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THE SEMANTICS OF GRAMMAR

Anna Wierzbicka

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THE SEMANTICS OF GRAMMAR

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Volume 18

Anna Wierzbicka

The Semantics of Grammar

THE SEMANTICS OF GRAMMAR

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Introduction

1. Language and meaning

Nothing is as easily overlooked, or as easily forgotten, as the most obvious truths. The tenet that language is a tool for expressing meaning is a case in point. Nobody would deny it — but many influential schools and trends in modern linguistics have ignored it, and have based their work on entirely different and often incompatible assumptions.

In many cases, the conviction that meaning can be more or less ignored in the study of language is clearly linked with a conviction that semantics is an independent field, which can be left to those who happen to be interested in meaning, while other linguists can devote themselves to something else — in particular, to syntax. Grammar in general, and syntax in particular, is seen as more or less autonomous of semantics, and can be pursued independently.

Of course this alleged autonomy of grammar has often been questioned, and a great deal of valuable work has been done on the basis of the opposite assumption. Nonetheless, the idea that grammar is one field and semantics another, is still very widespread. In fact, even those linguists who oppose the idea of 'autonomous syntax' as a peculiar aberration in the study of language often oppose to it the slogan of 'syntax AND semantics' — implying that syntax and semantics are two separate, if interrelated, domains.

The view on which this book is based is quite different. If semantics is to be defined as a study of meaning encoded in natural language then syntax is simply one part of semantics.

Language is an integrated system, where everything 'conspires' to convey meaning -- words, grammatical constructions, and illocutionary devices (including intonation). Accordingly, linguistics falls naturally into three parts, which could be called lexical semantics, grammatical semantics, and illocutionary semantics. A Morrisian division of the study of signs into

semantics, syntax and pragmatics may make good sense with respect to some artificial sign systems but it makes no sense with respect to natural language, whose syntactic and morphological devices (as well as illocutionary devices) are themselves carriers of meaning.

In natural language, meaning cannot be defined in terms of a relationship between linguistic units and elements of extra-linguistic reality. Attempts to develop semantic theories based on 'truth conditions', 'denotational conditions' and the like have not been fruitful in terms of actual description of languages. They have usually ended up as manifestos and declarations. (Cf. Wierzbicka 1985c.) In natural language meaning consists in human interpretation of the world. It is subjective, it is anthropocentric, it reflects predominant cultural concerns and culture-specific modes of social interaction as much as any objective features of the world 'as such'. 'Pragmatic meanings' are inextricably intertwined in natural languages with meanings based on 'denotational conditions'. (Cf. e.g. Wierzbicka 1980b and 1987b; see also Padučeva 1985.)

Even concrete concepts such as 'mouse', 'rat' or 'worm' are culture-specific and determined in their content by the speakers' interests and attitudes as much as by any objective 'discontinuities in the world'. "*Men* make sorts of things", as Locke (1690/1959, 2:85, original emphasis) put it a long time ago. The idea that abstract concepts such as 'promise' and 'command' (cf. Searle 1979:ix) or 'shame' and 'disgust' (cf. Blount 1984:130) are language-independent and determined by objective 'discontinuities in the world' is even more of an illusion. (For discussion, see Wierzbicka 1985c, 1985a, and 1986c).

But if no boundary can be drawn between 'denotational meanings' and 'pragmatic meanings' in the area of the lexicon, no boundary can be drawn between them in the area of grammar either. The differences between active and passive sentences, between subjects and objects, between direct objects and oblique objects (complements), and so on, are essentially 'pragmatic' — that is, they are determined, to a considerable extent, by the speakers' interests and attitudes. (For detailed discussion, see Wierzbicka 1980b). The thematic-rhematic structure of sentences, too, can be said to be a matter of their 'pragmatic' organization, but it cannot be separated from their lexical and grammatical structure. (For an illuminating discussion of this problem, see Bogusławski 1977.)

Semantics is one. It encompasses lexicon, grammar and illocutionary structure. It is of paramount importance that we be able to perceive its

essential unity, and that whatever part of the overall task we focus on at a given time, we always keep in mind our main goal: an integrated semantic description of natural languages. (For further discussion, see Wierzbicka 1987a.)

2. Grammatical semantics

The present book is devoted to 'grammatical semantics', that is to the study of meaning conveyed by grammatical devices — mainly in English, but also in a number of other languages, such as Russian, French, German, Polish, Italian, Spanish and Japanese. 'Grammatical semantics' can be naturally subdivided into the semantics of syntax and the semantics of morphology, and that is how the book is organized. Syntax and morphology of course cannot be rigidly separated from one another, but the distinction offers a useful, if somewhat arbitrary, way of organizing material which ranges over a wide variety of grammatical structures.

The basic idea behind the notion of 'grammatical semantics' is this. Every grammatical construction encodes a certain meaning, which can be revealed and rigorously stated, so that the meanings of different constructions can be compared in a precise and illuminating fashion, both within one language and across language boundaries.

Grammar is not semantically arbitrary. On the contrary, grammatical distinctions are motivated (in the synchronic sense) by semantic distinctions; every grammatical construction is a vehicle of a certain semantic structure; and this is its *raison d'être*, and the criterion determining its range of use.

For example, if English has a number of different complement constructions, associated with complementizers such as THAT, ING, TO and FOR TO, the choice between these complement constructions is neither arbitrary nor determined by some formal, non-semantic constraints, but is predictable from the intended meaning. In some situations, the speaker can choose between two or more complement constructions, for example:

a. Mary started TO work.
b. Mary started workING.
a. It is time TO go.
b. It is time FOR me (us, you) TO go.
a. I hope THAT I will be able to come.
b. I hope TO be able to come.

In other situations, similar choices are not available, for example:

a. Mary finished typING the letters.
b. *Mary finished TO type the letters.
a. Mary managed TO hit the target.
b. *Mary succeeded TO hit the target.
a. Mary is likely TO win.
b. *Mary is probable TO win.

In every case, however, the syntactic possibilities are determined by the underlying semantic structures (that is, by the intended meaning). Generally speaking, what is semantically incoherent, is syntactically incongruous. Syntax, so to speak, follows from semantics. (Cf. Jakobson 1936/71, Apresjan 1967, Bolinger 1977, Garciá 1975, Dixon 1982b, Wierzbicka 1980b, Padučeva 1985, Van Valin and Wilkins, In press.)

3. 'Autonomous syntax': an illustration

Over the last three decades, many different theories of autonomous syntax have been proposed. They differ from one another in ways that their authors regard as important; but they are all based on the same assumption that syntax can be accounted for independently of meaning. The 'autonomous syntax' approach to language is epitomized in the following problem, offered in a recent *Source book for linguistics* (Cowan and Rakusăn 1985:205, their orthography):

> CZECH: INFINITIVE CLAUSES
> Account for the relationship between infinitive sentences and subordinate clauses in Czech.
>
> Czech infinitive clauses:
> 1) *doktor se rozhodl višetřit yanu*
> 'the doctor decided to examine Jana'
> 2) *eva xt^{y}ela studovat filozofiyi*
> 'Eva wanted to study philosophy'
> 3) *barbora odmi:tla vařit ob^{y}et*
> 'Barbara refused to cook the lunch'
> 4) *yan b^{y}ežel varovat sousedi*
> 'Jan ran to warn the neighbours'
> 5) *liška se snažila xit^{y}it zayi:ce*
> 'the fox tried to capture the hare'

Czech subordinate clauses:

1) *přemluvila ysem doktora abi višetřil yanu*
'I persuaded the doctor to examine Jana'
2) *matka řekla ev^{y}e abi studovala filozofiyi*
'mother told Eva to study philosophy'
3) *muš fska:zal barboře abi uvařila ob^{y}et*
'the husband sent a message to Barbara to cook the lunch'
4) *křičeli ysme na yana abi varoval sousedi*
'we shouted at Jan to warn the neighbours'
5) *lofci podn^{y}ecovali lišku abi xit^{y}ila zayi:ce*
'the hunters kept inciting the fox to catch the hare'

The authors' intention is clear: the student is supposed to come up with the generalization that infinitive clauses are used if the subject of the complement clause or of a purpose clause is coreferential with the matrix subject, whereas *aby* clauses are used if the subject of the complement clause or of a purpose clause is coreferential with the matrix object. This is confirmed in their "Key to the exercises".

If the students were asked how to translate into Czech sentences such as:

a. John ordered Eva to do it.
b. John forbade Eva to do it.
c. John forced Eva to do it.

they would have to say, presumably, that one would have to use subordinated clauses with *aby* [abi], not infinitive clauses — and they would be wrong. In fact, the following translations are perfectly correct:

a. *Jan nařidíl Evě to udelat.*
b. *Jan zakázal Evě to udelat.*
c. *Jan přinutíl Evu to udelat.*

How does autonomous syntax deal with such facts, which violate the neat syntactic generalizations? Very simply: it either ignores them or calls them 'exceptions'. But if we look at such 'exceptions' from a semantic point of view we discover that they make perfect sense: the subordinate clause with *aby* indicates, roughly speaking, lack of control, and a concomitant lack of an expectation that the action will be performed.

Verbs such as *nařidit* 'order', *zakazat* 'forbid', or *přinudit* 'force' tend to take infinitive complements, rather than subordinate clauses with *aby*,

because they imply a high degree of control, whereas verbs such as *prosit* 'ask' or *přatsi* 'wish' tend to take *aby* clauses. Since human beings normally view themselves as being more in control of their own actions than of those of other people, the infinitive constructions will tend to be associated with coreferential subjects, whereas the *aby* construction will tend to be associated with non-coreferential subjects. But the presumption of strong control calls for a infinitive clause even with non-coreferential subjects, and the presumption of weak control calls for an *aby* clause even in the case of coreferential subjects. For example:

a. *Jan běžel varovat sousedi.* (Cowan and Rakusăn 1985:205)
'John ran to warn the neighbours' (an infinitive clause).

b. *Karel jel do Ruska, aby se naučil perfektně rusky.*
(Lee 1964:128)
'Karl went to Russia (in order) to learn perfect Russian'
(an *aby* clause).

Thus the syntactic fact that the infinitive tends to be associated with coreferential subjects is not a purely formal rule (subject to some 'exceptions'), but a manifestation of a deeper semantic generalization — a generalization which explains both the syntactic rule and the apparent exceptions.

It is important to stress that differences of this kind cannot be dealt with by assigning different characteristics to individual verbs, as generative grammarians usually do. What matters is not just the choice of this or that verb, but the choice of an intended meaning. Depending on the intended meaning of the entire sentence, the same verb can often be used either with an infinitive clause or with an *aby* clause. For example (Mr. Borek Šindler, p.c.):

Jan běžel varovat sousedi./
Jan běžel aby varoval sousedi.
'John ran to warn the neighbours.'

Karel jel do Ruska studovat ruštinu./
Karel jel do Ruska aby studoval ruštinu.
'Karl went to Russia to study Russian.'

Matka nařídíla Evě vařit obed.
'Mother ordered Eve to cook the dinner.'

Matka nařídíla Evě aby studovala filozofii.
'Mother ordered Eva to study philosophy.'

Thus, differences in distribution follow not from formal rules concerning coreference but from differences in meaning; and differences in meaning must be attributed not only to different lexical items but to the syntactic constructions themselves.

One might say, of course, that a workbook for undergraduate students is entitled to use regularized and idealized data. I wouldn't argue against that. But the point is that the huge scholarly literature on complementation in general, and on English complementation in particular, proceeds along exactly the same lines. For example, the contrast between TO and FOR TO in English is normally dealt with, in generative grammar, in terms of coreference versus non-coreference. In fact, however, this account is open to the same kind of objections as the treatment of the Czech infinitive clauses in the Cowan and Rakušan workbook. (For detailed discussion see below, chapter 1, sections 6.4 and 7.)

Autonomous syntax cannot account for differences in meaning, and it doesn't try to do that. But it cannot account for differences in distribution either, because distributional facts are not independent of meaning. A semantic approach to syntax allows us to solve both problems at the same time: it allows us to account for differences in meaning, and *ipso facto*, it allows us to account for differences in distribution. It delivers us from the meaningless universe of arbitrary, blind rules, and arbitrary, blind exceptions to the rules, and it enables us to see how syntax makes sense.

4. The need for a semantic metalanguage

The idea that syntax is semantically motivated, is not new. The *novum* of the present book lies in the fact that it offers a methodology that seeks to demonstrate the validity of this idea.

I maintain that grammatical constructions embody certain meanings; and I try to reveal these meanings, to show exactly what they are, and how the use of a given construction can be predicted from its meaning. A task of this kind couldn't possibly be carried out without an appropriate semantic metalanguage. This book tries to develop such a metalanguage — and to make use of it at the same time. By testing the proposed metalanguage against a wide range of constructions from a number of different languages, I hope I have demonstrated its suitability for the task.

5. The need for an integrated linguistic description

Meaning is conveyed by grammatical constructions as much as by words, and it is conveyed jointly by all levels of linguistic structure. There is no such thing as 'grammatical meaning' or 'lexical meaning'. There are only lexical and grammatical MEANS of conveying meaning — and even here no sharp line can be drawn between the two.

For example, if some English verbs take one type of complement and other verbs take another, (cf. e.g. *forbid to* vs. *dissuade from*), this is determined both by the meaning of the verbs AND by the meaning of the construction. In fact, the notion of the meaning of a word in isolation is in any case a fiction. For example, one cannot really say what a verb such as *promise* or *order* means, one can only say what a phrase such as 'X promised to do Z' or 'X ordered Y to do Z' means. (See Žolkovskij 1964, Bogusławski 1966:27, Mel'čuk 1974:75.)

The meaning of a sentence is determined jointly by the meaning of its words and of its grammatical devices, and any line between the two is bound to be arbitrary. This is due not only to the intermediary status of so called 'function words', such as conjunctions, prepositions, postpositions, auxiliaries, and so on, but also to the grammatical status of 'full words' such as nouns, verbs, or adjectives. The very fact that a word is a noun, or an adjective, or a verb, determines some aspects of its meaning (see the discussion of the semantic differences between nouns and adjectives in chapter 9, and between adjectives and verbs in chapter 3, section 8). All words are 'function words'. To reveal the semantic foundations of grammar we must cease to be satisfied with a separate 'semantic metalanguage' for dealing with grammar, including conventional labels such as 'present' or 'past', 'masculine' or 'feminine', 'singular' or 'plural', 'realis' or 'irrealis', 'animate' or 'inanimate', 'countable' or 'mass', and so on. We must develop, and learn to employ, an integrated semantic metalanguage, suitable for the description of meaning no matter how this meaning is conveyed. (Cf. in particular Apresjan 1980.)

I said earlier that semantics divides naturally into three parts: lexical semantics, grammatical semantics, and illocutionary semantics. It is important to emphasize, however, that this division, too, is partly arbitrary, and that there are no sharp dividing lines between the three domains. For example, speech act verbs such as *ask* and *order*, might be said to belong primarily to lexical semantics, whereas grammatical devices such as the imperative

or the interrogative might be said to belong primarily to grammar; but in fact the meanings involved are of the same kind, and it is necessary that we have a unified semantic metalanguage which allows us to reflect that. For example, concepts such as 'I want' are as relevant to the meaning of the imperative as they are to the meaning of words such as *order* or *ask*; and concepts such as 'I know' are as essential to the concept of 'declarative' and 'interrogative' modalities as they are to the meaning of words such as *inform* or *question*. Furthermore, concepts such as 'I want' and 'I know' are also essential to the meaning of tag questions, modal particles, and innumerable other illocutionary devices. Generally speaking, the line between grammar and (linguistic) pragmatics is just as fluid as that between grammar and the lexicon (cf. Humboldt 1963:121). Meaning is conveyed by the utterance as a whole. To portray it we need an integrated semantic metalanguage, in which meanings can be stated and compared regardless of the technical differences in the ways they are expressed.

This book seeks to explicate the meaning of grammatical constructions in the same metalanguage in which a large body of lexical items and of illocutionary meanings has already been explicated. (See in particular Wierzbicka 1985c, 1986a-d,f-g, 1987b and In press a.)

6. The proposed semantic metalanguage

To compare meanings one has to be able to state them. To state what the meaning of an expression or a construction is one needs a semantic metalanguage. In accordance with the general program which I have been pursuing for more than two decades, I will try to state the meaning of syntactic constructions under consideration in terms of simple and intuitively understandable sentences in natural language. This, I believe, will ensure that the proposed semantic representations will be verifiable and intuitively revealing. But the subset of natural language in which the explications are formulated is highly restricted, standardized, and to a large degree language-independent (i.e. isomorphic to equivalent subsets of other natural languages). For this reason, the natural language used in the explications can be viewed as a formal semantic metalanguage.

The metalanguage developed and applied in the present work is, so to speak, carved out of the natural language. Its lexicon is based on a hypothetical set of universal semantic primitives (cf. Bogusławski 1966 and 1970; and Wierzbicka 1972, 1980a, 1985c, 1987b and In press c) which cor-

respond to indefinable lexical items of natural languages. The current version of this hypothetical set includes the following fifteen elements (for discussion and justification, see Wierzbicka, In press c): *I, you, this, someone, something, time, place, want, don't want, say, think, know, imagine, become*, and *part*. Other candidates currently under consideration include *like, two, other, world, good, kind of,* and *feel*. (Cf. Goddard, In press.) It is not clear at this stage to what extent these items can be viewed as true lexical universals. The widespread polysemy of words and morphemes in human languages makes it impossible to determine without painstaking analysis whether or not a given language has separate words embodying concepts such as, for example, 'part' or 'know'. It seems certain, however, that a semantic metalanguage based on the fifteen or twenty hypothetical primitives enumerated above is at least relatively language-independent, and that this set of fifteen or twenty can be matched to a considerable degree with sets of actual words (or morphemes) to be found in different languages of the world.

In addition, the metalexicon employed in the present work includes a few dozen more concepts, which are neither indefinable nor universal or near-universal, but which are still relatively very simple and which recur widely in the languages of the world as separate lexical items. This larger set, whose items can be defined in terms of the basic set of fifteen (or twenty) primitives, includes concepts such as 'do', 'happen', 'because', 'if', 'people', and so on.

As for the syntax of the semantic metalanguage employed here, it is based, essentially, on a very limited number of patterns which can combine in spatially (temporally) ordered sequences such as the following ones:

I think of this
I want this
I imagine this
I know this
I say this

Again, these basic patterns are supplemented with a number of further patterns, which are more complex and more language-specific (such as, for example, 'I want to do this').

It should be stressed that the work on this metalanguage is far from finished. A number of tentative versions have to be experimented with, before anything like the optimal version is found. I have been engaged in

this experimentation for twenty years, and I feel that considerable progress has been made, in my own work and in that of colleagues (cf. in particular Bogusławski 1972, 1975, 1979; Goddard 1979 and In press; Chappell 1980, 1986a,b, and In press; Wilkins 1986 and In press; Harkins 1986, Ameka 1987, Neumann 1987). But we are still, in a sense, at the beginning of the road.

The idea of an 'optimal' semantic metalanguage is not a straightforward one. What is optimal for one purpose is far from ideal for another. At least two different levels of an 'optimal' semantic metalanguage should be distinguished.

From a purely semantic point of view, the optimal semantic metalanguage is a minimal one, one whose lexicon would contain nothing but a minimum of elements necessary for portraying semantic relations; and whose syntax would contain nothing but the minimal core of grammatical constructions shared, as Humboldt (1963:16) speculated, by all languages of the world. ("We should search for a middle point of all languages; it can be found, and we must not lose it from sight when languages are compared and contrasted with one another. Both in the lexicon and in the grammar of all languages there are a number of elements which can be determined completely *a priori*, [i.e. which are language-independent, A.W.] and which can be separated from all the conditions imposed by individual languages.")

From a practical point of view, however, a mini-language based exclusively on the 'alphabet of human thought' and on the mini-grammar associated with it is far from ideal, because semantic formulae couched in such a mini-language are necessarily very long and hard to read. For purposes of readability and intelligibility, less radical versions of a semantic metalanguage must often be used. (Cf. Apresjan 1980.) For purposes of language-teaching, lexicography, or descriptive grammar, a metalexicon of one hundred or two hundred items is undoubtedly more useful than a truly minimal one of fifteen or twenty. It must be remembered, however, that without some intuitively comprehensible metalexicon the meaning of grammatical constructions in a given language can never be explained to any outsiders, and the range of their use can never be predicted. For example, if we want to explain the meaning (or meanings) of the French subjunctive in a way which would be both verifiable and potentially useful, it is of little use to resort to artificial labels such as 'realis', 'irrealis', 'potentiality', 'subjectivity', 'factivity' or 'emotivity', because labels of this kind cannot predict correctly the range of its use. Formulae of the kind proposed here are not

always easy to comprehend either, but they are intuitively verifiable and they do have the explanatory and predictive power that the arbitrary labels lack. Such formulae can predict correctly the range of use, and can be used, therefore, in language teaching, as well as in linguistic typology and other branches of theoretical and descriptive linguistics. They can be both cognitively revealing and socially useful.

It should be added the the program outlined here is fully consonant with the fundamental principles which were first formulated and advocated by Leibniz:

(1) Semantic analysis should seek to be based on an "alphabet of human thoughts *(alphabetum cogitationum humanarum)*", in other words, on a "catalogue of primitive notions, that is to say, notions which cannot be made clearer by any definitions *(catalogus notionum primitivarum, seu earum quas nullius definitionibus clariores reddere possumus)*" (Couturat 1903:435);

(2) "Everything in language should be reduced to the simplest possible explications, which can always be substituted, with the sense intact, for what is being explicated *(reducenda omnia ad simplicissimas explicationes, quae semper salvo sensu in locum substitui possunt)*" (Couturat 1903:244).

Only formulae constructed in a metalanguage carved out of natural language can fulfil the requirement of substitutability, *salvo sensu*, in the original context *(in locum)*; and only primitives linked with real words from a natural language can be intuitively so clear that no definitions can make them any clearer (although in view of the frequent polysemy of real words, illustrative sentences may be needed to clarify which meaning of a given word is posited as indefinable). Any artificial primes (markers, features, logical symbols, or whatever) have to be explained (defined) in terms of something that is intuitively clear; and no formulae constructed in an artificial metalanguage can be substituted, in context, for words or expressions in sentences of a natural language.

7. The idea of 'ethno-grammar'

The grammatical constructions of any natural language encode certain meanings. These meanings can be 'deciphered' and stated in precise and yet intuitively comprehensible semantic formulae. To the extent to which the semantic metalanguage in which such formulae are worded is language-

independent and 'culture-free', the meanings encoded in the grammar of different languages can be compared and the differences between them can be shown explicitly. In particular, proceeding in this way we can reveal areas of special elaboration, areas that a given language seems to be particularly 'interested in' and which it seems to regard as particularly important. Just as the lexicon of a language may be particularly rich in the area of cultivation and consumption of rice, or in the area of kinship, the grammar of a language may be particularly elaborated in the area of deliberate causation, or in the area of voluntary, uninhibited emotions, or again in the area of kinship.

Differences of this kind are of course of enormous cultural interest, and they have often been the subject of speculation in the past, starting above all with Wilhelm Humboldt, and continuing with thinkers such as Vossler, Spitzer, Bally, Baudoin de Courtenay, Boas, Sapir and Whorf, to mention but a few. In the past, however, speculations and investigations of this kind have often met with scepticism and suspicion, as open to subjectivism and arbitrariness, and not accessible to empirical verification. I believe that the introduction of a standardized semantic metalanguage, and the use of standardized semantic formulae which can be both rigorous and intuitively verifiable, opens new possiblities in this area. The old questions which used to excite our intellectual ancestors and which many linguists felt forced to abandon under pressure from behaviourists and/or formalists (in the structuralist and generativist tradition) can, I think, be asked again — with a new sense of purpose.

Transformational grammar is rightly credited with introducing new standards of explicitness and rigour in grammatical descriptions. But the 'transformational ideology', to which 'surface differences' are no more than 'surface differences', must be cast aside; and, despite all the changes, what applies to the transformational grammar of the 60s and 70s applies also, by and large, to the more recent brands of generative grammar. Ten years ago an advocate of the 'semantics of grammar', Dwight Bolinger (1977:ix) wrote this:

"Despite a number of skirmishes over the past few years (...), there has been no frontal attack on the theory that it is normal for a language to establish a lunacy ward in its grammar or lexicon where mindless morphs stare vacantly with no purpose other than to be where they are. The idea has been around for a good while. (...) contemporary linguistics has carried the fantasy to new heights, and expanded it with a new version of an old vis-

ion, that of synonymy: not only are there mindless morphs, but there are mindless differences between one construction and another." Bolinger acknowledges that "the idea that things can be the same but different or different but the same is prerequisite to science" (p.2); but, he goes on, "linguists have tended to define linguistics so as to say that variation in surface structures that have the same deep structure is irrelevant to the one thing that matters most in language, namely meaning" (p.3).

'Surface differences' point to differences in meaning. Differences in grammatical form are not arbitrary, but signal differences in meaning. (Cf. Haiman 1985, Langacker 1985, Kirsner 1985, Zubin and Köpcke 1986, and the references in section 2 above.) I would further suggest that 'surface differences' between different grammatical systems point to differences in the underlying semantic systems. Hence the idea of 'ethno-grammar'.

8. The philosophy of grammar

Every language encodes a certain universe of meanings. Some of these meanings are presumably universal, others are more or less widespread, while still others may be restricted to one particular language. (Cf. Pawley 1987). Of course suggestions of this kind are impossible to prove, because we cannot compare all natural languages, but the deep semantic differences between closely-related languages, such as for example, English and German, or Polish and Russian, and the recurring similarities between genetically and culturally distant languages, provide evidence which cannot be ignored.

It is worth recalling in this connection the Humboldtian concept of "the content *(der Inhalt)* of a given language" (1963:17), which could be defined as the universe of all the meanings encoded (lexically or grammatically) in that language. According to Humboldt, all languages have in their lexicon and in their grammar elements which are universal, and language-independent; "but they also have a much larger number of concepts, and of grammatical features, which are so tightly woven into the individuality of a given language that they cannot be viewed as a common thread, and that they cannot be transferred, without distortions, into other languages. Consequently, a considerable part of the content of every language depends on those unique features." (1963:16-17).

Humboldt's concept of the "content of a language" deserves reviving, if it can be made more precise. The meanings encoded in the words of a

language should of course be stated in adequate dictionaries (based on a well-justified semantic metalanguage); but the meanings of the grammatical constructions should also be explicitly stated in the same semantic metalanguage, so that the characteristic semantic features of a language can be traced across the entire language. For example, semantic areas such as emotions, sensations, body parts, causation, volition, place or time, could then be studied as individual domains, and their different treatment in different languages could be precisely compared. (For some attempts in this direction, see in particular chapter 3: The semantics of causatives in a cross-linguistic perspective, and 2: Ethno-syntax and the philosophy of grammar.) Attempts of this kind have of course a long tradition in the study of 'notional grammar' by such classical linguists as Jespersen (1924) or Brunot (1953). In more recent times efforts in this direction have sometimes been undertaken in contrastive grammar (e.g. Bogusławski and Karolak 1970) and in descriptive grammars of individual languages (e.g. Wilkins, To appear). The use of a standardized semantic metalanguage could open new possibilities in this area of study. The philosophies built into the grammar of different languages become commensurable if all sentences in all languages can be translated into the universal language of semantic primitives. To put it less strongly: different philosophies are comparable to the extent to which the constructions that embody them can be translated into the universal language of semantic primitives.

9. Universals of grammatical semantics

Grammatical constructions of a given language encode meanings which are specific to that particular language. It is logically possible that some of these meanings are unique, some rare, others fairly common, and others universal. It is also logically possible that no meanings encoded in grammatical constructions are universal, but that there are certain semantic elements or configurations of elements which — universally — play an important role in grammar.

For example, Italian has a construction which can be loosely called the 'self-gratifying agent' construction, illustrated in the following sentence:

Giovanni si è mangiato un piccione intero.
Giovanni to-himself has eaten a pigeon whole
'Giovanni ate (up) a whole pigeon; (he enjoyed it).'

This construction has of course parallels in other languages, for example in Spanish or in Russian, but the exact semantic conditions on its use are in each case different (see chapter 5, section 7). This means that the exact semantic structure encoded in this construction is peculiar to Italian, and possibly unique. Similarly, American English has a construction *('take a V')* which could be loosely said to encode the meaning of a brisk, determined and self-oriented action. For example:

I decided to take a swim/walk.

This construction, too, has parallels elsewhere, for example, in the English constructions of the form *'have a V'*, which are used more widely in British and Australian English than in American English:

I had a swim/walk/lie down/chat.

But the exact semantic conditions on the use of these constructions *('take a V'* and *'have a V')* are in each case different. For example, one cannot say:

*We took a chat.	(Cf. We had a chat.)
*I took a lie-down.	(Cf. I had a lie-down.)
*I had a leap/dive.	(Cf. I took a leap/dive.)

This suggests that the semantic structures encoded in these constructions are not identical (see chapter 5, section 6). Quite possibly, each one is unique (without exact equivalents anywhere else in the world).

Are there any meanings which are known to recur, in a grammaticalized form, in languages of the world and which could be regarded as plausible candidates for semantic universals of grammar? At this stage, we don't really know. In the past, typological investigations were seldom organized in such a way as to throw much light on this matter. At the same time it would be foolish to deny that a great deal of relevant, though inconclusive, evidence has nonetheless come to light. (Cf. e.g. Li ed. 1976, Givón 1984b, Comrie 1981, Hopper and Thompson eds. 1982, Craig ed. 1986, Plank ed. 1984, Foley and Van Valin 1984, Mallinson and Blake 1981, Shopen ed. 1985).

For example, it would appear that most grammars pay some attention to the distinctions between voluntary and involuntary action, or between unspecified action and involuntary action. In many languages this is realized by means of a contrast between a dative and a nominative agent (for example in Kannada, Sridhar 1976, or in Russian). For example:

a. *On vstretil ee.*
he-NOM met-MASC her-ACC
'He met her, he came across her.'
b. *Emu vstretilas' ona.*
he-DAT met-FEM-REFL she-NOM
'He met her, he came across her, not because he wanted to.'

English would seem to have hardly any grammatical constructions referring specifically to involuntary action (but cf. expressions such as *It occurred to me that* ...) although it does have a construction referring, so to speak, to 'foolish agents', e.g. *She got herself kicked out/fired/killed.* On the other hand, it does have some constructions referring specifically to intentional action — for example, the American *'take a V'* construction mentioned earlier.

Turning now to more central areas of grammar, it is of course natural to search for semantic correlates of traditional concepts such as 'subject' and 'direct object'.

In discussing such concepts it is useful to draw a distinction between a semantic invariant and a semantic prototype. The semantic prototypes of 'subject' and 'direct object' are probably fairly clear. Roughly speaking, the semantic prototype of 'subject' is based on the concept of 'independent topicality', or of 'primary predicandum' (cf. Kacnel'son 1972). It might be formulated as follows (cf. Wierzbicka 1978):

I want to say something about X
not because I want to say something about anything else

This would distinguish 'subjects' from various 'discourse topics', or 'left-dislocated' topics, such as, for example:

(Speaking of Australian foods), meat pies I like,
but sausage rolls I hate.

The semantic prototype of 'direct object' combines the idea of 'undergoer of an action' with the idea of, so to speak, 'dependent topicality'. This could be formulated as follows:

I want to say something about Y
because I want to say something about person X
something happened to Y
because X did something to Y

In passive sentences, the undergoer ceases to be a direct object, because

the meaning of an undergoer phrase 'promoted to subjecthood' is different from that spelled out above:

> I want to say something about Y
> not because I want to say something about anything else
> something happened to Y
> because someone did something to Y

These formulae are meant to spell out the semantic prototypes of the syntactic categories of subject and direct object, not their semantic invariants. Thus in English, for example, what is called the direct object is not restricted to semantic undergoers. For example, in the sentences:

> John heard Mary.
> John admired Mary.

'Mary' is the direct object, but not the semantic undergoer (nothing 'happens' to Mary as a result of John's action, and in fact no action is referred to).

But the concept of prototype — which is undoubtedly useful — should not be treated as an excuse for the lazy, as has so often been the case in recent years (cf. Wierzbicka, In press b). The extensions from the prototype which a given word or construction allows are as important to an adequate linguistic description as the prototype itself. For example, the prototype of a feathered flying creature may or may not allow — depending on the language — for an extension to non-flying feathered creatures such as ostriches or to flying non-feathered creatures such as bats. Similarly, the prototype of direct object formulated earlier is linked in different languages with different sets of extensions (cf. Hopper and Thompson eds. 1982, Plank ed. 1984, Wierzbicka 1981) and it is as important to establish what these are as to describe the prototype itself.

Nor is it the case that the grammar of a language makes no distinction between the semantic prototype of a construction and the extensions of this prototype. For example, it has often been pointed out that 'transitivity' is not a matter of either/or, but a matter of degree. (Cf. in particular Hopper and Thompson 1980, and Jacobsen 1985.) For instance, in English the following tests (among others) could be used to distinguish a number of distinct subtypes of transitives (cf. chapter 5):

X V-ed Y	(e.g. killed, kicked, read, opened, liked, heard, resembled)

X had a V	(e.g. a kick, *a kill, a read, *an open)
X was V-ed by Y	(e.g. kicked, killed, read, opened, liked, heard, *resembled)
X V PREP Y	(e.g. kicked at, struck at, *killed at, *murdered at)
Y V-TR→INTR	(e.g. Y broke, tore, bent, opened, *murdered, *cut, *destroyed)

If all such differences are taken into consideration a semantic account in terms of prototypes can be supplemented by an account in terms of semantic invariants. For example, while a 'direct object' defined solely on the basis of the construction 'X V-ed Y' can hardly be assigned a semantic invariant, a 'direct object' defined with reference to a whole battery of syntactic tests probably can. For English, the relevant tests would include those illustrated above: (1) ability to occupy the slot directly after the verb, (2) ability to 'undergo passivization', (3) inability to occur in a 'have a V' construction, (4) inability to occur in an 'X V PREP Y' construction, (5) inability to 'undergo intransitivization', and so on.

Generally speaking, however, all that we can say at this stage is that there are certain semantic configurations which are known to play an important role in the grammar of many languages as semantic prototypes; not ALL languages, but MANY languages (cf. Schachter 1976, Foley and Van Valin 1977); and not as semantic INVARIANTS but as semantic PROTOTYPES. (Cf. Comrie 1981; Givón 1984a).

It should be added, however, that a semantic typology of grammatical systems and grammatical constructions, a typology based on a clearly formulated methodology and on an explicit semantic theory, is still in its very early stages. It doesn't have a long past. I believe, however, that it does have a future.

10. By their fruits shall ye know them

This book is not yet another treatise on semantic theory, but a study in empirical semantics. The semantic theory advanced here is offered as a tool for description and as a key to understanding. It does not make promises as to what can be done with it at some indefinite future stage. It asks to be evaluated on the basis of what can already be demonstrated. The analyses in this book are neither perfect nor definitive. I believe, however, that enough empirical work has been does to offer it as evidence that the theory

advanced here is an effective methodology.

There is no shortage of books devoted to reflections on language and mind, language and cognition, language and meaning, and so on. A particularly speculative example of this genre is provided by a recent volume on semantic theory and cognitive science (with special emphasis on "human categorization"), which runs over six hundred pages and which is supported by just three original examples ("case studies"), taken from one language: English (G. Lakoff 1987; for relevant discussion, see Wierzbicka 1986e and In press b). Lakoff dismisses the semantic primitives approach to meaning as "not necessary" (p.278-280). Anyone who feels that a few *ad hoc* examples from English are leavening enough for several hundred pages on theory of human language and human cognition is unlikely to be attracted by any empirical approach. This book is intended for those who believe that theory should be tested.

Part 1: The semantics of syntax

1. The semantics of English complementation in a cross-linguistic perspective

1. Introduction

1.1 *Preliminary remarks*

The area of English complementation constitutes one of the greatest challenges to a theory of syntax based on semantic foundations. An enormous amount of work has already been done in that area, much of it by some of the leading scholars in modern linguistics. That research has, I think, established beyond any doubt whatsoever the semantic basis of different complement constructions and the futility of non-semantic approaches to this area of study. On the other hand, the intensive research which has been done to date cannot really be said to have resulted in rigorous and verifiable semantic generalizations with full predictive power. From this, many scholars appear to conclude more or less as follows: clearly, the syntax of English complementation cannot be satisfactorily accounted for without semantics; unfortunately, with semantics, it cannot be satisfactorily accounted for either.

This being so, we seem to have reached a stage when anybody wishing to seriously advance the view that syntax has semantic foundations simply must meet the challenge of English complementation. This is precisely the goal of the present chapter.

1.2 *Preliminary illustrations*

When one compares pairs such as (a) and (b):

a. He remembered doing it.
b. He remembered to do it.

it seems obvious that the two complement types — the ING type and the TO type — differ in meaning, and that the two meanings must be stated in

any adequate grammar of English.

Furthermore, the semantic difference between the two complement types seems to explain why some verbs can only take ING whereas some others can only take TO, for example:

a. She wanted to dance./*She wanted dancing.
b. She kept dancing./*She kept to dance.

In fact, the semantic nature of the distinction between TO and ING was established beyond any reasonable doubt twenty years ago, by Bolinger (1968); and more recently, by several other writers on the subject, in particular, by Dixon (1984b). There is no need (and no room) to repeat here the evidence presented in those key papers.

But although the semantic nature of the contrast between TO and ING has been conclusively established, the exact meanings of the two constructions have not been stated — at least not in a form in which they would be open to rigorous verification. Thus, Bolinger (1968) speaks of "reification versus hypothesis or potentiality"; and he endorses, and generalizes, Jespersen's (MEG 5:166) observation that "The infinitive seems more appropriate than the gerund to denote the imaginative (unreal)". Another way Bolinger characterizes the contrast between TO and ING is in terms of "something projected versus something actually done" (1968:123).

In my view, all this is insightful, and true, but it is not sufficient to explain why, for example, one cannot say:

*He imagined to be blind.

or why one can say:

He imagined being blind.

Surely, Jespersen's description "imaginative, unreal" does apply here, and yet TO cannot be used, whereas ING can. Does Bolinger's description "projected" apply here? Of this, one cannot be sure, since one doesn't really know what exactly Bolinger meant by this term. In any case, the distinction between "something projected versus something actually done" is not sufficient to explain why one CAN say:

He managed to do it.

Nor is it sufficient to explain the contrast between *manage* and *succeed*:

*He succeeded to do it.
He succeeded (*managed) in doing it.

Dixon (1984b:592) contrasts *succeed* with *fail*:

John failed to hit the target.
John succeeded in hitting the target.

and points out that: "*Succeed* refers to a definite event from the past, something that has happened; only an ING complement is possible. *Fail*, on the other hand, describes something that the agent wanted to do, but was unable to achieve." But this doesn't really explain why one can say

John managed to hit the target.

Similarly, in the pair:

He continued to read.
He continued reading.

both variants imply that the action (reading) was real (i.e. did really occur). Yet a TO complement is as appropriate here as ING.

When faced with such apparent arbitrariness even semantically-oriented linguists often admit defeat, or at least partial defeat ("you cannot explain everything"). For example, Dixon, despite his own successes in explaining many cases of apparent arbitrariness, nonetheless believes that the choice of complements is semantically motivated only "in most instances" (1984b:594).

Bolinger takes a bolder stand and formulates his theoretical credo without any such hedges: "a difference in syntactic form always spells a difference in meaning" (1968:127). Moreover, in every concrete case he considers, he is able to come up with a suggestive and illuminating explanation for the contrast. It must be said, however, that his explanations are offered on a somewhat *ad hoc* basis. The generalizations offered (projected, potential, hypothetical, unreal, and the like) are, to my mind, not rigorous enough to be fully verifiable. In fact, Ney (1981:52) points out that "Wood ([1956]:11) seems to feel that the very opposite of Bolinger's analysis is true (...). In Wood's system (...) the gerundive complement is the abstract form and the infinitival complement is the reified form."

Unfortunately, instead of concluding that abstract terms such as 'reification' or 'potentiality' are not open to intersubjective verification, Ney himself proposes that even more terms of this kind should be introduced. Thus, he introduces "±actuality", "±process", "±intensity", "±initiation", and so on.

As a final example, let us consider Bresnan's (1979:88) interpretation

of the meaning of the TO complement (which she identifies with FOR TO complements, and calls the FOR complement):

"I propose that all the readings come from the inherent intentional meaning of the *for*-complement interacting with contextual semantic factors such as governing predicate, modality, and time. The advantages of explaining the essential unity of meaning of *for* as well as its systematic syntactic distribution are not to be lightly dismissed. Having established the distinct meanings of the main complementizers, we can conclude again that complementizers exist in deep structure."

I would be the last person in the world to dismiss lightly such advantages — but have they really been achieved? For example, where is the 'intentional' meaning in sentences such as these (Bresnan's own examples)?

I'm surprised to see you here.
It offends him [for him] to see you here.

Obviously, Bresnan is using the word 'intentional' in some sense quite different from what it has in ordinary English. But in what sense? Since this is never spelled out the validity of her generalization simply cannot be verified.

In the present work, I will explore the hypothesis that ALL contrasts between TO, ING and THAT can be accounted for in terms of meaning; and, moreover, that they can be accounted for in terms of rigorous and intuitively verifiable semantic representations.

Of course the area of English complementation is so large that it cannot be exhaustively surveyed in a book, let alone in one chapter (cf. the numerous books which have already been published on this subject, e.g. Rosenbaum 1967, Menzel 1975, Bresnan 1979, Freed 1979, Ney 1981, Conrad 1982, Ransom 1986). I cannot possibly, therefore, consider here all cases of apparent arbitrariness. What I can try to do, however, is to develop some hypothetical general rules, and to show how they explain some of the most recalcitrant cases of apparent arbitrariness. I will focus on the following areas, in the following order:

TO and wanting
TO and opinion
ING and time
TO, ING and aspectuals
TO and emotion
FOR TO versus TO

THAT and knowledge
The subjunctive: a cross-linguistic perspective

2. TO and 'wanting'

2.1 *To be or not to be — that is the question*

What exactly WAS Hamlet's question? And how do we know it? Let us consider first another, analogous, utterance:

To go or not to go? — that is the question.

Intuitively, the meaning of such questions is fairly clear, although I don't think any grammar of English predicts what it is. Roughly, we could state this meaning as follows: Should I decide: 'I want this: I will do it' or should I decide: 'I want this: I will not do it'? Should I decide: 'I want this: I will be', or should I decide: 'I want this: I will not be'?

Clearly, this meaning must be due largely to the construction used, because if ING is used instead of TO, it is no longer there, and in fact the whole utterance loses its original sense:

?Being or not being — that is the question.

The fact that one can hardly say:

?To know or not to know — that is the question.

supports our semantic interpretation: one cannot say

*I decided to know it.
*I decided not to know it.

because 'knowing' is not something one can control at will.

It is easy to see that the semantic implications of Hamlet's question apply also to other TO questions, whether direct or indirect:

The first question, of course, was how to get dry again.
(Carroll 1960:45) ⇒
they all thought this: I want this: I will get dry
(they didn't know what they should do)
How to win friends and influence people ... ⇒
(I imagine) you think this:
I want this: I will win friends and influence people
(I can tell you what you should do)

What applies to the combination of *how* with TO applies to all the other WH-words — with one remarkable exception:

Where to turn for help?
What to do?
Who(m) to ask for advice, for help?

The exception in question involves the word *why*:

*Why to wait?	*Why to bother?	*Why to stop here?
Why wait?	Why bother?	Why stop here?

I suggest that the explanation of this remarkable difference between *why* and the other WH words is to be found in the semantic clash between the meaning of the TO complement (which offers a motive, i.e. a reason) and the meaning of *why* (which implies that the speaker can't think of any good reason):

*Why to wait? ⇒
I think this: I want this: I will do it
I don't know this: why I should do it

Wanting to do something can be seen as a reason for doing it; hence the clash. Thus, the anomaly of the combination of *why* with TO confirms the reality of the semantic structure ascribed to TO complements (in the context of volition).

The element 'should', which we have detected in Hamlet's question, and in other TO-questions may or may not be implied by volitional TO complements (we will return to this problem in section 7), but the elements of 'thinking', 'wanting' and 'future time' are always there.

The meaning of TO complements is remarkably similar in all these respects to that of purposive clauses with the infinitive and TO. For example, the sentence:

Mary went to the Library to read the latest issue of *Language*.

can be roughly paraphrased as follows:

Mary went to the Library
because she thought this:
I want this: I will read the latest issue of *Language*

The same semantic elements are of course implied by the 'allative' TO. Roughly:

Mary ran to the Library. ⇒
Mary ran (along a certain path)
because she thought this:
I want this: I will be in the Library

Similarly, a *road TO Mandalay* is a road which leads TO Mandalay; someone who thinks this: 'I want this: I will be in Mandalay' can safely take such a road (rather than, say, a *road FROM Mandalay* or a *road AROUND Mandalay*).

Needless to say, TO complements do not always imply 'wanting'. Later on, we will consider other complement constructions with TO, and we will discuss the question of a possible semantic invariant of all TO constructions. Here, we simply note that there is at least one TO complement construction, in addition to the purposive TO clauses, and that this construction — like the purposive TO — does imply wanting (as well as thinking and a future 'will'). Roughly speaking, TO complement clauses imply 'wanting' if (1) the main verb is a verb of wanting, or (2) the main verb is (or can be interpreted as) a verb of intentional action, or (3) there is no main verb (as in Hamlet's question).

2.2 *Remember* and *forget*

Let us see now whether the tentative meaning assigned to the TO complement in questions can be transferred to other lexico-syntactic contexts. First, can it be transferred to the complements of verbs such as *remember* and *forget*? Adapting the earlier formula slightly, we obtain the following (rough) analysis:

X remembered to lock the door. ⇒
X thought this:
I want this: I will lock the door
I will do it because of that
because of this, X did it
X thought this because some time before that time
X thought this of the same thing: I should do this
X forgot to lock the door. ⇒
X did not think this:
I want this: I will lock the door
I will do it because of that

because of this, X didn't do it
some time before that time X thought of the same thing:
I should do this

Exactly the same analysis applies to the verb *think*:

X didn't think to lock the door. ⇒
X didn't think this: I want this: I will lock the door
because of this, X didn't do it

I will argue that essentially the same formula applies to all sentences where TO + INF is compatible with the idea of volition. If the verb in the complement clause is not an action verb, the semantic formula reads:

X V_{vol} to be Z ⇒
X thought this: I want this: I will be Z.

The past tense is used here for convenience, and is not part of the semantic invariant, but the elements 'think', 'I want this' and 'I will' are included in that invariant.

Wood (1956:15) has discussed the difference in meaning between the phrases 'think to INF' and 'think of ING' and was inclined to attribute it to the polysemy of the verb *think* (although he talks both about "differentiation of meaning in the main verb itself" and about the effect on the meaning of the verb "produced by the use of the gerund or the infinitive"). "For instance, in *Did you think of asking Brown*? the verb *think* means 'have the intention', but in *Did you think to ask Brown*? (not quite the same as *remember to ask*) it means something like 'did it occur to you?'" (Cf. also Brecht 1974.)

The observation is subtle and interesting, but the analysis quoted above does little to explain it. The suggestion that the gerund implies 'intention' and the infinitive doesn't is extremely confusing. In fact, one could argue that the opposite is true:

a. Did you think to ask Brown? ⇒
did you (at some point) think this:
'I want this: I will ask Brown'
and did you do it because of that?
b. Did you think of asking Brown? ⇒
(when you were thinking of doing different things)
did you think of (the possibility of) asking Brown?

Consider also the following pair of sentences, which makes the difference

between 'think TO' and 'think OF ING' even clearer:

a. – I looked out the window and saw this group of thieves coming up our front steps.
– Did you think to lock the door? ⇒
did you think this:
'I want this: I will lock the door'
and did you do it because of that?

b. – I don't know what I can do, I've tried everything and yet papers continue to disappear from my desk.
– Did you think of (the possibility of) locking the door?

Here as in the preceding case, the intention ('X thought this: I want this: I will do this') is conveyed by the TO complement, not by the ING. Moreover, it seems clear that TO doesn't differ here from ING along the lines of 'potentiality' versus 'actuality', as suggested by Bolinger (1968) and Dixon (1984b): it is the ING clause, not the TO clause, which implies 'possibility'. TO implies not just 'possibility' but 'wanting'. (Cf. *I'm thinking of movING to Sydney* vs. *I would like TO move to Sydney*.) Furthermore, the difference between 'think TO INF' and 'think of ING' can be shown to be exactly the same as that between 'remember TO INF' and 'remember ING', or that between 'forget TO INF' and 'forget ING'. There is no need, therefore, to posit two different meanings for the verb *think* (or *remember* or *forget*). The difference in meaning between 'V TO INF' and 'V (OF) ING' can be wholly attributed to the meaning of the complements. (For a similar view, see Van Valin and Wilkins, In press.)

2.3 *Verbs of volition*

The semantic structure postulated above explains immediately why verbs of intention typically take TO complements:

He wanted/planned/meant/intended/proposed/chose/decided to go. ⇒
he thought this: I want this: I will go

Some verbs of volition (e.g. *decide*) can take either TO or ING (or THAT). The difference between phrases such as *decide to go* and *decide on going* has often been described as meaningless — even by linguists who in principle believe in the semantic basis of differences in complementation. For example, Kiparsky and Kiparsky (1971:357) write: "After prepositions,

infinitives are automatically converted to gerunds, e.g. *I decided to go* vs. *I decided on going* or *I forced John to do it* vs. *I forced John into doing it.*"

In fact, however, *decide ON* doesn't mean the same as *decide TO*. *Decide on* implies that a number of possibilities have been considered ('gone through' in a person's mind) and that the subject decided to 'stop' on one of those possibilities. *Decide to* doesn't imply any such series of possibilities. It can be said, then, that *decide on* can be really reduced to *decide to*:

I decided on going. ⇒
  having thought about different things that I might do,
  I decided to do this one: going

Decide that can also be reduced to *decide to*:

I decided that I was sick. ⇒
  I decided to think that I was sick.

Verbs of desire behave in the same way as verbs of intention:

He desired/wished/longed to go.
He was eager/anxious/crazy/aching/yearning/delirious to go.

The difference between these two subtypes (volition and desire) has to do with additional components, such as 'he thought: I can cause it' (for intention etc.) but the basic semantic structure proposed here for the TO complement applies to both subtypes. For example (roughly):

I long to go. ⇒
  I think this: I want this: I will go
  I imagine this: it will happen because of that
  I know this: I cannot cause it
  I feel something because of that

Dixon (1984b:592) has suggested that a TO complement "can only be used if the subject wants the activity to take place; if it is something that is not (or not yet) wanted then only an ING clause will be permitted. Compare [Dixon's numbers]:

(29) I planned/hoped/intended for Mary to go.
(30) I deferred/postponed/delayed Mary's going."

But the very fact that one can say:

I don't want to do it.

seems to suggest that there is no conflict between 'not wanting' and TO. Consider also the following sentences, which imply that the person spoken of didn't want to do the action indicated in the complement:

He was reluctant to do it.
He hesitated to do it.
He was afraid to do it.
He was loath to do it.

On the other hand, all such sentences imply also that the speaker is considering the possibility of doing the action in question. The reluctance, fear or even loathing seem to constitute a reaction to the hypothetical intention of performing that action. Consequently, the component: 'X thought this: I want this: I will do Z' is not incompatible with such sentences.

What is crucial, then, is not so much a person's wanting or not wanting to do something, as the presence or absence of a thought about wanting. I think it is precisely this hypothetical intention, this thought about wanting, which explains contrasts such as the following one (Wood 1956:15):

a. She was afraid to wake her mistress up.
b. She was afraid of waking her mistress up.

In (a), the maid thinks that she should wake her mistress up, and a tentative intention to do so is formed in her head; and this tentative intention is accompanied by fear. In (b), the idea of deliberately waking her mistress up never enters the maid's head.

She was afraid to wake her mistress up. ⇒
  when she thought this: I want this: I will do it
  she felt afraid
She was afraid of waking her mistress up. ⇒
  when she thought this:
    this might happen because of what I am doing
  she felt afraid

Exactly the same explanation applies to the following pair (Wood 1956:15):

a. I am afraid to cross the road when it is in this icy condition.
b. I am afraid of falling down and breaking a limb.

When one is *afraid to* do something, the fear is triggered by the thought: 'I want this: I will do it'. When one is *afraid not to* do something, the fear is triggered by the thought 'I want this: I will not do it'. But if a verb doesn't

contain such a component, a component of the form 'I think this: I want this: I will ...' and is not compatible with it, it cannot take a TO complement.

If verbs such as *refrain*, *avoid* or *abstain* do not take TO it is not because they are incompatible with wanting. One can say, for example:

I wanted to talk to Mary but I refrained from doing so
(*to do it) because I thought I shouldn't.

X wanted to dance with Y but he avoided doing so
(*to do so) because he was afraid of Z.

As these examples show, both *refrain* and *avoid* are compatible with wanting. In fact, *refrain* presupposes wanting: first, one has an impulse to do something, but then one suppresses that impulse, and one doesn't act upon it. The word "impulse" is important here because while *refrain* does presuppose wanting, it doesn't presuppose a conscious intention. For example, one can say *He refrained from sneezing,* whereas one would hardly say *He refused/decided to sneeze.* The 'script' for *refraining* (cf. Schank and Abelson 1977) starts with wanting, but at the end there is no expectation that the subject will either think or do something. The 'script' for *avoiding* doesn't necessarily start with the subject's wanting but, like that of *refrain*, it includes a cautious thought going through the subject's mind ('if I do this, something "bad" could happen'). At the end of this 'script', too, there is no expectation that in the future the speaker will do or think anything in particular. The following formulae show this:

X refrained from doing Z. ⇒
  X wanted this: Z will happen
  after that, X thought this:
    if I do Z something bad would (could) happen
  after that, X thought this: I don't want this: I will do Z
  because of this, X didn't do Z

X avoided doing Z. ⇒
  X thought this:
    if I don't do something, Z could happen
    I don't want this (Z)
  X did something because of that
  Z didn't happen because of that

Thus, while the intuition that a TO complement is linked with 'wanting' seems basically correct, the idea that TO is incompatible with 'not

wanting' does not. The idea of future expectation is as important to TO as the idea of wanting. 'Wanting' gives rise to an expectation that something will happen because of that, and this is why TO is the normal complement in the context of wanting. When, however, a verb presents a 'script' in the course of which an initial intention is 'removed' from a person's head, then this verb doesn't carry with it any expectations as to what might happen next. Naturally enough, verbs of this kind tend to take *from* + ING and cannot take TO. (Cf. verbs such as *prevent*, *dissuade* or *discourage*, which will be discussed in 2.5 and 2.6 below.) The image of an intention being 're-moved FROM' a person's mind, versus the image of an intention 'pointing TO' a future goal explains to some extent the extension in the use of *from* and *to* from physical to abstract relations.

2.4 *Verbs of attempting*

Clearly, the postulated semantic structure applies also to verbs of 'attempting':

He tried/attempted/strove/managed/failed/endeavoured to go.

For example:

He failed to hit the target. ⇒
he thought this: I want this: I will hit the target
he did something because of that
one could think this at that time:
it will happen because of that
it didn't happen

As for the quasi-synonyms *manage* and *succeed* we can now say that if only one of them, *manage*, takes TO, it is because only *manage* fits the postulated semantic structure. Compare, for example, the following contrasts:

a. Most people failed to hit the target, but Mary, who was hardly looking, accidentally succeeded in hitting it.
b. *Most people failed to hit the target, but Mary, who was hardly looking, accidentally managed to hit it.
a. She applied for the job, and she managed to get it (isn't she crafty).
b. She applied for the job, and she succeeded in getting it (isn't she lucky).

Manage refers to the interested person's action, and it implies a causal relation between the action and the desired outcome; this is why if this outcome is achieved it can be attributed to the agent's craftiness or skill. *Succeed* refers to an event and it doesn't imply a causal relation between the desired outcome and the interested person's action (this outcome may be due to luck). Furthermore, *manage* implies an effort and an intention aimed at the desired outcome (one cannot *manage* to do something by accident, without really trying); and this effort creates a natural expectation that the desired outcome might indeed eventuate. In the case of *succeed* the desired outcome can be due to accident and luck; and there is no reason to expect that it will eventuate. Hence the following contrasts:

How to succeed (*manage) in business without really trying.
Can you manage to walk on these stilts?
?Can you succeed in walking on these stilts?

The noun *manager*, which is derived from a different but related sense of the word *manage*, points in the same direction. Bank managers are called 'bank managers', not 'bank succeeders', because they are expected to think, to act according to their thoughts, and to be responsible for the outcome. But success can come anyone's way without their thinking, without their trying, and without their being responsible for the course of events.

To capture these differences between *manage* and *succeed* the following semantic formulae can be proposed:

X managed to do Z. ⇒
one could think this: X cannot do Z
X thought this: I want this: I will do Z
X did some things because of that
one could think at that time: Z will happen because of that
Z happened because of that
X succeeded in doing Z. ⇒
X wanted this: Z will happen
X did something because of that
one couldn't know this: Z will happen because of that
Z happened

These formulae explain why *manage* can take a TO complement whereas *succeed* cannot: the configuration 'X thought this: I want this: I will do Z' is included in the explication of *manage* but not in the explication of *succeed*.

2.5 *Speech act verbs*

2.5.1 *Intransitive speech act verbs*

Naturally enough, speech act verbs which express intention follow the same pattern as mental verbs of intention:

He vowed/agreed/consented to go.

It should be added that speech act verbs — like the corresponding mental verbs — can take a TO complement not only in cases of positive volition but also in cases of negative volition. For example, one can say:

He refused/declined to go.

implying of course that he didn't want to go, not that he did want to go. On the other hand, both *refusing* and *declining* constitute the speaker's responses to the thought that he should decide and intend to do something. The speaker considers the possibility of forming such an intention, and rejects this.

I refuse to do Z (go) ⇒
I know this: someone wants this:
I will think this: 'I want this: I will do Z (go)'
and I will do it because of that
I know this: one could think this of me:
I will do it because of that
I say: I don't want it
I will not do it

It is instructive to note that 'negative' acts such as refusing or declining can be actually performed with utterances containing a TO complement: *I am not going to do it*, just as acts of positive intention can: *I intend to do it, I promise to do it.* This TO indicates that at the end of the relevant 'script' there is a future oriented thought in the speaker's mind: 'I will (not) do it'.

2.5.2 *Transitive speech act verbs*

If we turn now to transitive speech acts of volition such as *order*, *ask* or *beg*, their analysis may appear to be perfectly straightforward in the light of the foregoing discussion. Of course the person who says:

I order/ask/beg/implore you to do Z.

is not considering his own future action, but he IS considering a future

action of the addressee. Apparently, then, all that is needed is an expansion of the proposed semantic formula along the following lines:

I promise to do it. ⇒
  I think this: I want this: I will do it
  I say: I will do it
I order/beg you to do it. ⇒
  I think this: I want this: you will do it
  I say: I want this: you will do it

I think that this analysis is essentially correct. I would not, however, wish to maintain that it applies to all transitive speech act verbs which take the TO complement. Consider, for example, verbs such as *remind, advise* or *warn*. If I say:

I remind you to take your medicines.
I advise you to appeal against this decision.

do I wish to imply that I WANT you to do these things? You have asked me to remind you to do something that you, not I, want to be done; and you have asked me to advise you what you, not I, should aim at. What I am referring to, then, is your own decision, your own intention, rather than my own.

It would be incorrect, therefore, to say that the syntactic pattern:

X V_{speech}-ed Y to do Z

always implies that X said to Y 'I want this: you will do Z'. On the other hand, the postulated semantic invariant of the TO complement does seem to apply to all speech act verbs which take this complement. For example, if I *remind* you to do something I do imply that I want you to think 'I want this: I will do Z'. If I *advise* you to do Z I imply that I expect you to think 'I want this: I will do Z'. If I *allow* you to do Z I imply that I know what you are thinking ('I want this: I will do Z').

In fact, even if I *order* or *beg* you to do something I am not only expressing my own wanting that you should do it, but I am also referring to an intention in your own mind. This seems to be one crucial difference between *ordering* someone to do something (with a TO complement) and *making* them do it (without a TO complement): that *ordering*, just like *begging*, *reminding* or *allowing*, does appeal to the addressee's thoughts and will.

a. X ordered (begged, etc.) Y to do Z. ⇒
X said this to Y:
I want this: you will do Z
I say this because I want this:
you will think this: 'I will do Z'
you will do it because of that
one could think at that time:
because of this, Y will think this: 'I will do Z'

b. X reminded (advised, etc.) Y to do Z. ⇒
X said this to Y:
you should do Z
I say this because I want this:
you will think this: 'I will do Z'
one could think this at that time:
because of this, Y will think this: I will do Z

c. X permitted (allowed, etc.) Y to do Z. ⇒
X said this to Y:
I know this: you want this: you will do Z
I say this: I don't say 'I don't want this'
I say this because I want this: you will think this:
'I can do Z'
one could think at that time:
because of this, Y will do it

Looking for a set of semantic components which could be viewed as an invariant of the whole pattern we could propose the following:

X V_{speech}-(ed) Y to do Z ⇒
X said something to Y
one could think this at that time:
because of this, Y will think this: 'I will do Z'
someone wants this

Let us turn now to the question of positive and negative intention with respect to transitive speech act verbs. Why can one say, for example:

X persuaded/encouraged Y to do Z.
X persuaded Y not to do Z.
X forbade Y to do Z.

but not:

*X dissuaded/discouraged Y to do Z?

It must be acknowledged that *dissuade* and *discourage*, too, refer to a thought in the addressee's mind: 'I want this: I will do Z'; a thought which the speaker is seeking to remove. To that extent, they seem to be similar to *forbid* — and yet *forbid* can take a TO complement whereas *dissuade* and *discourage* cannot. Why?

Let us start by considering the difference between *dissuade from* and *persuade not to*. In both cases it is assumed that the addressee intends to do something, and, loosely speaking, one might say that in both cases the speaker is trying to remove that intention from the addressee's mind. Speaking more precisely, however, *persuade not to* implies that the speaker is trying to implant a different intention in the addressee's mind, namely an intention not to do something. Thus:

X dissuaded Y from doing Z. ⇒
  Y thought this: 'I want this: I will do Z'
  after that, X said this to Y:
    I know this: you think this: 'I will do Z'
    I say: this is not a good idea (not a good thing)
    I say this because I want this: you will not think this
  because of this, Y did not think this after that
X persuaded Y not to do Z. ⇒
  X said this to Y:
    I think this: you (might) think this:
      'I want this: I will do Z'
    I say: you should not do it
    I say this because I want this: you will think this:
      'I want this: I will not do Z'
  one could think at that time:
    because of this, Y will think this after now
      ('I want this: I will not do Z')
  because of this, Y thought this

The differences between the two variants can be spelled out as follows. (1) In the case of *dissuade*, the speaker knows that the addressee has formed an intention to do something; in the case of *persuade not to*, the speaker merely anticipates (imagines, regards as possible) an intention in the addressee's mind. (2) In the case of *dissuade*, the speaker is trying to 'remove' the intention from the addressee's mind; in the case of *persuade*

not to the speaker is trying to 'implant' an intention into the addressee's mind (an intention NOT to do something). (3) In the case of *dissuade*, the result is that 'nothing happens' (i.e. the addressee doesn't do anything); in the case of *persuade not to* the result is that something does happen: namely, an idea is formed in the addressee's mind; and an expectation arises as to what is going to happen afterwards.

It is interesting to note that *persuade not to* is similar in all these respects to *forbid* which — not surprisingly — also takes TO:

X forbade Y to do Z. ⇒
X said this to Y:
I think this: you (might) think this: 'I want this:
I will do Z'
I say: I don't want this
I say this because I want this: you will think this:
'I cannot do Z'
one could think at that time:
because of this, Y will think this ('I cannot do Z')

(One difference is that *persuade* implies success on the speaker's part: the desired idea gets indeed implanted in the addresse's mind, whereas *forbid* has no such implication of success; cf. Wierzbicka 1987b.)

On the other hand, *dissuade* is similar in its main features to *prevent,* which — not surprisingly — also takes *from ING* rather than TO:

X prevented Y from doing Z. ⇒
one could think this: Y will do Z (OR: Z will happen to Y)
after that, X did something to Y
because of this, Y didn't do Z (OR: Z didn't happen to Y)

The differences between the two explications (of *dissuade* and of *prevent*) stem from the fact that *dissuade* is a speech act verb, concerned with communication (i.e. with saying and thinking), whereas *prevent* is not a speech act verb.

2.6 *Interactional verbs*

As mentioned earlier, Kiparsky and Kiparsky (1971:357) have asserted that "After prepositions, infinitives are automatically converted to gerunds, e.g. *I decided to go* vs. *I decided on going;* or *I forced John to do it* vs. *I forced John into doing it.* These infinitival gerunds should not be confused

with the factive gerund, with which they have in common nothing but their surface form."

This account fails to explain, however, why some infinitives can be "automatically converted" to gerunds, whereas others cannot. Why can't one say, for example,

*I encouraged/induced John into going?

Furthermore, the analysis offered by the Kiparskys fails to account for the differences in meaning between the infinitival and the gerundive versions.

Let us first consider some verbs which allow the gerund with the preposition *into* and which do not take a TO complement:

a. X talked/tricked/manoeuvred/pushed Y into doing Z.
b. *X talked/tricked/manoeuvred/pushed Y to do Z.

Variant (a) suggests, it seems to me, that X wanted Y to do Z, and that Y did Z not because of any conscious intention on Y's part but as a result of X's 'machinations'. Naturally, verbs such as *trick* and *manœuvre* fit this pattern to perfection, but other verbs are also possible if their meaning is not incompatible with the meaning attributed here to the pattern itself. Verbs such as *induce* or *encourage* are not compatible with this pattern because they do imply an appeal to the target person's thoughts and intentions. On the other hand, verbs such as *trick* or *manœuvre* cannot take the TO complement because they are incompatible with the meaning of this complement — if we portray this meaning with reference to the target person's thoughts and intentions.

X V-ed Y into doing Z. ⇒
  X thought this: I want this: Y will do Z
  X did something because of that
  Y did Z because of that (i.e. because of what X did)
  Y did it not because Y wanted it
X V-ed Y to do Z. ⇒
  X said (did) something to Y
  one could think this because of that:
    Y will think this because of that:
      'I will/can/cannot do Z'

In the case of *force* both patterns are available, because the meaning of the verb is compatible with them both:

X forced Y to do Z. ⇒
Y thought this: I don't want this: I will do Z
X did something to Y
one could think at that time: Y will do Z because of that
Y thought this because of that: I cannot not do Z
Y did Z because of that
X forced Y into doing Z. ⇒
Y thought this: I don't want this: I will do Z
X did something to Y
Y did Z because of that
Y did it not because Y wanted it

(I have refrained from mentioning in these formulae X's, i.e. the causer's, thoughts and intentions, because X can refer here to an inanimate force.)

Two other interactional verbs, *induce* and *get* (transitive), appeal necessarily to the target person's thoughts and intentions, and they both take TO. The main difference between these two verbs consists in this: in both *get* and *induce* the causer creates an intention, on the part of the causee, to do what the causer wants the causee to do; but in *induce*, the causer is also anticipating resistance on the part of the causee and is trying to overcome this resistance. The following semantic formulae portray this relationship:

X got Y to do Z. ⇒
X thought this: I want this: Y will do Z
X did something to Y because of that
because of this, Y thought this: I want this: I will do Z
one could think this: Y will do Z because of that
Y did Z because of that
X induced Y to do Z. ⇒
X thought this: I want this: Y will do Z
X knew this: Y will think this: I don't want this
X did something to Y because of that
because of this, Y thought this: I want this: I will do Z
one could think this: Y will do Z because of that
Y did Z because of that

On the other hand, *make*, which might be expected to behave rather like *force*, takes neither TO nor INTO. On reflection, however, this behaviour of *make* is not unpredictable, because, unlike *force*, *make* refers neither to

the causee's thoughts and intentions, nor to anybody else's expectations regarding the causee's future actions.

It is instructive to note, in this respect, the difference between *force* and *make* in the context of inanimate causes:

a. The rain forced me to go inside.
b. The rain made me go inside.

Version (a) implies that the causee didn't want to do Z, but that something happened to him which created an expectation that he would do it, and which indeed produced a thought in the causee's mind: 'I cannot not do it' — a thought followed by an act. Version (b) doesn't imply that the causee thought 'I cannot not do Z'; it simply implies that the causee did Z and that he 'didn't want it'. (Cf. Chappell 1978.)

X made Y do Z. ⇒
X did something (or: X happened)
Y did Z because of that
Y didn't want it

Finally, it should be noted that the passive causative with *make* does take TO (cf. Palmer 1965:169):

Mary was made to wash the dishes.
*Mary was made wash the dishes.

and also, that its range of use, and range of interpretations, is different from that of the corresponding active:

The hairspray made Mary cough.
??Mary was made to cough by the hairspray.

Similar asymmetries affect other causative constructions:

John got Mary to wash the dishes.
??Mary was got (by John) to wash the dishes.
John had his secretary type his application.
*John's secretary was had (by him) (to) type his application.
Mary's father let her answer the phone.
*Mary was let answer the phone by her father.
Mary helped John do his homework.
*John was helped do his homework by Mary.

Furthermore, similar asymmetries hold for non-causative constructions with an infinitive complement without TO (cf. Palmer 1965:169-170):

John watched Mary wash the dishes.
*Mary was watched by John wash the dishes.
John saw Mary wink.
*Mary was seen wink by John.
Have you ever known them come on time?
Have they ever been known to come on time?
*Have they ever been known come on time?

The fact that constructions of this kind (with a bare infinitive) cannot be passivized seems to be due to their split transitivity, with both the nominal object and the complement clause sharing in the status of the direct object and neither of them fully achieving that status (cf. Kirsner and Thompson 1976:211). In fact, it has been argued that in constructions of this kind the complement clause is the direct object (cf. Palmer 1965:170). Thus, Palmer proposes the following analysis:

I saw him come up the street. ⇒
I saw + he came up the street.

Personally, I find a 'split transitivity' approach more convincing (see Wierzbicka 1980b:112-113). Palmer's analysis seems to me more applicable to sentences such as the following one:

He let go the rope.

What matters most in the present context, however, is that if the passive *make* construction behaves differently from the active one this is not due to an 'accident' of syntax, but to the fact that the two *make* constructions are in fact different constructions, with different kinds of structure and different kinds of semantic interpretations (see below, section 3.2).

3. TO and opinion

3.1 *Opinion predicates and 'subject-to-object raising'*

Sentences in which a TO complement expresses something like an opinion are usually regarded as semantically and syntactically unrelated to those in which it expresses something wanted. For example, Dixon (1984b:589-590) writes: "We (...) need to recognize at least two varieties of TO complement construction. The first kind of TO complement clause refers to some as yet unrealised activity: the TO indicates the desirability,

necessity or inevitability of its taking place. (...) There is another kind of TO complement that is semantically quite different and involves a judgment concerning the subject of the TO clause." Dixon illustrates what he calls TO_2 with the following examples:

I know that Mary hit John/I know Mary to have hit John.
I know that Mary is clever/I know Mary to be clever.

and he notes that "TO_2 complements are rather limited; they are always most felicitous when the complement clause verb is *be*."

I agree that the two complement constructions in question are different in both their syntax and their meaning. I would like, however, to raise the following questions: what exactly IS the meaning of a sentence such as *I know Mary to be clever*? How does it differ in meaning from *I know that Mary is clever*? Why are TO_2 complements so limited? And is there no semantic connection at all between TO_2 and TO_1?

My hypothesis is that the two types are in fact semantically related, and that if we elucidate the semantics of TO_2 we may obtain important evidence with respect to the semantics of TO_1.

To begin with, it should be recalled that the TO of opinion occurs most commonly (and for some verbs, exclusively) in the passive form:

She is thought/believed/said/alleged/reported/rumoured
to be dishonest.

In sentences of this kind the speaker is clearly distancing himself from other people's opinion. (Cf. Lysvåg 1975). Their meaning can, therefore, be represented as follows:

Mary is said (thought, believed etc.) to be dishonest. ⇒
people say (think, believe etc.) this of Mary:
she is dishonest
I don't (want to) say: I say this
I say: people say this

(The formulae 'I don't say', 'I don't want to say', and 'I don't want this: I will say' will be treated here as equivalent.) This use of TO is reminiscent of certain uses of the subjunctive in languages such as Latin, where the use of the subjunctive with *quod* ('that') "indicates that the speaker himself is not taking responsibility for the truth of the assertion" (R. Lakoff 1968:215).

The same applies to German sentences such as the following ones, which were discussed by the Kiparskys (1971:359):

a. *Er behauptet, dass die Erde flach ist.*
'He claims that the Earth is (Indicative) flat.'
b. *Er behauptet, dass die Erde flach sei.*
'He asserts that the Earth is (Subjunctive) flat.'

In essence, the difference in meaning between the two sentences can be represented as follows:

a. he says this: the Earth is flat
b. he says this: the Earth is flat
I don't want to say: I say this

The main difference between the English and the German pattern is that in German one can distance oneself in this way from other people's words, or from another person's words, whereas in English one can only distance oneself from what 'people' (in general) say, not from what another person says:

English:
people say this ...
I don't want to say: I say this
I say: people say this
German:
X says this ...
I don't want to say: I say this
I say: X says this

(For further discussion of the semantics of the subjunctive see section 9 below.)

I suggest that it is this distancing function inherent in the English 'passive of opinion' which explains the lesser acceptability, or the non-acceptability, of the corresponding active constructions:

Mary is rumoured/said to be a Mormon.
*They rumour/say Mary to be a Mormon.
Mary is alleged to be a Mormon.
?They/I allege Mary to be a Mormon.

This lack of symmetry between the passive and the active shows that the 'passive of opinion' constitutes a construction in its own right, with its own peculiar meaning. Even in sentences with *know*, where the speaker cannot express any uncertainty about the thing known, there is still an element of this distancing function:

Mary is known to be dishonest. ⇒
people know this of Mary: she is dishonest
I don't want to say: I say this
I say: people say this

In a sense, if we say that somebody "is known to be dishonest" we cannot completely disassociate ourselves from the assertion in question. One cannot say, for example:

*She is known to be dishonest, but I don't know if this is true.

Nonetheless, the passive turn of phrase allows us to de-emphasize our personal responsibility for the assertion: the formula 'I don't want to say: I say this; I say: people say this' allows us to capture the speaker's attitude.

At first blush, this interpretation appears to make it impossible for us to relate passive sentences such as *She is known/believed to be dishonest* with active first-person sentences such as *I know her to be dishonest.* Surely, in the first-person opinion sentences the speaker cannot possibly be de-emphasizing his own responsibility for the assertion?

In trying to find a solution to this difficulty it will be helpful to consider the following contrasts:

a. I believe/judge Mary to be dishonest.
b. *I say Mary to be dishonest.
c. Mary is said to be dishonest.

Remarkably, the verb *say* (unlike *think* or *believe*) can be used in the passive impersonal opinion sentences such as (c), but not in the active personal ones such as (b). I suggest that this is not an accident. The pattern (c) allows the speaker to diminish his commitment to what is being said ('people say this; I don't want to say: I think this'). Despite the appearances, pattern (a) allows the speaker to achieve something similar. The hidden message: 'I believe/think this; I don't say: people say this' is analogous to hedges such as *in my view, this is only my personal opinion, I may be wrong but that's what I think, subjectively speaking,* and so on. Pattern (b) is the only one which would not allow the speaker to diminish his responsibility for what is being said, because it would be self-contradictory to say in one breath:

I say this; I don't (want to) say: I think this

and this is the only pattern which is not acceptable.

This analysis makes it possible for us, I think, to demonstrate a seman-

tic link between the two accceptable patterns (a) and (c), and to clarify its nature.

Mary is believed to be dishonest. ⇒
people believe this of Mary: she is dishonest
I don't want to say: I say this
I say: people say this

I believe Mary to be dishonest. ⇒
I believe this of Mary: she is dishonest
I don't want to say: people say this
I don't want to say: I know this
I say: I believe this

The passive construction refers to other people's opinion, which the speaker wishes to disassociate himself from; the active construction, on the contrary, refers to the speaker's private thoughts.

An additional advantage of the analysis proposed here is that it offers a solution to an otherwise inexplicable puzzle noted by the Kiparskys (1971): why are first-person sentences with the verb *know* acceptable at all? Semantically, sentences such as:

I know Mary to be dishonest.

are "factive" — and yet, as the following examples show, "only non-factive predicates allow the accusative and infinitive construction" (Kiparsky and Kiparsky 1971:348):

I believe Mary to have been the one who did it.
He fancies himself to be an expert in pottery.
I supposed there to have been a mistake somewhere.
*I resent Mary to have been the one who did it.
*He comprehends himself to be an expert in pottery.

The Kiparskys deal with this puzzle by saying that *know* is exceptional in being semantically factive and syntactically non-factive. But this is a contradiction in terms, which undermines the whole idea that semantic factors (such as factivity) "account for the complement system of English, and other languages as well" (1971:365).

To be taken seriously, linguistic theories have to be verifiable. When we come across counter-examples we should not dismiss them as insignificant 'exceptions'. Rather, we should receive them as evidence that our theories have to be revised. If they cannot be revised in such a way as to be

able to accommodate the 'counter-examples', they should be rejected, and the search for solutions should be recommenced.

Trying to understand why *know*, which is semantically factive, can occur in a syntactic pattern which implies a subjective assessment rather than objective knowledge, it will be useful to take as our starting point Dixon's (1984b:590) observation that sentences such as *I know Mary to be dishonest* express a judgement (rather than a statement of fact). For other 'cognitives' this fact was established many years ago by Borkin (1973) and Riddle (1975). For example, as pointed out by Borkin (1973:45-46), sentences such as

I found Harry (to be) terribly amusing
(although others think he's a bore).
I find this chair comfortable.

imply personal and experiential knowledge. One can hardly say:

*I bet that if you look in the files, you'll find her Mexican.

although there is nothing wrong with the corresponding THAT sentence:

I bet that if you look in the files, you'll find that she is Mexican.

I believe, however, that observations of this kind can be extended to the verb *know* itself. Sentences such as *I know X (to be) Y,* too, express judgment rather than knowledge, and if they do express knowledge rather than judgement, they have to express 'personal, experiential knowledge' rather than 'public knowledge'. Compare, for example, the following two sentences:

a. I know Mary to be a Mormon.
b. ?I know Lisbon to be the capital of Portugal.

Sentence (a) does not exactly diminish the speaker's responsibility for the assertion, but it makes this assertion personal, and therefore disputable; by contrast, sentence (b) says something that is indisputable, public knowledge — and it is not felicitous. The conclusion must be that the variant (a) implies subjectivity, possibility of doubt, and a non-factual perspective: that is, precisely the kind of perspective characteristic of this syntactic pattern as a whole. If the meaning of this pattern is correctly stated then *know* ceases to be an exception to the over-all generalization, and provides further evidence for its validity.

I know Mary to be a Mormon. ⇒
I know this of Mary: she is a Mormon
I don't want to say: people say this
I say: I know this

It is interesting to note that the distinction between 'private knowledge' and 'public knowledge' is largely restricted to the contrast between 'people' and 'I'. Sentences such as:

?John knows Mary to be a Mormon.

are much less natural than any of the following:

I know Mary to be a Mormon.
Mary is known to be a Mormon.
John believes Mary to be a Mormon.

This is natural, because if I say "John knows *p*" then I, too, know that *p*, so John's knowledge is no longer purely personal knowledge. It is more natural, therefore, to say:

John knows that Mary is a Mormon.

However, there is at least one verb in English for which the distancing TO complement is allowed with the third person and not with the first one. This verb is *presume*, which differs "mysteriously" from its near-synonym *assume* in being able to take a TO complement (in the active construction) at all:

Dr Livingstone, I presume/I assume.
He presumes (*assumes) to know everything.
*I presume to know everything.

The following explications explain, I think, these puzzling facts:

He presumes to know everything. ⇒
he thinks this: 'I know everything'
I don't want to say: people say this
I don't want to say: I think this
I say: he thinks this

*I presume to know everything. ⇒
I think this: I know everything
I don't want to say: people say this
I don't want to say: I think this
I say: I think this

One can distance oneself from someone else's opinion, but not from one's own. It is self-contradictory to express an opinion and to deny it at the same time. The contrast between the unacceptable affirmative phrase **I presume to...* and the acceptable negative one *I don't presume to...* is also revealing, since the negation removes the contradiction.

There are other puzzles involved with 'subject–to–object raising' which the present analysis solves. For example, why is it that, as Dixon (1984b: 589) puts it, sentences of this kind "are always most felicitous when the complement clause verb is *be*", or as Quirk et al. (1985:1204) put it, "the nonfinite clause normally contains the verb *be* or some other verb of stative meaning"? John Payne (in a seminar given at the Australian National University, 29 July 1987) drew attention to the fact that no similar restriction holds for the corresponding passive sentences:

a. I believe Mary to be a good driver.
b. I believe Mary to drive well. (worse than (a))
a. Mary is believed to be a good driver.
b. Mary is believed to drive well. (as good as (a))

Why is it that the active 'raised' constructions favour stative verbs, whereas their passive counterparts are equally felicitous with stative and active verbs?

From the present analysis of 'raised' constructions, the following answer emerges. The active 'raised' constructions of the kind under discussion encode, roughly speaking, the speaker's opinion about someone or something ('X thinks this about Y'), and opinion in general favours evaluative (i.e. stative) predicates over factual ones, which are likely to refer to actions and events:

– What does he think of Mary?
– That she is clever/that she is dishonest/that she is a good driver.
– ?That she studies law/?that she resigned from her job.

The passive 'raised' constructions of the kind under discussion embody a different meaning: not what the speaker thinks of someone or something but what other people say about that person or thing; and 'saying something of someone' in general differs from 'thinking something of someone' in not favouring evaluative (i.e. stative) predicates:

– What did he say of Mary?
– That she studies law/that she resigned from her job.

Furthermore, the idea that the 'raised' constructions under discussion imply 'thinking' (something of someone/something) and 'saying' (something of someone/something) explains the very fact of 'raising', that is, the fact that the noun phrase which would seem to be the subject of the complement clause behaves instead like the object of the main clause. Under the analysis proposed here, the structural link between the main verb and its 'surface object' begins to make sense, since it is shown to reflect a semantic link between a predicate of thinking or saying and the entity thought about or spoken about.

3.2 *'TO BE deletion'*

Let us consider in turn those 'idiosyncratic' and 'exceptional' verbs (cf. Stockwell, Schachter and Partee 1973:578) which not only allow a 'subject–to–object raising' but which also allow or even require a simultaneous 'TO-BE deletion':

I consider him (to be) intelligent.
They elected him president.

When one compares such sentences with sentences where TO BE "is not deletable", such as:

*I want him president.
*I expect him intelligent.

the logic behind this apparent 'idiosyncrasy' becomes evident. Verbs such as *want* or *expect* are clearly future-oriented, and this is why they require the presence of TO, whereas verbs such as *consider* or *elect* either can or have to be interpreted as referring exclusively to the present, and this is why they don't require, or don't allow, TO. (For a different, but not incompatible interpretation see Borkin 1973.) It is particularly illuminating to note that close synonyms such as *think* and *believe* or *elect* and *choose*, can differ in this respect from one another:

They chose (? elected) him to be their president.
The very last time that he refused to gratify my idle inclinations,
I felt so disappointed, fool that I was! and thought (?believed)
him so severe. (Jane Welsh, in Carlyle 1908:253)

In the pair of quasi-synonyms *elect* and *choose*, *choose* emphasizes the agent's wanting (e.g. that's why people normally *choose,* rather than *elect*

or *select,* their spouses; cf. this volume, chap. 6, section 4); hence the presence of TO. Roughly:

They chose him to be their president. ⇒
they wanted this:
he, not someone else, will be their president
he became their president because of that

A number of verbs such as, for example, *appoint*, may or may not take TO, depending on whether the speaker wants to emphasize the intention or the result:

They appointed him president. ⇒
they said: he will be president
it happened because of that
They appointed him to be president. ⇒
they thought this: we want this: he will be president
they said: he will be president
it happened because of that

On the other hand, verbs such as *make*, which do not imply any intentionality whatsoever, occur always (in the construction under discussion) without TO:

She made him a laughing-stock.
(*She made him to be a laughing-stock.) ⇒
she did something to him
he became a laughing-stock because of that

We should also recall sentences with perception verbs, such as:

Mary saw John (*to) wink.

which were mentioned in section 2.6. In sentences of this kind, there is no wanting, and no future orientation, and naturally, TO is not allowed.

Turning now to epistemological verbs such as *believe*, *think* and *consider*, we can point out that *believe* refers to knowledge, whereas *think* and *consider* don't, and, moreover, that knowing appears in the explication of *believe* in the future-oriented frame 'I don't want to say':

I believe that she is a Mormon (she is dishonest). ⇒
I think this: she is a Mormon (she is dishonest)
I don't want to say: I know this

On the other hand, when Jane Welsh says that she "thought her father

severe" she is not referring to something that someone might know and that she herself doesn't know. Rather, she is expressing her personal opinion, based on her past experience, not on conjectures relating to some objective, knowable, truth. For this reason, I suggest, the word *think* in her sentence has no TO and could not be replaced with *believe*. (Cf. Borkin 1973.)

I thought him severe. ⇒
I thought this of him: he is severe

In many contexts, verbs such as *think*, *consider* and *believe* can be substituted for one another without any tangible difference in meaning. In some contexts, however, the subtle semantic differences between them do become apparent and may even be reflected in their syntax.

As for sentences with the verb *know*, such as:

> I knew him to be a stubborn hot-headed blockhead. (Jane Welsh, in Carlyle 1908:60)

the presence of TO can be traced here, too, to wanting:

> I always knew you to be a deceitful person. (Thomas Carlyle, in Carlyle 1908:118) ⇒
> I always knew this of you: you are a deceitful person
> I don't want to say: people said this
> I say: I knew this

I conclude that the alleged 'TO BE deletion' is yet another fiction of a-semantic generative grammar. Fictions of this kind not only fail to explain the facts, but, moreover, they distort those facts. They fail to reveal the beautifully functioning, sensitive, subtle mechanism that the syntactic system of a language really is, and present instead a bizarre, chaotic, 'mindless' collection of arbitrary rules and equally arbitrary exceptions to the rules.

3.3 *Opinion predicates and 'subject-to-subject raising'*

It has often been pointed out that many 'epistemological predicates' can undergo a 'transformation' which is called 'subject-to-subject raising' can which relates sentences such as (a) and (b) below:

a. It is likely (certain) that John will win.
b. John is likely (certain) to win.
a. It seems (appears, happens, turns out) that John is a Mormon.

b. John seems (appears, happens, turns out) to be a Mormon.

Kiparsky and Kiparsky (1971:358) have argued that the transformation in question has a semantic basis and that it is blocked in what they called factive clauses. This explains, in their view, why one cannot say, for example:

*He regrets Bacon to be the real author.

What the Kiparskys couldn't explain is why some non-factive predicates cannot undergo this hypothetical transformation either. Contrasts such as the following ones:

a. He is likely/certain to win
b. *He is probable/possible to win.

were left without any explanation whatsoever and in fact non-factive predicates such as *possible* or *probable* were simply called "exceptions" (1971:346).

But, as pointed out earlier, 'exceptions' of this kind undermine the whole idea that syntactic differences in sentential complementation have a semantic basis and can be explained in semantic terms. Fortunately, there is (I think) a better solution. Predicates such as *probable* or *possible* do not have to be written off as 'exceptions', because their 'idiosyncratic' behaviour can be accounted for in terms of general principles which can be independently established.

To begin with, I would argue that a distinction must be drawn between 'psychological predicates' and 'logical predicates'. Psychological predicates are those which require an individual mind as their point of reference. For example, *know*, *think* and *believe* are clearly in this category: nothing can be 'known', 'thought' or 'believed' unless there is at least one mind which knows, thinks or believes. By contrast, predicates such as *true, false, possible, impossible, probable* or *improbable* do not require individual minds as their reference point. For example, a sentence can be true or false, regardless of people's views, thoughts, ideas, and so on. In saying this, I am not making a philosophical claim but a linguistic observation: predicates such as *know*, *think* or *believe* have two argument slots (X knows/thinks/believes *p*), whereas predicates such as *true* or *false* have only one argument slot ('*p* is true/false').

On the basis of the distinction introduced above, the following generalization can be made: 'subject-raising' applies to psychological predicates; it does not apply to logical predicates. Before I attempt to explain

why this should be so let me first demonstrate the validity of this assertion. First, it must be pointed out that superficially intransitive verbs such as *seem* or *appear* are among the psychological predicates. Sentences such as:

It seems/appears that *p*.

must be interpreted as referring to unspecified persons (minds), not as referring to no persons (minds) at all. A slot for a person/persons is there:

It seems to me (to X) that *p*.

Secondly, it should be realized that quasi-synonyms such as *likely* and *probable* in fact do differ in meaning. *Likely* focusses on people's thoughts, expectations and knowledge, so it has a psychological perspective; by contrast, *probable* focusses on relationships between events, and so it has a logical perspective. In support of this claim, contrasts such as the following can be adduced:

The plot of this play is very improbable/*unlikely.
The theory of probability/*likelihood
We have to calculate the probability/*likelihood of enough members of our association being alive in 2010 to justify the investment.

Similar contrasts exist between the psychological predicate *certain* and the logical predicates *possible* and *impossible*:

It/he is certain that Methuselah did not live to be 900.
It/*he is impossible that Methuselah lived to be 900.

Certainty is always someone's certainty; but possibility, or impossibility, is not someone's possiblity. It is also worth pointing out that 'raised' sentences are usually used to express estimates, such as *John is likely to win*. They are less likely, therefore, to be used in questions or in assertions about the past:

It is certain that Methuselah did not live to be 900.
?Methuselah is certain not to have lived to be 900.
?Is Methuselah certain to have lived to be 900?

Assuming that it has been established that it is only psychological predicates to which 'subject-raising' may apply, the question naturally arises why it should be so. To answer this question, we must look, however briefly and superficially, at the meaning of the individual predicates. When we do this we are bound to discover that the psychological predicates subject to

'subject-raising' form in fact a strikingly uniform class in terms of meaning. They all have to do with conjecturing and finding out, with not knowing and forming hypothetical judgments.

In the case of *seem* and *appear* the tentative judgment is based on the 'appearances'. In the case of *turn out* and *prove (She proved to be dishonest)* it is a matter of finding out (coming to know) something that one wouldn't have expected. In the case of *happen* or *chance (He happened to be there)* it is a matter of finding out facts which one couldn't have expected on the basis of prior knowledge. In the case of *tend (He tends to be late for lectures)* it is matter of justified expectations (which cannot, however, be treated as foreknowledge). And so on. Since I do not have the room here to undertake a detailed semantic analysis of all such predicates, I will only sketch rough semantic formulae for two of them: *likely* and *certain*.

I think John is likely to win.
(I think John is likely to be a Mormon). ⇒
thinking of John I would want ('would like') to say this:
he will win (he is a Mormon)
I don't want to say: I know this
I say this: I think we will (come to) know this

I think John is certain to win.
(I think John is certain to be a Mormon). ⇒
thinking of John I want to say this:
he will win (he is a Mormon)
I don't want to say: I know this
I say: I think this: we will (come to) know this;
I am certain of this

I have deliberately left in these formulae some components with the complement TO ('I wouldn't want to say this', 'I don't want to say this') in order to draw attention to the close links between the uses of TO in epistemological and in volitional contexts. As these formulae suggest, predicates such as *likely* or *certain* too, involve wanting. The etymological link between *deliberate* and *deliberation* highlights the role of wanting and decision-making in opinions, views or assessments. (Compare also the use of *decide* in *I decided that John was a Mormon*, closely related to *I decided to think that John was a Mormon*.) The relationship between TO complements in epistemological and volitional contexts will be discussed in the next section.

3.4 *The relationship between the TO of opinion and the TO of volition*

Let us consider the question of the relation between what Dixon (1984b) calls TO_2 and TO_1 . In *I know Mary to be a Mormon* we find TO_2 and in *I would like to win* we find TO_1. Presumably, the TO of *Mary is certain to win* and of *I am likely to win* would also be categorized as TO_2. But in fact, Dixon's definition of TO_1 ("The first kind of TO complement clause refers to some as yet unrealized activity;" 1984b:589) seems to fit such sentences, too.

I think we should conclude from this that, first, the different complement constructions with TO are semantically interrelated; and, second, that while formulae such as "yet unrealized activity" may provide helpful hints they do not offer a sufficient basis for distinguishing the different semantic types of TO complements from one another.

We will return to the question of the semantic core of TO complements in section 10.4. At this stage, let us note that these elements appear to play a crucial role in this area: 'I think', 'I want', and future 'will'.

4. ING and time

So far, we have focussed on the relationship between volition and the TO complement. We have not explained, however, why *want* and its close relatives should not be able to take the ING complement at all. Why cannot one say, for example:

*I want (desire, wish, hope etc.) going to Paris next year?

At first sight, it might seem that Jespersen's (MEG 5:166) observation quoted earlier is sufficient to explain this: "The infinitive seems more appropriate than the gerund to denote the imaginative (unreal)." What is wanted can be said to be unreal, so it might seem that this is a sufficient reason for *want*'s preference for TO. However, as pointed out earlier, the verb *imagine* itself doesn't take TO, and does take ING (except when it has an overt object):

He imagined being blind (*to be blind).

Consider also the following sentences:

John continued to sing.
Mary managed to solve the problem.

where the 'real' complements do take a TO form. Consequently, the reason for the inability of *want* and related words to take an ING complement must lie elsewhere.

I would suggest that the incompatibility lies in the future orientation of want and in the present (current) orientation of ING. This contrast in temporal orientation can be illustrated with sentences such as the following ones:

I enjoy swimming in this pool (*tomorrow).
I want to swim (*swimming) in this pool tomorrow.

If we enjoy doing something we enjoy it at the very time when we are doing it; but if we want to do something, the doing must be subsequent to the wanting.

In essence, this simple explanation seems to me sufficient, but before it can be adopted we have to establish that ING complements really do imply sameness of time. To establish this is not a simple matter. On the face of it, there are counter-examples galore. There are also a number of theoretical problems which have to be discussed before these counter-examples can be tackled.

4.1 *The gerund and simultaneity*

The idea that the gerund implies simultaneity is, I think, a case of the obvious being consistently overlooked. And yet here, as elsewhere, a greater degree of confidence in purely formal clues than linguists have become accustomed to expect in the post-transformational era, would have provided unmistakable clues to the apparent mystery. Everybody knows, of course, that the gerund of the gerundive complement is formally identical with the present participle — but this formal identity is usually viewed as too obvious and too trivial to even note; much less, to comment on; much less, to investigate as a possible clue to the mysterious distribution of the gerund in complement constructions. (I must note, however, that some writers and grammarians go to the other extreme and simply identify gerunds with participles, extending the term 'participle' to both, e.g. Ross 1972a, Quirk and Greenbaum 1973. It is surprising that these grammarians haven't noticed the similarity between the two categories in their 'sameness of time' component.)

To make up for this oversight, let us consider sentences with participial

clauses such as:

He arrived puffing and panting.
I reached it, standing on the chair.

Commenting on these two sentences, Palmer (1965:177) says this: "Here the *-ing* form obviously modifies the subject of the sentence. Less obvious, however, is the status of:

She sat talking.
We stood talking.

SIT and STAND could be regarded as catenatives on the model of KEEP (and regularly collocated with TALK). The only argument against this is the possibility of:

She sat in the chair talking.
We stood in the street talking."

The crucial points about the sentences in question which Palmer did not spell out, are these:

(1) The participial clause implies simultaneity: he was puffing and panting at the time when he arrived (not before and not after); I reached it while I was standing on the chair (not before and not after); she was talking while sitting in the chair, not before and not after; we were talking while we were standing in the street, not at some other time. We might recall in this connection Jespersen's (MEG 4:91) observation: "In all cases like:

He came, carrying a heavy burden on his back.
He comes, carrying a heavy burden on his back.
He will come, carrying a heavy burden on his back.

we have a vague simultaneity with something else, rather than any definite reference to one particular time." I would add that while TO clauses do not have "any definite reference to one particular time either", they differ from ING forms in implying a 'vague futurity' rather than a 'vague simultaneity' (cf. *She sat talking* vs. *She sat to talk*).

(2) The subject of the participial clause is the same as that of the main clause (it was the person who arrived that was puffing and panting; the reaching and the standing were done by the same person; and so was the talking and the sitting/standing).

(3) The participial construction is closely related to the gerundive con-

struction — so much so that in some cases it is difficult to decide which construction is really involved. *She sat talking* is indeed very closely related to *She kept talking*. In particular, both these sentences — not just the first one — imply the identity of the subject and the identity of the time spoken of. Neither of these two sentences is compatible with the interpretation that the main verb refers to Thursday and the gerund, to Saturday; and neither is compatible with the interpretation that the subject of the main clause refers to Robin whereas that of the subordinate clause, to Hilary.

Can these statements be generalized to all verbal complements with ING, as they can be generalized to all clauses with a present participle? At first sight, it seems quite clear that they cannot. For example, it has often been pointed out that a sentence such as

I like boxing (singing).

can be interpreted as meaning that I like to watch other people boxing, or to listen to other people singing, rather than to indulge in these activities myself. This would seem to demonstrate that the identity of the subject is not required by the gerundive complement. On the other hand, it has also been pointed out that the ING form is sometimes a noun, not a gerund. As Palmer (1965:154) remarks, "There is potential ambiguity in

I like boxing.

This may mean either that I like to box or that I like other people boxing. But the questions are, respectively:

What do you like doing?
What do you like?

In the second meaning, *boxing* is clearly to be treated as a noun, the object of *like*, parallel with *football* and *ice-cream* in:

I like football.
I like ice-cream.

There is an obvious advantage in stating that with the other meaning *boxing* is *not* a noun, *not* the object of *like:* that we have a structure of a different kind."

Other linguists have pointed out that the contrast between nominal and verbal gerundive complements is reflected in their internal structure: nominal gerundive complements have the internal structure of noun phrases whereas verbal gerundive complements have the internal structure of verb

phrases. For example, nominal gerundive complements — in contrast to the verbal ones — are introduced with articles, take preceding adjectival modifiers, can be pluralized, introduce their direct object in a prepositional phrase, and so on (cf. Jespersen MEG 5:89; also Wasow and Roeper 1972:45; Thompson 1973).

a. The reading of the proclamation upset John.
b. Reading the proclamation upset John.

a. The sightings of UFO's make Mary nervous.
b. Sighting UFOs makes Mary nervous.

What is particularly important from our point of view is that nominal gerunds do not imply any sameness of time. For example, if one says:

Mary is studying medieval painting.

then the 'painting' and the 'studying' clearly refer to different times.

If we limit our attention exclusively to verbal gerundive complements, can we maintain the generalization that the identity of subject is always required? And does the identity of subject always imply the identity of time?

According to Thompson (1973) the generalization that gerundive complements require this identity can be maintained with respect to what she calls 'private verbs', such as, above all, mental verbs; but it cannot be maintained with respect to what she calls 'public verbs', such as, above all, 'communication verbs', that is, speech act verbs. For example, sentences such as the following ones clearly do not imply the coreferentiality of the subjects:

The psychiatrist recommended getting away for a week.
Kathy suggested going to the beach.

Thompson points out that causative verbs, too, can take gerundive complements with non-coreferential subjects. For example, the following two sentences are open to such an interpretation:

Cooking breakfast will surprise Mother.
Trapping muskrats bothers Mary (she is circulating a petition to make it illegal).

For reasons of space, I shall not undertake here any detailed discussion of Thompson's 'public predicates', and shall for the time being limit myself largely to investigating the possible links between the identity of subject and the identity of time. Does a sentence such as:

Hal considered becoming a karate instructor.

imply that the considering and the becoming should occur at the same time? Presumably not; presumably, the becoming is seen as subsequent rather than simultaneous to the considering. But if so, then why does the verbal gerundive complement imply simultaneity in sentences such as *I liked talking to him (yesterday)*?

One possibility which suggests itself is that in this case, the simultaneity is implied by the verb itself, rather than by the gerundive complement. In fact, however, *like* (in contrast to *enjoy*) does not always require simultaneity. One can say, for example:

I would like to go to Paris in 1993.

referring to a present attitude to a future action. In this case, however, a TO complement, not an ING complement, is required. It is true that *like* + ING can refer to a subsequent action in the combination *feel like*:

I feel like going for a walk.

But even here, the implied time of the complement clause is 'now'. One could hardly say, unless in jest:

?I feel like going to Paris in 1993.

Moreover, one could hardly say:

?I feel like becoming a karate instructor.

Consider also the two (alleged) senses of *try*:

a. He tried to fry the mushrooms
b. He tried frying the mushrooms.

Clearly, the choice of a gerundive complement forces here an interpretation based on the 'sameness of time' requirement (the trying and the frying had to occur at the same time). By contrast, the TO complement suggests a sequence of times: first the trying and then, if ever, the frying.

Finally, consider the following observations offered by Wood (1956:15). "When *like* and *(do) not like* take the gerund they suggest enjoyment and repugnance respectively. (...) But with the infinitive it [this verb] suggests rather desire, preference or choice, and in the negative reluctance. (...) Thus *I don't like tidying up his study* is a toned down version of *I detest tidying up his study*, but *I don't like to tidy up his study* implies not that it is distasteful to me (I may indeed be anxious to tidy it up)

but that I hesitate to do so since he might be offended or it might not meet with his approval."

Clearly, the TO complement suggests that it is the thought of an intended action which is accompanied by an emotion; whereas the ING complement suggests that the emotion accompanies the action itself.

I don't like (detest) tidying up his study. ⇒
when I am tidying up his study,
I feel this: I don't like it (I detest it)
I don't like (?detest) to tidy up his study. ⇒
when I think this: I want this: I will tidy up his study
I feel this: I don't like it

We are faced, then, with a remarkable paradox: in some contexts, gerundive complements evidently follow participial clauses in implying sameness of both subjects and times; in other contexts, however, they imply an identity of subject without implying an identity of time. Clearly, in trying to solve this paradox we should start by attempting to identify the crucial factors which trigger these different interpretations.

4.2 *Gerunds as noun phrases*

Emonds (1976) has argued that there is a significant syntactic difference between TO complements and ING complements: within the context of the complex sentence, gerundive complements (including those which have an internal structure of verb phrases) behave like any other noun phrases, whereas TO complements on the whole do not behave like noun phrases. For example, TO complements do not occur after prepositions, whereas ING complements do; TO clauses cannot be clefted, whereas gerundive clauses can; TO complements cannot occur in the subject position of embedded clauses, whereas gerundive complements can; and so on. On the basis of this and other similar evidence Emonds argues with some plausibility that from the point of view of their external syntax, gerundive clauses are noun phrases, whereas TO complements are not.

To avoid confusion at this point, it is important to stress that Emonds is talking here about the external syntax of gerundive complements, not about their internal structure. For example, the phrase *sighting UFOs* has the internal structure of a verb phrase (unlike the phrase *the sighting of UFOs*); yet from the point of view of its external syntax the phrase *sighting*

UFOs behaves just like any other noun phrase (it can be clefted, it can take prepositions, and so on). By contrast, a TO complement, such as *to sight a UFO,* does not behave like any other noun phrase. (For further discussion of Emonds' claims see Ney 1981.)

In a later work, Emonds (1985) recognized that his generalization applies only to one class of gerundive complements. For example, he had not considered the use of such complements with aspectual verbs, as in the sentences:

He kept talking.
He went on talking.

where the ING form does not have a clear nominal status (one can't say, for example, **It was talking that he kept*). From our point of view, however, sentences such as these do not present a problem, because they clearly do refer to the same time: if the 'talking' took place on Friday, then the 'keeping' could not have occurred on Thursday. (For further discussion of such sentences see section 5.1 below.)

What we do have to examine now is the behaviour of those (verbal) gerunds which do behave externally like noun phrases.

Approaching the problem from a different angle from Emonds, Menzel (1975) has suggested that verbal gerundive complements (which externally behave like noun phrases) are in fact sentential complements on specific head nouns such as *action, event* or *fact*, whereas TO clauses are sentential noun phrases without any head noun (see also Stockwell, Schachter and Partee 1973). Thus, Menzel (1975:156) argues that "a well-defined subset of infinitival complements describes actions, and that the difference between gerundive and infinitive actions is due to the presence, as opposed to the absence, of the head noun *action*". Contrasts in acceptability such as the following ones:

a. John relished/enjoyed the action of eating the meat.
b. *John wanted/tried the action to eat the meat.

are explained as due to the fact that the gerundive clause always contains a head noun in the underlying structure, whether or not this head noun shows up on the surface. Menzel refers here, rightly, to Lees' (1960:71) observations regarding contrasts such as:

a. His eating vegetables is $\left\{ \begin{array}{l} \text{surprising} \\ \text{*fashionable} \\ \text{*fun} \end{array} \right\}$.

b. For him to eat vegetables is { surprising / *fashionable / *fun }.

c. Eating vegetables is { *surprising / fashionable / fun }.

d. It is { *surprising / fashionable / fun } to eat vegetables.

Following this, Menzel (1975:18) points out that "Since actions but not facts can be 'fun' or 'fashionable', and facts but not actions can be 'surprising', gerundives containing subjects and FOR-TO nominals are factive, while infinitives and subjectless gerunds are actions."

The idea that logical (or semantic) categories such as 'fact', 'action' or 'event' play a crucial role in the syntax of English complementation has also been pursued by a number of philosophers of language, and in particular by Zeno Vendler (1967 and 1972). It is to Menzel's credit that he was able to develop this idea in considerable detail, and to use it (building on Vendler's works) as an efficient analytical tool in analysing a large body of syntactic and semantic data.

Personally, I wouldn't want to commit myself to the methodological framework within which Menzel carried out his analysis, and I regard his 'head nouns' as no more than convenient fictions. I believe, however, that these fictions point to important semantic and syntactic realities, and that they are indeed convenient. Adopting, for the time being, these fictions, I would say that verbal gerundive complements may include in their underlying structure at least five different 'head nouns': fact, action, process, state, and possibility. (It is possible that gerundive complements can also take events, but this matter requires further investigation.) These five different types of verbal gerunds can be illustrated with the following sentences:

Mary enjoyed [the action of] eating the steak.
[The process of] growing old is painful.
John enjoys [the state of] being sick.
Mary regretted [the fact of] quarrelling with Jane.
John considered [the possibility of] locking the door.

It is interesting to compare gerundive complements in this respect with THAT clauses, which prove to be more restricted in their potential for combining with different semantic types:

John believed [the proposition] that Jane died.
Mary regretted [the fact] that Jane died.
[The possibility] that they would come was unlikely.
*Mary enjoyed [the action] that she was eating the steak.
*John relished [the state] that he was sick.
*[The process] that the Germans collapsed was gradual.

The main feature of THAT complements is that they can combine only with 'timeless' semantic types: facts, propositions and possibilities do not have to refer to time at all, and when they do mention time, they present it in a timeless prespective (cf. Vendler 1967:123):

The collapse of the Germans (in 1945) was an event.
The collapse of the Germans (in 1945) is a fact.

By contrast, ING complements range over both temporal (actions, processes, states) and atemporal types (facts, possibilities). One atemporal type that ING complements, interestingly, cannot take is propositions (cf. Kiparsky and Kiparsky 1971:347):

*John believed having offended Mary.
*Mary supposed being helpful.

As for the participial clauses, they, too, can refer to both temporal semantic types such as actions and processes and to (at least some) atemporal types such as facts. Not being in any sense noun phrases they cannot take any 'head nouns' in Menzel's sense, but they can be readily categorized in terms of semantic types of the kind introduced by Vendler:

a. She sat there talking [action].
b. He arrived puffing and panting [processes].
c. Being a Russian [a fact] Mary understood how John felt.
d. Having quarreled with him the day before [a fact], she didn't want to ask for his help.

Having established this, we can qualify Jespersen's suggestion that participial clauses imply 'a vague simultaneity' in the following way: whenever participial clauses refer to temporal semantic types (such as actions and processes) they imply sameness of time; when they refer to facts (a non-temporal category) simultaneity or otherwise is irrelevant to them. For example, in sentence (c) above, being a Russian is not presented as simultaneous with Mary's understanding John; rather, it is presented as a timeless background to it. Similarly, in sentence (d) the quarrel and

the reluctance to ask for help are not presented as simultaneous; but their non-simultaneity is immaterial because the quarrel (including its temporal reference) is presented here as a fact (one might say: an 'eternal fact').

Returning now to gerundive complements we will see at once that they behave in exactly the same way as participial clauses: whenever time is relevant they imply sameness of time. In other words, they imply sameness of time whenever they combine with temporal semantic types such as actions, processes and states; when, however, they combine with atemporal semantic types such as facts and possibilities they are free of the 'sameness of time' constraint, because under those circumstances, time is irrelevant.

This explains why two different times can be referred to in sentences such as (a) and (b) below:

a. I regret [the fact of] quarrelling with Mary last year.
b. Hal considered [the possibility of] becoming a karate instructor.

Sentence (a) refers to a fact, and sentence (b), to a possibility. Consequently, there is no reason to expect that they should be bound by the requirement of sameness of time. When it comes, however, to actions, processes, and states, sameness of time is indeed required — just as it is in analogous participial clauses. Hence the following contrasts between ING complements and TO complements:

In January, John arranged to go to Paris in February.
*In January, John risked/avoided going to Paris in February.
On Friday, Mary decided to practise ice-skating on Saturday.
*On Friday, Mary practised ice-skating on Saturday.

It is interesting to note here that the distinction between temporal and non-temporal gerunds applies regardless of the coreferentiality, or otherwise, of their subjects (in relation to the main clauses). For example, if a doctor *recommends* swimming this obviously doesn't mean that the patient should start swimming right there and then, in the doctor's rooms. Similarly, if a friend *suggests* taking a trip abroad this doesn't mean that the trip should be undertaken on that very day. But then, speech act verbs such as *recommend* or *suggest* refer to some possibilities that the addressee should consider, rather than to some actions that the addressee should perform. Speech act verbs which do refer to the addressee's actions — such as *order* or *beg* — do not take gerundive complements:

X ordered Y to do Z/*doing Z.

X ordered/commanded/asked/begged Y to do Z/*doing Z.
X recommended/suggested/proposed doing Z.

Similarly, verbs of strong commitment to a certain action, such as *promise* or *vow*, take TO, not ING; but verbs referring to mere thinking about possible courses of action take ING:

X promised/vowed to do Z/*doing Z.
X considered/thought about/envisaged/deliberated about [the possibility of] doing Z.

Conrad (1982:180) has noted that the contrast between speech act verbs such as *suggest* or *discuss*, which take the gerund, and speech act verbs such as *ask* or *offer*, which take the infinitive, cannot be accounted for in terms of an explanation (in terms of "referring and non-referring complements") which, he thought, worked well elsewhere. From this he concluded that "it is safest to explain the use of the two forms as the result of arbitrary distribution". In fact, however, the clear links between the gerund and the 'possible' on the one hand, and between the TO infinitive and the 'wanted' on the other, point in the opposite direction. The fact that some verbs, e.g. *propose*, can take either the gerund or the infinitive, shows not the arbitrariness of such contrasts but their subtlety, and sensitivity to different nuances of interpretation.

But apart from gerundive clauses referring to possibilities or facts, is it always true that a gerundive complement implies sameness of time? This time, one could not say that there are counter-examples galore. Nonetheless, there are some, and these should be considered.

I dread being (*to be) summoned by the boss.
She dreams of becoming (*to become) an actress.
I remember talking (*to talk) with John about it last year.

Dread refers to the future, and yet ING is possible (and in fact virtually obligatory). However, as many dictionaries of English point out (e.g. Webster 1968) *dread* is an 'intense' emotion, which involves a vivid 'picture' of the dreaded event. This suggests that *dreading* involves an act of imagination; and the terrifying event happening in our imagination is of course simultaneous with the feeling itself. In other words, *dread* behaves syntactically like *imagine* (*I dread/imagine being summoned by the boss*) because 'dreading' implies imagining.

Clearly, the same argument applies to *dream*. If one dreams of becom-

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ing an actress one doesn't really become an actress at the time when one dreams of it, but in one's imagination, one does become an actress concurrently with the dreaming. It is the nature of imagination that even when one imagines future events one imagines them ('pictures them in one's mind') as if they were present.

I believe that a similar argument applies also to *remembering*. Precisely this is the difference between remembering THAT and remembering V-ING. If I remember THAT I did something I know that I did it but I do not necessarily have a mental picture of myself doing it; if, however, I remember DOING something, then I do have a mental picture of myself doing it. (Cf. Conrad 1982:176). Roughly:

I remember that I danced with the Prince of Wales. ⇒
I think this: I know this:
I danced with the Prince of Wales
I know this not because somebody else said this
I know this because some time before now
I thought of the same thing: I know this

I remember dancing with the Prince of Wales. ⇒
I can see in my mind this:
'I am dancing with the Prince of Wales'
I can see this not because it is happening to me now
I can see this because some time before now
I thought of the same thing: it is happening to me now

Compare these explications with that of *remember to* given earlier:

X remembered to lock the door. ⇒
X thought this: I want this: I will lock the door
X did it because of that
X thought this because some time before that time
X thought this of the same thing: 'I should do this'

What applies to *dread*, *dream* or *remember* applies also to the verb *imagine* itself. Stockwell, Schachter and Partee (1973:582) comment on this verb as follows: "There is a major unresolved problem not discussed earlier nor handled in this rule, in connection with EQUI-NP-DEL in gerundive nominalizations. Consider the following examples:

a. Bill imagined that he was leaving.
b. Bill imagined himself to be leaving.

c. Bill imagined leaving.
d. *Bill imagined to be leaving.

(...) Clearly, within this grammar some important generalization has been missed, since we must enter *imagine* twice in the lexicon."

In the present work, however, *imagine* doesn't have to be viewed as an exception to any of the generalizations proposed. Sentence (c) above is acceptable because the act of leaving is imagined as present (concurrent with the act of imagining). Sentence (d) is unacceptable because it implies a future rather than a concurrent event. Sentence (a) is acceptable because it can be interpreted as having a gerundive complement based on the verb *know* — and *know* does take THAT:

Bill imagined knowing that he was leaving.

Sentence (b) is acceptable because it, too, can be interpreted as based on an epistemological predicate analogous to *know* or *believe*:

Bill knew himself to be incurably ill.
Bill believed himself to be a victim of unfair treatment.

The ING complement doesn't require that something should be actually done, but if it refers to an action at all then it requires that this action be seen as occurring at the same time to which the main verb refers. For most verbs, this will mean that the action referred to in the complement will be seen as real (or at least as real as the event referred to by the main clause). But for those mental verbs which involve imagination, the reality of the action will not be implied. On the other hand, it seems that the 'sameness of time reference' is always required.

I conclude that if one cannot say:

*I want (desire, wish, hope etc.) dancing with the Prince of Wales.

it is because of a semantic clash between the future orientation of *want* and the present orientation of ING. *Want* implies this:

I want this: I will do Z (Z will happen) after this time

The ING complement implies this: 'at the same time', i.e. 'not before this time, not after this time', hence, the inevitable clash:

*I want doing Z. ⇒
I want this:
I will do Z after this time, not after this time

The ING form inherently refers to time; it has so to speak a temporal valence, which has to be satisfied. If no time is explicitly specified, then the temporal reference of the ING form is interpreted as meaning 'at the time spoken of' (cf. Jespersen MEG 4:180). In participial clauses referring to temporal categories such as actions or processes the reference to time is satisfied via the main clause: the time of the participial clause is interpreted as the same as the time of the main clause *(He arrived puffing and panting; She sat talking)*. In an ING complement whose hypothetical 'head noun' inherently refers to time (as actions, processes or states do), the time spoken of in the complement is necessarily interpreted as the time to which the matrix clause refers.

4.3 *TO, ING and action*

To check the hypothesis about the 'present' (contemporary) orientation of ING and the future orientation of TO let us examine some contrasting sentences with ING and TO referring to intentional action, which have been discussed in the literature. For example, Wood (1956) offers the following contrasts:

a. I keep this old jacket for working in the garden.
b. I have kept this old jacket to give to a jumble sale.
a. A spanner is used for tightening nuts.
b. You will need a spanner to tighten that nut.

Wood (1956:14) tries to explain such contrasts as follows: "Where purpose is concerned it is more usual to employ the gerund for the general purpose for which something exists or which it is intended to serve (...) and the infinitive for a particular purpose which it is hoped to achieve or which one has in view." But the phrasing used here ("it is more usual ...") implies a lack of a firm generalization, and indeed Wood himself proceeds to offer an example which seems to contradict his tentative rule:

A spanner is used to tighten nuts.

The generalizations proposed in the present work account, I think, for these and other similar examples, as the following rough explications demonstrate:

a. I keep this old jacket for working in the garden. ⇒
I keep this old jacket for using (wearing)

at the times when I work in the garden

b. I have kept this old jacket to give to a jumble sale. ⇒
I have kept this old jacket because I thought this:
'I want this: I will give it to a jumble sale'

FOR suggests simultaneity and habituality: 'I want to use this old jacket when (whenever) I work in the garden'; TO refers to intention, and doesn't suggest sameness of time. It would be less natural, therefore, to swap the complement constructions in the example above:

I keep this old jacket to work in the garden.
I have kept this old jacket for giving to a jumble sale.

Compare also the following sentences:

a. Take this ointment to put on your pimples.
b. Take this ointment for putting on your pimples.

Sentence (a) suggests that the ointment is to be used once, whereas (b) suggests that it is to be used 'whenever needed' — that is to say, at times when it is needed. The same applies to the spanner examples:

a. A spanner is used for tightening nuts. ⇒
when people tighten nuts they use a spanner
b. You will need a spanner to tighten that nut. ⇒
if you are thinking this:
'I want this: I will tighten that nut'
you will need a spanner

There are many situations when both ING and TO are appropriate, and when the choice depends on the speaker's conceptualization. Explications of the kind proposed here show explicitly what these alternative conceptualizations are. At the same time, they explain why in other situations only one complement type is appropriate. (As for the link between FOR and 'habituality', see section 7).

4.4 *ING and evaluation*

Consider sentences such as the following ones (cf. Thompson 1973:377):

Hitting Jack over the head was unwise.
"Billy, tearing up my new paper dolls was mean", cried Susie.

Could it be maintained that in these sentences, too, there is a question of two things occurring at the same time? In Thompson's article, the two sentences above come in a close sequence with an ING of emotion:

Going there was fun.

Clearly, the notion of 'the same time' does apply to this last sentence (the going and the fun occurred at the same time). But does it also apply to evaluative sentences such as *Doing X was unwise/mean*?

I would argue that in a sense it does, because what such sentences assert is that when one was doing X one was doing *ipso facto* something unwise, mean, and so on. I would suggest, therefore, explicating such sentences along the following lines:

"Billy, tearing up my new paper dolls was mean", cried Susie. ⇒
Billy, when you were tearing up my new paper dolls
you were doing something mean
Hitting Jack over the head was unwise. ⇒
when you (I, they, etc.) were hitting Jack over the head
you were doing something unwise

And, more generally:

Doing Z was bad/good. ⇒
when person X was doing Z
X was doing something bad/good

It is easy to see that this analysis applies to sentences including speech act verbs of evaluation, such as *condemn, approve, disapprove, thank* or *apologize*, because all such verbs refer to an action which the speaker judges as good or bad. For example:

I disapprove of eating between meals. ⇒
I think that when people are eating between meals
they are doing something bad
Thank you for keeping an eye on the house. ⇒
I know that when you were keeping an eye on the house
you were doing something good for me
(I feel grateful to you because of that)
I apologize for keeping you waiting. ⇒
I know that when I was keeping you waiting
I was doing something that was bad for you
(I feel sorry because of that)

It is possible that this analysis can also be applied to sentences such as the following ones:

I shouldn't advise (*you) writing to Rev. Love. (Dixon 1984a:7)
The law forbids (*you, *us) shooting deer.

In combination with TO complements, verbs such as *advise* or *forbid* require the presence of an object referring to the addressee. Sentences with ING, however, such as the above ones, do not require this. They can, I believe, be explicated along the following lines:

I don't think that when writing to Rev. Love
you would be doing something good
The law says that when one is shooting deer
one is doing something bad

Of course in this area as in others different complement constructions may often seem to be mutually substitutable. For example, it doesn't seem to matter much whether one says (a) or (b):

a. To lie is wrong.
b. Lying is wrong.

Yet sensitive grammarians have always felt that there IS a difference and they tried as best they could to articulate this difference. For example, Wood (1956:11) wrote this: "When we say *To lie is wrong* we are thinking of you, me or anyone else telling lies; that is to say we think of it in connection with a subject, though not with any particular subject, and with various though unspecified occasions. But when we say *Lying is wrong* we are thinking of the activity or the practice in a universal sense, as a vice having an existence independent of the individual who succumbs to it. The first is roughly equivalent in meaning to *It is wrong to be a liar*, the second to *Mendacity is to be condemned on moral grounds*."

But while comments of this kind may have considerable heuristic value on a purely intuitive basis, it is not easy to detect in them any clear and firm generalizations. They accord well, however, with the broader hypotheses which account for the contrasts between ING and TO elsewhere. We could rephrase these hints as follows:

Lying is wrong. ⇒
when one lies one is doing something wrong

TO refers to a specific imaginary occasion and to what a specific imaginary

person should or should not do on that occasion:

To lie is wrong. ⇒
when I imagine this: I know this:
person X thinks this: 'I want this: I will lie'
I think this: this will be wrong
X should not do that

(For further discussion, see section 7.4.)

5. TO, ING and aspectuals

5.1 *Constraints on TO complements*

The interaction between aspectual verbs and different complement constructions presents a number of interesting puzzles. In particular, it is a striking fact that near-synonymous aspectual verbs differ from one another in their syntactic behaviour. Thus, *stop* differs from *cease*:

John ceased peeling the potatoes/to peel the potatoes.
John stopped (quit) peeling the potatoes/*to peel the potatoes.

Keep differs in a similar way from *continue*:

Mary continued worrying/to worry.
Mary kept worrying/*to worry.

Begin is symmetrical and closely related to *finish*. Yet here, too, the syntactic behaviour of the two verbs is different:

John began to peel the potatoes.
*John finished to peel the potatoes.

The list of such puzzling facts could be extended. Instead of doing so at this stage, however, let us start searching for some possible solutions.

The fact that *finish* cannot co-occur with TO provides a good starting point. *Finish* seems to be closely related to *end* in that both these verbs involve the idea of 'the last part', that is of the part after which there are no other parts (of the thing referred to). The main difference is that *end* refers to the point immediately after the last part, whereas *finish* refers to the last part itself. For example, in a race the *finish* comes before the *end* (the runners, or horses, "move into the finish with X in the lead", etc.) It might be added in passing that *begin* is similarly related to *start*, with *begin* referring

to the first part, and *start*, to the moment before the first part, despite Newmeyer's (1975:51) rash statement that "although semantically they are indistinguishable, *start* and *begin* differ syntactically in a number of ways". The very fact that the two verbs differ syntactically in a number of ways should have alerted the writer to the existence of subtle, but quite clear, semantic differences between them. For example, the fact that in the sentence:

The beginning/*starting of [the film] "Faces" is very dull.

start behaves differently from *begin*, which Newmeyer presents as an inexplicable puzzle ("no theory or proposal to date can account for it in a non ad-hoc way"), follows quite simply from the difference in meaning between 'first part' and 'first moment'. (Cf. Freed 1979:71.)

Similarly, this difference between 'first part' and 'first moment' explains, I think, the fact noted by Dixon (1976:352) that at races and similar events the initial moment is normally called 'start' rather than 'beginning': the sudden onset of the action means that what matters is the initial moment rather than the first part of the activity.

To return to *finish*, however, it appears that its inability to co-occur with TO can be easily explained if we assume that TO refers to what is forthcoming: because, by definition, nothing can be forthcoming after the last part of an activity. It will be recalled that in the context of volition the following component has been attributed to TO complements:

one could think that it (something) will happen after that

If the same meaning is attributed to TO complements of aspectual verbs, their inability to occur with *finish* becomes perfectly understandable.

As a first approximation, then, we could try the following formulae:

At moment *t*, X began to do Z. ⇒
before *t*, X wasn't doing Z
at *t*, X was doing it
one could think at that time:
more of it will happen after now

* At moment *t*, X finished to do Z. ⇒
before *t*, X was doing Z
one could think at that time:
more of it will happen after now
after *t*, more of it didn't happen

The formula assigned to *begin to* is perfectly compatible with the meaning of *begin*, but the formula assigned to *finish to* is incompatible with the meaning of *finish* which implies that 'more of it cannot happen' at all. This explains why *begin to* is grammatical and *finish to* ungrammatical.

It might be added that English has two quasi-aspectual verbs for which TO is the only possible type of complement — and that both these verbs refer to future expectations. These verbs are *tend* and *be going*. Usually, these two verbs are not included in discussions of English aspectual verbs (see, for example, Newmeyer 1975, Dixon 1976, or Freed 1979). In my view, however, they belong to this class — and the fact that they require a TO complement is as predictable, semantically, as the fact that *finish* cannot take this complement at all.

Mary tends to come late to lectures. ⇒
(*Mary tends coming late to lectures.)
because of what is known about Mary
when it is the time for a lecture
one can think this: Mary will come late
Mary is going to come late today. ⇒
(*Mary is going coming late today.)
because of something that is known about Mary now
one can think this: Mary will come late today

But why the difference between *cease* or *stop*, or between *keep* and *continue*? Dixon (1976:351) has presented the inability of *stop* to take TO as due to "interference from the paradigm of the homonymous item indicating cessation of motion (...). Thus, we can have *He ceased reading, He ceased to read,* and *He stopped reading* but not in this sense **He stopped to read*. The last sentence is already preempted by the paradigm of the other verb *stop*: *he stopped [at the library] [in order] to read.*"

It can be doubted, however, whether this is the real explanation for the difference between *cease* and *stop*. Every natural language is full of ambiguities, and normally a form is not preempted from having an otherwise expected meaning just because it has also another meaning. (The systematic ambiguity of sentences such as *I like boxing* is a case in point.) One might add that no other meaning has 'preempted' the combination of *quit* with *to*, and yet one cannot say *He quit to smoke* any more than one can say *He stopped to smoke* (in the relevant sense).

I believe that here as elsewhere, the syntactic difference follows in fact

from a difference in meaning. *Stop* refers to a sudden change from action to non-action (cf. the definition in LDOTEL 1984: "to stop — to come to an end, esp. suddenly"), whereas *cease* is quite compatible with gradual change:

> The noise stopped/?ceased as suddenly as it had started.
> Gradually, imperceptibly, the tremor/rain ceased/?stopped.
> Stop/*cease (it) at once!

Cars *stop* rather than *cease (moving)* because it is essential to their function that they should be able to make a sudden transition from movement to rest. For the same reason, one suspects, bottles have *stoppers* rather than *ceasers* (one doesn't want the liquid to leak, 'slowly and imperceptibly'; one wants it to come to a sudden and complete halt). One could of course try to undermine this explanation by pointing to the fact that *stop* is simply a much more common word than *cease*, and that it therefore can be expected to occur in a wider range of situations. Against this, however, one can point out to the fact that there are also contexts, and uses, where *cease* is much more felicitous than *stop*, as for example in the following lines from Whittier's (1872) hymn:

> Drop thy still dews of quietness
> Till all our strivings cease. (?stop)

Consider also the fact that in a war one speaks of a *cease-fire* rather than a *'stop-fire'* — presumably, because the scale of the conflict usually precludes a sudden and total halt of all firing. In bodily processes, when something 'ceases to function' this usually suggests a natural death; but if someone's heart, or pulse, stops beating, this suggests something sudden, like a heart attack, rather than a quiet 'passing away'. Generally speaking, gradual changes leave more room for expectations than sudden, abrupt ones. Sudden changes are likely to be due to an unpredictable act of somebody's will. *Quit* is a particularly striking example of this, in its combination of intentionality (cf. Freed 1979:113) and abruptness:

> When his baby daughter was born, John decided to quit smoking.
> ?Gradually, he quit smoking.
> *It quit raining.
> *Around that time, he quit to smoke.

Another aspectual verb which implies intentionality (cf. Freed

1979:102) and unpredictability (though not quite the degree of suddenness implied by *quit*) is *resume*. Not surprisingly, therefore, this verb, too, takes ING and cannot take TO:

He resumed reading.
*He resumed sneezing.
*It resumed raining.
*He resumed to read.

Stop is not similarly restricted to intentional acts, but due to its implication of suddenness it invites volitional interpretations much more readily than *cease* does:

a. He stopped breathing (probably intentionally).
b. He ceased to breathe (probably unintentionally).

But even when a sudden change is not due to an act of will, it is likely to be unpredictable. In the case of a gradual change, the end point can be expected to follow the preceding stages.

We can recapitulate the foregoing discussion of *stop* and *cease* in the form of the following approximate formulae:

At time *t*, the rain ceased. ⇒
  before *t*, it was raining
  one could think then: more of it will happen after now
  at *t*, one could think this:
    more of it will not happen after now
  after *t*, more of it didn't happen
At time *t*, the rain stopped. ⇒
  before *t*, it was raining
  at *t*, one could not know this:
    more of it will not happen after now
  after *t*, more of it didn't happen

Thus, *stop* implies a sudden and unpredictable change; *cease*, by contrast, suggests an ongoing process which at first can be expected to continue but which at a certain point can be expected to come to an end. As suggested earlier, a TO complement requires (in the context of aspectual verbs), the following component: 'one could think at that time: more of it will happen after now'. *Cease* does have such a component, whereas *stop* does not. Hence the contrast:

X ceased (*stopped) to do Z.

Turning now to the third pair of quasi-synonyms whose syntactic behaviour seems idiosyncratic, that is to *keep* and *continue*, we can now expect to find differences between them with regard to expectations. To see that such differences can in fact be detected, let us compare the following pair of sentences:

a. Mary kept painting her car.
b. Mary continued to paint her car.

Sentence (a) suggests that Mary painted her car many times; speaking more generally, it suggests an arbitrary and unpredictable behaviour on Mary's part. Sentence (b) does not imply anything like that; rather, it implies that some process (the painting of some particular car) could be expected to last for a certain time (until the whole car was painted); and that at some point during that time something occurred that could have caused an interruption (but didn't cause it).

Thus, *continue* does refer to 'reasonable expectations', just as *cease* does; whereas *keep* refers to an unpredictable repetition, just as *stop* refers to an unpredictable change. This explains the similarity of syntactic behaviour between *continue* and *cease* (which both take TO) and also between *keep* and *stop* (which don't take TO).

After time *t*, X continued to do Z. ⇒
  before *t*, X was doing Z
  one could think then: more of it will happen after now
  at *t*, one could think this:
    more of it will not happen after now
  after *t*, more of it happened[1]

(The combination of *continue* with ING will be discussed in section 5.2.)

To recapitulate, I have claimed that in the context of aspectual verbs TO complements imply an expectation: 'I think this: more of this will happen after now'. Those aspectual verbs which are incompatible with such an expectation cannot take TO complements.

5.2 *Constraints on gerundive complements*

Turning now to ING complements of aspectual verbs it should be noted that while all aspectual verbs can take such complements, an ING complement cannot always be substituted for a TO complement. For example, as pointed out by Wood (1956:14), one can say:

Then we began to realize/understand what had happened.
I begin to see your point.

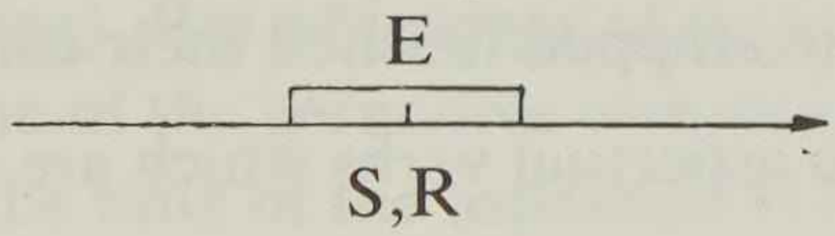
but not:

?Then we began realizing/understanding what had happened.
?I begin seeing your point.

The main point which has to be made here is that in combination with aspectual verbs the gerundive complements always refer to a 'stretch of time', just as participial clauses with -ING do, and as the ING forms of the 'progresssive aspect' do. As Reichenbach (1947:290) said, referring to finite ING forms, "The English language uses the present participle to indicate that the event covers a certain stretch of time." Reichenbach illustrated this statement with diagrams such as the following one ("in which 'E', 'R', and 'S' stand, respectively, for 'point of event', 'point of reference', and 'point of speech', and where the direction of time is represented as the direction of the line from left to right", 1947:290):

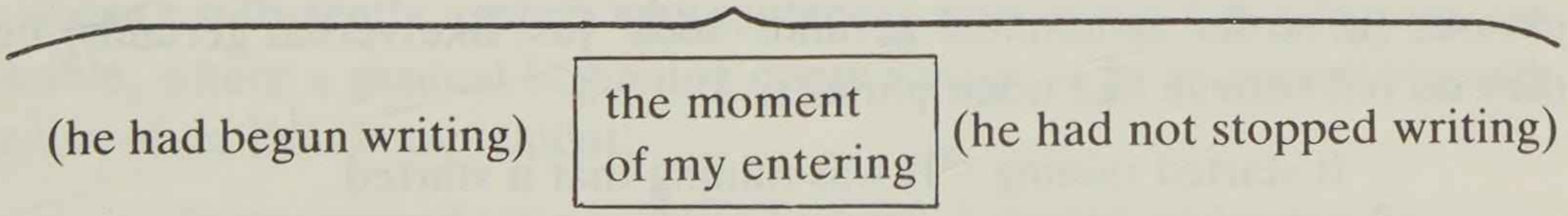
Present, Extended

I am seeing John.



Similar diagrams were used earlier by Jespersen (MEG 4:180):

When I entered he was writing.
he was writing



According to Jespersen (MEG 4:180): "The essential thing is that the action or state denoted by the expanded tense is thought of as a *temporal frame encompassing something else* which as often as not is to be understood from the whole situation."

Gerundive complements can differ in this respect from present participles and from finite -ING forms because they don't always refer to stretches of time. For example, the sentences:

(John's) winning the race delighted Mary.
Mary regretted (John's) losing the race.

refer to momentary events, rather than to any stretches of time. I believe, however, that if (some) gerundive complements differ in this respect from other finite and participial ING forms this is due to their status of noun phrases. As mentioned earlier, however, not all gerundive complements function as noun phrases. In particular, the gerundive complements of aspectual verbs do not:

a. John enjoyed/kept playing the piano.
b. It was playing the piano that John enjoyed/*kept.

To understand the interaction of aspectual verbs with gerundive complements it is essential to bear in mind that in this syntactic context gerundive complements are not noun phrases — a fact which is obscured by the ambivalent nature of several of these verbs. *Begin, start, keep, stop* and *finish* can all be used as transitive verbs with 'normal' nouns as their objects:

John began/started his lecture.
John kept his promise/his father's watch.
Mary and John stopped/finished their conversation.

Cease and *go on* are two aspectual verbs which are not used in this way.

*Mary went on a conversation.
?Mary ceased her lecture.

However, when *begin*, *start*, *keep*, *stop* or *finish* are used as truly aspectual verbs their complements are not noun phrases. They may look like noun phrases (in so far as nominal gerunds 'look' just like verbal gerunds) but they do not behave like noun phrases.

It started raining./*It was raining that it started.
John started snoring./*It was snoring that he started.
Mary kept laughing./?It was laughing that Mary kept.
John stopped working./?It was working that John stopped.

The complements of aspectual verbs (used as aspectual verbs) refer necessarily to a stretch of time, and this stretch of time is conceived of as ongoing, 'progressing', not as a static period which can be viewed as an entity, of a sort (and consequently, treated as a noun).

Compare, for example, the following sentences:

a. Mary began hitting John.
b. Mary began to hit John.

According to Dixon (1984b:591) for sentence (a) "to be appropriate, Mary must have rained at least a few blows on John (...)" But (b) "could be said when she had merely raised the stick but had not yet brought it down upon his head (perhaps she will, or perhaps she won't)". From our point of view, the most important point is that sentence (a) refers necessarily to a stretch of time, during which Mary rained some blows on John, whereas sentence (b) doesn't presuppose a stretch of time.

Furthermore, it is essential to bear in mind that the 'stretch of time' referred to by the verbal gerund is not defined independently of the time of the aspectual verb, but is defined with reference to it. This can be done in three different ways: (1) The moment referred to by the main verb can be presented as identical with the beginning of the stretch of time referred to by the complement (as in *I began/started talking to her*); (2) the moment referred to by the main verb can be presented as identical with the end of the stretch of time referred to by the complement (as in *I stopped/finished/peeling the potatoes*); (3) the time referred to by the main verb can be presented as co-extensive with the time referred to by the complement (as in *He kept/continued working*). But whichever of these three methods of identification is used, the time of the gerundive complements must be somehow defined with respect to the time of the aspectual verb.

Wood (1956:14) points out that verbs such as *understand* or *realize* "denote something which may persist over a period or may develop by stages until it reaches completeness, but cannot be progressive in the same way that *to look* in the sense of *to regard* can be". I think he is quite right, but he doesn't sufficiently explain why sentences such as the following one are possible, where a gradual beginning doesn't seem to be incompatible with the use of an ING complement:

> In my second year in Alice Springs, I started understanding what people were saying in Aranda.

The difference between a sudden and a gradual change is of course a relative one. In the sentence above, the onset of the process of understanding people is dated in a meaningful way: it occurred some time in the second year of the speaker's stay in Alice Springs; and it went on. For many speakers, this is sufficient for the gerundive complement to be acceptable in this context. In the sentence **I begin seeing your point* the 'seeing' does not

refer to a process which started at some particular time (however loosely defined) and which went on for a stretch of time. Rather, it refers to a state (cf. Vendler 1967:107).

It is interesting to note that, of the two sentences below:

a. *I begin seeing your point.
b. ?I began seeing your point.

(b) sounds better than (a) (Karen Mutch, p.c.) The reason is, I believe, that with respect to the past it is easier to view the period of understanding as extending over a definite period of time. If the beginning of a state of affairs occurs 'now', it is harder to visualize in advance a definite stretch of time, over which this state of affairs will endure. The main reason why sentence (b), while better than (a), is still a little odd, is that it is difficult to conceive of 'seeing someone's point' as a dynamic, on-going process. There is a difference in this respect between 'seeing a point' and 'understanding someone': in the latter case, but not in the former one, the speaker refers to an on-going changeable process, involving many separate instances of 'decoding' someone's utterances.

The crucial difference here is, then, not that between a state of affairs 'developing by stages' and a state of affairs coming into existence suddenly, but that between a process and a state. A realization may come to us in a flash, yet one cannot say:

*Suddenly, I started realizing what had happened.

The reason is that the aspectual verb *start* forces us to interpret the following gerund as referring to a stretch of time and as compatible with a dynamic, processual interpretation.

The distinction between processes and states is sometimes blurred because the same verbs — for example, *understand* or *love* — can be interpreted in either way. But it is essential to realize that gerundive complements of aspectual verbs are limited to those predicates which can be interpreted (in a given context) as referring to on-going processes rather than to mere states. The essential difference between the two categories can be defined as follows: 'processual predicates' are those which imply a 'constant possibility of change' (cf. Wierzbicka 1980a:197-198).

Verbs which imply such a 'constant possibility of change' are compatible with the idea of 'duration over a stretch of time'. Purely stative verbs, such as *know*, are incompatible, or almost incompatible, with this idea, because they are not compatible with the idea of a 'constant possibility of

change'. As one would expect, therefore, verbs of this kind do not take gerundive complements:

???Around that time, I started knowing the answer.

One can hardly fluctuate in knowing an answer to a question. As for feelings and attitudes, some of them can be more readily conceived of as capable of fluctuations than others:

?Around that time, I started liking Mary.
??Around that time, I started detesting Mary.

Like and *detest* seem to differ in this respect, interestingly, from *love*, which is more open to a dynamic, 'fluctuating', interpretation, as Merle Haggard's song testifies:

Well, today, I started loving you again ...

But the very use of the temporal frame ("well, today ...") suggests here a view of love compatible with a 'constant possibility of change'.

It must be stressed once more, however, that what really matters is not the verb as such but the whole sentence, which may — or may not — be compatible with the idea of a 'constant possibility of change'. For example, the copula verb *look* may or may not be open to a dynamic interpretation depending on the transitional (or otherwise) nature of the predicate adjective:

Mary looks/is looking sad.
Mary looks/?is looking Chinese.
In this light, this painting looks/is looking faded.
This painting looks/?is looking authentic.

Aspectual verbs vary in their ability to take purely stative complements. As one would expect, this variability stems from the differences in their meaning. For example, *keep*, which requires an ING complement, does not take purely stative complements. By contrast, *continue*, which can take either an ING or a TO complement, can take both 'processual' and stative complements:

She continued to like him/to expect him to call.
?She continued liking him/expecting him to call.
??She kept liking him/expecting him to call.
She continued to look young and beautiful.
?She continued looking young and beautiful.

He continued to ask/asking more and more difficult questions, and the precocious pupil continued to know/?knowing all the answers.

As for *cease* and *stop*, Merriam-Webster (1972:381) justly notes that "*stop* applies primarily to action or process (...); *cease* primarily to states and conditions (...)"; and it quotes Keats' line "when I have fears that I may *cease* to be", where *stop* could hardly be substituted for *cease*.

I think the analysis developed here is fully consistent with the following observations offered by Wood (1956:14): "*I have ceased worrying about it* means 'I used to worry but I do so no longer'. *I have ceased to worry about it* means 'I do not worry now'. It is true that in any case the cessation of an activity implies its previous existence or performance, but the point is that where the construction with the infinitive denotes the present position, that with the gerund denotes the end of the past."

The complement *worrying* refers to a stretch of time, and the verb *ceased* refers to the end of that stretch. If there is no clear end, and no clear 'stretch of time', a gerund cannot be used. For this reason, one informant suggested, *I have ceased to worry* could be said with reference to a situation when the speaker used to worry 'off and on'; but *I have ceased worrying* implies a continuous stretch of worrying.

The following semantic formulae can account, I think, for these relations between *cease to* and *cease ING* and also between *cease ING* and *stop ING*:

At that time *(t)*, they ceased to fire. ⇒
  before that time *(t)*, they had been firing
  one could think then: 'more of it will happen after now'
  at that time *(t)*, one could think this:
    'more of it will not happen after now'
  after that time *(t)*, more of it didn't happen
At that time *(t)*, they ceased firing. ⇒
  before that time *(t)*, they had been firing for some time
  one could think then: 'more of it will happen after now'
  after t, more of it didn't happen
At that time *(t)*, they stopped firing. ⇒
  before that time *(t)*, they had been firing for some time
  at that time, one couldn't know this:
    'more of it will not happen after now'
  after *t*, more of it didn't happen

In the first part of this section we dealt with the combination of aspectual verbs with TO, and we linked this TO with the presence of a future expectation ('at that time, one could think this: Z will happen after now'). In the second part, we focussed on the combination of aspectual verbs with ING and we linked this ING with the presence of 'a constant possibility of change'. It is time to point to a logical connection between these two alternatives: in the context of a 'constant possibility of change' there can be no secure expectations as to what might happen next. To put it less strongly: the choice between a TO complement and an ING complement of an aspectual verb depends on whether the speaker is viewing the situation in terms of a constant possibility of change or in terms of expectations as to what might happen next. Some verbs *(finish, keep, stop, quit* and *resume)* by virtue of their meaning don't leave the speaker any freedom in this respect; others *(begin, start* and *continue)* do, because they are compatible with either interpretation.

Freed (1979:155) concludes her interesting study of English aspectuals with a question mark: "We may wonder why the other five aspectualizers which occur with sentential complements [i.e. *stop, finish, quit, resume* and *keep,* A.W.] do not occur with the *to V* form. No final solution has been found which adequately solves this strange distribution."

I submit that this "strange distribution" is not strange at all: quite simply, TO is linked with the presence of a future expectation, and it cannot co-occur with verbs which are semantically incompatible with such an expectation. If the activity is *finished,* we cannot expect more of it to happen later; *stop* implies a sudden and unpredictable change, which leaves no room for any reasonable expectations as to what may happen next; *quit* and *resume* imply an arbitrary and unpredictable act of will; and *keep* implies an arbitrary and unpredictable pattern of behaviour. Thus, the English aspectuals in fact provide support for the thesis that syntax, so to speak, follows from semantics; but to see this we have to remember that in natural language meaning involves not only objective features of objects and situations but also subjective factors, such as the speakers' intentions, feelings and expectations.

5.3 *The 'doubl-ing constraint'*

Let us now turn to the following contrast in acceptability, noted by Ross (1972a:61):

a. It continued to rain.
b. It continued raining.
c. It is continuing to rain.
d. *It is continuing raining.

Ross tries to account for such contrasts in terms of an "output condition" on sequences of ING involving equi-subject verbs, which he calls the "Doubling Constraint". However, as he points out himself: "There are some verbs which, mysteriously, do not occasion doubl-ing violations — *avoid* is one."

Ross (1972a:78) says that a mechanical and totally non-semantic 'doubl-ing constraint' "seems to be wrong in a far more serious way, because it cannot account for the fact that there is a hierarchy of unacceptability of doubl-ing violations". He illustrates this hierarchy with sentences such as the following ones:

a. His avoiding contacting Harriet is understandable.
b. ?Red's attempting breathing without a snorkel was ill-considered.
c. ??Red's trying swimming back alone was probably due to all that ale he drank.
d. *Her keeping resisting him didn't help much.

Ross seems to think that the 'hierarchy' in question has something to do with the choice of the verb. However, the following sentences show that this is not the case. Consider, for example, the following contrasts:

*It is beginning/stopping raining.
I'm just beginning marking the essays.
Finally, I'm beginning writing my dissertation.
Right now, I'm stopping listening to the man who tells us we're 'so successful'. (We sit on boards and committees.) I'm aiming at making those boards and committees irrelevant in the long run. (Scutt 1987:234)
I'm trying walking the dog every night (to see if it stops him barking so much).

The acceptability of some sentences with 'doubl-ing' indicates that a purely mechanical 'doubl-ing constraint' does not provide any real solution to the problem (much less, any explanation). It seems to me that it is more fruitful to look for a semantic explanation, and that in fact the seeds of such an explanation are contained in the account of aspectuals given in the preced-

ing section.

Before showing, however, how the 'doubl-ing constraint' can be explained on the basis of the discussion in the preceding section, I would first like to draw the reader's attention to a different kind of evidence. Consider sentences such as the following ones (cf. Wierzbicka 1967):

?I was writing four letters one after the other.
?She was sitting on a couch, first eating an apple and then reading a book.
?She was sitting on a couch, eating six pears.

The oddity of such sentences indicates that the verbal ING forms absolutely require sameness of time. There is a semantic clash between the verbal phrases *was writing* and *was eating* and the adjuncts (or the implied adjuncts) *one after the other, first* and *then*. I suggest, then, that sentences such as:

*John was finishing peeling the potatoes.

are anomalous because the verb phrase refers here to two different stretches of time: the time of 'finishing' and the time of 'peeling', and thus it violates the 'sameness of time' condition, inherent in the meaning of verbal ING forms.

One might point out, of course, that aspectual verbs such as *finish, stop, cease, start* or *begin* never point to the same stretch of time as their complements, gerundive or otherwise. But as seen earlier, in sentences such as:

John finished/began peeling the potatoes.

the aspectual verb identifies a given stretch of time by pointing to one of its temporal boundaries (as one might identify an era by calling it "before Christ" or "after Christ"). This is no different from saying, for example,

From 4 pm on, I was writing letters.
Until 7 pm, I was working.

It could be objected that in pairs of sentences such as (a) and (b) below:

a. When John arrived Mary left.
b. When John arrived Mary was peeling the potatoes.

neither (a) NOR (b) implies 'sameness of time': surely, the difference is that (a) refers to a sequence of events (and times), whereas (b) refers to

one time which is included in another. But in natural language, 'sameness of time' doesn't have to be interpreted as perfect co-extensiveness. Even sentences with two finite ING forms, such as:

When Mary was working, John was playing the piano.

don't insist on perfect co-extensiveness of the two activities. They are not compatible, however, with an interpretation which would place one activity after the other. 'Sameness of time' can be interpreted loosely, but it has to be interpreted as 'sameness of time.' It is quite a different matter, however, to have sentences referring to two manifestly different stretches of time as if they were 'the same time', such as *X was beginning/finishing doing Z*. These are self-contradictory, just as the following sentence is:

?In the morning, I was reading all day.

The ING form of the complement indicates that this complement refers to a certain stretch of time (say, from 9 am till 5 pm). But the ING form of aspectual verbs such as *begin* or *finish* signals an indeterminate stretch of time near one of the boundaries of that main stretch. Both ING forms (the complement and the aspectual) send the message: 'I am talking about the same time'; but this strikes us as impossible. One might add that in those situations where the two stretches of time — for example, the finishing and the doing — can be interpreted as referring to the same time, sentences with two INGs become more or less acceptable. For example, one can imagine the following exchange:

– Have you typed that letter?
– I'm just finishing typing it now.

with the two gerunds being interpreted as referring to the same stretch of time.

Let us return now to sentences where an aspectual verb such as *begin, start* or *stop* does allow doubl-ing, such as the following ones:

I'm just beginning marking the essays.
I'm beginning counting, now: 1, 2, 3 ...

Why don't we get any semantic clash here? My answser is that in sentences of this kind the first ING form doesn't refer to any stretch of time at all, but rather, that it expresses the speaker's intention. The use of ING forms for the expression of intention is a well-known fact, which can be illustrated with sentences such as the following ones:

I'm leaving now.
I'm going (to the shop).
Yes, yes, I'm coming.

In sentences of this kind the speaker is not referring to a gradual process of coming or going, ranging over a stretch of time. Rather, he/she is referring to an event (seen as completed), which, the speaker says, will occur 'now'.

But the fact that the doubl-ing involving verbs such as *begin* or *start* doesn't refer to two stretches of time doesn't mean that doubl-ing referring to two stretches of time is never possible. It IS possible in sentences whose main verb can be interpreted as referring to the same stretch of time to which the complement refers. This applies, for example, to sentences with verbs such as *try* (in the sense of experimentation), with *enjoy* or with *practice*, which do allow doubl-ing:

I'm trying walking the dog every night.
I'm enjoying playing tennis under lights.
On Friday, Mary was practising ice-skating.

Facts of this kind show once more that grammar does make sense — provided, however, that we look at it from a semantic point of view. If we ignore meaning then indeed grammar will appear to us as a jungle of mindless, mechanical, arbitrary 'rules', 'exceptions' and 'constraints'. But this is not the fault of the grammar.

5.4 *Aspectual causatives*

Among many apparent idiosyncrasies of English aspectual verbs the following contrast has often been mentioned (cf. e.g. Palmer 1965:153):

He kept them talking.
He stopped them talking.
*He continued them talking.

I believe that this contrast, far from being idiosyncratic and arbitrary, makes perfect sense, semantically, and provides further evidence for the non-arbitrariness of syntactic distinctions. The main point to note there is that the pattern

$$\text{NP } V_{asp} \text{ NP V-ING}$$

is a construction in its own right, with its own meaning, and that it is this meaning which determines the range of verbs that can occur in this pattern.

The meaning in question can be described as follows: (1) The ING verb refers to an action verb extending over a stretch of time; (2) the aspectual verb refers to an action occurring at the same time (though not necessarily co-extensive in time with the other action); (3) there is a causal relation between the two actions; (4) the time of the causee's action is determined by the causer.

To appreciate this interplay of temporal and causal relations it is instructive to consider minimal pairs such as the following ones:

a. He got her to do the dishes.
b. He got them talking.

Both constructions are causative, but in (a) the time of the causee's action (i.e. the time of the washing of the dishes) could have occurred some time after the action of the causer; by contrast, in (b) the talking has to start at the time of the causer's endeavours.

Typically, the causative action occurs either at the outset of the stretch of time to which the ING form refers or at its end:

He started/stopped them talking.
This question set me thinking.
She sent him packing.
He sent the book flying.

One might argue, of course, that if one person sends another person 'packing', the action of packing doesn't start exactly at the moment of sending. This indicates, however, that the phrase *send packing* contains in fact an element of expressive exaggeration, which is quite in keeping with its vividness. Physically speaking, the packing may start a little later than the sending, but in the speaker's mind it starts 'at once'.

In the case of *keep* as in the sentence

He kept us waiting.

the causer's action doesn't refer to the first or the last moment of the stretch of time in question, but to the whole stretch. It should be noted, however, that the action of the causee (the waiting) is determined at every point by the causer's arbitrary whim: at any point whatsoever, the waiting could be cut by an act of the causer. To understand why *keep* differs in this respect from *continue* or *stop* from *cease* it is instructive to consider first the reason why *finish* cannot occur in this construction:

*He finished her peeling the potatoes.

I suggest that sentences such as this one contain a semantic clash. *Finish* claims, so to speak, that the action didn't extend beyond a certain point because it had run its full course (e.g., all the potatoes had been peeled). But the construction: 'NP + aspectual verb + NP + ING', implies that the action didn't extend beyond that point because of an action by the causer. These two claims are incompatible, and, not surprisingly, they result in an unacceptable sentence.

Exactly the same applies, I think, to the pairs of quasi-synonyms *stop* and *cease*, and *keep* and *continue*. As pointed out in section 5.1, *cease* and *continue* suggest actions or processes which have their natural temporal outline, determined by the logic of the action or the process itself, not by an arbitrary external intervention. Hence the contrast in the interpretation of sentences such as (a) and (b) below:

a. She continued to paint her car.
b. She kept painting (*to paint) her car.
a. He ceased to breathe.
b. He stopped breathing (*to breathe).

In (a), one can expect the painting of the car to continue till the whole car has been painted; but in (b), the action can stop at any point, because it has no natural boundary. Similarly, in the second pair sentence (a) suggests that the breathing weakens gradually till it reaches the final point; but sentence (b) suggests that the breathing stops at some unpredictable point. The causative construction 'NP + aspectual verb + NP + ING' implies that the time of the action is determined by the causer's whim. This is compatible with the meaning of *stop* and *keep* but not with that of *continue* or *cease*.

Finally, turning now to the last pair of quasi-synonyms relevant here, *begin* and *start*, we will recall that, as pointed out in section 5.1, *start* refers to the moment before the first part of a period, whereas *begin* refers to the first part itself. Hence the contrast:

a. He started them talking.
b. *He began them talking.

In (a), the causer determined arbitrarily the moment when the period of talking starts; but in (b), *begin* suggests a gradual development of the action, which is incompatible with the implications of the construction itself.

Generally speaking, the meaning of the construction under discussion can be represented as follows:

NP_1 $V_{(aspectual)}$ NP_2 V-ING
(e.g. He started/stopped/kept them talking.) ⇒
X did something to Y
Y was doing something (V) for some time (t_1 - t_2)
because of that
X did this not before Y was doing it,
not after Y was doing it

It should be added that there are two other minor constructions in English which are closely related to the present one: the ING of perception and the ING of pleasurable action. The ING of perception can be illustrated with the following examples:

He watched them coming.
He heard them singing.
He found them talking
He caught them eating his chocolate.

In this case, there is no causal relation between the two processes, but the temporal relation is the same as in the causative construction: the action referred to by the ING form has to refer to a stretch of time, and the perception cannot occur before or after that stretch:

NP_1(X) $V_{(perception)}$ NP_2(Y) V-ING ⇒
Y was doing something (V) for some time (t_1 - t_2)
X perceived this
X perceived this not before Y was doing it,
not after Y was doing it

The ING of pleasurable action can be illustrated with the following examples:

He went fishing/hunting.
He went swimming/jogging.
They went drinking.
?They went eating.
?They went studying.
?They went singing.

As Palmer (1965:163) points out (in connection with the sentence *He went fishing*): "Here GO, rather like KEEP, is almost 'adverbial'. The activity indicated by the second verb took place — he fished. GO collocates with

verbs that imply movement — FISH, HUNT, LOOK FOR, etc., but is followed only by the simple *-ing* form (not any of the participials)."

The idea that GO + ING indicates movement seems to me correct, but insufficient. It implies also a stretch of open-ended, pleasurable activity. (The fact that one can *go drinking* but not *go eating* can be seen as due to the same factors as the fact that one can *have a drink* but not **have an eat*: see this volume, chap. 5.) Contrasts such as this:

a. He went fishing./He went swimming.
b. He went to fish/to swim.

show not only that the action of the ING verb is seen as real (in contrast to that of the infinitive), but also that it is seen as defined over a stretch of time starting with the initial movement of 'going'. Of course the actual swimming or fishing doesn't have to start immediately after that initial movement, but the outing is seen as starting right there and then, and as dominated by the activity of the ING form. Roughly:

Y went V-ING ⇒
at moment *t*, Y went somewhere, because Y thought this:
I want this: I will now be doing V for some time
Y was doing V for some time, at that time

The implication that the activity of V-ING was probably undertaken for pleasure seems to be due to two factors. First, if this activity was triggered by a sudden impulse of the agent's will one surmises that it wasn't a pre-planned expedition with a serious purpose but probably just an 'outing'. Second, the very fact that the activity is defined over a stretch of time, starting with that initial impulse, suggests that if there were to be any tangible results these were not seen as terribly important to the agent. For example, if the duration of the fishing trip is counted from the moment of the initial impulse, which presumably occurred long before any fish were actually caught (if some were caught) then presumably the fish were less important to that trip than the activity itself.

Once more, we have to conclude that even minor syntactic patterns, which at first sight appear to be arbitrary and idiosyncratic, on closer inspection reveal internal logic, which far from contradicting the logic of the major syntactic patterns illuminates it and offers fresh evidence for its validity.

6. TO and emotion

6.1 *Emotion, awareness and thought*

In this section, we can take as our starting point the following puzzle. Why do people often open their encounters with the formulae:

I'm pleased to meet you (to see you).
It's nice to meet you (to see you).

but not with any of the following:

?I'm pleased meeting you (seeing you).
?It's nice meeting you (seeing you).
?I'm pleased that I meet you (see you).
?I'm pleased because I meet you (see you).
??It's nice because I meet you (see you).

Presumably, the four patterns (TO, ING, THAT and BECAUSE) have four different meanings, and only one of these meanings (that associated with TO) is appropriate. But what are these different meanings?

The differences in use of the different complement types in the context of emotions have been investigated with great subtlety and insight by Bolinger (1968, 1977 and especially 1984). Bolinger has demonstrated that sentences with TO such as:

I blush to think of it.
I regret to have inconvenienced you.
I was glad to be going.

"express an attitude towards an event, not a reaction to it" (1984:52). Bolinger has discussed and illustrated that importance of the contrast "between emotions caused and emotions projected" (1984:52), and he has shown the close link between the use of the TO complements and the "projective pole" of the "reactive-projective range" (p.56-57). I believe, however, that Bolinger's concept of 'projective emotions' covers in fact two different types, which can be distinguished as emotions based on wanting and emotions based on awareness. For example, in the following pairs of sentences:

a. I am eager to see Peter here.
b. I am delighted to see Peter here.

sentence (a) is based on wanting, whereas sentence (b) is based on awareness.

Alternatively, we could distinguish the two types in question using the familiar labels 'factive' and 'non-factive'. For example, sentence (b) above refers to a fact and is, therefore, 'factive', whereas sentence (a) does not refer to a fact and is, therefore, 'non-factive'. However, the labels 'factive' and 'non-factive' are not always apposite, as the following sentences demonstrate:

I would be delighted/surprised to see Peter here.
I would be sorry to lose.

Kiparsky and Kiparsky (1971:367) were forced to call such sentences 'factive' despite the fact that they clearly do not refer to facts. A distinction in terms of wanting and awareness allows us to account for such sentences without any similar contradiction, because while the two sentences above do not refer to facts they do nonetheless refer to awareness (and do not refer to wanting).

In what follows, we will deal primarily with projective emotions based on awareness, because the analysis of 'projective emotions' based on wanting is relatively straightfoward and it follows the analysis of TO complements of verbs of volition:

I am eager to see Peter here. ⇒
  I think this:
    I want this:
      I will see Peter here
      it will happen soon
  when I think this, I feel something ('eager')
I don't like to tidy up Peter's room. ⇒
  when I think this:
    I want this: I will tidy up Peter's room
  I feel this: I don't like it

What is common to both these types (projective emotions based on wanting and projective emotions based on awareness) and what I think underlies Bolinger's concept of 'projectiveness' is that in both cases the complement refers to something 'thought of'. In the case of 'reactive emotions' the emotion may be caused by an actual happening (process, action, or state); but in the case of 'projective emotions' the emotion is caused by a thought. Roughly:

a. I blush hearing this. ⇒
when I hear this I blush
b. I blush to hear this. ⇒
when I think this: I hear this,
I blush

To see this difference more clearly it is useful to consider expanded contexts:

a. I always blush hearing compliments.
b. ?I always blush to hear compliments.
c. I blush to think that I suspected this saintly woman of being a thief.

Sentence (b) above is odd, because 'I blush to' implies 'I blush at the thought ...' But the thought 'I am hearing a compliment' is unlikely to cause anyone to blush. On the other hand, there are many thoughts which can easily make one blush. The thought: 'I have suspected this saintly woman of being a thief' is clearly of this kind. This explains why sentence (c) above is felicitous.

As Bolinger (1984:52) points out, "When we say *I blush to think of it* we express an attitude, not merely a contingent reaction. The thing is not merely the cause of my blushes but I am crying shame on it. I may *shiver, quail, weep, sigh,* or *gag* when I think of it, but I am not apt to say **I sweat (flush, redden) to think of it* (though I may sweat or redden at the thought of it and may definitely do any of these things *when* I think of it)." I think the reason for this is not only that *blush* has been stereotyped as projective, (as suggested by Bolinger), but also that in the case of *blush* it is easy to reconstruct the thought which underlies the emotion.

As noted earlier, however, 'projective emotions' in the TO pattern involve not only thinking but also awareness, knowing (unless they are of the 'wanting' type). This means that the thought which underlies the emotion concerns the experiencer's awareness of a situation, rather than that situation itself. This can be represented as follows:

I blush to think that I suspected this saintly woman of being a thief. ⇒
when I think this: I know this:
I suspected this saintly woman of being a thief
I feel something (and I blush because of it)

As Bolinger points out, 'projective emotions' very frequently co-occur with verbs of current perception, such as *hear, see, realize*, or *find out*, and perception of course involves awareness.

I was happy (sad, sorry, surprised etc.) to see/hear/realize/
find out that *p*.

I would like to suggest that whether or not a verb of knowledge (*see, hear, find out, learn, know*, etc.) is present in the surface structure it is always present in the semantic structure of sentences of the type under discussion. For example, if, as pointed out by Bolinger (1984), sentences such as the following ones:

I was surprised to have fallen.
I was surprised to come in and see you.
I was surprised to be (or: to find myself) trembling all over.

are more acceptable than:

?I was surprised to fall.
?I was surprised to come in.

it is because the former ones, in contrast to the latter ones, are compatible with the idea that the speaker is, as Bolinger (1984:48) puts it, "taking stock of the situation". This "taking stock of the situation" is in keeping with the idea of 'knowing', or 'coming to know'. As a first approximation, this can be portrayed as follows:

I was surprised to be trembling all over. ⇒
when I thought this: I perceive this:
I am trembling all over
I felt surprised

The nature of perception is such that what is perceived now normally happens now; for this reason, complements of 'projective emotions' are usually, or at least very frequently, interpreted as referring to the same time as the main clause (I perceive Z ⇒ Z happens now). But awareness, in contrast to perception, is not limited to present state of affairs. For this reason, the complements of 'projective emotions' sentences can also refer to the past:

I was surprised to have fallen. ⇒
when I thought this: I know this: I have fallen,
I felt surprised

I am sorry to have failed. ⇒
when I think this: I know this (now): I have failed,
I feel sorry

This supports the idea that we cannot explicate 'projective emotions' in general in a simpler format, along the following lines:

I was sorry to fail. ⇒
when it happened (when I failed)
I was sorry

The TO pattern implies that it wasn't the event that triggered the emotion but the awareness of that event, and the idea of 'awareness' implies three distinct ingredients: thinking, knowing, and personal experience:

I think this: I know this now: this happened to me

The relevance of both 'thinking' and 'knowing' to the TO pattern is highlighted by the following contrasts between TO and THAT:

1. a. I was sorry to have failed.
   b. I was sorry to think that I had failed.
   c. I was sorry to know that I had failed.
2. a. I was sorry that I had failed.
   b. I was sorry that I thought that I had failed.
   c. I was sorry that I knew that I had failed.

In the TO pattern, the three variants (a), (b) and (c) are very close to one another in meaning (they are not identical, but they are close). In the THAT pattern, however, the three variants (a), (b) and (c) are very different in meaning. This shows that in the TO pattern, in contrast to the THAT pattern, 'thinking' and 'knowing' are implied anyway, whether or not they are explicitly mentioned.

The relevance of 'personal experience' to the TO pattern is highlighted by contrasts such as the following one:

a. I blush to think of my behaviour.
b. ?I blush to think of his departure.

Sentence (a) is fully felicitous because it is easy to reconstruct the implied thought: 'I behaved badly'. (We reconstruct it on the basis of the following reasoning: blushing is thought of as a symptom of shame; shame arises from thinking about one's bad behaviour; if one blushes because of one's own behaviour then presumably one has behaved badly). Sentence (b) is less

felicitous (without additional explanations), because while thinking about somebody's departure could perhaps cause someone to blush, (depending on the circumstances), the sentence doesn't make the link in question clear, and no amount of guessing helps to reconstruct it in a non-arbitrary way. If, however, sentence (b) can be accepted as felicitous at all this can be done only on the assumption that 'his departure' can be interpreted, in a particular situation or context, as 'something that happened to me' (e.g. it reflected upon me).

6.2 *Emotion and attitude*

However, although this account captures some important aspects of 'projective emotions', it leaves, I think, some other aspects unaccounted for. In particular, it doesn't account for their 'attitudinal' character; it portrays them as a fleeting reaction to a thought, rather than as a reaction based on an enduring attitude. And yet this attitudinal character of 'projective emotions' is important if we want to be able to account fully for the differences in the implications of sentences such as (a) and (b) below:

a. Hearing his criticism she felt confused/bewildered/embarrassed.
b. ?She felt confused/bewildered/embarrassed to hear his criticisms.

The range of acceptable emotions appears to be much wider in the ING pattern than it is in the TO pattern. This is due, I think, to the fact that the TO pattern implies an attitude, based on a thought — and the thought should be recoverable for the sentence to be felicitous. With emotion words such as *ashamed, happy, delighted, sorry*, or *surprised* the underlying thought can indeed be easily recovered, by virtue of their meaning: *happy, delighted* ⇒ 'this is good'; *ashamed, sorry* ⇒ 'this is bad'; *surprised, amazed* ⇒ 'I would have thought: this will not happen'. But with emotions such as *confused, bewildered* or *embarrassed* it is harder to reconstruct the underlying thought (unless the context provides additional clues).

Furthermore, the hypothesis of an attitudinal dimension inherent in the TO pattern allows us to make sense of its infinitival form. As we have seen earlier, a combination of TO with the infinitive generally implies a future time orientation. 'Reactive emotions' are inherently present or past oriented: one reacts emotionally to something that has already happened, or that is happening 'now'. But an attitude naturally extends to any future events falling into a given category. This can be represented along the following lines:

My attitude towards Z-ing (e.g. smoking) is Y. ⇒
when I imagine this: I know this: person X is Z-ing
I think this: this is good/bad/...

An attitude towards possible future events can be represented as follows:

when I imagine this: I know this: Z will happen,
I think this: this will be good/bad/...

Sentences in the TO pattern, such as *I was sorry to fail* can of course refer to past events, as well as to future events; but by choosing the TO pattern the speaker indicates that he is viewing the past event in the light of a future-oriented or open-ended attitude. This can be portrayed in one of the following two ways:

a. I was sorry to fail. ⇒
when I imagined this: I know this:
this will happen to me (I will fail)
I thought this: this will be bad, I will feel sorry
when I thought this: I know this now:
it happened to me
I felt it (sorry)

b. I was sorry to fail. ⇒
if I had known this: this will happen to me (I will fail)
I would have thought: this will be bad, I will feel sorry
when I thought this: I know this now:
it happened to me
I felt it (sorry)

Of these two formulae, which are in any case very close, variant (a) may seem preferable as simpler. In fact, however, its implications are stronger than those of variant (b), as it implies that the speaker had imagined the event before it actually happened. But this is probably not always warranted. For example, if I say:

I was delighted to hear that Jim and Betty got married.

perhaps I don't necessarily wish to imply that I had previously envisaged the possibility of Jim's and Betty's marriage. In any case, an implication of this kind seems inappropriate in the case of emotions triggered by unexpected events, such as surprise or amazement. For emotion predicates of this kind, I would propose an analysis along the following lines (for further discussion, see section 7.5):

I was surprised to hear that. ⇒
I wouldn't have thought:
this will happen to me (I will hear that)
when I thought this: I know this now:
it is happening to me
I felt surprised

Discussing sentences such as

I was sorry to hear the news.
I was glad to hear the news.

Bolinger (1984:52) comments as follows: "One is glad or sorry ABOUT something; the emotions are not merely felt, but projected on their cause." I think it is possible to interpret these observations as follows: if my attitude to an event is such that I am glad or sorry about it, this means that in advance of this event I could have predicted my emotional reaction to it, for the emotional reaction is in this case due to a certain thought, and the attitude, too, is linked with that particular thought.

If this analysis is correct then there is indeed much more to 'projective emotions' than just an emotional response to a state of affairs. First, it is not a state of affairs as such that one is responding to but an awareness of a state of affairs; and this awareness has two components: thinking and knowing, or more precisely, 'my thinking' and 'my knowing':

when I think this: I know this: ...
I feel this: ...

Second, the state of affairs that triggers (indirectly) a 'projective emotion' has to be perceived in terms of a personal experience:

this happened to me/this is happening to me

Third, the emotional response is not unpredictable (for the experiencer); rather, it is a predictable expression of a more permanent attitude:

if I knew this: this will happen to me
I would have thought this: ...

OR:

I wouldn't have thought this: this will happen to me

The construction is 'factive' because it involves the speaker's knowledge of a state of affairs: 'I know this now'; but this knowledge is subjective and

personal ('I', 'now'). Furthermore, in addition to being factive, the construction is also, in a sense, 'imaginary', 'future-oriented' and 'projective', because it refers to an imaginary future event ('if I knew this: this will happen to me'; or 'I wouldn't have thought this: this will happen to me'). This, I think, explains the use of the TO complement, and links the present construction with the other TO constructions discussed earlier.

6.3 *'Projective emotions' and the alleged extraposition*

The hidden meaning of 'projective emotions' is highlighted by contrasts such as the following ones:

a. It is nice to be appreciated.
b. ?To be appreciated is nice.
a. It is lovely to hear that you two are getting married.
b. ?To hear that you two are getting married is lovely.
a. It is nicer to travel than to arrive.
b. ?To travel is nicer than to arrive.

Despite the alleged transformational relationship between the two versions, the version without IT sounds, in each case, pompous, unnatural, and vaguely inappropriate, whereas the version with IT sounds perfectly natural. On the other hand, there is nothing unnatural about sentences (without IT) such as the following ones:

> To know her is to love her.
> DeQuincey held that to be murdered is the consummating touch to the fame of the philosopher. (quoted in Jespersen MEG 5:163).

In fact, sentences of this kind often don't have any natural paraphrases with IT (cf. Emonds 1976:123):

> *It is to love her to know her.
> ??It is the consummating touch to the fame of a philosopher to be murdered.

What I think these contrasts in acceptability show is that the version with IT has in fact a different meaning from the version without IT. It seems clear that the semantic role of the complement in 'projective emotion' sentences doesn't depend crucially on the form of the emotion predicate:

a. I'm pleased to meet you.
b. It's nice to meet you.

The idea that the phrase *to meet you* is the extraposed subject in (b) but a mere complement in (a), is counter-intuitive. In both sentences the speaker is doing, essentially, the same: expressing an attitude to the event of 'meeting you', and a feeling triggered by this event.

English provides a special syntactic pattern for expressing emotional attitudes to personal experiences. This pattern has a few variants (E stands for an emotion predicate):

a. I feel E TO INF.
b. It is E TO INF.
c. It makes me E TO INF.

There are no alternative variants of the same functional pattern with a different word order:

*TO INF I feel E.
*TO INF is E.
*TO INF makes me E.

6.4 *TO versus ING versus THAT*

It will be useful to recall at this stage Jespersen's observation (MEG 5:166) quoted by Bolinger (1968:123): "The infinitive seems more appropriate than the gerund to denote the imaginative (unreal)." The present analysis gives, I think, substance to this assertion — despite the fact (pointed out earlier), that the verb *imagine* itself takes an ING, not a TO, complement. If one cannot say:

*I imagine to go to London.

it is because one cannot imagine the future, as one cannot perceive the future (without visualizing it as if it was already present); and yet TO implies a reference to the future. In the case of 'projective emotions', imagination is indeed involved, and its content is, as usual, present rather than future ('I imagine this: I know this: ...'); but the TO complement is triggered here, as it is elsewhere, by a reference to the future: ('I imagine this: I know this: I will ...').

The difference between 'projective' emotions in the TO pattern and the 'reactive' ones in the ING patterns is highlighted by the difference

between common openings and closings of first encounters, alluded to at the outset:

a. I'm pleased to meet you (?meeting you).
b. It's been nice talking to you (?to talk to you).

Sentence (a) expresses not only the speaker's pleasure caused by the meeting, as a *because* sentence would:

I'm pleased because I'm meeting you.

but also the speaker's attitude to that meeting:

if I had known this: I will meet you
I would have thought this:
this will be good, I will feel pleased

The 'factive' component ('I know this now: it happened/is happening to me') and the emotive one ('I feel pleased') are superimposed on the attitudinal components.

The closing utterance doesn't refer to an attitude, to imagination, or to knowing. By contrast, it refers to the preceding stretch of time, characterized by an on-going process (conversation) and to an emotion, experienced concurrently with it:

It's been nice talking to you. ⇒
when I was talking to you I felt this: it is nice

Turning now to a comparison of the TO pattern with the THAT pattern we will note that while both are 'factive', the THAT pattern feels more 'objective', and, so to speak, 'more factive' than the TO pattern. This difference is manifested, among other things, in the fact (pointed out by Bresnan 1979:85) that the THAT complement can preserve factivity even under an irrealis modality, whereas the TO complement cannot (see also Karttunen 1971):

a. I would be surprised that she said that
(if I hadn't heard it already).
b. I would be surprised to hear that
(I haven't heard it).

Furthermore, the THAT pattern places no restrictions on the subject of the complement clause, whereas the TO pattern generally speaking requires that the subject of the complement should be coreferential with that of the matrix clause:

I regretted (it) that Peter failed. → Peter failed.
I was sorry to have failed. → I failed.

It is true that non-coreferential subjects can occur in the FOR TO pattern, which generative grammarians tend to identify (either fully or partially) with the TO pattern. For example, Bresnan (1979:79), says this: "I will assume that *for* is present in the deep structure of cases like *I like a noble-man to marry* and *I wish you to be happy*, but is deleted under certain conditions when contiguous to a verb." This attitude, however, seems hardly justified in view of semantic differences between the two patterns, which are evident in those rare contexts where both patterns can be used (at least in some varieties of English). For example:

a. I want him to come.
b. I want very much for him to come. (cf. ?I want for him to come.)
a. I want him to be admitted.
b. I want for him to be admitted.
a. I would like you to be there (*to have been there).
b. I would like for you to be there/to have been there.

Variant (a) suggests a confident expectation which is absent in the (b) version. The difference in question is reminiscent of the correlation between the presence of FOR and lack of control in other syntactic contexts:

a. He ordered (*asked) an investigation.
b. He asked for (*ordered for) an investigation.
a. I'm expecting (*hoping) a letter from him.
b. I'm hoping for (*expecting for) a letter from him.

Differences of this kind (which we will explore in greater detail below) indicate that FOR TO and TO cannot be regarded as equivalent. The fact that FOR TO allows non-coreferential subjects doesn't mean that we can say that TO does.

Furthermore, it is very instructive to consider in this connection impersonal emotion sentences, such as the following ones:

It was nice to see them.
It was fun to do that.

Here, the subjects are not coreferential (since the subject of the complement clause is human, and the main clause has 'it' as its subject); and yet the normal interpretation is that the subject of the complement clause is coreferential with the experiencer implied by the main clause. This shows

that if personal emotion sentences such as

I was delighted to do that.

imply coreferentiality of the subject of the complement clause and the experiencer of the main clause this is due not to any formal syntactic condition (which would trigger an alleged FOR deletion), but to the semantics of the TO construction itself.

The fact that the TO pattern requires an experiencer identical with the subject of the complement clause suggests that what is really required in TO complements of emotion predicates is not so much knowledge or awareness as self-awareness. By contrast, the knowledge implied by a THAT complement is, essentially, public knowledge (not in the sense of referring to something that is generally known but in the sense of referring to something that is 'generally knowable'). This can be represented as follows:

I am surprised that Peter failed. ⇒
when I think this: one can know this: Peter failed
I feel surprised

The range of emotive predicates which can take a THAT complement is much more restricted than the range of predicates which can take a TO complement:

It would be fun/boring to do that.
?It was fun/boring that you came to see us/that we did it.

As pointed out by Lees (1960:72), facts are not 'fun' or 'boring'. TO complements are 'factive' in the sense that they refer to something known (by the experiencer), but they do not refer to public facts, as THAT complements do. A subjective, personal, experiential idea such as 'I know this now: it happened/is happening to me' can trigger many different kinds of emotions, but a public fact ('one can know this') has, naturally, more limited possibilities in this respect:

I was ecstatic to have won.
?I was ecstatic that you won.
I was flabbergasted to see him lose.
?I was flabbergasted that he lost.

As Bolinger (1984:56) points out, however, "one who invents a sentence like (...) *I was plunged into gloom that they rejected me* is not regarded as

deviant", because each pattern "is open to accretions through metaphor and hyperbole". We cannot, therefore, put emotion words into rigid categories: those which allow TO, those which allow THAT, and those which allow ING. What we CAN do, is to account for the different interpretations of sentences with different complement types, especially in cases when the same emotion word allows a choice in this respect.

7. FOR TO versus TO

7.1 *FOR TO in emotion sentences*

7.1.1 *Attitude and knowledge*

Turning now to look at FOR TO emotion sentences in more detail, we must note first of all that sentences of this kind favour imaginary, hypothetical contexts over 'real' ones.

a. I'd be delighted for you to stay with me.
b. ?I was delighted for you to stay with me.

As pointed out by Bresnan (1979:72), "speakers vary quite a bit in their acceptance of *for*-complements in contexts like (23b) [Bresnan's numbers and acceptability ratings]:

23. a. It's rather odd that a man is chairing a women's meeting.
b. ?It's rather odd for a man to be chairing a women's meeting."

In general, it seems that linguists are sometimes more tolerant in this respect than ordinary speakers. For example, Stockwell, Schachter and Partee (1973:523) cite the following sentences as acceptable:

What I deplore is for idiots to be running this country.
It is deplorable for idiots to be running this country

which most of my informants (Australian, American and British) reject. The Kiparskys (1971:363) go even further than that and accept also sentences such as the following ones:

I regret for you to be in this fix.
We resented for her to do it.
We deplored for her to do it.

But whatever one thinks of any individual sentences, the fact remains that FOR TO favours, to some extent, 'unreal contexts'; and that it differs in

this respect not only from THAT but also from TO. For example, native speakers of English don't hesitate to accept 'factive' TO sentences such as:

I was delighted to win.
I was ashamed to see that.

but they often do hesitate to accept the corresponding FOR TO sentences:

I was delighted for Mary to win.
I was ashamed for Mary to see that.

On the other hand, if the FOR TO sentences are generic, or refer to the future, or are openly hypothetical, they are usually accepted much more readily. For example, the following sentence is usually readily accepted as felicitous:

I am ashamed for any of my friends to see what sort of man I've married. (quoted in Jespersen, MEG 5:304)

I conclude from this that the basic semantic function of FOR TO emotion sentences consists in expressing attitudes as such rather than actual emotions:

I am ashamed for any of my friends to see what sort of man I've married. ⇒
when I imagine this: I know this:
this will happen to someone [X will see Y]
I think this: this will be bad, I will feel ashamed

This analysis is in full harmony with Jespersen's (MEG 5:304) interpretation of FOR TO sentences, quoted by Bresnan (1979:79): "It should be noted that in nearly all sentences the combination of *for* and an infinitive denotes some vague possibility or something imagined. Take, e.g. ... He was ashamed for the Japanese to see it = ashamed at the thought that the J. might possibly see it." The present analysis also accords well with Spears' (1973:634) claim that FOR complements are "habitual", because they refer "not to one process, but a class of processes, and the embedding predicate assigns a property to any process that qualifies for membership in that class."

THAT sentences refer to public facts and they are not slanted in any way towards the first person: they place no person-restrictions on the subject of the subordinate clause and they refer to 'what one (anyone) can know', not to 'what I know'. TO sentences are doubly slanted towards

the first person: first, they refer to the speaker's personal experiences ('it happened/is happening to me'), and second, they refer to the speaker's personal knowledge ('I know this now'). FOR TO emotion sentences, however, are mid-way between those two patterns. They differ radically from TO sentences in not only allowing but in fact requiring non-coreferential subjects:

I was delighted for Peter to win.
*I was delighted for me (myself) to win.

From this point of view, FOR TO sentences are at the opposite pole from TO sentences: the former are exclusively other-oriented, whereas the latter are exclusively self-oriented; both these patterns are therefore in contrast to the THAT pattern, which is neutral in this respect:

I was delighted that Peter had won.
I was delighted that I had won.

In a different respect, however, FOR TO sentences are similar to TO sentences since both these patterns — unlike the THAT pattern — refer to the speaker's personal knowledge: while one might say that, in a sense, all three patterns are 'factive', in the case of TO and FOR TO this 'factivity' is, so to speak, of a less factual and objective character. The very fact that FOR TO, like TO, refers to the speaker's imagination, the speaker's anticipation of an event, the speaker's attitude towards that event, means that this pattern, too, reflects the speaker's subjective perspective. In fact, even the other-orientation of FOR TO itself involves a subjective perspective; the contrast between 'self' and 'other', 'me' and 'not-me' indicates an emphasis on 'self' and a reluctance to treat 'self' and 'other' in the same way. It is only the neutral THAT pattern which makes no distinction between 'self' and 'other' and which implies a truly 'public', objective, factual perspective.

In the next two sections, we will discuss the other-orientation of FOR TO and its subjective, attitudinal character in more detail.

7.1.2 *Other-orientedness of FOR TO*

It is usually said — and there is of course some truth in it — that TO sentences (in the context of emotions) imply coreferential subjects, whereas FOR TO sentences imply non-coreferential ones. Generative grammarians usually take it for granted that 'syntactic constraints' of this kind have nothing to do with meaning: in the underlying structure, TO = FOR TO. In

my view, however, an analysis of this kind is singularly unilluminating. Not only does it fail to explain facts which at first sight seem mysterious but it also obscures those which are otherwise relatively clear. Consider, for example, pairs of sentences such as the following:

a. I was pleased for you.
b. I was pleased for you to be elected.
a. I was ashamed for her.
b. I was ashamed for her to say that.

Clearly, in variants (a) at least, FOR means something. Roughly speaking, it means that something happened that involves someone else, something that I perceived as good or bad, and that I felt something because of that, even though it didn't happen to me. Clearly, then, this FOR pattern is both emotive and other-oriented. If one cannot say:

*I was pleased for me.
*I was ashamed for me.

it is not because of any formal syntactic constraints, but because these sentences are semantically incoherent; and they are incoherent because FOR means something. But the (b) variants, too, are emotive and other-oriented. If FOR means something in (a), it is counter-intuitive to say that in (b) it means nothing, and that its presence or absence is regulated by mechanical, non-semantic rules.

The close link between the 'FOR NP' pattern and the 'FOR NP TO S' pattern is quite clear in sentences such as the following ones:

> Shouldn't you be glad for me to have the same sort of happiness? (quoted in Jespersen, MEG 5:303)

Here, "glad FOR NP TO VP" implies directly "glad FOR NP". This is of course not always the case, for example it is not the case in the following sentence:

> We shall be only too pleased for Albert to take over the pew. (quoted in Jespersen, MEG 5:304).

Yet here, too, the link between the two patterns is clear: one person's feeling being caused by an event involving another person.

Consider also the '*in lieu*' or '*quid pro quo*' uses of FOR, as in the following sentences:

She didn't have to do it, he did it for her.

He'd give his eyes for the case not to come on. (quoted in Jespersen, MEG 5:306).

The 'benefactive' use of FOR is less strongly other-oriented than the 'emotive' and the *'in lieu'* ones, but the idea of 'other-orientedness' is present here, too. While one can say both (a) and (b) below:

a. She knitted a jumper for Peter.
b. She knitted a jumper for herself.
a. She bought a hat for Mary.
b. She bought a hat for herself.

the use of FOR in (b) is contrastive ('not for someone else'), whereas its use in (a) is not necessarily so. The identity of the agent and the beneficiary is allowed, but whether or not the two are identical the FOR phrase does refer to 'someone else':

a. She did it for someone else.
b. She did it not for someone else.

Significantly, sentences where the beneficiary and the agent are coreferential, but where FOR is not used, are not contrastive:

She knitted herself a jumper.
She bought herself a hat.

It is also worth noting that sentences such as:

She knitted a jumper for her.

are not ambiguous, the two personal pronouns being automatically interpreted as referring to different persons. This is in marked contrast with sentences without FOR:

She washed her jumper.

which are perfectly ambiguous, as the two pronouns may or may not be coreferential (Jean Harkins, p.c.)

To return to the use of TO and FOR TO with emotion predicates, we can portray the self-orientedness of one and the other-orientedness of the other in the following way:

I shall be only too pleased to take over the pew. ⇒
when I imagine this: I know this: this will happen to me
I think this: this will be good, I will feel pleased

I shall be only too pleased for Albert to take over the pew. ⇒
when I imagine this: I know this:
this will happen to someone
I think this: this will be good, I will feel pleased

It might be added that the other-orientedness of the FOR-TO pattern extends, to some extent, to its use in the context of impersonal predicates, as in the following sentences:

a. It was unexpected for him to do that.
b. ?It was unexpected for me to do that.
a. It was odd for him to fail.
b. ?It was odd for me to fail.

In sentences of this kind there are no 'coreferential subjects', so the oddness of (b) sentences cannot possibly be explained in these terms. It can, however, be explained in terms of the other-orientedness of FOR TO: sentences of this kind imply that one is looking at oneself from outside, as if one were looking at someone else. The following contrast in acceptability (Jane Simpson, p.c.) supports this:

?It was odd for me to fail.
They thought that it was odd for me to fail.

By contrast, impersonal TO predicates imply self-orientedness, even though formally speaking their subjects are no more coreferential than those of the corresponding FOR TO sentences. As noted in section 6.4, sentences such as:

It was good to see them.
It was nice to talk to them.

imply that the experiencer of the 'good feeling' is identical with the subject of the complement clause.

The real difference between FOR TO and TO, then, is one of perspective: TO implies an experiential, personal, first person perspective, whereas FOR TO implies an external, third person perspective. Distinctions of this kind are of course very common in the grammar of different languages, the best known example being, perhaps, that of Japanese experiential sentences, which are essentially restricted to the first person (for an in-depth study see Todoriki 1987):

Watashi wa samui.
'I am cold.'

**John wa samui.*
'John is cold.
John wa samugatte iru.
'John appears to be cold.'

For Russian, similar distinctions were recently discussed in Zaliznjak and Padučeva (1987). For English, observations along similar lines have sometimes been made with respect to so-called 'parenthetical verbs' (e.g. *I guess it is time to go* vs. *?He guesses it is time to go;* cf. Urmson 1963). In the area of complementation, however, the transformational approach, with its mechanical 'Equi-noun phrase deletions' and the like, seems to have prevented the recognition of this important dimension of semantic contrast.

As I have argued in *Lingua mentalis* (Wierzbicka 1980a; cf. also Wierzbicka 1976a), in natural language 'I' is not viewed as a specific instance of 'someone'. 'I' and 'someone' are two different universal semantic primitives, and the former cannot be reduced to the latter. This fundamental fact is obscured by artificial devices of linguistic description such as referential indices, PRO-s, dummies and the like. To understand the significance of the experiential perspective in both syntax and cognition we must recognize that 'I' — and 'you' — cannot be reduced to 'someone'. (Cf. Langacker 1985.)

7.1.3 . *FOR TO and the subjunctive (a first look)*

In languages such as Italian or Spanish, the English FOR TO pattern is usually translated by means of the subjunctive. For example (the translations were kindly provided by Ada Valentini):

> I should be sorry for you to think that. (quoted in Jespersen, MEG 5:303)
> *Mi dispiacerebbe che tu pensassi*(SUBJ) *questo.*
> We shall only be too pleased for Albert to take over the pew.
> *Saremmo felici se Alberto prendesse*(SUBJ) *il banco.*
> Nora's husband is content for her to be a doll. (quoted in Jespersen, MEG 5:304)
> *Il marito di Nora è contento che lei sia*(SUBJ) *una bambolina.*

It is intriguing to note, therefore, that the opposite is often not true: not only does the subjunctive have many uses which the FOR TO pattern doesn't have, but even in the area of 'commentative emotional evaluations' (Noonan 1985:117) the subjunctive is used much more widely than FOR

TO is used in English.

Cross-linguistic similarities and differences of this kind provide invaluable clues to the semantics of the individual constructions, and should therefore be utilized whenever possible in developing adequate semantic representations. For example, none of the following Italian sentences offered in Lepschy and Lepschy (1977:226-227) as illustrations of the use of the subjunctive can be fully felicitously rendered in the FOR TO pattern:

Sono arrabbiato che tu non mi abbia scritto.
?I am angry for you not to have written to me.
Sono contento che lui venga presto.
?I'm pleased for him to be coming early.
Mi rincresce che la lettera non sia arrivata in tempo.
?I'm sorry for the letter not to have arrived in time.
Mi dispiace che lui vada in Italia.
?I'm sorry for him to be going to Italy.
E un peccato che lui sia gia partito.
?It's a pity for him to have already left.

To account for contrasts of this kind, as well as for the partial inter-translatability of the two patterns, we must posit for them overlapping, but not identical, semantic representations.

As one step in this direction, it might be pointed out that while both the Italian subjunctive and the FOR TO pattern express an emotional response to an idea, rather than to an actual event, the Italian subjunctive — in contrast to the FOR TO pattern — can refer to very specific events of a highly unpredictable nature. Factive FOR TO sentences seem most acceptable in the context of stereotyped 'good' or 'bad' events such as winning, losing, getting married, getting elected, and so on:

I was delighted for him to win/for them to be getting married.

This suggests, I think, that the FOR TO pattern refers to events that can be imagined in advance and towards which one can form a lasting attitude. Jespersen's sentence "He was ashamed for the Japanese to see it" is a good example in this respect. Clearly, the Italian subjunctive doesn't have such an enduring attitudinal component. Accordingly, the component 'when I imagine this: I know this: this will happen' will not be posited for it. The differences in use between FOR TO and the Italian subjunctive provide, I think, additional evidence for the validity of this component with respect to FOR TO. (For further discussion, see section 9.)

7.1.4 *Why is FOR TO more restricted in use than TO?*

We have pointed out earlier that for many speakers FOR TO, in contrast to TO, is more or less restricted to imaginary contexts. We have also hinted that even in imaginary contexts, the use of FOR TO is more restricted than the use of TO, FOR TO being by and large restricted to stereotyped good and bad events:

I would be delighted for Peter to get married.
?I would be delighted for Peter to see Jim.
I would be delighted to see Jim.

It seems to me that this contrast in acceptability may be due to a kind of tension between the other-orientedness of FOR and the subjective orientedness of TO. One can of course have a positive or negative attitude towards somebody else's hypothetical marriage, or victory, or defeat, but it is harder to imagine why one should have an 'attitude' towards more trivial and accidental events involving other people. Nonetheless, in special circumstances, one can have an emotional response to such events; and it is quite possible to say (using THAT):

I was delighted that Peter had seen Jim.

But FOR TO (like TO) implies more than a fleeting emotional response: it implies a longer-term attitude. Attitudes require, it seems, more significant targets than fleeting emotions. This would explain the contrast between the THAT sentence above and its FOR TO counterpart:

?I was delighted for Peter to see (have seen) Jim.

On the other hand, due to our human egocentrism, events affecting us personally are more likely to appear to us as 'significant' than those affecting other people. This explains, I think, the contrast between the FOR TO sentence above and its TO counterpart, which is fully felicitous:

I was delighted to see (have seen) Jim.

7.2 *FOR TO and volition*

FOR TO complements, like TO complements, can be based either on 'knowing' or on 'wanting'. In the preceding sections, we have discussed the use of FOR TO complements based on knowing and referring to emotional attitudes to (hypothetical or real) knowing. We will now consider briefly FOR TO complements based on wanting, and the relationship between the

two types.

7.2.1. *Personal volition*

Let us begin with the following question: what is the difference between volitional sentences with and without FOR, such as (a) and (b) below? And why is (b) more felicitous than (c)?

a. I want you to come.
b. I want very much for you to come.
c. ?I want for you to come. (OK in some American English)

The answer to this question has already been foreshadowed: the version with FOR sounds more helpless and less confident than the version without FOR. The degree modifier 'very much' implies strong desire rather than self-confident volition. This is entirely in keeping with the difference (noted earlier) between non-confident verbs such as *hope for* and *long for* or *ask for* and the confident ones such as *order (*for)*.

We will posit, therefore, for sentence (b) — but not for sentence (a) — the component: 'I don't want to say: one could think this: it will happen (because of that)'. This component seems also quite appropriate for FOR TO sentences with adjectives of volition, such as *keen* or *impatient*, for example:

> His mother was frightfully keen for Michael to stay with them. (quoted in Jespersen, MEG 5:303)
> I was so impatient for you to come to God. (quoted in Jespersen, MEG 5:304)

7.2.2 *Impersonal (i.e. unspecified) volition*

Next, let us consider the contrast between the personal and the impersonal volition sentences with FOR:

a. I want very much for him (*for me, *for myself) to be present.
b. It is desirable for him (for me) to be present.
c. It is necessary for him (for me) to be present.

The personal mode (a) places restrictions on the subject of the FOR TO clause: in this mode, FOR indicates 'otherness'. In the impersonal mode (b and c) there are no similar restrictions on the subject of the FOR TO clause. Nonetheless, one can say that here, too, the person who 'wants' must be different from the subject of the FOR TO clause: by choosing the

impersonal turn of phrase *(it is desirable, it is necessary)* the speaker makes it clear that he is not expressing his own volition ('I don't want to say: I want it'). Rather, he is referring to what 'would be good' and to what 'should be done'.

Furthermore, it should be noted that 'public' predicates such as *desirable* or *necessary*, for all their apparent force, imply a lack of interpersonal control rather than its presence. There is perhaps more urgency and more authority to (a) than to (b) below:

a. It's necessary for you to do that.
b. I want you to do that.

Yet here, as elsewhere, the variant without FOR implies a greater confidence in the outcome than the variant with FOR.

Accordingly, it seems justified to posit for the FOR TO impersonal volition sentences not only the impersonal component 'I don't want to say: I want it', but also the component of weak expectation: 'I don't want to say: one can think this: it will happen (because of that)'. This leads us to the following formulae:

I want (very much) for him to be present. ⇒
I think this: I want this: he will be present
I don't want to say: one can think this: it will happen
It is desirable for him to be present. ⇒
if one knew this: he will be present
one would think this:
this will be good
he should do it
I don't want to say: I want it
I don't want to say: one can think this: it will happen
It is necessary for him to be present. ⇒
if one knew this: he will be present
one would think this:
this will be good
someone should cause it
if one knew this: he will not be present
one would think this: this will be bad
I don't want to say: I want it
I don't want to say: one can think this: it will happen

The element 'should', which appears in these explications, corresponds

to the element 'should' which we have encountered earlier in TO questions such as:

To be or not to be …
How to win friends …

But in TO questions, 'should' is implied in addition to 'want', not instead of 'want'. Roughly:

How to win friends … ⇒
if you want this: you will win friends
I will tell you what you should do

In the context of impersonal volition sentences with FOR TO complements 'should' seems to be implied INSTEAD of 'want'. We will also come across the link between FOR TO and 'should' (unaccompanied by 'want') in the context of impersonal evaluation. It can hardly be an accident that in all such contexts the element *should* can also appear on the surface, for example:

It is desirable for him to be present/that he should be present.
It was odd that he should have done that.

The Kiparskys (1971:364) called this mysterious epenthetical *should* "the subjunctive marker", and they implied that this element has nothing to do with the "*should* of obligation". It seems more illuminating, however, to look for a link between these two uses of *should*, and to try to see how the "subjunctive *should*" could be analysed as an element of semantic structures containing the "*should* of obligation". For this reason it is important to note that the "subjunctive *should*" doesn't optionally appear with all "emotives", as suggested by the Kiparskys. It can appear, it seems, in the context of evaluation and volition (in particular, impersonal volition), but not in emotive contexts in the stricter sense of the term 'emotive'. For example, sentences (a) below are more acceptable than (b):

a. It is desirable that he should be present.
a. It was odd that he should have said that.
b. ?I was pleased that he should have said that.
b. ?I was sorry that he should have done that.

This suggests that FOR TO complements fall perhaps into a number of distinct types. We will take up this point in section 7.3.

7.2.3 *Volition expressed in directives*

Directive speech act verb such as *order* or *permit* normally take TO, not FOR TO, complements. However, the corresponding periphrastic expressions such as *give orders* or *give permission* often take FOR TO. This contrast between TO and FOR TO in the context of directives gives us additional evidence of the semantic, as well as syntactic, differences between the two. Generally speaking, TO implies here coreferentiality between the addressee and the intended agent, whereas FOR TO implies that the intended agent is different from the addressee. As Jespersen (MEG 5:301) pointed out, the sentence:

She said for you all to go in.

"is curiously different from 'She told you all to go in': it was said to the speaker, not to those she wanted to go". Similarly, the following sentences with FOR quoted by Jespersen (MEG 5:303,302), imply directives given to someone other than the target person:

I gave permission for the infant to go.
The good man gave immediate orders for all his family to be summoned round him.

In a sense, the nouns *order* and *permission* combined with FOR may seem no less confident than the verbs *order* and *permit* combined with TO. Nonetheless, here too the component 'I don't want to say: one could think: it will happen because of that' makes sense. If X says to Y: "I order you to do Z", one may well expect that Z will happen because of that; if, however, X says to Y: "I want W to do Z — this is an order", one can hardly expect that Z will happen BECAUSE of that. X's order has to be transmitted to someone else before it may become effective. This is not the case with orders aimed at the addressee himself.

Thus, here as elsewhere, coreferentiality is linked with a firm expectation of effectiveness and both are signalled by TO, whereas non-coreferentiality is linked with a weak expectation of effectiveness, and both are signalled by FOR.

7.2.4 *TO versus FOR in the context of impersonal volition*

In the context of impersonal volition, the target person may or may not be identical with the speaker, and in both cases FOR TO can be used:

a. It is time for John to go.

b. It is time for me to go.
a. It was necessary for Mary to go.
b. It was necessary for me to go.

Interestingly, however, a bare TO can also be used in such sentences:

c. It is time to go.
d. It was necessary to go.

Who is the target person in such sentences? Since the main clauses are impersonal there is no question here of any coreferentiality of subjects (clearly, the two subjects are not coreferential). Is it possible that here, too — as in TO sentences of emotion — the subject of the complement clause has to be 'coreferential' with the 'logical' or 'psychological' subject of the main clause, or simply with the speaker?

In this case, I think, the facts are not quite as simple as that. An 'experiential', 'emotive' sentence such as:

It was nice to talk to them.

does imply that the subject of the complement clause is coreferential with the speaker. An impersonal 'desiderative' sentence such as

It is time to go.
This is the place to stop.

could refer to the speaker's own action, but it could also refer to the addressee's action. It could also refer to some other people's action — provided that the speaker is included in the group. Thus, the utterance:

Where is John? It's time to go!

implies that either the speaker is going or the addressee is going, or the speaker and John are going together, or the addressee and John are going together, or the speaker, the addressee and John are all going together. It cannot mean, however, that John is going whereas the speaker and the addressee are staying.

I suggest that this interpretation is born out of the 'strong expectation' component conveyed by the TO complement: if the utterance expresses someone's will, and expects to mobilize somebody to action, then it is clear that it can only mobilize the addressee or the speaker himself/ herself, not somebody absent from the scene. Thus, the TO version *(It's time to go)* signals the component: 'one can think this: this will happen because of that', whereas FOR TO version *(It's time for X to go)* signals the component: 'I

don't want to say: I think this: this will happen because of that'.

Since one can say both:

a. It is time to go.
b. It is time for me to go.

the contrast between the TO pattern and the FOR TO pattern cannot be described here in terms of any mechanical 'coreferentiality'. It can, however, be described in terms of a subjective 'I-perspective' (or 'you-perspective') versus an objective, external 'someone-perspective'. It is not impossible to think of oneself as 'someone', on a par with anybody else. This is different, however, from thinking of oneself as 'I'. Sentences such as:

*I am keen for me (myself) to go.
*I was delighted for me (myself) to win.

are unacceptable, because the personal, subjective perspective of 'I am keen' or 'I was delighted' clashes with the objective, impersonal perspective of FOR TO. Sentences such as:

It's time for me to go.

are acceptable because they do not involve a similar clash. The main clause *It's time* conveys an impersonal, objective obligation — a kind of impersonal volition, and this is fully compatible with the objective, impersonal perspective of FOR TO. Sentences such as:

It is time to go.

are acceptable, too — because an individual can well have a subjective feeling, an awareness, of 'duty', of an externally imposed obligation:

I have to go.
I must go.

An impersonal volition phrase such as *It's time* implies: 'I don't want to say: I want it'. FOR TO implies: 'I don't want to say: I think this: this will happen because of that'. The implication that one is not in control of one's future actions any more than of those of other people suggests an objectivized, external view of oneself.

7.3 *FOR TO and 'emotivity'*

What exactly establishes the range of predicates (and predications) which are able to take FOR TO complements? What determines, for exam-

ple, the following contrasts in acceptability (Bresnan's examples, 1979:84):

a. *It is true for God to exist.
b. It is right for God to punish sinners.
a. *It is clear for these houses to be occupied.
b. It is illegal for these houses to be occupied.

The Kiparskys (1971:363) have attempted to capture the factor in question under the label of 'emotivity', which they defined as follows: "Emotive complements are those to which the speaker expresses a subjective, emotional, or evaluative reaction. The class of predicates taking emotive complements (...) includes in general all predicates which express the subjective value of a proposition rather than knowledge about it or its truth value. It is this class of predicates to which *for-to* complements are limited."

These remarks are insightful and helpful — but they are hardly rigorous enough to have necessary predictive power. A foreigner learning English might easily conclude from them that *clear* does take FOR TO whereas *illegal* does not, because whether or not something is clear is a matter of subjective judgment, whether legality or otherwise can be intersubjectively defined and determined. We have seen, however, that in fact the reverse is true (that is, that *illegal* does take FOR TO, and *clear* doesn't). Furthermore, we have seen that clearly 'emotive' predicates such as *regret*, *resent* or *deplore* can hardly take FOR TO complements at all. Stockwell, Schachter and Partee (1973:549) have attempted to deal with this last difficulty by marking such verbs as exceptions, and by saying that "they are semantically [Emotive] but syntactically [-EMOT]". This, however, undermines the whole rationale of the innovative approach taken by the Kiparskys. I conclude that the question of what really determines the use of the FOR TO complements remains to be answered.

My own proposal in this regard can be summarized as follows. English has not one FOR TO construction but several. These several constructions are interrelated and form a chain, or rather a family, of constructions, with identical or similar components recurring in more or less similar configurations. Four of these constructions (numbers 1-4 below) have already been discussed, but there are two more (numbers 5-6 below), which have to be discussed in turn. When we have done this, we can examine the links between the individual members of the family in more detail. The composition of this family can be represented as follows:

(1) Personal volition (e.g. *I want very much for Peter to be present.*)

(2) Volition expressed in directives (e.g. *He gave orders for his family to be summoned.*)
(3) Impersonal (unspecified) volition (e.g. *It is necessary for Peter to be present.*)
(4) Emotional attitude (e.g. *I was delighted for him to win.*)
(5) Evaluation (e.g. *It was wrong for him to do that.*)
(6) Intellectual judgment (e.g. *It was odd for him to do that.*)

As a first approximation, the links between these categories can be represented as follows:

(1) I want it
(2) I want it, someone should cause it
(3) I don't say: I want it, I say:
    it will be good/bad
    someone should/shouldn't cause it
(4) it will be good/bad, I will feel something (delighted/sorry etc.)
(5) one should/shouldn't do that, it will be good/bad
(6) one should/shouldn't think: this will happen

We will look now in more detail at the categories (5) and (6).

7.4 *FOR TO and evaluation*

We have seen that FOR TO emotion sentences tend to concentrate on an emotional response to a value judgment: 'it will be good/it will be bad.' We have also seen that the ideas of 'good' and 'bad' play an important role in FOR TO impersonal volition sentences. Clearly, the same basic value judgments ('it is good/it is bad') also play an important role in the area of evaluative sentences with predicates such as 'right', 'wrong', 'not fair', 'appropriate', 'inappropriate', and so on. We could therefore suggest that contrasts such as:

It is illegal/*clear for these houses to be occupied.
It is right/*true for God to punish sinners.

which cannot be accounted for in terms of 'subjectivity' or 'emotivity', can be satisfactorily accounted for in terms of presence or absence of a reference to 'good' or 'bad' (*illegal* and *right* imply 'bad' and 'good', respectively, whereas *clear* and *true* imply neither). As a first approximation, therefore, we can propose the following semantic invariant for FOR TO

evaluative sentences:

It is right/wrong etc. for X to do Z. ⇒
when I imagine this: I know this: X will do Z
I think this: it will be good/bad

Since sentences of this kind express an impersonal, 'objective' judgment, an impersonal component of the kind proposed for impersonal volition seems justified here as well:

I don't want to say: I want/don't want this

It is interesting to note, however, that evaluative FOR TO sentences, in contrast to emotive ones, seem to be restricted to human action:

It is illegal for these houses to be occupied.
?It is bad for this soil to be so poor.
It was crazy for her to leave that job.
?It was a tragedy for the babies to die.

It is also interesting to note that 'right' and 'wrong', rather than 'good' and 'bad', are really the key concepts in the evaluative FOR TO sentences; or more precisely, that it is the concept of 'should' which seems to play the crucial role here. For example, if we say that it was *crazy*, *foolish*, *sensible* or *a mistake* for someone (X) to do something (Z) we seem to be implying that X shouldn't have done it, rather than that what X did was 'bad'; or if it was 'bad', it was 'bad' in the sense that X shouldn't have done it, rather than in any other sense.

The notions of 'good' and 'bad', 'right' and 'wrong', and 'should' and 'shouldn't' are of course mutually related. Since, however, an exploration of these interrelations cannot be undertaken here, I will confine myself here to proposing a semantic formula couched partly in terms of 'should', without any further discussion of the links between 'should' and 'good/bad'.

It is right/wrong for X to do Z.
(It is right/wrong for X to cause Z.) ⇒
when I imagine this: I know this: X will do Z
I think this: X should/shouldn't do it
I don't want to say: I don't want this

It is possible, however, that one other 'impersonal' component may be justified in the case of FOR TO evaluative sentences. To see this, let us

consider the contrast between FOR TO and OF TO evaluative patterns:

It was crazy for Mary to do that.
It was crazy of Mary to do that.
It was kind/selfish of Mary to do that.
?It was kind/selfish for Mary to do that.

Predicates such as *kind* or *selfish* can be used to describe a person, as well as an act. As pointed out by Bolinger (1977, chap. 7), the OF TO pattern is used in evaluating a person and an act at the same time; it is natural, therefore, that combinations of OF TO with predicates of this kind should be perfectly felicitous. But, as Bolinger has shown, the FOR TO pattern doesn't have such a double function: it is used for evaluating an act, rather than an act and a person.

But if predicates such as *kind* or *selfish* can be used to evaluate an act, as well as a person, there would seem to be no reason why they could not be used to evaluate an act alone. And yet we have seen that combinations of FOR TO with predicates of this kind are not fully felicitous. This suggests that the FOR TO pattern is used not only to evaluate an act as such, but to evaluate an act to the explicit exclusion of the person. It is as if the speaker was saying not only: 'he should/shouldn't have done that, it was a good/bad thing to do', but also 'mind you, I'm not saying anything about the person, I'm only saying something about the act'.

If this is correct then the explication of the evaluative FOR TO sentences sketched earlier should be expanded as follows:

It is right/wrong for X to do Z. ⇒
  when I imagine this: I know this: X will do Z
  I think this:
    it will be good/bad
    X should/shouldn't do it
    I don't want to say: I don't want it
    I don't want to say something good/bad about X

7.5 *FOR TO and intellectual judgment*

In FOR TO evaluation sentences the speaker passes judgment on a human action: 'it is a good/bad thing to do, one should/shouldn't do that'. In FOR TO intellectual judgment sentences the speaker comments on events from the point of view of their relation to expectations:

It was unexpected/odd/strange/surprising for X to do Z.
It was normal/natural/usual for X to do Z.

In sentences of this kind, the crucial idea seems to be this:

one would (wouldn't) have thought this: this will happen

If the notion of evaluation applies here at all it concerns not the action of the complement clause but a hypothetical expectation that such an action would take place.

It is unusual for the train not to leave late. ⇒
if someone said: the train will not leave late
one would have thought: one should not think that
if I knew: it happened
I would have thought: it is unusual

Sentences of this kind sound deliberately impersonal and deliberately non-emotional. Even those speakers who find sentences of type (a) below acceptable, usually reject sentences of type (b):

a. I was delighted/sorry for Mary to win.
b. ?I was surprised for Mary to win.

This suggests that in 'FOR TO sentences of intellectual judgment' the emphasis is indeed on intellectual judgment, not on emotions, and in particular, not on the speaker's personal emotions. Accordingly, it seems justified to add to the explication of such sentences the component 'I don't want to say: I felt something'.

It was odd/surprising for X to do Z. ⇒
if someone had said: X will do Z
one would have thought: one shouldn't think this
when I knew: it happened
I thought: this is odd (this would surprise people)
I don't want to say: I felt surprised

It is true that intellectual comments conveyed in the FOR TO pattern can also employ adjectives such as *interesting*, *amusing* or *funny*, which don't directly refer to expectations:

It was interesting/amusing/funny for X to Z.

It seems to me, however, that when such adjectives are used in the FOR TO pattern they begin to imply that the event was unexpected, as well as

'interesting', 'amusing', and so on. The fact that these adjectives — just like the adjectives of the 'surprise' type — can take *should*, supports this:

It was interesting/amusing/funny that X should have done Z.

I think that this *should*, too, can be plausibly traced back to the component:

if someone had said: X will do Z
one would have said: one shouldn't think this

In contrast, adjectives based clearly on evaluation in terms of 'good' or 'bad', (such as *nice, good* or *sweet*) don't sound completely felicitous in the FOR TO pattern:

?It was nice for X to do Z.
?It was sweet for X to do Z.
?It was good for X to do Z.

— unless the segment "ADJ for X" is interpreted as one constituent ("it was nice for X", "it was good for X"). If such an interpretation is not possible the sentence sounds odd:

??It was lovely for X to do Z (e.g. to see them).

In contrast, the corresponding TO sentence is perfectly felicitous:

It was lovely to do Z.

This sentence, however, implies an emotion (a 'lovely feeling'), not a judgment, and it implies a personal, first person perspective ('when Z happened to me, I had a lovely feeling').

7.6 *FOR TO and 'obviation'*

Bresnan (1982:389) has suggested that FOR TO is "an obviative clause marker", which, like the obviative markers in other languages, "excludes coreference with specified types of antecedents" (1982:331). It is not clear, however, how this new interpretation of FOR TO can be applied to minimal pairs such as:

a. It is time to go.
b. It is time for me to go.

The difference between (a) and (b) consists not in an absence versus presence of coreference with an antecedent, but in the choice of a third-person perspective ('someone') in (b) versus a non-third person perspective ('I',

'you', 'we') in (a). (In (b), even 'me' is treated as 'someone', see section 7.2 above.)

Furthermore, it is not clear how the claim that FOR TO is a marker of obviation could explain the difference in meaning between (a) and (b) below:

a. Grandfather wished us to kiss him goodnight (and we had to comply).
b. He wished for her to kiss him (but he knew it would not happen).

By calling FOR TO a "marker of obviation" Bresnan focusses once more, exclusively, on the differences in coreferentiality between TO and FOR TO, and ignores the differences in meaning. I believe that both the differences in coreferentiality and the differences in the semantic interpretation are predictable from the meanings of the two constructions.

It is no accident that FOR TO, which is less confident than TO, is associated with a non-first-person perspective: it is natural for human beings to be more confident about their own future actions and current experiences than about those of other people (cf. Introduction, section 3). Differences between TO and FOR TO with respect to coreferentiality are real enough, but they follow from the meaning of FOR — a meaning which can be established on the basis of independent evidence such as the contrasts mentioned earlier:

a. He hoped/wished for a present.
b. *He expected/wanted for a present.
a. He asked/begged for food.
b. *He ordered/demanded for food.

'Autonomous syntax' has always ignored such facts, and it continues to do so, because they are incompatible with its fundamental assumptions. Consequently, in 'autonomous syntax', *plus ça change plus c'est la même chose.*

8. THAT and knowledge

8.1 *Say THAT and know THAT*

The complementizer THAT is associated, above all, with two basic predicates, *know* and *say*, which keep turning up in all the explications proposed for THAT constructions. It is natural to hypothesize, therefore,

that all the other predicates which take THAT complements include in their meaning either 'say' or 'know'. A further, stronger hypothesis would try to reduce all the predicates taking THAT to just one: either *say* or *know*.

If we start by exploring this stronger hypothesis we will notice that *know* seems to be a more likely candidate for the source of all THAT complements than *say*. First, all verbs referring to different kinds of knowledge (perception verbs, verbs of memory, verbs of learning, verbs of awareness, and so on), do take *that*:

I knew/realized/saw/felt/learnt etc. THAT *p*.

By contrast, many speech act verbs do not take THAT, for example:

I implored/refused/invited (John) to/*that ...

Moreover, the very verb *say* in combination with THAT seems to imply knowledge, whereas the reverse is not true (that is, the verb *know* in combination with THAT doesn't imply speech). One can say, for example,

I knew that he was right, but I remained silent.

On the other hand, if one says:

She says that Tashkent is the capital of Uzbekistan.

this does imply, if not knowledge, than at least a claim to knowledge on the part of the speaker. A sentence of the form "X said that *p*" implies that the speaker views his message as factual, as referring to something 'knowable' ('one can know this'). To see this, compare for example the following pairs:

a. He said: "You are an idiot!"
b. He said that I was an idiot.
a. He said: "You are beautiful!"
b. He said that I was beautiful.

The (a) versions sound like reports of utterances expressing emotion, rather than 'objective' judgement; by contrast, the (b) versions imply that the speaker was trying to assess the reality, not merely to express his emotion. The (b) version implies: it is a fact — a 'knowable' — that person Y is an idiot (that person Y is beautiful).

Generally speaking, there are many things one can say which would never be reported in a THAT frame, even if they were formally in the indicative mood. One could say for example:

You idiot!
The weekend is over ... Tomorrow it'll be Monday morning again. (cf. Larkin and O'Malley 1973)

but utterances of this kind could hardly be reported with THAT:

?He said she was an idiot. (cf. He called her an idiot.)
?He said that the weekend was over and that the next day it would be Monday morning again.

An utterance reported in a TO frame implies a reference to wanting — either the speaker's wanting or the addressee's expected wanting:

He said to go. ⇒
he said this: you should think this:
'I want this: I will go'

An utterance reported in a THAT frame implies a reference to knowing:

He said that Mary was sick. ⇒
he said this: one can know this: Mary is sick

We can hypothesize, therefore, that THAT complements are acceptable in those kinds of sentences where a component in the frame 'know' can be plausibly reconstructed — a conclusion which parallels exactly Luelsdorff's (1979) conclusion concerning WH complements. This conclusion would explain not only the use of THAT complements with verbs of knowledge, in the broad sense, including perception and memory, but also with various 'assertives' and 'semi-assertives' (cf. Hooper 1975), such as *assume, presume, suspect, expect*, and so on, which can be regarded as semantic derivates of 'know', that is as verbs which in their semantic structure refer to knowing (whether in the affirmative or in the negative). For example, *presume* and *suspect* imply 'I don't know' rather than 'I know' — but this kind of reference to knowing, too, would explain their ability to take THAT.

In support of this analysis of THAT, I adduce the following passage from Bolinger (1984:47): "*That* clauses (...) presuppose INFORMATION. The information may be affirmed, doubted, denied, or emotionally reacted to, but there is always a representation of knowledge ..."

It should be mentioned that a different hypothesis about the THAT complement was put forward in Bresnan (1979:70-73). She writes: "A semantic function of *that* is also isolable, despite wide variations imposed by

various predicates, moods and auxiliaries. The function of *that* is to 'definitize' a complement. (...) The predicates which select *that*-complements are those which are compatible with a definite, specific proposition. (...) *That* seems to seal off its domain from external time quantification and modality. One way of grasping this phenomenon is to conceive of *that* as itself a kind of 'definiteness' operator."

In support of these suggestions, Bresnan adduces contrasts such as the following ones (1979:72):

It's rather odd that a man is chairing a women's meeting.
*It's always rather odd that a man is chairing a women's meeting.
It's always rather odd for a man to be chairing a women's meeting.

But while these examples are indeed compatible with Bresnan's hypothesis, the following one is not:

It is unjust that men tend to chair women's meetings.

Clearly, here the complement hasn't been 'definitized'. But both this example and Bresnan's examples can be explained in terms of the hypothesis which links THAT with 'knowing':

It is unjust that men tend to chair women's meetings. ⇒
when I think of this: one can know this:
men tend to chair women's meetings
I think this: it is unjust
It is rather odd that a man is chairing a women's meeting. ⇒
when I think of this: one can know this:
a man is chairing a women's meeting
I think this: it is rather odd

The impression of greater definiteness in this last example is due to the singular noun *a man,* not to the THAT construction. But as a general proposition, the generalization about definiteness and specificity of THAT complements is not valid. Bolinger's thesis that THAT is linked with 'information' and 'knowledge' appears to be much closer to the mark. If we add that FOR TO — but not THAT — is linked with imagination, the impression of greater 'definiteness' of THAT will become clearer: naturally, what is known (or what can be known) seems more definite than what is imagined.

Kiparsky and Kiparsky (1971:356) have suggested that: "Simple *that*-

clauses are ambiguous, and constitute the point of overlap (neutralization) of the factive and non-factive paradigms." To illustrate this claim, they point out that although the sentence:

I regret that John is ill.

"has the same superficial form as the non-factive

I believe that John is ill.

(...) it differs radically from it in syntactic form, and the two sentences have different deep structures".

I believe that these remarks are correct, but that they are also one-sided. THAT clauses are indeed ambiguous, but both varieties (the 'commentative' and the 'epistemological' one) derive ultimately from the same source: from 'knowing'. What is different is the configuration in which this semantic component is embedded. Thus:

I regret that John is ill. ⇒
when I think this: one can know this: John is ill
I feel regret
I believe that John is ill. ⇒
I think this: John is ill
I don't want to say: I know this
I say: I believe this

In the 'commentative' type of THAT clauses the speaker is thinking of a piece of knowledge concerning a certain state of affairs and is reacting to that thought. In the 'epistemological' type, the status of this predication is specified with respect to knowledge: the speaker either supports it with a confident 'I know this' or hedges it with a distancing component 'I don't want to say: I know this'.

As for the choice between THAT and TO, we have already seen (in section 3.1) that epistemological sentences allow TO only in those cases where the speaker stresses the personal and subjective basis of his utterance.

a. He found her to be intelligent/?Mexican.
b. He found that she was intelligent/Mexican.
a. He is certain (*possible) to win.
b. It is certain/possible that he will win.

In 'commentative' sentences, we find the same kind of difference between TO sentences and THAT sentences:

a. It was good to see them.
b. It was good that I (he) saw them.

Sentence (a) refers to a personal experience — to a feeling caused by personal awareness; sentence (b) refers to an objective fact. For this reason, unambiguously emotive verbs and adjectives sound much more felicitous in pattern (a) than in pattern (b):

It was lovely to see them (?that I saw them).
I was delighted to see them (?that I saw them).

8.2 *THAT sentences with a modal*

In the preceding section, I have adduced, in an abbreviated form, a quote from Bolinger's (1984:47) analysis of THAT sentences. Given *in extenso*, the first sentence reads: "THAT clauses (provided they have no modal, as in *I desire that they should leave*) presuppose INFORMATION." Does this mean that a THAT clause with a modal is entirely different from a clause without a modal? Surely, if we were forced to adopt such a conclusion this would detract considerably from the appeal of the simple hypothesis that THAT belongs to KNOW. I think Bolinger is quite right in pointing out that the combination of THAT with SHOULD (or WOULD) doesn't PRESUPPOSE information. But then, THAT without a modal doesn't always presuppose information either. For example, the sentences (cf. McCawley 1973:135-136):

I dreamed that my toothbrush was pregnant.
Harry thinks that his toothbrush is trying to kill him.

don't presuppose the information introduced by THAT. What is relevant is not that any information (or knowledge) should be presupposed, but that it should be referred to, in the semantic structure of the sentence. I think that this reference to knowledge is present in all sentences with THAT, whether or not they include a modal. Furthermore, I think that it is this (explicit or implicit) reference to knowledge which explains why some verbs (e.g. *decide* or *desire*) can take THAT, whereas their near-synonyms (e.g. *want* or *long*) cannot.

In the case of *decide*, the implicit reference to 'knowing' can be reconstructed roughly along the following lines:

I decided that I should go. ⇒
I didn't know what I should think I should do
after that, I said to myself:
I know now: I want this: I will think this: I should go
I think this: I will do it
I decided that I would go. ⇒
I didn't know what I wanted
after that, I said to myself:
I know now: I want this: I will go
I think this: I will do it

An analysis along these lines predicts that *decide* can take TO as well as THAT, because it is compatible with the semantic structures associated with both these complements. By contrast, *want* makes no reference to 'know' in its semantic structure and it cannot take THAT complements at all.

There are many volition verbs like *decide*, which refer in their semantic structure to both wanting and knowing. It appears that usually verbs of this kind can take both TO and THAT complements, with a subtle (or not so subtle) difference in meaning, TO complements focussing on volition and THAT complements focussing on knowledge. In particular, TO seems more appropriate than THAT in the context of old information. This means that, for example, with *vow*, one is more likely to use THAT in a performative, present tense utterance and TO in a past tense report than vice versa:

a. I vow that I will avenge their death.
b. He vowed to avenge their death.
c. (?)I vow to avenge their death. (OK, but less natural than a or b.)

With *order* or *ask*, the THAT variant is most likely to be used if the action is to be carried out by somebody other than the addressee:

a. He asked that his mail be forwarded to him.
b. ?He asked that she forward his mail to him.
a. He ordered that the prisoners be released and their property be restored to them.
b. ?He ordered that they release the prisoners and restore their property to them.

This can be explained as follows: TO stresses the volitional aspect of ordering and asking, and therefore it is more important in face-to-face interaction, where the speaker is trying to prevail upon the addressee's will. THAT stresses the informational aspect of ordering and asking, and makes these acts closer to instructions: it is important for the intermediary that he should know and understand exactly what is expected; the question of will is less important if it is not necessarily the addressee who is supposed to carry out the order or request.

In any case, however, directives like *order* and *ask* seem to allow THAT complements only in the case of new information. It is interesting, but not unexpected, therefore, that 'reactive' speech act verbs such as *refuse* and *decline* don't take THAT complements at all:

She refused to do it.
*She refused that she would do it.

Similarly, *implore* seems to differ from *ask* or *order* in terms of old information: usually, we start imploring after we have asked and been refused; thus the content of our request is probably old information, and we *implore* in order to prevail upon the addressee's will.

Limitations of space preclude much further discussion of differences between TO and THAT complements here. Many intriguing contrasts exist in this area (e.g. the contrast between *desire that* and **want that*), which at first sight may seem arbitrary, but can in fact be shown not to be so. In the case of *desire*, the reference to 'know' takes, I think, the following form:

I desire to do Z. ⇒
I want this: I will do Z
I know this: one cannot think: Z will happen because of that

Roughly speaking, *desire* is less direct and less forceful than *want*. *Want* is compatible with different degrees of forcefulness, and 'forcelessness', but by itself it doesn't refer to knowing, or not knowing, what the outcome is going to be; and this is why it cannot take THAT:

I want to do Z. ⇒
I want this: I will do Z

It is for that reason, I suggest, and not for any stylistic reasons, that the variant (a) below sounds more polite than variant (b):

a. What does Your Ladyship desire?
b. What does Your Ladyship want?

Variant (a) implies that Her Ladyship's desires are expected to be carried out by other people (servants, and the like), and this makes the verb *desire* more appropriate in this context than *want*. Similarly, the sentence:

I desire that they should leave.

implies that the speaker is not going to grab the unwelcome visitors by the scruff of their necks and throw them out, whereas the sentence:

I want them to leave.

is not incompatible with such a course of events.

I conclude that THAT complements derive from a component of 'knowing' in the semantic structure. This would accord well with Bogusławski's (1979 and In press) thesis that in the semantic structure KNOW is always linked with some proposition. (For an illuminating discussion of the differences between *know p* and *know that p*, see Bolinger 1972.)

9. The subjunctive: a cross-linguistic perspective

9.1 *Preliminary remarks*

Problems that in English syntax revolve around the choices between complement structures such as FOR TO, TO, ING and THAT, in the syntax of many other languages revolve around the choice between the 'indicative' and the 'subjunctive'. Often, the same factors seem to be responsible for the choices in question. In particular, the English FOR TO constructions (often identified by grammarians with some or all of the TO constructions), seem to correspond to a considerable extent to what is called the subjunctive in languages such as French, Italian or Spanish. The description given by the Kiparskys to the English FOR TO pattern corresponds very closely to the descriptions usually offered for the 'subjunctive' in the grammars of Romance languages. Nearly all such descriptions talk about sentences expressing "subjective, emotional, or evaluative reaction", or about predicates "which express the subjective value of a proposition rather than knowledge about it or its truth value" (Kiparsky and Kiparsky 1971:363).

Judging from this, one might expect that the range of use of the relevant constructions is in all these languages the same. In fact, of course, it isn't — but, to the best of my knowledge, nobody has tried to propose pre-

cise semantic formulae which would account for the relevant differences, as well as similarities, between the different languages in question. Characteristically, the valuable recent typological study of complementation by Noonan (1985), which attempts to survey cross-linguistic similarities and differences in this area, doesn't even raise the question of the possibility of devising precise semantic formulae which would predict the scope of such similarities, and such differences. Usually, it is left to the language teachers to grapple with the 'details' and to devise precise, serviceable rules — and they do it by accumulating useful hints, examples and warnings, and more often than not by concluding that no firm rules are possible in this area and that, ultimately, one has to rely on one's intuition, on *"Sprachgefühl"*.

From a theoretical point of view, this is hardly a satisfactory state of affairs. In what follows, we will try to develop some formal rules for the use of the subjunctive. Naturally, limitations of scope necessary in a study such as the present one preclude any exhaustive treatment of the subjunctive in even one language, let alone in several. We will attempt, nonetheless, to develop here some rules which would cover a large proportion of the relevant data in some of the languages that we will look at.

9.2 *Verbs of volition*

In French, Italian and Spanish verbs of volition usually take an infinitive complement if the subjects are coreferential and a subjunctive one if they are not:

Je veux y aller.
'I want to go(INF) there.'
Je veux qu'il y aille.
'I want/wish him to go(SUBJ) there.'
**Je veux que j'y aille.*
'I want/wish to go(*SUBJ) there.'

The contrast in question is usually presented as due to an "Equi-NP deletion", as a result of which "**Je veux que j'y aille* becomes *je veux aller*" (Judge and Healey 1983:140). In the case of non-coreferential subjects, however, the subjunctive is not always required, because if "the decision is taken by an omnipotent authority which makes it impossible for the order not to be followed, the future indicative may be used (...): *J'ai décidé qu'il ira*" (1983:140).

This very fact, however, seems to suggest that if the infinitive embed-

ded under a volition predicate implies coreferentiality whereas the subjunctive implies different subjects, this is due to semantic factors, not to any mechanical syntactic rules: it is natural to regard one's own actions as more controllable, and therefore more predictable, than those of other people; and it is not natural to present one's own actions as unpredictable.

As pointed out by Givón (In press:11), Spanish (and, I would add, other modern Romance languages as well) don't have the grammatical means to render the exact meaning of English sentences such as *I want him to go*. Despite the non-coreferential subjects, sentences of this kind imply a degree of controllability, which in Romance languages is associated only with one's own actions — unless the speaker explicitly refers to the causer's control over somebody else.

Elle voulait s'en aller.
'She wanted to go.'
Elle voulait qu'il s'en aille.
'She wanted/wished (for) him to go.'
Elle l'a fait s'en aller.
'She made him go.'

If one adds to this the fact that causative verbs take infinitive complements regardless of the coreferentiality or otherwise of the two subjects, the following picture emerges. The infinitive complement implies an expectation that an event will occur, the subjunctive suggests that the speaker refrains from expressing such an expectation, whereas the indicative implies neither:

Je veux y aller.
'I want to go there.' ⇒
I think this: one can think this: it will happen
Je veux qu'il y aille.
'I want/wish him to go there.' ⇒
I imagine this: I know this: X will happen
I think this: I want it
I don't want to say: I think this: it will happen

This interpretation of the subjunctive (in the context of volition) is supported by the fact that it is used also in wishes, and in other similar contexts, where the speaker doesn't want to imply that he is in control. For example:

Dieu te bénisse.
'May God bless you.' ⇒
I imagine this: I know this: this will happen
I think this: I want it
I don't want to say: I think this: it will happen

In Italian and Spanish, the subjunctive is also used in "polite" (i.e. tentative) requests, for example:

Si accomodino, Signori.
'Please be seated, gentlemen.' ⇒
I imagine this: I know this: this will happen
I think this: I want it
I don't want to say: I think this: it will happen

This is in marked contrast with a straight imperative, which implies no similar diffidence (no 'I don't want to say: I think this: it will happen').

In French, "verbs indicating the probable take the indicative whereas those indicating the possible, the improbable, and the impossible, take the subjunctive" (Judge and Healey 1983:141). Interestingly, phrases such as *il est peu probable*, literally 'it is little probable', take also the subjunctive, and so do verbs such as *nier* 'deny'.

I interpret these facts as follows. The subjunctive indicates that the speaker explicitly refrains from committing himself to an assertion — not only from MAKING an assertion but even from committing himself to one, to any degree. To say 'it is possible' doesn't commit him to it, but to say 'it is probable' would, and this is why *probable* (but not *peu probable*) takes the indicative. It will be recalled that in English, too, *possible* differs in a similar way from *probable*:

It is possible (*probable) for scholars to disagree.

It is also very instructive to consider verbs such as *sembler* 'seem', which — depending on the speaker's confidence and caution — may take either the indicative or the subjunctive. Explications of the following kind can, I think, account for such facts:

Il me semble que cela est bien.
'It seems to me that this is(IND) good.' ⇒
I think this: X is good
I know this: this could be wrong

Il me semble que cela soit bien.
'It seems to me that this is(SUBJ) good.' ⇒
when I imagine this: someone says this: this is good
I think this: I would say this
I don't want to say: I say this
I know this: this could be wrong

Turning now to the fact that verbs of opinion behave differently in the negative than in the affirmative sentences we can explain this asymmetry in terms of the analysis proposed above. If the subjunctive implies the speaker's reluctance to commit himself to a proposition, it is natural that negative sentences should favour the subjunctive, since in negative sentences the speaker is rejecting a proposition anyway.

The following explications can account for facts of this kind.

Je pense qu'il viendra.
'I think that he will come(IND).' ⇒
I think this: this will happen
Je pense qu'il ne viendra pas.
'I think that he will not come(IND).' ⇒
I think this: this will not happen
Je ne pense pas qu'il vienne.
'I don't think that he will come(SUBJ).' ⇒
when I imagine this: someone says this: this will happen
I think this: one shouldn't say this
I don't want to say: I say this

9.3 *Subjunctive in relative clauses*

Contrasts such as the following ones:

Je cherche une maison qui est à vendre.
'I'm looking for a house which is(IND) for sale.'
Je cherche une maison qui soit à vendre.
'I'm looking for a house which is(SUBJ) for sale.'

are usually described (in transformational and post-transformational literature) in terms of a binary feature "±Specific" (cf. e.g. Hadlich 1971:190). This description, however, fails to account in any way for the relationship between this particular use of the subjunctive and all its other uses. Intuitively, this use is closely related to those other uses. This relationship can be

accounted for in the following formulae:

Je cherche une maison qui est à vendre. ⇒
I'm thinking of a house
I know this: it is for sale
I want this: I will find it
Je cherche une maison qui soit à vendre. ⇒
I imagine this:
I'm thinking of a house
I know this: it is for sale
I want this: I will find it
I don't want to say: I say this (this will happen)

The crucial differences are these. In the version with the indicative, the speaker has a particular house in mind ('I'm thinking of a house') and he knows something about it ('I know this: it is for sale'). In the version with the subjunctive, too, thinking and knowing are referred to, but they are in the scope of 'I imagine'. Moreover, the speaker explicitly refrains from expressing an expectation ('I don't want to say: this will happen').

9.4 *Verbs of emotion and evaluation*

As pointed out in an earlier section, the subjunctive is used in sentences which express an emotional evaluation. For example:

Je m'étonne que vous parliez chinois.
'I'm surprised that you speak(SUBJ) Chinese.'
Je regrette qu'il soit malade.
'I'm sorry that he is(SUBJ) ill.'

In sentences of this kind, the truth of the complement clause is presupposed, so there is no reason why the speaker should be reluctant to commit himself to it. Does this mean that the role the subjunctive plays in such sentences is entirely different from the role it plays elsewhere? Hooper (1975) has suggested that the function of the subjunctive in presupposed complements is similar to that in hypothetical and negative complements because, as she puts it, in both cases the complement clause is "not asserted". To put it differently, one might conjecture that the subjunctive signals that the speaker is not making an assertion, that he is not saying 'I say this.' The reasons for signalling this may be different: the speaker may wish to distance himself from an assertion because he believes it is not true,

or because he thinks it may not be true; but he may also wish to signal that he is not making an assertion because (as in the case of presupposed complements) there is no need to make that particular assertion.

I find Hooper's interpretation very appealing, but there are two major difficulties involved in it. First, the infinitival complements of verbs of volition or verbs of opinion are not asserted either and yet, as we have seen, they cannot be replaced with the subjunctive. Second, as pointed out by Klein (1977:17-18), complements of a non-negated verb *know* and other 'cognitives', i.e. verbs of knowledge, "never appear in the subjunctive, even on the presupposed reading". Neither in Spanish nor in French is it grammatical to use the subjunctive in sentences such as:

I know (see, recognize, realize, etc.) that *p*.

not even if the context makes it absolutely clear that *p* is fully presupposed, and therefore is not being asserted.

It seems to me that facts of this kind force us to abandon Hooper's appealing generalization and to search for a different one. If 'emotive factive' sentences take subjunctive complements this cannot be explained by the fact that these complements are not being asserted.

The fact that presupposed, fully factual, complements of *know* and other verbs of knowledge don't allow the use of the subjunctive, suggests, it seems to me, that there is a conflict in meaning between 'I know' and the subjunctive. Of course the subjunctive cannot possibly imply 'I don't know', because this would make it incompatible with presupposed complements. It can, however, imply 'I don't want to say: I know'. This hypothesis would explain simply and elegantly why one cannot say, for example,

* *Je sais qu'il soit malade.*
'I know that he is(SUBJ) ill.'

If the subjunctive implies 'I don't say: I know' it would flatly contradict the message of the main clause, which says clearly 'I know'. It would not, however, be incompatible with presupposed complements.

Je m'étonne qu'il soit malade.
'I'm surprised that he is(SUBJ) ill.' ⇒
when I think this: one can know this: he is ill
I feel surprised
I don't want to say: I know this
I want to say: I feel something thinking of it

It seems to me that an explication along these lines accords well with informal explanations such as the following one: "When the governing expression in the main clause indicates that the speaker accepts what follows without emotion and as a fact, and that fact is simply communicated as such, the indicative is used (...). Otherwise, the subjunctive is used (...). This includes cases in which what follows is accepted as factual, but viewed emotionally" (Poston, Chang-Rodríguez and Ferrigno 1974:135). Combining the imaginary saying with the presupposed knowledge we obtain the following formula:

Je m'étonne qu'il soit malade.
'I'm surprised that he should be ill.' ⇒
when I imagine this: someone says this: he is ill
I think this: I would feel surprised if one could know this
when I think this: one can know this
I feel this (surprised)
I don't want to say: I know this
I want to say: I feel something thinking of it

If we know something for a fact we cannot 'imagine that we know it'. We can, however, imagine that someone else says the thing in question. It is worth noting in this connection that in English, too, presupposed knowledge can be combined with a modal such as *should,* which seems almost certainly to be based on imagination:

I'm surprised that he should be ill.

Consider also utterances such as the following one (Jean Harkins, p.c.):

Just imagine — I saw Prince Charles today!

The addressee cannot be expected to accept something as a fact and at the same time to 'imagine' that it is a fact. He can, however, be asked first to imagine hearing a certain piece of news, and then, to accept this piece of news as real news.

The analysis proposed above contrasts the non-assertive component of opinion sentences ('I don't say: I say this') with what one might call an 'anti-cognitive' component of 'factive commentative' ones ('I don't want to say: I know this'). In defense of this contrast, I would point out that both these components (the 'anti-assertive' one and the 'anti-cognitive' one) are necessary anyway, to account for other facts concerning the use of the subjunctive.

Consider, for example, the following facts. In French, as pointed out earlier, the equivalent of *possible* takes the subjunctive, whereas the equivalent of *probable* does not, but in Italian, or in Spanish, both 'possible' and 'probable' take the subjunctive.

Es probable que se vaya(SUBJ) *pronto.*
Il est probable qu'il s'en va (**s'en aille,* *SUBJ) *vite.*
É probabile che vada(SUBJ) *presto.*
'It is probable that he will go quickly.'

If our semantic formulae are to have predictive power we should assign to the Spanish and Italian subjunctive in such sentences a different value from that assigned to the French subjunctive. I suggest that this can be done in the following way. In French opinion sentences, we might say, the subjunctive signals this: 'I don't say this', or 'I don't want to say: I say this'. This can be seen as incompatible with 'probable':

?He will probably come, I don't want to say: he will come.

In Italian and Spanish opinion sentences, we might say, the subjunctive means this: 'I don't want to say: I know this'. This formula is not incompatible with saying that the thing in question is probable. Consider also the following contrast:

Es casi cierto que se vaya(SUBJ) pronto.
Il est presque certain qu'il s'en ira (**s'en aille,**SUBJ) *vite.*
'It is almost certain that he will go quickly.'

Predicates such as 'probable' or 'almost certain' are, one might say, 'assertive', or 'weakly assertive' (cf. Hooper 1975), but they are not verbs of 'knowledge' or 'cognitives' (in the sense of Klein 1977). It makes sense, therefore, that they should be compatible with 'I don't say: I know this' but not with 'I don't say: I say this'.

Next, consider the evidence from the area of negative sentences with 'know'. In Italian and in Spanish, sentences of this kind readily take the subjunctive, e.g.

Non so dove lei sia.
'I don't know where she is(SUBJ).'

In French, however, *savoir* 'know' never takes subjunctive complements:

**Je ne sais pas où elle soit.*
'I don't know where she is(SUBJ).'

If in Italian and Spanish the subjunctive implies, in such sentences, 'I don't want to say: I know it', it is perfectly compatible with the content of the main sentence ('I don't know'). On the other hand, if the French subjunctive implies here: 'I don't want to say: I say this', the subjunctive would make no sense in sentences where the complement clause doesn't express any affirmative proposition at all, no matter how tentatively. The hypothesis advanced here explains, therefore, why French behaves differently from Italian and Spanish in this respect.

Finally, consider the following fact. In French, until the seventeenth century, the verb *croire* 'believe' could take either the indicative or the subjunctive (Judge and Healey 1983:154):

Je crois qu'il viendra(IND).
Je crois qu'il vienne(SUBJ).
'I believe he will come.'

In modern French, however, *croire* (in affirmative sentences) takes only the indicative:

*Je crois qu'il viendra (*vienne).*

This suggests that the meaning of the subjunctive in French has changed (unless that of *croire* has). But how has it changed? Since *croire,* like *probable,* is a verb of opinion, not a verb of knowledge, it seems reasonable to suppose that at the time when it was compatible with the subjunctive, the subjunctive implied 'I don't say: I know this', rather than 'I don't say: I say this'; and that in modern French it has come to mean in most contexts 'I don't say: I say this'. We might add that in modern Italian and Spanish the equivalents of *believe* are still compatible with the subjunctive:

Credo che se vada presto.
Creo que se vaya pronto.
'I believe that he will go quickly.'

What these facts seem to suggest is that in all three Romance languages which we have looked at two different components play a role in the functioning of the subjunctive: the 'anti-assertive' one 'I don't want to say: I say it' and the 'anti-cognitive' one 'I don't want to say: I know it', but that their role in the individual languages is different. In French, the scope of the 'anti-cognitive' component is narrower, having narrowed down in the modern era.

It is interesting to note that a similar process of narrowing down of the

subjunctive has occurred in modern German, where, however, it has gone much further. In contemporary German, the subjunctive is used frequently in reported speech (in the public sphere, not in colloquial speech), where it functions as a distancing device, its message being clearly that of 'X says/thinks this — I don't want to say: I say this' (cf. e.g. Borgert and Nyhan 1976:143-146, Kufner 1962:77-86). This function is carried out mainly by the so-called "special" or "quotative" subjunctive, which "is almost completely reserved for cases where the speaker has strong mental reservations about the truth of what he is saying" (Kufner 1962:86). For example (an example adapted from Kufner, and suggested by Gerda Smith, p.c.):

> *Hans Frau hat gesagt, er sei nicht mitgekommen, weil er Kopfschmerzen habe.*
> 'Hans' wife said that he didn't come because he had(SUBJ) a headache (but I don't believe he really has a headache).'

It seems clear that sentences of this kind convey the following message:

> person X says Y
> I don't want to say: I say/think this

The so-called "general subjunctive", which is also called the "unreal form", can also be used in quotative contexts where one speaker wishes to distance himself from another; but it can also be used in many other kinds of contexts, for example, "to express unreal or unfulfillable wishes" (Kufner 1962:83):

> *Hätte ich dass nur gewusst …*
> 'If I had only known that …'

It seems clear that this 'unreal' subjunctive carries in its meaning the notion of 'imagine' ('I imagine this …')

An even further reduction in the use of subjunctive has of course occurred in modern English. (Cf. e.g. Jespersen, MEG 4:113). On the other hand, modern English has developed a new syntactic device, closely related to the subjunctive: the FOR TO pattern. In a later section, we will try to summarize the similarities and the differences between this English pattern and the Romance subjunctive. First, however, we will take a quick look at the corresponding phenomena in Slavic.

9.5 *A look at some Slavic languages*

9.5.1 *Polish*

Consider the following sentences:

Chcę iść.
'I want to go.'
Chcę, żeby Barbara poszła.
'I want/wish for Barbara to go.'
* *Chcę, żebym ja poszła.*
'I want/wish for me to go.'

So far, this looks very much like French: verbs of volition take an infinitive in the case of coreferential subjects and a 'subjunctive' in the case of non-coreferential ones — except that in Polish what one might call the 'subjunctive construction' takes the form of an irrealis conjunction *żeby* combined with the (indicative) past form of the subordinated verb. Consider, however, the following sentences:

Marzę, żeby pójść.
'I dream/long to go.'
* *Marzę pójść.*
* *Marzę, żebym poszła.*

Here, despite the coreferential subjects, the subjunctive conjunction *żeby* is not only possible, but obligatory. On the other hand, the infinitive is still used, and the 'subjunctive' form of the verb is not allowed. Furthermore, consider the following contrasts:

Kazałam jej pójść.
'I ordered her:DAT to go.'
Zabroniłam jej pójść.
'I forbade her:DAT to go.'
Prosiłam ją, żeby poszła.
'I asked her:ACC to go.'
* *Prosiłam ją pójść.*

Here, the infinitive can be used for non-coreferential subjects if there is an assumption of control and a concomitant firm expectation that the action will occur.

Thus, the situation in Polish (with respect to volition) can be summarized as follows: (1) The bare infinitive implies an expectation that the

wanted action will occur; (2) the use of the subjunctive conjunction implies a lack of an expectation that the wanted action will occur; (3) coreferential subjects do not always preclude the use of the subjunctive in complement clauses.

I conclude from this that in Polish the bare infinitive as a complement of volitional verbs conveys a semantic component analogous (though not identical) to the one which has been posited for the French bare infinitive: 'one can think: this will happen'. I wouldn't want, however, to assign to the Polish infinitive exactly the same configuration of semantic components because of the considerable differences between the two languages in this area. For example, in Polish 'strong directives' such as *kazać* 'order' take the bare infinitive, whereas in French they require an infinitive with a preposition:

Kazał jej pójść.
Il lui a ordonné d'aller.
'He ordered her to go.'

On the other hand Polish makes a distinction between 'confident directives' similar to *order* and 'helpless directives' similar to *beg*, whereas French doesn't.

*Błagał ją, żeby poszla (*pójść).*
Il l'a imploré d'aller.
'He begged her to go.'

The matter requires further investigation. It is possible that it will turn out that for Polish we should postulate something along the lines of 'I imagine I can cause it'. Generally speaking, the links between the infinitive, expectation and controllability (cf. Riddle 1975 and Noonan 1985:102) would make a fascinating cross-linguistic study and it would be a challenge to try to account for them in adequate semantic formulae. We cannot, however, pursue this problem any further in the present study.

In the context of 'factive commentative' sentences Polish never uses the subjunctive.

*Cieszę się, że (*żeby) poszła.*
'I'm pleased that she went.'

In the context of opinion, the subjunctive (conjunction + verb) can, and for some verbs has to, be used in negative sentences, but not in affirmative ones:

*Sądzę, że pójdzie (*żeby poszła).*
'I think that she will go.'
*Nie sądzę, żeby poszła (*że pójdzie).*
'I don't think that she will go.'
Nie wierzę, że pójdzie (żeby poszła).
'I don't believe that she will go.'

Thus, French negative opinion sentences have close equivalents in Polish, but French affirmative opinion sentences do not:

Il n'est pas possible que Barbara soit malade.
Niemożliwe, żeby Barbara była chora.
'It's impossible that Barbara should be(SUBJ) sick.'
Il est possible que Barbara soit malade.
* *Możliwe, żeby Barbara była chora.*
'It's possible that Barbara is(SUBJ) sick.'

It is a cnallenge to devise plausible semantic formulae which would be able to account for both these similarities and these differences.

Tentatively, I would propose the following. Both the French and the Polish subjunctive of opinion involves a reaction to an imaginary state of affairs, but the nature of this imaginary state of affairs is in each case different. In French (and in the other Romance languages considered), the speaker imagines a person who says something, and he reacts to this imaginary proposition. In Polish, the speaker imagines that he himself knows something, and he reacts to this imaginary situation. In both French and Polish, the speaker indicates that he wouldn't want to assert the proposition in question:

French:
when I imagine this: someone says this:
I think this: ...
I don't want to say: I say this
Polish:
when I imagine this: I know this
I think this: ...
I don't want to say: I say this

If someone says something to us that we either don't believe or don't quite believe it is equally natural for us to respond by saying "it's possible", as by saying "it's impossible". However, if we imagine that we know something (which is very close to assuming that it is true) we usually proceed on that

assumption, unless we feel a strong impulse to reject it. For this reason, the explications sketched above would explain, it seems to me, why in Polish only negative opinion sentences take the subjunctive, whereas in French affirmative ones take it too — unless the speaker's affirmative response is too firm to clash with the 'anti-assertive' component 'I don't want to say: I say this'.

In support of the analysis proposed above I would draw attention to the remarkable difference between Romance and Slavic with respect to coreferentiality. In French, Italian or Spanish, as a rule, the subjunctive can occur only with non-coreferential subjects (including 'logical subjects'). As we have seen, however, in Polish (and, as we will see, in Russian) this is not the case. Whether the subjunctive conjunction is combined with an infinitive or with a finite form, it readily occurs in sentences with coreferential subjects:

Boję się, żeby nie zachorować.
'I'm afraid of falling ill(INF)'
Nie sądzę, żebym była chora.
'I don't think that I am(SUBJ) ill.'

Why should the Slavic subjunctive behave so very differently from the Romance one?

It seems to me that the analysis proposed here provides an answer to this question. Leaving aside for the moment volitional contexts, we can say that the Romance subjunctive involves two speakers: the real one and the imaginary one. This is a device which works well with non-coreferential subjects, but which with coreferential subjects would lead to confusion. To see this, compare the following explications:

Je ne pense pas qu'elle soit malade.
'I don't think that she is(SUBJ) ill.' ⇒
I imagine this: someone says this: she is ill
I think this: I don't think this
I don't want to say: I say this

* *Je ne pense pas que je sois malade.*
'I don't think that I am(SUBJ) ill.' ⇒
I imagine this: someone says this: I am ill
I think this: I don't think this
I don't want to say: I say this

To begin with, if the speaker distances himself from a sentence about himself this produces an odd effect similar to that of the sentences which relate out-of-the-body experiences:

> I was looking at me (rather than: myself) lying there, on the operating table, with indifference...

and also of FOR-TO sentences such as:

> It was odd/nice for me to say that.

In addition, a French sentence with coreferential subjects would produce confusion as to the relationship between the different occurrences of the word 'I' (who is 'I' in *I am ill*?); this fact, I suggest, makes Romance sentences of this kind even more unacceptable than the corresponding FOR-TO sentences.

The constraint on the coreferentiality is clearly semantic, not purely syntactic, and it holds also for sentences with impersonal phrases, where strictly speaking, the subjects are not coreferential:

> * *Il me semble que je sois malade.*
> 'It seems to me that I am ill.'

In Polish (or in Russian), the subjunctive does not involve an imaginary speaker, different from the real speaker. There is no reason, therefore, why the complement sentence should not refer to the real speaker. Hence the grammaticality of sentences such as the following ones:

> *Nie wydaje mi się (nie przypuszczam), żebym była chora.*
> 'It doesn't seem to me (I don't suppose) that I am(SUBJ) ill.'

The alert reader will no doubt ask, however: if Polish (unlike French) allows the subjunctive in opinion sentences with coreferential subjects, why doesn't it allow the subjunctive in volitional sentences with coreferential subjects? In other words, if in opinion sentences Polish differs in this respect from French, why is it that in volition sentences it behaves just like French?

> * *Chcę, żebym poszła.*
> * *Je veux que j'y aille.*
> 'I want to go(SUBJ).'

At this point, it should be recalled that in the case of French volition sentences with the subjunctive we have not postulated any imaginary speaker, different from the real speaker. This means that if sentences of this kind

don't allow coreferential subject, we have to find a reason for this different from that which, we have suggested, prevents the use of the subjunctive in coreferential opinion sentences.

It will be recalled that for the subjunctive of volition, we have postulated the component 'I don't want to say: I think this: this will happen'. Let us see, therefore, if this component could explain the inappropriateness of the subjunctive in volition sentences with coreferential subjects:

* *Je veux que j'y aille.*
'I want to go(SUBJ).' ⇒
I imagine this: I know this: X will happen
I think this: I want it
I don't want to say: I think this: it will happen

It seems to me that this explication — which would also apply to the corresponding Polish sentence — does explain why the sentences in question are unacceptable (both in French and in Polish). The component 'I don't want to say: I think this: it will happen' suggests that the speaker has no control over the event in question. But this is odd: normally, we don't make conjectures about our future actions ("it might happen that I'll do such and such, but who knows"); rather, we talk about them in terms of intentions, or possible intentions.

Not surprisingly, the constraint on coreferential subjects in volitional contexts extends also to impersonal sentences, where the 'dative' experiencer of the main clause is coreferential with the subject of the complement:

Nie chce mi się iść.
'I:DAT don't feel like going.'
* *Nie chce mi się, żebym poszła.*

This fact demonstrates once more that the 'constraints' in question are based on meaning, not on any mechanical non-semantic rules.

9.5.2 *Russian*

In Russian, the subjunctive is (apart from a difference to be discussed below) used in essentially the same way as it is in Polish; in particular, it is used in volitional and 'optative' sentences, and in negative opinion sentences, and it is not used in positive opinion sentences or in 'factive commentative' ones.

On the other hand, the use of the infinitive is markedly different from

what it is in Polish (cf. Bogusławski and Karolak 1970:143,147). Thus, Russian uses the bare infinitive not only for speech act verbs of 'strong expectation' such as *prikazat'* 'order' and *zapretit'* 'forbid' but also for speech act verbs of weak expectation such as *prosit'* 'ask' or *umoljat'* 'beg' (and even for 'negative' verbs such as *otgovorivat'* 'dissuade'). Similarly, there is no difference in this respect between mental verbs of strong expectation such as *rešit'* 'decide' and mental verbs of weak expectation such as *mečtat'* 'wishfully dream':

Ona prikazala emu itti.
'She ordered him:DAT to go.'
Ona prosila ego itti.
'She asked him:ACC to go.'
Ona rešila itti.
'She decided to go.'
Ona mečtala itti.
'She daydreamed about going, she longed to go.'

This suggests that the Russian infinitive as a complement of volitional predicates does not carry the implication of 'controllability' which I have tentatively postulated for the bare (conjunction-less) infinitive complement of volition predicates in Polish ('I imagine I can cause it'). (The fact that the infinitive is also used with negative verbs such as *otgovorivat'* 'dissuade' points to a difference in meaning between the Russian infinitive construction and the English TO complement.)

Since the scope of the infinitive in Russian is wider than it is in Polish, and since it includes some uses which in Polish belong to the subjunctive, the scope of the subjunctive in Russian is narrower than it is in Polish. (This is the difference between the Russian and the Polish subjunctive which was hinted at earlier.) This raises the following question: shouldn't the Russian subjunctive be assigned a semantic formula somewhat different from that which has been assigned to the Polish subjunctive? If the two formulae are identical, and the two ranges of use are different, this would mean that the formulae in question don't have the full predictive power which ideally they should have.

While the matter requires further investigation, it seems to me that the identical formulae can be defended in this case on the following grounds. While in spoken, colloquial Russian the subjunctive (in volitional contexts) is indeed used less widely than it is in Polish, nonetheless in written and more formal prose it can be used pretty much as it is in Polish (cf.

Bogusławski and Karolak 1970:144-8). This suggests that the semantic invariants of the two constructions are perhaps the same, and that the difference in use may be due more to pragmatic factors than to semantic ones. Since in Polish the infinitive implies a firm expectation, and the subjunctive, a lack of such expectation, speakers of Polish are under pressure to use the subjunctive whenever they don't wish to express a strong expectation. If in Russian the infinitive doesn't signal a strong expectation, it can be used more freely in situations when the speaker wishes to convey neither a strong expectation nor a lack of a strong expectation.

9.6 *FOR TO and the subjunctive (a second look)*

We have seen again and again that there are intimate links between 'subjunctive' complements in Romance languages and the FOR TO constructions in English. To begin with, we have noted that many FOR TO sentences would be normally translated into French or Italian by means of subjunctive complements. We have also seen that the FOR TO constructions share, to a considerable degree, the constraint on coreferentiality of subjects, or 'logical subjects', which is so characteristic of the Romance subjunctive. Could one say, then, that FOR TO is a kind of English 'subjunctive' — not a morphological subjunctive, to be sure, but a syntactic subjunctive?

To answer this question we need of course a rigorous definition of the concept 'subjunctive', and — as pointed out by Lyons (1977, 2:847) — definitions of this kind are generally not available:

"In this connexion, it is important to emphasize that, at the present stage of linguistic theory and descriptive practice, it is impossible to formulate any very clear notion of the distinctions that are grammaticalized, within the category of mood, throughout the languages of the world. The labels that are used in standard descriptions of particular languages are often misleading in that they imply that the functions of the moods are narrower or more specific than they really are. This is true, for example, of the term 'conditional' as it is used with respect to French, or the 'inferential' as it is applied to Turkish. In general, we cannot be sure that, because the same term is used in relation to two different languages, the moods that the term refers to have exactly the same function in the two languages. Nor can we be sure that, because two different terms are used, two different functions are involved."

What applies to concepts such as 'conditional' or 'inferential', applies of course also (and perhaps especially) to the concept 'subjunctive' (cf. Jespersen 1924:48). Vague references to 'subjectivity', 'emotivity' or 'unreality' are hardly sufficient as a basis for cross-linguistic identification of modal concepts. It seems to me, however, that tentative semantic analysis in terms of relatively simple concepts such as 'imagine', 'say', 'want' or 'feel' does offer a starting point for such a task.

Lyons (1977, 2:848) suggested 'non-factivity' as a possible semantic invariant of the different subjunctives in different languages — an invariant which would apply equally well to the 'subjunctives of volition' and 'the subjunctives of opinion/uncertainty'. In a similar vein, Givón (1984b:318-320) proposes the notion of 'irrealis' as the core of "the so-called subjunctive moods". These suggestions, however, are hard to reconcile with the fact that in many languages 'factive commentative' sentences, too, take the subjunctive. Hooper's (1975) suggestion that 'non-assertiveness' is the key concept is compatible with a wider range of facts than Lyons' or Givón's; but, as we have seen, it is not entirely satisfactory, either, because there are lots of 'non-asserted' complements in Romance or Slavic which could never take the subjunctive.

The considerations of the present chapter suggest that the term 'subjunctive' is usually linked with a combination of two kinds of components. The first one involves the speaker's imagination ('I imagine'). The second constitutes a kind of distancing device, which often can be interpreted as 'anti-assertive': 'I don't want to assert this', or in the standardized semantic metalanguage employed here, 'I don't want to say this'. We have seen, however, that in volitional contexts it seems more justified to formulate the 'distancing' component somewhat differently: 'I don't say: one can think this: it will happen'; and in some other contexts (for example, in 'commentative' contexts) somewhat differently again: 'I don't want to say: I know this'. Consequently, I would propose the following tentative definition of the concept 'subjunctive', which would serve as a basis for cross-linguistic identification: it is a device which combines in its meaning the following two semantic components:

(1) I imagine ...
(2) I don't want to say ...

The first of these components belongs to the conditional as well as to the subjunctive, and this accounts for the links between the two, but the

second component sets them apart. Consider, for example, the following contrast (Judge and Healey 1983:166):

a. *Il faut que je trouve une maison qui soit habitable toute l'année.*
'I need to find a house which would be(SUBJ) habitable the whole year.'

b. *Il faut que je trouve une maison qui serait habitable toute l'année.*
'I need to find a house which would be(COND) habitable the whole year.'

As Judge and Healey put it: "The conditional refers to a house which, so far, only exists in the speaker's imagination, whereas the subjunctive (...) stresses the uncertainty of finding such a house." It seems to me that these comments accord very well with the idea that the component 'I imagine' should be posited for both the conditional and the subjunctive, but that the subjunctive requires also a distancing component such as 'I don't want to say: I say: this will happen'.

It seems reasonable to suggest that it is this 'distancing component' of the subjunctive ('I don't want to say ...') which is responsible for its tendency to require that the subject of the complement clause should not be identical with the experiencer — a fact which has been noted for a number of genetically and typologically distant languages, such as Romance languages, apparently Bantu languages (cf. Givón 1971:61), and Basque (cf. Lafitte 1962). It is natural for languages to treat other people's experiences as less accessible to us and 'less certain' than our own. On the other hand, the distancing component of the subjunctive can be interpreted simply in terms of uncontrollability and uncertainty without being grammatically linked with the distinction between 'ego' and 'alter'. This seems to be the case in Slavic.

Whether or not we would wish to limit the use of the term 'subjunctive' to morphological categories or whether we would prefer to extend it to syntactic constructions, is a matter for further consideration. But if we do extend it to syntactic constructions then, I think, we have to acknowledge that English FOR TO complement constructions do qualify (whereas the mere TO constructions do not): 'projective' TO constructions do seem to refer to the speaker's imagination, but they do not seem to encapsulate any 'distancing' component ('I don't want to say ...'). (They differ from the conditional by their links with awareness and/or wanting.) FOR TO constructions are also closely related to TO constructions in their future orientation ('I imagine this: this will happen ...'), but this is a feature which

subjunctive constructions in the other languages considered don't have. Hence, for example, the following characteristic contrasts:

Il est possible que nous soyons seuls dans l'univers.
'It is possible that we are(SUBJ) alone in the universe.'
*It is possible for us to be alone in the universe.

Intellectual judgment predicates such as *possible* can take FOR TO complements, but only if they can be interpreted as future-oriented:

It is possible for us to be alone in this building on Sunday. ⇒
when I imagine this: I know this:
we will be alone in this building on a Sunday
I think this: it is possible

The subjunctive (in any case, the Romance subjunctive) is not similarly restricted.

Quite remarkably, FOR TO constructions, too, participate in the contrasts between 'ego' and 'alter', between 'higher controllability' and 'lower controllability', and between 'strong expectation' and 'weak expectation', which are so characteristic of the subjunctive in a cross-linguistic perspective.

10. Conclusion

10.1 *General remarks*

The evidence presented here shows, I think, that different complement constructions are associated with different meanings, and that the range of use of a given construction can be predicted from its meaning. If one verb — for example *like, prefer* or *decide* — can be used with two or three different complement constructions with no obvious difference in meaning, this doesn't mean that there are no constant and systematic differences in meaning between these constructions. Rather, it means that the differences in question — always real — may be more or less noticeable, depending on the lexical context. In many contexts, they are so conspicuous that they cannot possibly be overlooked; and in some contexts, they may lead to sharp contrasts in grammaticality.

Naturally, if one is ingenious and patient enough, one could always explain differences between individual lexical items in some *ad hoc* way. For example, why does the syntactic behaviour of *manage* differ from that

of *succeed*? or why does *likely* behave differently from *probable*? or *forbid* from *dissuade*? or *stop* from *cease*? or *want* from *decide*? or *want* from *hope*? For each such pair, some *ad hoc* explanation could be thought up.

But this is not what I have tried to establish in the present study. Instead, I have looked for generalizations which, within certain well-defined categories, would apply to any member of a given category, and which would therefore have full predictive power. Moreover, I have sought to state the proposed generalizations in a standardized semantic metalanguage, derived from natural language — a metalanguage which would make them both rigorous and intuitively verifiable. Limitations of space preclude of course a very detailed recapitulation of the conclusions arrived at in the different sections of this study. A brief summary, however, is in order. I will now, therefore, take one final look at the four main complementizers of the English language: ING, THAT, TO and FOR TO, in this order.

10.2 *ING*

There are two different kinds of ING complements: temporal ones and non-temporal ones. The non-temporal ones refer to facts or to possibilities, the temporal ones refer to events, processes and actions, that is to 'things' happening at some particular time.

The temporal ING complements are closely related to finite clauses in the ING (i.e. progressive) aspect, and to ING participial clauses, that is to other ING constructions where time is relevant. It seems that in the past the relationships in question have tended to be overlooked because of the interference from the non-temporal ING complements, which blurred the over-all picture. The investigation of semantic types such as facts, events, processes and so on, and of their syntactic significance, by Vendler and others, has made it possible to disentangle the different types of ING complements, and to clarify the basic characteristics of the temporal ING complements. It emerges that just as a participial ING clause, e.g.

She sat talking to him.

refers to something happening at the same time as something else, so does an ING complement clause, such as

She enjoyed talking to him.

This explains why one cannot say, for example:

*She wanted talking to him.

The future orientation of *want* is incompatible with the simultaneous orientation of ING.

10.3 *THAT*

THAT complements can be shown to be derived from either SAY clauses or KNOW clauses. I have argued that of these two types the KNOW type is more basic, and SAY clauses can be reduced to the KNOW type. For example:

Mary says that Stalin was a Georgian. ⇒
Mary says this: 'this is a fact: Stalin was a Georgian'

In other words:

Mary says this:
'one can know this: Stalin was a Georgian'
It is possible that there is life on Mars. ⇒
if someone says this:
'this is a fact: there is life on Mars'
I will say this: it is possible

In other words:

if someone says this:
'one can know this: there is life on Mars'
I will say this: it is possible
It is amazing that a baby kangaroo can fit on a teaspoon. ⇒
when I think this:
'this is a fact: a baby kangaroo can fit on a teaspoon'
I think this: it is amazing

In other words:

when I think this:
'one can know this: a baby kangaroo can fit on a teaspoon'
I think this: it is amazing

If one cannot say:

*I want that I get rich.

it is, I presume, because one cannot 'want' and 'know' the same things, at the same time: 'want' implies an attitude which is incompatible with factuality. (What is 'wantable' is not 'knowable', and vice versa.)

If some of the semantic relatives of *want* — e.g. *hope* and *wish* — can nonetheless take THAT complements, it is because they contain additional semantic components, which, so to speak, give THAT à foothold in the sentence. For example (roughly):

I hope that she comes. ⇒
I want this: she will come
I don't say this: 'one can know this: she will come'
I don't know this

Hope, unlike *want*, implies 'not knowing'; and 'not knowing', just like 'knowing', can combine with THAT.

Similarly, if ING verbs and adjectives such as *enjoy, relish* or *fun* cannot take THAT complements, it is, I suggest, because being focussed on current sensations they are not compatible with an intellectual 'one can know' component. They differ in this respect from more intellectual, more attitudinal emotion terms such as *pleased, glad,* or *surprising*, which can readily take propositions as their objects:

I am pleased/glad that they are getting married.
*I enjoy/relish (it) that they are getting married.
It is surprising that they are getting married.
?It is fun that they are getting married.

10.4 *TO*

The TO complement is associated with a personal, subjective, first-person mode: 'I want', 'I think', or 'I know'. Its close links with the 'I want' mode are manifested in the context of volition verbs:

She wants/hopes/plans/intends/longs to go. ⇒
she thinks this: 'I want this: I will go'

It is particularly important to note that TO complements don't differ from THAT complements along the lines of 'imagine' vs. 'know', or 'non-factive' vs. 'factive', as has sometimes been implied in the literature. TO complements can be 'factive', and THAT complements can be 'non-factive' (assuming for the moment that we know what exactly these labels mean):

She was delighted to have won.
She hoped that he would win.

TO complements are compatible with the element 'know', but only in the subjective first person mode of 'I know' (which is sometimes reflected in the so-called "coreferentiality constraint"); by contrast, THAT complements introduce an 'objective', impersonal, 'one can know' perspective. Roughly:

She was delighted to have won. ⇒
when she thought this: 'I know this now:
this happened to me (I have won)'
she felt delighted
She was delighted that he had won. ⇒
when she thought this: 'one can know this:
this happened (he has won)'
she felt delighted

In most types of TO complements which have been discussed here there is also a clear future orientation ('this will happen'), and there are reasons to think that this feature, too, should perhaps be regarded as part of the semantic invariant of all TO complement constructions. The future component is clearly in evidence in volitional contexts (*She wants to go*), and we have detected its presence in the attitudinal component of the emotional and evaluative sentences:

It is wrong to lie. ⇒
when I imagine this: I know this of someone:
this person will lie
I think this: this is wrong
She was delighted to win. ⇒
when she imagined this: 'I know this: I will win'
she thought this: 'this will be good, I will feel delighted'
when she thought this:
'I know this now: it happened to me'
she felt this (delighted)

It is also fairly easy to see how a future component could be reconstructed for at least one subtype of TO opinion complements:

He is certain to be a Mormon. ⇒
I think this: we will know this: he is a Mormon
I don't say: I know this
I say: I am certain of this

It is less clear whether a component referring to the future would also be justified for the other type of TO opinion complements which we have considered:

I know (believe) Mary to be a Mormon.

But for these sentences, too, we have postulated a kind of disclaimer:

I don't say: people know (believe) this
I say: I know (believe) this

And this disclaimer, if spelled out more precisely, probably contains a reference to the future:

I don't say: people know (believe) this. ⇒
I don't wan't to say: people know (believe) this. ⇒
I don't want this: I will say this: people know (believe) this

Thus, it would appear that TO complements are generally characterized not only by a personal, first-person mode ('I want', 'I know', 'I think'), but also be a future component of some sort.

10.5 *FOR TO*

FOR TO has usually been treated in the past as a mere variant of TO, called for in certain syntactic environments. I have argued that this is incorrect and that if TO and FOR TO tend to be used in different syntactic environments this is a result of their different meanings, rather than an indication of identical meaning and a 'complementary distribution'.

I have pointed out that in fact there are some contexts where TO and FOR TO are both possible, and that in these contexts the semantic differences between the two come across most clearly. One such clear difference has to do with an element of 'uncertainty' or lack of confidence built into FOR TO. For example:

He wanted her to kiss him.
He wished for her to kiss him.
?He wished her to kiss him.

Want is more confident that *wish* and it occurs more readily with TO, whereas *wish* usually requires FOR TO. But in those situations where one expresses one's wishes on the assumption that they will be as a result complied with, *wish* can take TO, too:

He wishes you to be present.

The same difference between a tentative FOR TO and confident TO is evident in the following contrast:

He asked for you boys to be brought here.
*He ordered for you boys to be brought here.

On the other hand, even confident acts like orders risk remaining unfulfilled if they are given in absentia, via some intermediaries, and with respect to some later time. Hence the contrast between *order* and *give orders*:

He gave orders for the boys to be brought here.

Finally, of the two near-synonyms *wait* and *expect* the more confident one, *expect*, takes TO, whereas the less confident one, *wait*, can only take FOR TO:

She expected/*waited him to come.
She waited/*expected for him to come.

A second major difference between TO and FOR TO — not unrelated to the first one — has to do with the distinction between 'I' and 'someone', or 'ego' and 'alter'. This distinction often manifests itself in a contrast between 'coreferential' and 'noncoreferential' subjects:

She was keen to go.
She was keen for him (*for herself) to go.

But this apparent syntactic contrast is no more than a reflection of an underlying difference in meaning. In some contexts, FOR TO is perfectly compatible with coreferentiality, and yet the difference in meaning (between a non-first-person perspective and a third-person perspective) is still there:

It was nice to talk to her. ⇒
"I" talked to her, "I" felt something nice.
It was nice for him to speak to her. ⇒
"he" talked to her, it was nice (for him? in general?)

To acount for these (and other) differences between TO and FOR TO I have posited for different uses of FOR TO components such as the following ones:

I don't say: this will happen
I don't say: I want it
I don't say: I feel this

What these components have in common is the element 'I don't say', which links the English FOR TO constructions with the so-called subjunctive mood in languages such as French or Spanish.

Furthermore, FOR TO seems to be associated with an imaginary component ('I imagine this'), which also links it with what is called "subjunctive" in other languages.

10.6. *Concluding remarks*

It hardly needs to be pointed out that the present study of the semantics of English complementation is not exhaustive. Obviously, many questions remain unanswered, and many problems remain to be investigated. Many of the explications proposed here will no doubt have to be altered and improved on, and many of the generalizations will have to be rephrased. It seems to me, however, that certain important problems have been solved; and that the basic goal of this study — to establish the semantic basis of English complementation and to describe it in non-impressionistic and verifiable terms — has been achieved.

Note

1. The corresponding formula for *keep* would read:

X kept doing Z. ⇒
before *t*, X was doing Z
at *t*, one couldn't know this:
the same will be happening after now
after *t*, the same was happening

2. Ethno-syntax and the philosophy of grammar

1. Introduction

It is a commonplace to say that every language embodies in its very structure a certain world-view, a certain philosophy. To prove it in a rigorous and verifiable way, however, is quite a different matter. Scholars tend to treat the Humboldtian (or Whorfian) thesis — despite its compelling intuitive appeal — with suspicion and embarrassment. One suspects that this is precisely because while being "obviously true" it is at the same time notoriously difficult to prove.

This chapter seeks to explore one way in which insight and rigour might be achieved in this intriguing area. The essence of this approach is signalled by the first word of the title: ethno-syntax. Since the syntactic constructions of a language embody and codify certain language-specific meanings and ways of thinking, the syntax of a language must determine to a considerable extent this language's cognitive profile. It is true that lexical items also embody language-specific ways of thinking. But the semantic analysis of an entire lexicon is a gigantic task; and a cognitive description of a language which confines itself to SELECTED lexical items is usually open to the charge of being arbitrary and therefore inconclusive (cf. Wierzbicka 1976c). In the case of syntactic constructions, on the other hand, there is more hope of surveying the entire relevant areas. Moreover, syntactic constructions have on the whole a higher frequency of occurrence in speech than most categories of lexical items; they are also more stable, more resistant to change, less dependent on extra-linguistic factors. For all these reasons it appears that a rigorous syntactic analysis of language-specific syntactic categories should provide an especially valuable source of insight into the common ways of thinking characteristic of a given speech community.

To say this is not, of course, to dispute the feasibility of what is often called 'ethno-semantics'; I am merely suggesting that alongside the widely recognized field of 'ethno-semantics' a new field of enquiry should be

created and promoted, namely 'ethno-syntax'.

The domain of ethno-syntax is the same as that of syntax *tout court*. What is different is the point of view — the perspective in which the facts of syntax are placed.

In this chapter I am going to discuss a number of constructions from a number of different languages which seem to provide especially clear examples of 'ethno-philosophy' embodied in syntax. These examples, however, will not be selected at random. The whole point of the approach advocated here is to explore ways of going beyond random collection of examples. But there is a whole continuum of possibilities between picking up arbitrarily constructions which appear to be revealing, and going systematically through the entire syntactic system. It may also be possible to formulate more modest and yet theoretically justifiable strategies. One might, for instance, try to compare the syntactic systems of a number of languages in terms of one specific philosophical problem. This should be possible because while different languages may embody different philosophies, these different philosophies have, nonetheless, a great deal in common and CAN be compared. There are, to be sure, language-specific *Weltanschauungs*, but there is also, as Jespersen put it, "the philosophy of grammar", i.e. that limited stock of questions, if not answers, on which grammars of natural languages tend to focus. Thus, one might ask the following question: how do different peoples appear to view the relation between the body and the 'owner of the body', between bodily experience and mental experience? Or in other words, what views on the problem of the body/person relation are reflected in the syntax of different languages? Why is it, for example, that one can say in English:

Mary pricked herself on the finger.
John kissed Mary on the lips.
Fido bit John on the leg.

but hardly:

?Mary pricked her glove on the finger.
?John kissed the Bible on the cover.
?Fido bit the table on the leg.

What other constraints of this type are built into the syntax of different languages? What is their significance? (See also Wierzbicka 1976b; also Bally 1926, Chappell 1986b, Neumann 1987.)

In what follows, I want to look more closely at this and one or two

other questions of the same kind.

2. Bodily actions and events

2.1 *Doing something to a part of someone's body*

Consider three French sentences:

a. *Pierre$_i$ a lavé sa$_j$ tête sale.*
'Peter$_i$ washed his$_j$ dirty head.'

b. *Pierre$_i$ lui$_j$ a lavé sa$_j$ tête sale.*
'Peter$_i$ to-him$_j$ washed his$_j$ dirty head.'

c. *Pierre$_i$ lui$_j$ a lavé la$_j$ tête (*sale).*
'Peter$_i$ to-him$_j$ washed the$_j$ (*dirty) head.'

The event described in these sentences is the same. (Actually, the first sentence is ambiguous: the head it refers to may or may not be a part of Peter's own body; but at the moment we are interested only in the non-coreferential reading.) But this event is viewed in three different ways. In the first case, the head is viewed as an entity different from and independent of the person; washing it is like washing any other object. In the second case the head is still viewed as an entity different from the person — but washing it is no longer viewed simply as washing an object: in this case the person is viewed as affected by the fact that his head is being washed. In the third case, the head is no longer viewed as an object different from the person: on the contrary, it is viewed as an aspect of that person himself; naturally, washing it is not viewed in this case as simply washing an object: it is viewed as doing something to the person. (Cf. Bally 1926, Hatcher 1944, Kayne 1975.)

The fact that the definite-article construction precludes the presence of a modifying (non-restrictive) adjective is of course very significant: it highlights the fact that in this case the part of the body is not viewed as an autonomous object, worth focussing on and describing. Though the speaker recognizes that something happens to that part of the body, he emphasizes, by his choice of syntactic construction, that he views the event as concerning the entire person: the act of washing the person's head is viewed in this case as washing THIS PERSON — 'with respect to the head'. This is very different from the act of washing the head as such, and also different from the act of washing the head and thereby affecting, indirectly, its 'possessor'.

Clearly, the three sentences call for three different semantic representations. I would propose the following:

PART OF THE BODY VIEWED AS A SEPARATE OBJECT, UNRELATED TO THE PERSON

Pierre$_i$ a lavé sa$_j$ tête sale.
'Peter$_i$ washed his$_j$ dirty head.' ⇒
something happened to part Y of Z's body
because X did something to it

PART OF THE BODY VIEWED AS AN OBJECT SEPARATE FROM, BUT RELATED TO, THE PERSON

Pierre$_i$ lui$_j$ a lavé sa$_j$ tête sale.
'Peter$_i$ to-him$_j$ washed his$_j$ dirty head.' ⇒
something happened to part Y of Z's body
because X did something to it
it (what happened to Y) can be thought of as something
that happened to Z

PART OF THE BODY VIEWED AS AN ASPECT OF THE PERSON

*Pierre$_i$ lui$_j$ a lavé la$_j$ tête (*sale).*
'Peter$_i$ to-him$_j$ washed the$_j$ (*dirty) head.' ⇒
something happened to part Y of Z's body
because X did something to it
I'm thinking of it (of what happened to Y) as something
that happened to Z, not to something other than Z

The case (b) is evidently intermediate between (a) and (c): in (a), the speaker ignores the effect that the action may have on the head's owner; in (c), he concentrates on the owner, and in fact he views HIM as the real undergoer of the action; in (b), he views the HEAD as the undergoer of the action, but he recognizes that this action affects, indirectly, the head's owner, and that therefore this owner can also be viewed as the undergoer of the action.

In the examples considered so far the agent and the undergoer were different, but when they are identical, the same three different possibilities of conceptualization are again available to the speaker:

a. *Pierre$_i$ a lavé sa$_i$ tête.*
'Peter$_i$ washed his$_i$ head.' ⇒

something happened to part Y of X's body
because X did something to it

b. *Pierre$_i$ s'est lavé sa$_i$ tête sale.*
'Peter$_i$ to-himself washed his$_i$ dirty head.' ⇒
something happened to part Y of X's body
because X did something to it
it (what happened to Y) can be thought of as something
that happened to X

c. *Pierre$_i$ s'est lavé la$_i$ tête (*sale).*
'Peter$_i$ to-himself washed the$_i$ (*dirty) head.' ⇒
something happened to part Y of X's body
because X did something to it
I'm thinking of it (what happened to Y) as something
that happened to X, not to something other than X

It is worth noting that the definite-article construction does not require that the word referring to a part of the body should occupy the direct object position, i.e., should be viewed as the direct undergoer of the action. Even if an external object is involved in the action more centrally and is viewed as its direct undergoer, the body-owner can still be regarded as indirectly affected (even though no part of his body was affected directly). Thus, one says:

Il s'est mis une compresse sur les yeux.
'He put to-himself a compress on the eyes.'
Il$_i$ lui$_j$ a mis une compresse sur les$_j$ yeux.
'He$_i$ to-him$_j$ put a compress on the$_j$ eyes.'

This time, the conceptual scheme is:

something happened to thing W
one can think of it as something that happened
to part Y of Z's body
because X did something
I'm thinking of it (what happened to Y) as something
that happened to Z, not to something other than Z

(where W is the compress, and Z can be identical with X).

This means that even the intervention of an external object does not prevent French speakers from viewing the affected part of the body as an aspect, as it were, of the body's owner, and not as an autonomous entity.

Furthermore, the same three different possibilities obtain in the case of

impersonal events which involve a part of someone's body:

a. *L'eau tombait sur sa tête.*
'The water was falling on his head.' ⇒
something happened to X
one can think of it as something that happened
to part Y of Z's body
(where X is water, Y is the head, and Z is the owner of the head)

b. *L'eau lui tombait sur sa tête nue.*
'The water was falling to-him on his bare head.' ⇒
something happened to X
one can think of it as something that happened
to part Y of Z's body
one can think of it as something that happened to Z

c. *L'eau lui tombait sur la tête (*nue).*
'The water was falling to-him on the (*bare) head.' ⇒
something happened to X
one can think of it as something that happened
to part Y of Z's body
I'm thinking of it (what happened to Y) as something
that happened to Z, not to something other than Z

Thus, French provides the means for viewing a part of the body in three different ways: (a) as an object like any other object; (b) as an object independent of but intimately related to the person; and (c) as an aspect of the person himself. Anything that happens to a part of a human body — be it as a result of somebody's action or of a spontaneous, non-voluntary event — can be viewed as affecting the person, and even as something that happens to a person himself, although it can also be viewed as a purely physical event.

No physical object can be seen as similarly affected by something that happens to one of its parts:

Pierre a lavé les murs de la maison.
'Peter washed the walls of the house.'
* *Pierre lui a lavé les murs (à la maison).*
'Peter to-it washed the walls (to the house).'
L'eau tombait sur le toit de la maison.
'The water was falling on the roof of the house.'

* *L'eau lui tombait sur le toit.*
'The water to-it was falling on the roof.'

Thus French syntax sees the body/person relation as quite unique.

2.2 *Can a part of the body do something?*

Consider now the following sentences (on the coreferential reading):

Pierre$_i$ a levé sa$_i$ tête.
'Peter$_i$ lifted his$_i$ head.'
*Pierre a levé la tête (*lourde).*
'Peter lifted the (*heavy) head.'
Pierre s'est levé sa tête lourde.
'Peter to-himself lifted his heavy head.'
*Pierre s'est levé la tête (*lourde).*
'Peter to-himself lifted the (*heavy) head.'

When one compares this group with the one considered previously one is struck above all by the difference in the number of possible choices: in this case there are not three but four different possibilities! The extra construction possible in this case is characterized by the presence of the definite article in the object noun phrase and the absence of the reflexive clitic in the verbal complex:

Pierre$_i$ a levé la$_i$ tête.
'Peter$_i$ lifted the$_i$ head.'
* *Pierre$_i$ a lavé la$_i$ tête.*
'*Peter$_i$ washed the$_i$ head.'

(Actually, the starred sentence above is not absolutely impossible, but it must be interpreted as elliptical, which is not the case with the non-starred one). What exactly is the conceptual scheme grammaticalized in this additional construction?

The contrast between the definite article and the possessive pronoun seems to have in this case the same value as in the previous one; in any case, it is methodologically sounder to assign to it the same value — unless compelling evidence forces us to do otherwise. We do not see such evidence. But what does the absence of the reflexive pronoun in one of the definite-article constructions signify? And why can one use this construction with verbs like *lever* 'lift' but not with those like *laver* 'wash'?

Langacker (1968) has suggested that the clue to this question lies in the active vs. passive role of the part of the body: if one lifts one's head or arm the head or arm itself can be viewed as 'doing something'; if one washes one's head or arm neither the head nor the arm are doing anything, they are only undergoing the action.

Langacker's observation appears to me to be basically correct (I will qualify this agreement in a moment). It is confirmed by Kayne's (1975) observation that if the relevant part of the body is paralysed or otherwise incapable of spontaneous movement one would either not use the definite article at all or use it in combination with the reflexive clitic. The possessive-pronoun construction implies that the part of the body is NOT viewed as an autonomous entity, and also, that it is passive.

Erica García (1975:129) has suggested the following explanation of these facts: When the part of the body is passive and merely undergoes external action, the speaker has to indicate whether this action comes from the owner of the body or from another person — hence the need for a dative personal pronoun (reflexive or otherwise). When the part of the body is active, then the action can only come from the owner of the body; accordingly, in this case there is no need for a reflexive dative (because there is no need to distinguish explicitly between an internal and an external agent in a case when only an internal agent is conceivable).

This explanation seems to me to be basically convincing. I would add, however, that the reflexive clitic indicates also the double role that the speaker is attributing to the agent: that of both agent and patient (agent and undergoer of the action). The absence of the reflexive clitic (in combination with the definite article) indicates that the agent is seen as performing one single role: the active one, and that the part of his body involved in the action is seen as partaking in his action. Thus, the sentence:

Pierre a levé la tête.
'Peter, lifted the, head.'

does not indicate whether the head was active or passive, but it does indicate that the speaker is not thinking of it as an autonomous entity. The sentence:

Pierre s'est levé sa tête (avec les mains).
'Peter to-himself lifted his head (with his hands).'

implies (by the reflexive clitic) that Peter is seen as both the agent and the patient, which means that in this case his head must have been 'passive', i.e.

lifted by means of Peter's hands, and also that his head is viewed as an autonomous entity, not as an aspect of Peter himself.

Before proposing semantic representations for the four sentences in question it is necessary to clarify the concept of an 'active part of the body', suggested by Langacker (1968). There is no doubt that in cases like:

Pierre$_i$ a levé la$_i$ tête.
'Peter$_i$ lifted the$_i$ head.'
Pierre$_i$ a ouvert les$_i$ yeux.
'Peter$_i$ opened the eyes.'
Pierre$_i$ a tiré la$_i$ langue.
'Peter$_i$ pulled out the$_i$ tongue.'

the part of the body in question is seen as playing an important and in some sense 'active' role in the event. But does it really mean that this part of the body is actually 'doing something'? Can we say that a part of the body is 'doing something' without personifying it? And yet in sentences of this kind there does not seem to be any element of personification at all.

It seems to me that the crucial variable is slightly different from that suggested by Langacker. The head is not 'doing' anything, something happens to it, but what happens to it (its movement upward) is seen as due to internal rather than external causes. In other words, something happens to the head not because something happens to something else — but because something happens in the head (neck) itself. Similarly, when someone opens his eyes *(Il ouvre les yeux)* the eyes themselves do not 'do' anything, something happens to them (they become open); but it happens not because something happens to something else (a hand, an instrument, etc), it happens because something has happened in the eyes themselves. By contrast, in the situations in which the part of the body is viewed as passive what happens to it is caused by something that happens to some 'instrument'.

This leads us to the following semantic representations:

PART OF THE BODY VIEWED AS AN AUTONOMOUS OBJECT

Pierre$_i$ a levé sa$_i$ tête.
'Peter$_i$ lifted his$_i$ head.' ⇒
something happened to part Y of X's body
because X did something

INDIRECT ACTION, PART OF THE BODY PASSIVE BUT VIEWED AS AN ASPECT OF THE PERSON

Pierre s'est levé la tête (avec les mains).
'Peter to-himself lifted the head (with the hands).' ⇒
something happened to part Y of X's body
because something happened to something else
because X did something
I'm thinking of it (what happened to Y) as something
that happened to X, not to something other than X

DIRECT ACTION, PART OF THE BODY ACTIVE AND VIEWED AS AN ASPECT OF THE PERSON

Pierre$_i$ a levé la$_i$ tête.
'Peter$_i$ lifted the$_i$ head.' ⇒
something happened to part Y of X's body
because something happened in Y
because X did something
not because something happened to something else
I'm thinking of it (what happened to Y) as something
X did, not something that happened to something other than X

INDIRECT ACTION, THE PART OF THE BODY PASSIVE AND VIEWED AS AN AUTONOMOUS OBJECT

Pierre s'est levé sa tête (avec les mains).
'Peter to-himself lifted his head (with the hands).' ⇒
something happened to part Y of X's body
because something happened to something else
because X did something
one can think of it (what happened to Y)
as something that happened to X

2.3 *What counts as a direct bodily action*

There is of course nothing peculiarly French about the existence of special constructions which grammaticalize different ways of thinking about events involving the human body. Many languages have similar constructions. But although these constructions and the meanings grammaticalized by them exhibit striking cross-linguistic similarities nonetheless they are to a considerable extent language-specific.

For example, does the distinction between direct and indirect bodily

action, grammaticalized in French, exist also in other Romance languages? Pairs like the following ones seem to suggest that they do.

French:

a. *Pierre a levé la tête.*
'Peter$_i$ lifted the$_i$ head.'

b. *Pierre s'est lavé la tête.*
'Peter$_i$ to-himself washed the$_i$ head.'

a. *Pierre a ouvert les yeux.*
'Peter$_i$ opened the$_i$ eyes.'

b. *Pierre s'est ouvert les yeux (avec les mains).*
'Peter$_i$ to-himself opened the eyes (with the$_i$ hands).'

Spanish:

a. *Pedro levantó la cabeza.*
'Peter$_i$ lifted the$_i$ head.'

b. *Pedro se lavó la cabeza.*
'Peter$_i$ to-himself washed the$_i$ head.'

a. *Pedro abrió los ojos.*
'Peter$_i$ opened the$_i$ eyes.'

b. *Pedro se abrió los ojos (con las manos).*
'Peter$_i$ to-himself opened the$_i$ eyes (with the$_i$ hands).'

Italian:

a. *Pietro alzò la testa.*
'Peter$_i$ lifted the$_i$ head.'

b. *Pietro si lavò la testa.*
'Peter$_i$ to-himself washed the$_i$ head.'

a. *Pietro aprì gli occhi.*
'Peter$_i$ opened the$_i$ eyes.'

b. *Pietro si è aperto gli occhi (con le mani).*
'Peter$_i$ to-himself opened the$_i$ eyes (with the$_i$ hands).'

Sentences like these seem to suggest that Spanish and Italian make exactly the same distinction as French. For Spanish this has been explicitly claimed to be the case (see García 1975:129). Consider, however, the following sentence:

French:
*Pierre pressait son (*le) nez contre la fenêtre.*
'Peter was pressing his (*the) nose against the window.'

Spanish:
Pedro está poniendo la nariz en contra de la ventana.
'Peter$_i$ is pressing the$_i$ nose against the window.'

Italian:
Pietro sta schiacciando il naso contro la finestra.
'Peter$_i$ is pressing the$_i$ nose against the window.'

In this case, Spanish and Italian behave in a way DIFFERENT from French: they extend the 'direct-bodily-action' construction to situations in which French does not allow it.

What exactly is the difference between the Spanish and Italian pattern of usage on the one hand and the French pattern on the other?

Let us compare the nose-on-window situation with the head-lifting and eye-opening. What the two types of situation have in common is that in neither is an 'instrument' used: nothing intervenes between the agent and the part of the body, not even the agent's hands. Where the two situations differ is in the nature of the involvement of the part of the body. In one case (the head, the arm, the eyes), it is 'active', i.e. the ultimate change in its state or position is due to an internal process; in the other case (the nose) the part of the body in question is passive: the ultimate change in its state or position is not due to any internal process but to an 'action' (process) within some other part of the body (thus, to press one's nose against the window one has to move one's head, not one's nose as such). This means that the crucial variable to which Italian and Spanish are sensitive is the absence of an 'instrument'; the crucial variable to which French is sensitive is the 'active' role of the part of the body. Since the active role of the part of the body presupposes the absence of an instrument, the French 'active-body-part' construction automatically implies directness of action. But the absence of an instrument does not presuppose an active role by the part of the body. So the Spanish and Italian 'direct-bodily-action' construction can be extended to cases where the part of the body is passive. The correct semantic representations of the relevant constructions should reflect this difference. I would propose the following:

Pierre a levé la tête.
'Peter$_i$ lifted the$_i$ head.' ⇒
something happened to part Y of X's body
because something happened in Y
because X did something

(not because something happened to something else)
I'm thinking of it as something X did,
not something that happened to something other than X

The fourth component of this explication is placed in brackets because it is predictable from the second one and therefore possibly superfluous.

Pedro levantó la cabeza.
Pietro alzò la testa.
'Peter$_i$ lifted the$_i$ head.' ⇒
something happened to part Y of X's body
because X did something
not because something happened to something else
I'm thinking of it as something that X did,
not something that happened to something other than X

The concept of indirect bodily action, on the other hand, seems to be exactly the same in French, Spanish and Italian:

Pierre s'est levé la tête (avec les mains).
Pedro se levantó la cabeza (con las manos).
Pietro si alzò la testa (con le mani).
'Peter$_i$ to-himself lifted the$_i$ head (with the hands).' ⇒
something happened to part Y of X's body
because something happened to something else
because X did something
I'm thinking of it as something that happened to X,
not to something other than X

2.4 *Spontaneous involuntary change in the body*

We have seen that in some languages things that happen to a part of a person's body can be viewed as something that has happened to the person himself. We have considered thus far three types of events which can be viewed in this way:

a. External action:
Il$_i$ lui$_j$ caressait les$_j$ mains.
'He$_i$ to-him$_j$ was stroking the$_j$ hands.'
b. 'Reflexive' action:
Il$_i$ se caressait les$_i$ mains.
'He$_i$ to himself was-stroking the$_i$ hands.'

c. External 'impersonal' events:
L'eau lui tombait sur la tête.
'The water to him was-falling on the head.'

We will now turn to a fourth type of events which are often viewed in this way: spontaneous involuntary events which have their cause inside the body. For example, in French and German one can say not only:

Ses mains tremblaient.
Seine Hände zitterten.
'His hands were trembling.'

but also:

Les mains lui tremblaient.
Ihm zitterten die Hände.
'To-him the hands were trembling.'

though not:

* *Les feuilles lui tremblaient (au pin).*
* *Ihm zitterten die Blätter.*
'The leaves to-it trembled (to the pine).'

The meaning grammaticalized in sentences of this latter kind can be represented as follows:

something happened to part Y of Z's body
because something happened in Y
not because Z wanted it
I'm thinking of it as something that happened to Z,
not to something other than Z

Some languages restrict this way of looking at the body/person relation to temporary processes; others extend it also to permanent changes. Thus, in Polish one can say:

Włosy mu posiwiały.
'Hair to-him greyed.'
Zaostrzyły mu się rysy.
'Features (of the face) to-him got sharper.'
Nos mu się wydłużył.
'Nose to-him got longer.'

though not:

* *Brzozie pożółkły liście.*
'To-birch yellowed leaves.'

But one cannot say in French or German:

* *Les cheveux lui sont devenus gris.*
* *Das Haar wurde ihm grau.*
* *Les traits du visage lui sont devenus tendus.*
* *Die Züge verschärften sich ihm.*
* *Le nez lui est devenu plus long.*
* *Die Nase wurde ihm länger.*

This means that Polish has, while French and German have not, grammaticalized the following meaning:

part Y of Z's body changed
because of something else that one can say about Y
not because Z wanted it
I'm thinking of it as something that happened to Z,
not to something other than Z

The change has to be presented as spontaneous ('because of something else about Y') because if it is not spontaneous the construction in question cannot be used. Thus, one could not say:

* *Włosy jej zrudziały (bo fryzjer ufarbował je na rudo).*
'Hair to-her got reddish (because a hairdresser dyed it red).'

This is not to say that the change cannot be due to an external event or action — it can be, but only indirectly, via some other change in the part of the body.

Włosy mu zrudziały po tym jak fryzjer ufarbował mu je na czarno.
'Hair to-him got reddish after the hairdresser had dyed it black.'
Włosy zrudziały mu od słońca.
'Hair to-him got reddish from the sun.'

Also temporary states of various parts of the body may or may not be viewed, depending on the language, as involving the whole person. Thus, one can say in Polish:

Nos ci się błyszczy.
'Nose to-you is-shining.'

but one cannot say in French or German:

* *Le nez te brille.*
* *Die Nase glänzt dir.*

As has been noted in Havers (1911), the construction in question existed also in Old French; thus, Rabelais COULD say:

Le visage lui reluisait.
'The face to-him was-shining.'

Interestingly, in German one cannot say:

* *Die Nase glänzte ihm.*
'The nose was shining to-him.'

but one CAN say (at least some speakers can):

Die Augen leuchteten ihm.
'The eyes were-shining to-him.'

This suggests that in German the state of a part of the body can be seen as the state of the person if and only if this state is due to something about the person, not just to something about this part of this person's body: the eyes may shine because of an inner emotion, the nose cannot. Thus, one cannot say:

* *Der Katze leuchteten die Augen.*
'To the cat the eyes were shining.'

to signify simply that the eyes of the cat shone in the darkness. These differences in usage can be accounted for by postulating semantic representations along the following lines:

Die Augen leuchteten ihm.
'The eyes were-shining to-him.' ⇒
one could say something about part Y of Z's body as
it was at that time
because one could say something about Z
not because Z wanted it
I'm thinking of it as something that one can say about Z,
not about something other than Z

Nos mu się błyszczał.
'Nose to-him was-shining.' ⇒
one could say something about part Y of Z's body as it
was at that time

because something else could be said about Y
not because Z wanted it
I'm thinking of it as something that one can say about Z,
not about something other than Z

One might add that in some languages even static properties of parts of the body are sometimes viewed as properties of their owners. Thus, one says in Polish:

Włosy mu się krecą.
'Hair to-him curls.'
Włosy sięgały jej do pasa.
'Hair reached to-her to waistline.'

In Polish, this is possible only with properties which while being static states can nonetheless be thought of (or imagined?) in process terms. Thus, although one can say:

Włosy mu się kręcą.
'Hair to-him curls.'

one cannot say:

* *Włosy mu są czarne.*
'Hair to-him is black.'

2.5 *Physical closeness*

To repeat: conceptualization of bodily events in different languages is often remarkably similar, but often equally remarkably different. Let us consider more closely, for example, the proposition made earlier to the effect that French provides syntactic means for presenting an event which involves a person's body as an event affecting that person himself. This sounds plain enough. But what exactly counts as an event which involves a person's body? When one looks at the facts more closely one discovers that different languages embody different views on this matter. For example, if someone or something comes to be physically close to a person — stands just above him, turns around him or settles in front of him, is this regarded as an event which involves that person's body and thus affects him or not? It turns out that different languages take different stands. French does so regard it: physical closeness of external entities can be viewed in French as an invasion of an individual's personal space. As Bally (1926) observed,

sentences in the following pairs are not synonymous:

1a. *Il court derrière elle.*
'He is running behind her.'
b. *Il lui court derrière.*
'He to-her is running behind.'
2a. *Il court après elle.*
'He runs after her.'
b. *Il lui court après.*
'He to-her runs after.'
3a. *Il tourne autour d'elle.*
'He turns around her.'
b. *Il lui tourne autour.*
'He to-her turns around.'
4a. *Il passe devant elle.*
'He passes in front of her.'
b. *Il lui passe devant.*
'He to-her passes in front of.'

The first sentence in each pair is a mere statement of fact, the second presents the fact of someone's physical closeness as affecting the person whose 'personal space' has been entered:

Il tourne autour d'elle. ⇒
X is doing something near Z's body
Il lui tourne autour. ⇒
X is doing something near Z's body
I'm thinking of it as something that happens to Z

By contrast, in Polish physical closeness can be considered as affecting a person only on condition that it involves specifically a PART of this person's body, not just the body as a whole. Thus, one can say:

Ciagle stoisz mi za plecami.
'You are constantly standing to-me behind (my) back.'
Ciagle kręcisz mi się pod nogami.
'You are constantly moving to-me around (my) feet.'
Mucha lata ci koło nosa.
'A fly is flying to-you close to (your) nose.'

but not:

* *Siedział mi naprzeciwko.*
'He was sitting to-me vis-à-vis.'
* *Biegł mi obok.*
'He was running to-me next.'
* *Kręcił mi się dookoła.*
'He was turning to-me around.'

Thus, the concept grammaticalized in the Polish construction calls for a slightly different semantic representation:

Ciągle stoi mi za plecami.
'He is constantly standing to-me behind (my) back.' ⇒
X is doing something near part Y of Z's body
I'm thinking of it as something that happens to Z,
not to something other than Z

In Polish, as in French, this construction cannot be applied to inanimate objects:

* *Ciągle kręcił się stołowi pod nogami.*
'He was constantly moving to the table around (the) legs.'
* *Il lui tourne autour (à la table).*
'He to-it is turning around (to the table).'

Italian appears to be similar to French, because it, too, contrasts sentences like those in the following pairs:

1a. *Pietro correva dietro di lei.*
'Peter was running behind her.'
b. *Pietro le correva dietro.*
'Peter to-her was running behind.'
2a. *Forse ero passato molto vicino a lei.*
'Perhaps I had passed very close to her.'
b. *Forse le ero passato molto vicino.*
'Perhaps to-her I had passed very close.'
3a. *Egli sedeva di fronte a lei.*
'He was sitting in front of her.'
b. *Egli le sedeva di fronte.*
'He to-her was sitting in front of.'

However, this apparent similarity is in fact somewhat deceptive, because in Italian the contrast in question is NOT restricted to people and their bodies (although this is its typical domain). The following sentence illustrates this:

Invece il cristallo c'era, si capisce, e mi riflette un instante mentre gli passavo vicino irresoluto ... (Prisco 1977:39)
'But the glass was there, of course, and it reflected me for a moment, while to-it I was passing close, undecided ...'

This means that superficially similar constructions in French and Italian codify in fact slightly different ideas, and should therefore receive slightly different semantic representations:

Il lui courait derrière.
'He to-her was running behind.' ⇒
X was doing something near person Y's body
I'm thinking of it as something that happened to Y

Egli le correva dietro.
'He to-her was running behind.' ⇒
X was doing something near Y
I'm thinking of it as something that happened to Y

2.6 *Can you affect a person by looking at him or her?*

A surprising number of languages embody in their grammar the view that you CAN, that if a person looks at a part of another person's body he is 'doing' something to it. For example, in Italian there is a choice between sentences like:

Pietro guardava i suoi seni.
'Peter was looking at her breasts.'

and those like:

Pietro le guardava i seni.
'Peter to-her was looking at the breasts.'

There is no similar choice in the case of inanimate objects:

Pietro guardava le finestre illuminate della sua casa.
'Peter was looking at the illuminated windows of her house.'
* *Pietro le guardava le finestre illuminate (alla sua casa).*
'Peter was looking to-it at the illuminated windows (to her house).'

Interestingly, in languages which do not regard looking as an instance of doing something to the person looked at, a special case is often made for

the action of looking at ("into") someone's eyes. For example, in English one can say:

He looked her in the eye.

but not:

*He looked her in the nose.

nor, needless to say:

*He looked the needle in the eye.

Clearly, looking in someone's eyes is regarded as a unique way of reaching (communicating with) the other person.

If one can affect a person by *looking* at a part of his or her body, can one also affect them by merely *seeing* it? Italian maintains that one can. Thus, one can say in Italian both:

Vidi i suoi denti.
'I saw her teeth.'

and:

Le vidi i denti.
'To-her I saw the teeth.'

a choice which, again, does not exist in the case of inanimate objects:

Vidi le finestre illuminate della sua casa.
'I saw the illuminated windows of her house.'
**Le vidi le finestre illuminate (alla sua casa).*
'To-it I saw the illuminated windows (to her house).'

A sentence like:

Le vidi le gambe.
'To-her/it I saw the legs.'

can only refer to human legs, not to the legs of a table or chair.

People can also be conceived of as being affected by the fact that a piece of their clothing was seen (or looked at) — provided that this piece of clothing was actually worn at the moment of seeing. Sentences like:

Le vedeva (guardava) le mutandine.
'To-her he saw (looked at) the underpants.'
Le vedeva (guardava) una macchia sul vestito.
'To-her he saw (looked at) a spot on the dress.'

imply that the underpants and the dress in question were seen on the person, not elsewhere.

Italian differs in this respect, interestingly, from French. French, too, allows and indeed encourages its speakers to view people as 'affected' by the fact of having parts (any parts) of their bodies seen; but it does not extend this to items of clothing. Thus, if a gust of wind lifts a girl's skirt and exposes her legs and her underpants, a Frenchman may well say:

Il lui a vu les jambes.
'He to-her saw the legs.'

but he would not say:

* *Il lui a vu le (son) pantalon.*
'He to-her saw the (her) underpants.'

It is not necessary to insist on the word 'affect' in this account of these facts. The semantic representation proposed says, strictly speaking, that in Italian and French the fact that a part of someone's body is seen can be conceived as a fact ABOUT the entire person (whereas the fact that a part of an OBJECT is seen cannot be conceived as a fact about the entire object):

Il lui a vu les jambes.
Le vedeva le gambe.
'He to-her saw the legs.' ⇒
X saw part Y of Z's body
I'm thinking of it as something that happened to Z,
not to something other than Z

Le vedeva le mutandine.
'To-her he saw the underpants.' ⇒
X saw thing W which was on part Y of Z's body
I'm thinking of it as something that happened to Z,
not to something other than Z

It is interesting to note that while some languages treat seeing and looking in the same way, others draw a line between them. For example, in Polish *looking* at a part of a person's body can be viewed as something that concerns the whole person, but *seeing* a part of a person's body cannot:

Patrzył na twoje nogi (piersi).
'He was looking at your legs (breasts).'
Patrzył ci na nogi (piersi).
'He was looking to-you at legs (breasts).'

Widział twoje nogi (piersi).
'He saw your legs (breasts).'
* *Widział ci nogi (piersi).*
'He saw to-you legs (breasts).'

Some languages extend the 'looking equals affecting' philosophy to other forms of perception and knowledge. For example, in Italian (but not in Polish) if anything becomes known about a part (or an aspect) of a person's body, this fact in itself can be viewed as a fact concerning the whole person; if something becomes known about a part or an aspect of an object this cannot be viewed as a fact concerning the whole object:

Gli hanno scoperto una ferita (al ragazzo).
'To-him they have discovered a wound (to the boy).'
* *Gli hanno scoperto una fessura (al piatto).*
'To-it they have discovered a crack (to the plate).'
Il dottore gli trovó la febbre (al bambino).'
'The doctor to-him found the fever (to the child).'
* *Il meccanico gli trovó una gomma a terra (all'automobile).'*
'The mechanic to-it discovered a flat tire (to the car).'

2.7 *Can a hat be viewed as a part of the body?*

The concept of bodily event is often extended to include events involving objects habitually worn on the body (especially the clothing, but also glasses, a pipe, etc). This happens, for example, in Italian. One says both:

Pietro si è lavato le mani.
'Peter$_i$ to-himself washed the$_i$ hands.'

and:

Pietro si tolse il cappello.
'Peter$_i$ to-himself took off the$_i$ hat.'

The definite article preceding the word *cappello* does not mean that Italians think of a hat as if it were a part of a person's body; rather, that something that happens to a person's hat (when this hat is actually sitting on a person's head) can be thought of as something that happens to this head itself and, consequently, as something that happens to the owner of the head. The change in the state of this part of the body is seen as affecting the state or the appearance of the whole person.

Pietro si è lavato le mani. ⇒
something happened to part Y of X's body
because X did something
I'm thinking of it (what happened to Y) as something
that happened to X, not to something other than X

Pietro si tolse il cappello. ⇒
something happened to thing W
one can think of it as something that happened to
a part of X's body
because X did something
I'm thinking of it (what happened to W) as something
that happened to X, not to something other than X

A similar construction to the Italian existed in Old French. As Bally pointed out, traces of this older state of affairs have survived in set phrases such as *tirer l'épée* 'to pull out one's sword'. In a sentence like:

Roland a tiré l'épée.
'Roland pulled out his sword.'

the action involving the sword is viewed as 'intransitive', i.e. as one which does not transcend the acting person. A knight's sword (worn on his body) is not viewed as a totally external object, but as if it were a part of the knight; more exactly, the routine action of pulling out one's sword is viewed as something that the knight does, not as something that happens to the sword because of something else that the knight does. In other words, it is viewed as a unitary action.

Roland a tiré l'épée. ⇒
something happened to thing W
one can think of it as something that happened to
a part of X's body
because X did something
not because something happened to something else
I'm thinking of it (what happened to W) as something
that X did, not something that happened to something
other than X

The absence of the reflexive clitic in the French sentence indicates that the action is viewed here as more integral and more personal than in the case of Italian sentences referring to 'bodily objects'. In the French sentence, the

speaker is not thinking of the effect the action will have upon the agent, whereas in the Italian sentence he IS concerned about this effect and recognizes that the same effect could be achieved if the action came from outside (from another person):

Pietro si tolse il cappello.
'Peter$_i$ to-himself took off the$_i$ hat.'
Pietro$_i$ gli$_j$ tolse il$_j$ cappello.
'Peter$_i$ to-him$_j$ took off the$_j$ hat.'

In French, a sentence like:

Roland$_i$ lui$_j$ a tiré l'épée.

could only be interpreted as elliptical: the sword in question would have to have been mentioned before.

Bodily action constructions can also be extended to clothing in Slavic languages. But the distinctions that Slavic languages draw in this area are not the same as those grammaticalized in Romance languages. For example, Polish has a construction which grammaticalizes the concept of 'simple bodily action'. This comprises both actions involving a part of the agent's body and simple routine actions involving objects worn on the body, and thus indirectly involving a part of the body:

*Piotr otworzył (*niebieskie) oczy.*
'Peter$_i$ opened (*blue) eyes$_i$.'
*Piotr umył (*żółte) zęby.*
'Peter$_i$ washed (*yellow) teeth$_i$.'
*Piotr zdjął (*czarny) kapelusz.*
'Peter$_i$ took off (*black) hat$_i$.'

The noun referring to the part of the body or to the part of clothing cannot be modified by an adjective unless a possessive pronoun is added; but the essence of the construction consists precisely in the absence of a possessive pronoun or qualifying adjective — if a possessive pronoun is added, adjectives may be added, too, but then the construction ceases to be restricted to bodily actions.

To understand the purport of the 'simple bodily action' construction we must compare it with alternative ways of presenting bodily actions.

Consider first the following pair of sentences:

Piotr otworzył oczy.
'Peter$_i$ opened eyes$_i$.'

Piotr otworzył sobie oczy.
'Peter$_i$ opened to-himself eyes$_i$.'

The contrast between the sentences with and without the dative reflexive pronoun is of course reminiscent of the Romance constructions considered earlier of the type:

Pedro abrió los ojos.
'Peter$_i$ opened the$_i$ eyes.'
Pedro se abrió los ojos.
'Peter$_i$ to-himself opened the$_i$ eyes.'

and the difference in the use of the two versions is also similar: the absence of the reflexive pronoun indicates the normal (direct) way of performing the action, while its presence indicates the use of an intermediate object (the agent's hands, presumably). The value of the Polish construction, then, might seem to be exactly the same as that of its counterparts in Romance languages. In fact, however, it is not. The similarity is misleading, because Polish extends the distinction in question to cases where a third entity (an 'instrument') is involved:

Piotr umył zęby.
'Peter$_i$ cleaned teeth$_i$.'
Piotr umył sobie zęby.
'Peter$_i$ cleaned to-himself teeth$_i$.'

This shows that the exact value of the reflexive-less construction in Polish is not the same as in Spanish or French. In Spanish the absence of a reflexive pronoun indicates that the action is indirect (no instrument). In Polish it indicates that the action is thought of as simple and ordinary. To open one's eyes in a simple, ordinary way means to open them without using one's hands, by the movement of the eyes themselves. For this reason, in the case of the eyes the concept of 'simple, ordinary action' and that of 'direct action' coincide. But to clean one's teeth in a simple, ordinary way does not mean to clean them without using one's hands. In this case the concept of a simple, ordinary action does not coincide with that of direct action. Polish syntax ignores the technical difference between the two types of actions. Routine actions like cleaning one's teeth are treated by Polish syntax as just as simple and ordinary as direct bodily events like opening one's eyes. Thus, Polish draws a line between activities such as cleaning one's teeth or washing one's ears on the one hand and those like cleaning one's toenails or

washing one's eyes on the other — because the former are ordinary routine actions whereas the latter are not:

Piotr$_i$ umył zęby$_i$.
'Peter$_i$ washed (cleaned) teeth$_i$.'
Piotr umył uszy.
'Peter$_i$ washed ears$_i$.'
Piotr przemył sobie oczy.
'Peter$_i$ washed to-himself eyes$_i$.'
Piotr oczyścił sobie paznokcie u nóg.
'Peter$_i$ cleaned to-himself toenails$_i$.'
?*Piotr przemył oczy.*
'Peter$_i$ washed eyes$_i$.'
?*Piotr oczyścił paznokcie u nog.*
'Peter$_i$ cleaned toenails$_i$.'

Sentences like:

Piotr umył sobie zęby (uszy, ręce).
'Peter$_i$ washed to-himself teeth$_i$ (ears$_i$, hands$_i$).'

are not unacceptable, but they imply that Peter performs such actions seldom and only on special occasions.

The essence of the 'simple ordinary bodily action' consists, it seems, in its integral character: the action is viewed as a simple, unitary event; if an action is not viewed as simple and ordinary it is no longer viewed as unitary either, and its different components (which are no longer predictable) have to be described separately. This means that a passive component is singled out, referring to an event which could, in principle, be caused by a different agent — hence the need for the reflexive pronoun (to indicate that in fact it was caused by the same agent).

Thus, a 'complex bodily action' is seen in terms of an active component, involving the agent, and a passive component, involving the part of the body. A 'simple action', on the other hand, is viewed as unitary and automatic, as a simple act which involves only one entity, the agent, with parts of the agent's body being included under this concept. In the case of simple bodily actions the agent naturally has to be identical with the 'owner' of the part of the body affected. Accordingly, in this case there is no need to signal this identity by means of a reflexive pronoun.

Furthermore, since the 'simple bodily action' sentences treat the action as more or less automatic they do not say anything about its purpose. 'Com-

plex bodily action' sentences, on the other hand, imply that the agent wants to achieve a specific purpose, concerning the body-owner himself. Thus, a sentence like:

Piotr$_i$ *umył sobie zęby.*
'Peter$_i$ cleaned to-himself teeth$_i$.'

implies not only that the action is viewed as rather unusual, but also that Peter wanted to achieve a special effect (say, to look particularly smart). This can be represented by saying that 'X thought this: I want this: something will happen to me because of that'.

Taken together, these observations lead us to propose the following semantic representations:

SIMPLE BODILY ACTION

Piotr otworzył (*ADJ) *oczy.*
'Peter$_i$ opened (*ADJ) eyes$_i$.'
Piotr umył (*ADJ) *zęby.*
'Peter$_i$ washed (*ADJ) teeth$_i$.' ⇒
something happened to part Y of X's body
because X did something
I'm thinking of it (what happened to Y) as something
that X did, not something that happened to something
other than X

COMPLEX BODILY ACTION

Piotr otworzył sobie (*ADJ) *oczy ręką.*
'Peter$_i$ opened to-himself eyes (*ADJ) with hand$_i$.'
Piotr przemył sobie oczy.
'Peter$_i$ washed to-himself eyes$_i$.' ⇒
something happened to part Y of X's body
because something happened to something else
because X did something
because X thought this: I want this:
something will happen to me because of that
I'm thinking of it (what happened to Y) as something
that happened to X, not to something other than X

These explications reflect the fact that a complex bodily action has to be also indirect, but a simple bodily action does not have to be direct.

As was mentioned earlier, Polish extends its distinction between sim-

ple and complex bodily actions to cases which involve objects worn on the body. Thus, the action of taking off or putting on one's hat or coat is viewed as being as simple and ordinary as that of cleaning one's teeth or opening one's eyes — provided that it is done in the ordinary way.

Piotr zdjął (*ADJ) *kapelusz.*
'Peter$_i$ took off (*ADJ) hat$_i$.'
* *Piotr zdjął sobie kapelusz.*
'Peter$_i$ took off to-himself hat$_i$.'
Piotr jednym palcem zdjął sobie kapelusz z głowy.
'Peter$_i$ with one finger took off to-himself hat$_i$ from head$_i$.'
Piotr włożył rękawiczki.
'Peter$_i$ put on to-himself gloves$_i$.'
Piotr włożył sobie rękawiczki na stopy.
'Peter$_i$ put on to-himself gloves$_i$ on feet$_i$.'

In the simple-bodily-action construction, the part of the body involved does not have to be mentioned: the construction itself indicates that it is the 'usual' part of the body, and there is no need to specify which part that is. In the 'complex-bodily-action' construction, however, nothing can be taken for granted, because the construction does not say that the part of the body involved is the usual one; hence in this case the part of the body has to be specified.

SIMPLE QUASI-BODILY ACTION

Jan zdjął (*ADJ) *kapelusz.*
'Jan$_i$ took-off (*ADJ) hat.' ⇒
something happened to thing W
one can think of it as something that happened
to a part of X's body
because X did something
I'm thinking of it (what happened to W) as something
that happened to X, not to something other than X

COMPLEX QUASI-BODILY ACTION

Jan włożył sobie rękawiczki na (*ADJ) *stopy.*
'Jan$_i$ put to-himself gloves on (*ADJ) feet$_i$.'
Jan jednym palcem zdjął sobie kapelusz z głowy.
'Jan$_i$ with one finger took-off to-himself hat from head$_i$.' ⇒
something happened to thing W

one can think of it as something that happened to
    part Y of X's body
because something happened to something else
because X did something
because X thought this: I want this:
    something will happen to me because of that
I'm thinking of it (what happened to Y) as something
    that happened to X, not to something other than X

2.8 *Overt and covert bodily constructions*

Are there languages whose grammar is completely indifferent to the problems of body/person influence? On both theoretical and empirical grounds it seems unlikely, although languages clearly differ in the degree of emphasis which they place on this problem, as well as in the perspective in which they view it.

English, for example, lacks most of the peculiar 'bodily' constructions characteristic of Romance, Slavic and (other) Germanic languages. Still, it has some, as the following pairs of sentences show:

1a. A rock hit John on the head.
 b. *A rock hit the house on the roof.
2a. John kissed Mary on the forehead.
 b. *John kissed the Bible on the cover.
3a. The puppy bit John on the finger.
 b. *The puppy bit the table on the leg.
4a. The princess pricked herself on the finger.
 b. *The car pricked itself on the front seat.

The precise conditions governing the use of such sentences are not easy to state. One thing all the aceptable ones seem to have in common is a sensation (or presumed sensation) on the part of the person affected. But necessary though it is the presence of a sensation is not a sufficient condition, as the following sentences show:

?The barbed wire scratched John on the arm.
?The curtain tickled John on the cheek.
?The needle blown from the table by the wind pricked
 John on the foot.

In fact, it appears that there is no generalization which would adequately

delimit the entire class in question, and that at least four different categories have to be distinguished:

(1) One category seems to embrace sentences which refer to a person's action directed to another person, generating a sensation and expressing an attitude:

John kissed Mary (*the chair) on the arm.
John kissed the Bible (*on the cover).

Other verbs in this category include *lick, stroke, pinch, pat, strike, hit, punch, kick, bite* and *prick*. The meaning grammaticalized in such sentences seems to be, roughly, as follows:

something happened to Z
because X did something
one can think of it as something that happened to
part Y of Z's body
because X wanted to cause Z to feel something
Z felt something because of that

(2) Another category embraces sentences referring to the action of a person or animal directed towards the body of another person or animal and generating an unpleasant sensation:

A bee stung John on the finger.
The puppy (inadvertently) bit John on the leg.

The difference between these two categories may seem slim, yet I think it is real. A sentence like:

The cat licked the kitten on the paw.

is humorously anthropomorphic because it implies an emotional attitude on the cat's part, directed towards the kitten; on the other hand, a sentence like:

The bee stung John on the finger.

is not in the least anthropomorphic, because it does not imply any emotion on the part of the bee. The meaning grammaticalized in sentences of the latter kind can perhaps be stated as follows:

something happened to Z
because X did something
one can think of it as something that happened to

part Y of Z's body
Z felt something because of that
that one doesn't want to feel

(3) A third category embraces sentences which refer to involuntary action which affects, unpleasantly, the agent's own body:

John (inadvertently) hit himself on the arm.
John (inadvertently) pricked himself on the arm.
John (inadvertently) scratched himself on the arm.

Needless to say, verbs like *kiss, lick, punch* or *pinch* cannot be used in this construction. The meaning grammaticalized in such sentences can be stated as follows:

something happened to X
that X didn't want
because X did something
one can think of it as something that happened to
part Y of X's body
X felt something because of that
that one doesn't want to feel

(4) A fourth category embraces sentences which refer to events involving inanimate objects:

A stone hit John on the head.
?A twig scratched John on the arm.
?A thistle pricked John on the foot.
?Mary's hair tickled John on the cheek.

The meaning grammaticalized in (acceptable) sentences of this kind contains the following components:

something happened to (person) Z
because something happened to thing X
one can think of it as something that happened to
part Y of Z's body
Z felt something because of that
that one doesn't want to feel

This formula needs further refinement. As it stands, it is too broad; while allowing all the sentences which it should allow it also allows some which it should exclude. For the time being, however, we will have to leave

it as it is.[1]

It is interesting to note that some of these covert categories of English are overtly distinguished in German.[2] In German the verbs referring to actions which express the agent's attitude towards the person bodily affected take only an accusative object. Thus, one finds:

*Er küsste sie/*ihr auf die Stirn.*
'He kissed her:ACC/*DAT on the forehead.'

One can of course also say:

Er küsste ihr die Hand.
'He kissed to-her the hand.'

but in this case the part of the body in question is treated as the direct undergoer of the action.

Verbs referring to impersonal events take only a dative object:

Der Stiel schlug ihm/?ihn ins Gesicht.
'The handle hit him:DAT/?ACC in the face.'
Der Rauch biss mir/?mich in die Augen.
'The smoke was stinging me:DAT?ACC in the eyes.'

Verbs referring to action which may or may not express an attitude take either an accusative or a dative object depending on whether the speaker sees the person bodily affected as a central or as a marginal participant in the event. He may be seen as central for two different reasons. Thus, if the event is very painful or otherwise hard to ignore by the sufferer, an accusative rather than a dative will be used. This can be illustrated by the following pair of sentences:

*Versehentlich trat er ihr/*sie auf den Fuss.*
'Unintentionally, he stepped to-her:DAT/*ACC on the foot.'
Versehentlich trat er sie/?ihr mit den Füssen in den Rücken.
'Unintentionally, he kicked her:ACC/?DAT with the feet in the back.'

In the first sentence the offence is trivial and negligible — hence the dative; in the second, it is serious and hard to ignore — hence the accusative.

If the agent is expressing an attitude towards the affected person, an accusative will be more appropriate. If the action is unintentional, it will presumably not express any attitude on the part of the agent, and therefore the dative will be more appropriate. If the action does not express an

attitude on the part of the agent (whether because it is unintentional or because it is meaningless), the accusative may still be preferred — but then it will imply that the person bodily affected was affected rather seriously. Thus, a sentence like:

Die Mutter schlug mich ins Gesicht.
'The mother hit me:ACC in the face.'

indicates either that she did it on purpose and that by doing so she was expressing her attitude towards me (presumably anger), or that her blow, intentional or not intentional, really hurt. The sentence:

Die Mutter schlug mir ins Gesicht.
'The mother hit me:DAT in the face.'

does not carry those implications. Thus, while many native speakers of German hesitate to accept the sentence:

Er hat sie (doch) nicht absichtlich ins Gesicht geschlagen.
'Unintentionally he hit her:ACC in the face.'

and express their preference for the dative version:

Er hat ihr:DAT (doch) nicht absichtlich ins Gesicht geschlagen.

they do not question the sentence:

Er hat sie doch nicht absichtlich mit dem Hammer ins Gesicht geschlagen.
'Inadvertently he hit her in the face with a hammer.'

This shows that intentionality as such is not a crucial parameter in the choice between dative and accusative (contrary to what has been claimed in Krahe 1972). This conclusion is also confirmed by the following contrast:

*Er klopfte ihr/*sie aufmunternd auf die Schulter.*
'He patted her:DAT/*ACC on the shoulder (encouragingly).'

Er schlug ihr/sie auf die Schulter.
'He hit her:DAT/ACC on the shoulder.'

With *schlagen* 'hit', both a dative and an accusative can be used; with *klopfen* 'tap' an accusative is ruled out, even when an adverb like *aufmunternd* 'encouragingly' indicates that the action was intentional, presumably because the meaning of this verb is such that it excludes the possibility of a painful effect or of a hostile attitude on the part of the agent.

To account for all these facts, I would propose the following semantic

representations:

AN ATTITUDE EPXRESSED, THE AFFECTED PERSON SEEN AS CENTRAL

*Er küsste sie/*ihr auf die Stirn.*
'He kissed her:ACC/*DAT on the forehead.' ⇒
something happened to Z
because X did something
one can think of it as something that happened
to part Y of Z's body
because X wanted to cause Z to feel something;
Z felt something because of that

AN ATTITUDE EXPRESSED, THE AFFECTED PERSON SEEN AS MARGINAL

Er küsste ihr die Hand.
'He kissed to-her:DAT/*ACC the hand.' ⇒
something happened to part Y of Z's body
because X did something
I'm thinking of it (what happened to Y) as something
that happened to Z, not to something other than Z

AN ATTITUDE EXPRESSED, THE AFFECTED PERSON SEEN AS CENTRAL AND AS AN OBJECT OF AGGRESSION

Wütend schlug er sie ins Gesicht.
'In a rage, he hit her:ACC in the face.' ⇒
something happened to Z
because X did something
one can think of it as something that happened to
part Y of Z's body
because X wanted to cause Z to feel something
that one doesn't want to feel

NO ATTITUDE EXPRESSED, THE AFFECTED PERSON TREATED AS CENTRAL AND AS A SUFFERER

Er hat sic nicht absichtlich mit dem Hammer ins Gesicht geschlagen.
'Inadvertently, he hit her:ACC in the face with the hammer.' ⇒
something happened to Z
because X did something

one can think of it as something that happened to
part Y of Z's body
Z felt something because of that
that one doesn't want to feel

Eine Biene stach sie in den Finger.
'A bee stung her:ACC on the finger.' ⇒
something happened to Z
because X did something
one can think of it as something that happened to
part Y of Z's body
Z felt something because of that
that one doesn't want to feel

NO ATTITUDE EXPRESSED, THE AFFECTED PERSON TREATED AS MARGINAL

Sie hat ihm doch nicht absichtlich ins Gesicht geschlagen.
'She hit him:DAT in the face.' ⇒
X did something
one can think of it as something that happened to
part Y of Z's body
I'm thinking of it (what happened to part Y of Z's body) as something that happened to Z, not to something other than Z

Der Rauch biss ihm/?ihn in die Augen.
'The smoke was stinging him:DAT/?ACC in the eyes.'
Der Stiel schlug ihm/?ihn ins Gesicht.
'The handle hit him:DAT/?ACC in the face.' ⇒
something happened to X
one can think of it as something that happened to
part of Y of Z's body
I'm thinking of it (what happened to part Y of Z's body) as something that happened to Z, not to something other than Z

2.9 *The status of 'bodily constructions'*

The last point I would like to raise in connection with 'bodily constructions' concerns their status in language: are they obligatory or optional? If

one looks at the data from this point of view one notices interesting differences between different constructions and different languages. For example, in French every action affecting a part of a person's body can be viewed as affecting the person himself; it can — but it does not have to. One can say either:

Elle$_i$ lui$_j$ a lavé ses$_j$ mains sales.
'She to-him washed his dirty hands.'

or:

Elle$_i$ a lavé ses$_j$ mains sales.
'She washed his dirty hands.'

(and there is of course a third version, with the definite article). Similarly, in English one can say either:

John kissed Mary on the lips.

or:

John kissed Mary's (pale) lips.

depending on whether one wishes to emphasize or to de-emphasize the interpersonal aspect of the act.

There are cases, however, when the event which involves a part of a person's body can be viewed in only one way: as involving the person himself. In English this seems to be true of sentences which refer to hurtful sensations. Thus, one would say:

A bee stung John on the nose.
The dog bit John on the leg.
A stone hit John on the head.

but one would hardly say:

?A bee stung John's nose.
?A dog bit John's leg.
?A stone hit John's head.

— unless, of course, John was dead or unless the nose, the leg and the head in question were John's favourite possessions rather than parts of his body. English is similar in this respect to French, Italian, Spanish, German and Russian. In fact, one might well be inclined to suspect that all languages behave in this respect in the same way as English. Yet, as Xolodovič (1974:331) has pointed out, Japanese, for one, is different. A sentence like:

Inu wa John no ashi o kanda.
'A dog bit John's leg.'

is perfectly natural, and does not imply that John is either dead or otherwise inaccessible to pain. If one wishes, one CAN show explicitly that John is affected: one does this by choosing an 'affective passive' construction instead of the neutral active (see this volume, chap. 4):

John wa inu ni ashi o kamareta.
John TOP dog by leg ACC bite-PSV-PAST

This means that Japanese allows its speakers to view hurtful events in a purely objective way, ignoring those sensations which inevitably follow them. Indo-European languages, on the other hand, do not provide their speakers with a similar measure of freedom: they force upon their speakers an experiencer's subjective point of view.

Another fact pointing in the same direction is the existence in Japanese of sentences like:

John no ashi wa oreta.
'John's leg broke.'

John no ha wa oreta.
'John's tooth broke.'

One can hardly say in English, German, French or Russian:

*John's leg broke.
**Hans' Bein brach.*
**La jambe de Jean s'est cassée.*
**Noga Ivana slomalas'.*

— not, at least, when speaking of a part of the body of a living person. Admittedly, one can say in English things like:

His leg was broken.
His front teeth were broken.

(for example, speaking of a football injury). But these sentences do not describe the event as such; rather they describe the event in terms of the resulting state. In Polish or Russian one cannot even say that: one HAS to present the event from the point of view of the sufferer. Thus, if John did something that directly caused the injury (for example, jumped in an awkward way, or bit on a nut) one would say:

Jan złamał nogę (ząb).
Ivan slomal nogu (zub).
'John$_i$ broke leg$_i$ (tooth$_i$).'

If John did something that indirectly caused the injury (e.g. accidentally hit his leg with a hammer or his tooth with a fork) one can say:

Jan złamał sobie nogę (ząb).
Ivan slomal sebe nogu (zub).
'John broke to-himself leg (tooth).'

If someone else did something that caused the damage one would say:

Złamali Janowi nogę.
Slomali emu nogu.
'They broke to John$_i$ leg$_i$.'

Not even a most detached doctor could refer to the event without mentioning the sufferer:

* *Jego noga złamała się.*
* *Ego noga slomalas'.*
'His leg broke.'

What a doctor CAN do if he is determined to avoid reference to the person is to classify the damage by using a past participle or a nominalized verb:

Złamana noga.
Slomannaja noga.
'Broken leg.'
Pęknięcie kości udowej.
Perelom kosti.
'Breaking of the thigh bone.'

Interestingly, both Polish and Russian draw a line between events like those resulting in a broken leg and those resulting in a broken tooth. Although one can say neither:

* *Jego noga złamała się.*
'His leg broke.'

nor:

* *Jego ząb złamał się.*
'His tooth broke.'

one CAN say:

Ząb mi się złamał.
'Tooth to-me broke.'
U menja slomalsja zub.
'At me$_i$ tooth$_i$ broke.'

but one cannot say:

* *Noga mi się złamała.*
'Leg$_i$ to-me$_i$ broke.'
* *U menja noga słomalas'.*
'At me$_i$ leg$_i$ broke.'

(We are speaking, of course, of legs and teeth which are parts of the body, not precious possessions kept in a drawer and played with from time to time.)

This means that although one cannot refer to the breaking of a person's tooth while ignoring the person himself, one CAN conceive of the breaking of the tooth as an autonomous event (an event necessarily involving the owner of the tooth, but consisting in the breaking of the tooth as such). A leg, on the other hand, is viewed differently: one cannot conceive of the breaking of a person's leg as an autonomous event. A tooth can break (in Polish) because of 'something that one could say about the tooth (not about something else)'; a leg cannot break (in Polish) because of 'something that one could say about the leg (not about something else)' — presumably because even if the breaking was due to the weakness of the bone, the very weakness of the bone would be considered as a fact about the person, not just a fact about the leg.

These observations lead us to the following semantic representations:

a. *Janowi złamał się ząb (*noga).*
'To-John$_i$ broke tooth$_i$ (*leg).' ⇒
something (bad) happened to part Y of X's body
because of something that one can say about Y
not because X wanted it to happen
I'm thinking of it as of something that happened to X,
not to something other than X

b. *Jan złamał nogę (ząb).*
'John$_i$ broke leg$_i$ (tooth$_i$).' ⇒
something (bad) happened to part Y of X's body
because something happened in Y

(not because something happened to something else)
because X did something
not because X wanted it to happen
I'm thinking of it as of something that happened to X,
not to something other than X

c. *Jan złamał sobie nogę (ząb).*
'John broke to himself leg (tooth).' ⇒
something (bad) happened to part Y of X's body
because something happened to something else
because X did something
not because X wanted it to happen
I'm thinking of it as of something that happened to X,
not to something other than X

Naturally, if John has a wooden leg or a golden tooth the direct active construction (b) will not be appropriate, although the breaking of a wooden leg or of a golden tooth will still be regarded as a bodily event. The sentences:

Janowi złamał się ząb.
'To-John broke tooth.'
Jan złamał sobie ząb.
'John broke to-himself tooth.'

CAN refer to a golden tooth, but the sentences:

Jan złamał ząb.
Ivan slomal zub.
'John$_i$ broke tooth$_i$.'

imply that the tooth was 'active'. The contrast is even clearer in the case of a dental bridge:

Janowi$_i$ złamał się most$_i$.
U Ivana$_i$ slomalsja most$_i$.
'To (at) John$_i$ bridge$_i$ broke.'
Jan złamał sobie most.
Ivan slomal sebe most.
'John broke to-himself bridge.'
* *Jan$_i$ złamał most$_i$.*
* *Ivan$_i$ slomal most$_i$.*
'John$_i$ broke bridge$_i$.'

The semantic rules discussed here are subtle and may seem less real than grammatical rules whose violation leads to unmistakable "mistakes". Yet native speakers "know" them and obey them with astonishing certainty and consistency. When questioned, native speakers may sometimes reply that a sentence like "John's leg broke" is "not ungrammatical", but they invariably recognize that they themselves would not say it. Clearly, their judgment "this is not ungrammatical" means only that sentences of this kind do not violate any of the rules that they have ever heard of. Their behaviour shows that they do violate some of the rules which they hear in their own minds.

3. The good/bad dichotomy

Human beings tend to see events in terms of good and bad. Natural languages reflect this perspective. The categorization of events as either good or bad is so widespread in natural language that it seems reasonable to hypothesize it as a linguistic universal. But of course different languages do it in different ways and to different degrees. Some languages grammaticalize the good/bad perspective in a quite overt way. For example, Vietnamese has two passives: a 'good' passive and a 'bad' passive, each of them with a clear, unambiguous formal marker. The same sentence:

John was looked at by everyone.

has two possible translations (Nguyen Thanh Chau, p.c.):

a. *John bị mọi người chú ý.*
John PSV-bad every person look at
'John was looked at by everyone, it's a bad thing.'

b. *John được mọi người chú ý.*
John PSV-good every person look at
'John was looked at by everyone, it's a good thing.'

(There is no neutral passive in the language. For further information on Vietnamese passives see Le 1976 and Bystrov and Stankevič 1974.)

In other languages the good/bad perspective is less obvious and less all-pervading; but when one looks for it one can always find it. (For a particularly careful analysis of the Chinese 'adversative' passive see Chappell 1986a.)

In English, for example, this perspective is less prominent than in many other languages; yet English, too, has a number of syntactic construc-

tions which codify the good/bad point of view. Take, for example, the characteristic (not fully standard) *on*-construction:

John's wife died on him.
John's car broke down on him.

This construction allows the speaker to present an event which directly involves someone or something (Y) related to a person (X) as indirectly involving that person (X) himself.

something bad happened to X's Y
one can think of it as something bad that happened to X

This construction has no positive counterpart. Thus, while English provides its speakers with a special construction for talking about unfortunate events, it makes no similar provision for fortunate ones.

This asymmetry, weighted towards pessimism, seems to be characteristic of very many languages. (It might be an absorbing empirical study to seek to determine whether there are any languages in the world in which 'positive' constructions outweigh the 'negative' ones. My own guess is that the answer would turn out to be no.)

Thus, in German there is a construction which may be called the 'dative of misfortune', similar in semantic value to the English *on* construction, but fully standard:[3]

Ihm ist die Frau gestorben.
'To-him the wife died.'

Similarly, one can say:

Die Wäsche wird mir wieder nass.
'The washing got wet to-me again.'

but not:

* *Die Wäsche wird mir trocken.*
'The washing got dry to-me.'

Other languages may have one or more positive-event constructions, alongside one or more negative event constructions, without however treating the two types of events in the same way. For example, in Polish one can say both:

Bielizna mi zmokła.
'Washing to-me got wet.'

and:

Bielizna już mi wyschła.
'Washing to-me got already dry.'

but one can only say:

Matka mi umarła.
'Mother to-me died.'

and not:

* *Matka mi wyzdrowiała.*
'Mother to-me recovered.'

A cynical would-be inheritor might say *Matka mi wyzdrowiała* and be understood, but the phrase could not be said with a straight face. This means that the range of applicability of the 'positive' construction is narrower: a sentence can present a person as positively affected by an event only if this event is at least partly due to his own efforts. Thus someone who had put his washing on the line in a sunny spot CAN say, with satisfaction:

Bielizna już mi wyschła.
'Washing to-me got already dry.'

A cook can say:

Ciasto ładnie mi się upiekło.
'Cake to-me nicely baked itself.'

But a person who has done nothing to cause a desired event cannot be referred to by means of a 'dative of affected person'. Thus, the view codified in this construction is that to get what we want we must collaborate with good fortune. Bad luck comes uninvited but good luck needs to be given a helping hand. It seems more appropriate, therefore, to call this construction something like the 'lucky agent dative' rather than the 'dative of good fortune'. Polish grammar seems to suggest that anybody can be unfortunate, but only agents or doers can be lucky. God helps those who help themselves.

We would propose the following semantic representation to capture the meaning grammaticalized in this construction:
LUCKY-AGENT CONSTRUCTION

Ciasto ładnie mi się upiekło.
'Cake nicely to-me baked itself.' ⇒

something good happened to Y
that X was doing something with
X did something to cause it to happen
one can think of it as something good that happened to X

The parallel negative construction could be assigned the following semantic representation:
UNLUCKY-AGENT CONSTRUCTION

Kartofle mi się rozgotowały.
'Potato to-me got-mushy-from-overboiling.' ⇒
something bad happened to Y
that X was doing something with
one can think of it as something bad that happened to X

This leaves us with a separate 'dative of misfortune' to which no symmetrical 'dative of good fortune' corresponds:
DATIVE OF MISFORTUNE

Matka mi umarła
'Mother to-me died.' ⇒
something bad happened to X's Y
one can think of it as something bad that happened to X

A sentence like:

Wszyscy pacjenci mi wyzdrowieli.
'All patients to-me recovered.'

may be used by a doctor, referring partly to good luck but partly to his own (successful) efforts. It would, therefore, be an instance of the 'lucky agent' construction, not of any hypothetical 'dative of good fortune'.

The reason why sentences like:

Matka mi wyzdrowiała.
'Mother to-me recovered.'

are rather odd (even in the mouth of a cynical would-be inheritor) is, I think, that the component 'one can think of this as something bad that happened to that person' is always referring to the 'propositional function', not to the full sentence; in the present case it would be interpreted as referring to the sentence 'someone's mother recovered'. This means that the speaker who says:

Matka mi wyzdrowiała.

commits himself to the view that if ANYONE'S mother recovers one can think of it as something bad that happens to that person. This is an odd view to hold — especially if it is presented not as a strictly personal opinion but as a standard thought.

Interestingly, the same asymmetry seems to obtain in Japanese. In addition to the famous 'adversative passive' (which we will discuss a little later), Japanese has a construction which might be called the 'adversative causative'. It can be illustrated by the following sentences (Inoue 1974):

Taroo ga tsuma o ryukan de shinaseta.
Taro SUB wife ACC flu of die-CAUS-PAST
'Taro's wife died of flu on him.'

Taroo ga kodomo o kootsuu-jiko de shinaseta.
Taro SUB child ACC traffic-accident in die-CAUS-PAST
'Taro's child died in a traffic accident on him.'

The meaning grammaticalized in this construction appears to be as follows:

something bad happened to X's Y
(not because someone did something)
one can think of it as something bad that happened to X

'Good events' are not spoken of in this way. Thus, sentences like the following one:

Taroo ga tsuma o atatakai kikoo de naoraseta.
Taro SUB wife ACC warm climate by recover-CAUS-PAST
'Taro's wife recovered to his advantage due to warm climate.'

are judged as marginal at best. On the other hand, if the beneficiary has actively contributed to his own good luck (i.e., if the beneficiary is also the agent) then the corresponding sentence is quite natural:

Taroo ga kodomo o shujutsu de naoraseta.
Taro SUB child ACC operation by recover-CAUS-PAST
'The child recovered to Taro's advantage due to the operation.'

The sentence implies that Taro was the doctor performing the operation and that he was both lucky and successful. The meaning grammaticalized in this construction appears to be:

something good happened to Y
because X did something
one can think of it as something good that happened to X

Another interesting asymmetry is displayed by the English *have* construction. Comparing sentences like:

John had his car stolen.
John had his car washed.

grammarians sometimes say that they differ in intentionality and/or causality: the first event is presented as neither wanted nor caused by John, the second as both wanted and caused by him. This account is, of course, basically true — but it is also inaccurate and misleading because it suggests a symmetry where in fact there is none. A sentence like:

John had his car stolen.

implies not only that the event was neither caused nor wanted by John, but also that it was BAD for John. If a friend of John's were to come furtively at night and wash John's car without having been asked to do so, we would not say, in those circumstances:

John had his car washed.

even though the event was neither caused nor perhaps particularly wanted by John. On the other hand, the sentence:

Mary had her dog weighed.

is perfectly normal, even though it does not imply that it is a good thing to have one's dog weighed — the sentence merely implies that Mary's instructions were complied with. (The presence of 'saying' (instructing) in the semantic structure of this construction was noted in Talmy 1976). The two constructions call, therefore, for different and asymmetrical semantic representations:

John had his car stolen. ⇒
  something bad happened to Z's Y
  because X did something
  one can think of it as something bad that happened to Z
John had his car washed. ⇒
  something happened to Z's Y that Z wanted
  because X did something
  because Z said he wanted this thing to happen to his Y

An interesting combination of some positive and more negative constructions exists in Japanese. We have already seen one example of this asymmetry in the Japanese causative construction. Further examples can be

found among the uses of the celebrated Japanese passive.

First, it will be observed that Japanese, like German, provides its speakers with means for presenting one person as negatively — but not positively — affected by something that happens to another person (some of these examples are from Alfonso 1971, Kuno 1973 and Inoue 1974; see also this volume, chap. 4):

John wa tsuma ni shinareta.
John TOP wife by die-PSV-PAST
'John's wife died on him.'

**John wa tsuma ni naorareta.*
'John's wife recovered to his advantage.'

The fact that John's wife died can be presented (by grammatical means) as affecting John negatively, but the fact that John's wife recovered cannot be presented (by grammatical means) as affecting John positively. If the passive *naorareta* is accepted by native speakers at all, it will be interpreted as something bad that happened to John, not something good (e.g., John hated his wife and was waiting for her death to be able to marry his mistress). Even so, the sentence will be slightly humorous, because it will imply that it is a bad thing for anyone if his wife recovers "on him".

Furthermore, if a person DOES something which does not directly involve anybody else, someone else can nonetheless be presented as negatively affected by the action — negatively, but not positively. Thus, a sentence like:

John wa Mary ni piano o hikareta.
John TOP Mary by piano ACC play-PSV-PAST
'Mary played the piano to John's disadvantage.'

can only be interpreted as referring to an event which affected John negatively (perhaps John had a headache, and Mary was playing very loudly).

On the other hand, if a person does something that directly involves someone else this can receive either negative or positive interpretation. For example, a sentence like:

Oyako no kyoosoo de kodomo ni ittoo narareta.
parent GEN competition in child by first prize get-PSV-PAST
'My child won the competition, I was affected by it.'

John wa sensei ni tonari ni suwarareta.
John TOP teacher by next to sit-PSV-PAST
'The teacher sat next to John, John was affected by it.'

is open to either interpretation, because the person affected is directly involved in the event (he is competing with the eventual winner, he is the object of another person's physical closeness etc).

Thus, Japanese grammaticalizes as a special category events and actions which are 'distant and bad' but not those which are 'distant and good' ('distant' meaning here those which do not involve us directly). It also grammaticalizes events which are 'close and relevant'. In the latter case, both 'good' and 'bad' events are provided for; but in the former, only bad ones are deemed worthy of grammatical treatment.

It is interesting to note, in this connection, that the concept of event which directly involves another person is interpreted very broadly in Japanese. Thus, in English one may say:

This bed has been slept in!

but not:

?This man has been sat next to (by a pretty girl).

In Japanese, on the other hand, having someone sit next to us, smile at us or even cry because of us may be regarded as an event which involves us directly.

This is not without parallels in Indo-European languages, of course. We have already mentioned that in French and Italian physical closeness to other people is also regarded as directly involving them.

Il lui courait derrière.
'He to-her was running behind.'
Gli sedeva vicino.
'To-him (she) was sitting close.'

We might add that 'communicative gestures' are also regarded in these languages (though not, e.g., in Polish) as directly involving another person:

Elle lui souriait.
Gli sorrise.
Kare wa kanojo ni waraikakerareta.
* *Uśmiechnęła mu się.*
'She to-him smiled.'

Elle lui a tendu la main.
Gli tese la mano.
* *Wyciągnęła mu rękę.*
'She to-him extended the hand.'

Japanese, however, seems to go even further in this direction. For example, one cannot say in French or Italian:

* *Elle lui pleurait à cause.*
* *Ella gli piangeva su.*
'She to-him was crying (over him).'

one can only say:

Elle pleurait à cause de lui.
Elle piangeva a causa sua.
'She cried because of him.'

In Japanese, however, one CAN say:

Kare wa kanojo ni nakareta.
'She cried because of him, he was affected by it.'

If the context implies that the affected person was NOT the reason of the crying, then the effect of crying would be interpreted as negative:

Haha wa akachan ni nakareta.
'The baby cried, it was bad for the mother.'

It should be mentioned that Japanese also has one POSITIVE construction which does not seem to have a negative counterpart: the *-te morau* construction.

John wa Mary ni piano o hiite moratta.
John TOP Mary by piano ACC play receive
'John "received" Mary's playing the piano, Mary played the piano to John's advantage.'

In this construction, however, the action is not only 'good' for the person affected, it is also intended as such. The 'good' event is not due to luck, but to another person's good will. A bad event, on the other hand, may be due either to bad will or simply to bad luck. Thus the philosophy behind the *-te morau* construction is the same as that behind the other Japanese constructions discussed earlier: bad events come in all forms — some may be due to someone's evil intentions, but others 'just happen'; good events, on the

other hand, do not 'just happen' — they have to be caused, at least partly, by intentional action.

John wa Mary ni piano o hiite moratta. ⇒
Mary did something
because she wanted to do what John wanted her to do
one can think of it as something good that happened to John

Another example of grammaticalization of the good/bad dichotomy is the Polish construction of 'agent-experiencer'. It can be illustrated by sentences like the following ones:

Jak ci się pracuje?
how to-you it works
'How is your work going?'

Jak ci się spało?
how to-you it slept
'How did you sleep?'

Jak ci się czyta?
how to-you it reads
'How is your reading going?'

and also:

Dobrze (źle) mi się dzisiaj pracuje (czyta).
well (badly) to-me it today works (reads)
'My work (reading) is going well (badly) today.'

A variety of adverbial expressions can be used in this construction, but they are all variations of the same basic good/bad contrast:

Dobrze (świetnie, doskonale etc) mi się dzisiaj czyta.
'Well (wonderfully, perfectly etc) to-me it today reads.'
Źle (słabo, kiepsko, marnie, etc) mi się dzisiaj czyta.
'Badly (weakly, poorly, lousily, etc) to-me it today reads.'
* *Wesoło (dziwnie, nierówno, chaotycznie) mi się dzisiaj czyta.*
'Merrily (strangely, unevenly, chaotically) to-me it today reads.'

Sentences of this kind mean that the agent experiences his own action as proceeding well (or not well) for reasons independent of him and unspecifiable.

X feels that X can (cannot) do well what X is doing
because of something that one can say about X

not because X wants it
not because of something that one can say about something else
one couldn't say why

Many Indo-European languages grammaticalize the concepts of 'good event' and 'bad event' in constructions referring to affected 'possessors': they provide means of viewing a person as negatively or positively affected by an action which directly involves something or someone belonging to that person. For example:

Ils lui ont tué sa femme.
Sie haben ihm die Frau getötet.
Gli hanno ucciso la moglie.
Oni emu ubili ženu.
'They to-him killed his wife.'

Ils lui ont sauvé sa femme.
Gli hanno salvato la moglie.
Sie haben ihm die Frau gerettet.
Oni spasli emu ženu.
'They to-him saved his wife.'

It is interesting that in all such cases the object or person directly involved has to undergo a specifiable change of state. For example, in the above sentences torturing could not be substituted for killing:

* *Ils lui ont torturé sa femme.*
* *Sie haben ihm die Frau gefoltert.*
* *Gli hanno torturato la moglie.*
* *Oni mučili emu ženu.*
'They tortured to-him his wife.'

Nor could one replace killing (or saving) with an indeterminate action, like convincing, unless the context made it clear that this action was regarded as something bad (or good):

? *Ils lui ont convaincu sa femme.*
? *Sie haben ihm die Frau überzeugt.*
? *Gli hanno convinto la moglie.*
? *Oni ubedili emu ženu.*
'They convinced to-him his wife.'

To account for these facts, I would propose the following semantic rep-

resentation for the construction in question:

Ils lui ont tué (sauvé) sa femme. ⇒
something bad (good) happened to Z's Y
because X did something
one can say something else about Y because of that
one can think of it as something bad (good) that
happened to Z

An interesting case of grammaticalization of the concepts 'bad event' and 'good event' exists in Spanish. It can be illustrated by sentences like the following ones:[4]

Me le robó la muñeca (a mi hija).
to-me to-her he-stole the doll to my daughter
'He stole my daughter's doll to her and my grief.'

Me le reparó la muñeca (a mi hija).
to-me to-her he-repaired the doll to my daughter
'He repaired my daughter's doll to her and my joy.'

Me le complicó la vida (a mi hija).
to-me to-her he-complicated the life to my daughter
'He complicated my daughter's life to her and my grief.'

Me le mejoró la vida (a mi hija).
to-me to-her he-improved the life to my daughter
'He improved my daughter's life to her and my joy.'

In sentences of this kind the speaker empathizes with another person (related to him in some way), to whom something bad (or good) was done. The dative of the first person personal pronoun indicates the speaker's feeling (negative or positive) caused by the other person's sorrow or joy.

The following semantic representation may capture the essence of these constructions (for ease of reference, this time I will number the components of the explication):

(1) something good (bad) happened to my X's Y
(2) because someone did something
(3) one can say something else about Y because of that
(4) one can think of it as something good (bad) that happened to my X
(5) my X felt something because of that that one wants

(doesn't want) to feel

(6) one can think of it as something good (bad) that happened to me

(7) I feel something because of that that one wants (doesn't want) to feel

Component (3) is meant to account for the fact that the object Y has to undergo a specifiable change of state. Components (5) and (7) seem needed to account for the emotional character of such sentences and for the difference in acceptability between cases like the following ones:

Me le reparó la muñeca (a mi hija).
'He repaired my daughter's doll to her and my joy.'
?*Me le reparó la casa (a mi hija).*
'He repaired my daughter's house to her and my joy.'
Me le complicó la vida (a mi hija).
'He complicated my daughter's life to her and my grief.'
?*Me le complicó el día (a mi hija).*
'He complicated my daughter's day to her and my grief.'

It is perfectly understandable that a little girl would be upset over a broken doll, and happy to see it repaired; and that her father might share her feelings. It is also understandable that a grown-up woman would feel grieved to see her life complicated by a scoundrel of a husband or lover; and that HER father, too, might feel sympathetic. On the other hand, trivial material worries or brief temporary complications do not necessarily generate emotions, and are even less likely to generate empathy on the part of other people.

The fact that sentences of this kind are restricted to a first-person singular empathizer (cf. García 1975:302) provides additional evidence for the presence of an emotional component: emotive utterances are usually limited to the first person singular subjects, either in form or in meaning (e.g., an interjection can express only the speaker's, not someone else's emotions).

This last argument, though, while confirming the need for component (7) in the explication, casts some doubt on the justifiability of component (5). Perhaps the difference in acceptability noted earlier can be sufficiently accounted for by the components (4), (6) and (7)?

Be that as it may, the construction has to be recognized as an instrument of empathy, as a linguistic fulfilment of the moral injunction "love thy

neighbour as thyself".

4. The unknown

It seems likely that all languages recognize the limitations of human knowledge in one way or another — if only through the category of indefinite pronouns. Consider for example the following English sentences:

?He lives somewhere in Russia — in Suzdal', to be precise.
?She is coming sometime soon — on Friday the 13th, if you really want to know.

They are odd, because the speaker specifies the very thing which he has previously indicated he does not know. Sentences of this kind contain in their very structure an 'ignorative' component (see also Wierzbicka 1980a:288). An adequate semantic representation should reflect this.

Grice (1975:51) has claimed that sentences of this kind merely "implicate" the component 'I don't know' (by virtue of "conversational implicature") and don't contain it in their meaning. But claims of this kind are unverifiable and have no predictive power, given the language-specific character of the alleged implicatures. (Cf. Wierzbicka 1987a.) Assuming, therefore, that the 'ignorative' component in question is part of the semantic structure, I would propose the following explications:

He lives somewhere in Russia. ⇒
  he lives in Russia
  I don't know where in Russia
She is coming sometime soon. ⇒
  she is coming soon
  I don't know when

The type of 'ignorativity' grammaticalized in this construction is very simple and basically rationalistic. It contains no hint of mysteries or unknowables. "I can't tell — but of course someone else might be able to", the speaker seems to be saying. Many languages, however, have constructions which explicitly recognize the existence of unknowables. Such constructions embody the view that the world is not entirely knowable, that it contains mysterious phenomena which are not fully verbalizable or accessible to analytical thought.

Consider, for example, the following pairs of Russian sentences (some of which are drawn from Scholz 1973 and Galkina-Fedoruk 1958):

a. *Ego* *zasypal* *sneg.*
him:ACC covered-3SG MASC snow-MASC NOM
'He was covered by snow.'
b. *Ego* *zasypalo* *snegom.*
him:ACC covered-3SG NEUT snow-INST
'He was covered by snow.'
a. *Ego* *pridavila* *sosna.*
him:ACC crushed-3SG FEM pine-tree-FEM NOM
'He was crushed by a pine-tree.'
b. *Ego* *pridavilo* *sosnoj.*
him:ACC crushed-3SG NEUT pine-tree-INST
'He was crushed by a pine-tree.'
a. *Ego* *pereexal* *tramvaj.*
him:ACC ran-over-3SG MASC tram-MASC NOM
'He was run over by a tram.'
b. *Ego* *pereexalo* *tramvaem.*
him:ACC ran-over-3SG NEUT tram-INST
'He was run over by a tram.'

The first sentence in each pair states a clear causal relationship: something happened to thing Y, because something happened to thing X. The second sentence in each pair refers to the same causal relationship, but it does so in a different way: it hints that there is more to the event than can be put into words, that an unspecifiable force was involved which brought the event about; the observable thing which caused the event is presented, this time, as an instrument in the hands of the unknown forces operating in the physical environment. To show the difference in meaning between the members of such pairs we would postulate the following semantic representations:

Ego *pridavila* *sosna.*
him:ACC crushed pine-tree-NOM ⇒
something happened to Y
because something happened to X

Ego *pridavilo* *sosnoj.*
him:ACC crushed-3SG NEUT pine-tree-INST ⇒
something happened to Y
because something happened to X
because something happened in that place
one couldn't say why

In the case of the 'unspecifiable local force' construction, the object acting as the direct cause is referred to, significantly, by means of an instrumental and the verb takes, equally significantly, a neuter form. The instrumental case suggests that the apparent causer of the event (the snow, the pine-tree, the tram) is seen by the speaker as an instrument of another power. The neuter of the verb, in combination with the absence of an otherwise required neuter pronoun, indicates that the ultimate causer cannot be specified. If the ultimate causer IS known, the construction in question cannot be used. For example, if a homicidal tram-driver (or wood-chopper) is responsible for the accident, the sentences:

Ego *pereexalo* *tramvaem.*
him:ACC ran-over-3SG NEUT tram-INST
Ego *pridavilo* *sosnoj.*
him:ACC crushed-3SG-NEUT pine-tree-INST

could not be used. Neither could one say:

Ego *zasypalo* *snegom.*
him:ACC covered-3SG NEUT snow-INST

if one knew that the snow had been poured over an unfortunate and helpless victim by a malicious individual (person, giant or whatever).

Russian also recognizes 'unspecifiable local events' which do not involve any 'instruments'. This can be illustrated by the following sentences:

Ego *ranilo.*
him:ACC wounded-3SG NEUT
'He was wounded.'

Na vtoroj den' vzlomalo *led.*
on second day broke-3SG NEUT ice-ACC
'On the second day the ice broke.'

In this case, the semantic representation would be simply this:

something happened to Y
because something happened in that place
one couldn't say why

If the object affected by the event happens to be a part of a person's body, the owner of the body will be represented as affected:

Emu otorvalo ruku i nogu.
to-him tore-off-3SG NEUT arm-ACC and leg-ACC
'He had an arm and a leg torn off.' ⇒
something happened to part Y of Z's body
because something happened in that place
one couldn't say why
I'm thinking of it as something that happened to Z,
not to something other than Z

It should be emphasized that the ultimate causer must be not only unknown but also in some sense unknowable, because there is a difference in meaning between sentences like the following ones:

Ego čto-to ranilo.
him:ACC something-NOM wounded-3SG NEUT
Ego ranilo.
him:ACC wounded-3SG NEUT

In the first sentence, the indefinite pronoun *čto-to* indicates that the causer is unknown but also that it is in principle knowable. In the second sentence, the absence of any subject, in combination with the neuter form of the verb, indicates that it is also unknowable. The difference between the two emerges more clearly, when one compares the semantic representation of the 'unknowable' version given above with that of the 'unkown-but-knowable' one:

Ego čto-to ranilo. ⇒
something happened to Y
because something happened to something else
I don't know what

Needless to say, the folk-philosophy reflected in the constructions under discussion conflicts strongly with the official ideology expounded by Soviet propaganda. This official ideology (or the so-called "scientific world-view") proclaims faith in the unlimited powers of human reason, in the absolute knowability of the world, in the absence of mysteries and unknowables. Moreover, it presents itself not merely as a program advocated by the state but as a world-view already adopted by the people. In this context, the immensely productive and widespread 'unknowable' constructions of Russian syntax constitute an embarrassment to the Soviet system. Understandably, orthodox Soviet grammarians have had a hard time trying to explain them away.

According to the academician Vinogradov (1947:467), "linguistic technique utilizes in these cases an outlived ideology". Galkina-Fedoruk, the author of a very comprehensive and otherwise quite insightful book on Russian impersonal sentences, has suggested that "at the present time impersonal sentences of the type under discussion are perceived as relics (*reliktovye javlenija*) or as sentences based on earlier existing models, i.e., on analogy" (1958:137). A similar or even greater embarrassment is caused by impersonal sentences referring to forces beyond human control (because from an official Soviet point of view human control over the world and over man's destiny knows no limits). "Russian has a small group of impersonal verbs expressing the action of some mythological force, which are connected with the obsolete concept of fate, destiny", Galkina-Fedoruk says (1958:141).

These 'unscientific', 'obsolete' concepts can be illustrated by sentences like the following:

Mne v karty vezlo.
to-me in cards was-lucky(VERB,Active,3SG NEUT)
'I was lucky at cards.'

In sentences of this kind the speakers betray their inadmissible view that some aspects of the world and some aspects of human life may be beyond the control of human institutions and beyond the reach of human reason.

Mne v karty vezlo. ⇒
something good (bad) happened to X
because of something that one can say about the world
one couldn't say why
not because X wanted it

According to Russian syntax, mysterious events occur not only in the physical environment (in which case they are seen as due to unspecifiable natural causes) but also in the human body. Consider for example the following sentences:

Ivana lixoradilo.
Ivan-ACC had-fever-3SG NEUT
'Ivan had fever.'

Ego produlo.
him:ACC was-in-draught-3SG NEUT
'He has been in a draught, it's bad for him.'

Ego pučilo ot soloniny.
him:ACC troubled-with-wind from lard
'He was troubled with wind from eating lard.'

Menja kolotit ot straxa.
me:ACC beats from fear
'I'm shaking with fear.'

Even though a cause may be indicated (e.g., fear, the consumption of lard) the event in the body is still seen as somewhat mysterious. In this case, the indefinite pronoun *čto-to* either cannot be added at all or if so, only in the sense of 'for some reason', not 'something'. If the bodily event directly involves a part of the body, not the whole body, then the owner of the body will be presented as indirectly involved:

Mordu u Bylinkina rozdulo do
face-ACC at Bylinkin swelled-3SG NEUT beyond
neuznavaemosti.
recognition
'Bylinkin's face has swollen beyond recognition.'

In this construction, the event referred to is almost always 'bad', but we cannot mention this badness in our semantic representations because apparently there ARE cases when the unspecifiable event is neutral or 'good':

Grud' emu osvobodilo.
chest-ACC to-him freed-3SG NEUT
'His chest became free.'

I suggest, then, the following formulae:

Ivana pučilo.
Ivan-ACC troubled-with-wind-3SG NEUT ⇒
something happened to Z
because something happened in Z's body
one couldn't say why

If a cause IS indicated, it is viewed as an indirect one; a more direct, unspecifiable cause IN THE BODY is still hinted at:

Ivan pučilo ot soloniny.
Ivan-ACC troubled-with-wind-3SG NEUT from lard ⇒
something happened to Z

because something happened in Z's body
one couldn't say why (because of something that
happened to W)

(where W = the lard).

According to Russian syntax, inexplicable events can also occur in the mind. One construction referring to inexplicable mental states and events can be exemplified by the following sentence:

Ego *tjanulo* *idti.*
him:ACC drew-3SG NEUT to-go
'He was tempted to go.'

In this construction, the person spoken of (referred to by an accusative) is presented as a passive undergoer of a process which takes place in his mind because of the action of some unspecifiable force. This force is seen as internal to the person affected but different from him.

Another construction refers to mental states which are equally unspecifiable and equally involuntary but not quite as passive:

Emu *dumalos'* *o* *Maše.*
to-him thought-3SG NEUT REFL about Mary
'He was thinking about Mary.'

In this case the person spoken of is referred to by a dative. This dative points to an involuntary character of the mental state (or process) in question, but the very fact that the involuntary character of the process is explicitly indicated means that the person involved is not viewed as being quite as passive as the one who can be referred to in the accusative, and thus be regarded as too passive for any explicit denial of his active, intentional role to be necessary.

The difference between the two constructions can be portrayed as follows:

Ego *tjanulo* *idti.*
him:ACC drew-3SG NEUT to-go ⇒
one can say something about X
because one can say something about something in X
(not in X's body)
one couldn't say why

Emu *dumalos'* *o* *Maše.*
to-him thought-3SG NEUT REFL about Mary ⇒

one can say something about X
because one can say something else about X
(not about X's body)
not because X wanted it
one couldn't say why

As these explications suggest, in one case the person spoken of (in the accusative) is viewed as affected by an agent other than himself (even though this 'agent' is something IN him, not something or someone outside him); in the other case the person spoken of (in the dative) is viewed as affected by something about himself, not by something about another entity, whether external or internal. This latter point is corroborated by morphological evidence: the verb in the dative construction takes a reflexive form.

There are other constructions in Russian which refer to inexplicable phenomena. The last type I wish to mention here can be exemplified by the following sentences:

Mne čto-to ne estsja.
to-me somehow not eats-3SG NEUT REFL
'I feel that for some reason I can't eat.'

Ne siditsja v xate tesnoj, ne
not sits-3SG NEUT REFL in small hut not
ležitsja na peči.
lies-3SG NEUT REFL on stove
'(I) feel (I) cannot sit in the small hut, (I) cannot lie on the stove.'

In sentences of this kind the person referred to is said to experience a state of inexplicable incapacity to do something. Characteristically, the verb has to be intransitive or used intransitively (no direct object can be mentioned). The reason for this (or is it an effect?), is, I think, that the peculiar impotence of the subject is presented as purely internal: his inability to do whatever he is trying to do cannot be ascribed to the nature of any other entity involved in the action; other entities are irrelevant to his state. The circumstances referred to by adverbial phrases CAN be seen as relevant, but only indirectly. The reflexive form of the verb again indicates that the cause of the incapacity is seen as internal rather than external.

The state of impotence is thus presented as purely subjective. For this reason, no doubt, the construction is mostly used in reference to the

speaker. If the person referred to is not the speaker himself, he is usually at least someone whose point of view the speaker has adopted.

Mne ne spitsja.
to-me not sleeps-3SG NEUT REFL ⇒
X feels X cannot do what X is trying to do
because of something that one can say about X
not because X wants it
not because of something that one can say about something else
one couldn't say why

The corresponding positive construction, as in sentences like:

Mne čudesno pisalos'.
to-me wonderfully wrote-3SG NEUT REFL
'I felt I could write wonderfully for some reason.'

Mne segodnja xorošo rabotaetsja.
to-me today well works-3SG NEUT REFL
'I feel my work is going well today.'

is not exactly symmetrical to the negative one: it refers not to an inexplicable capacity to do something but to an inexplicable capacity to do it well.

Mne xorošo rabotaetsja.
to-me well works-3SG NEUT REFL ⇒
X feels X can do well what X is trying to do
because of something that one can say about X
not because X wants it
not because of something that one can say about something else
one couldn't say why

Thus, the positive construction corresponds exactly to the Polish one which we have discussed earlier, but the negative does not correspond exactly to its counterpart in Polish.

As a final example, consider the following construction, particularly widespread in 'folk' Russian:

Ne byvat' Egor'ju na svjatoj Rusi.
NEG to-be Igor-DAT on holy Russia
Ne vidat' Egor'ju sveta belogo.
NEG to-see Igor-DAT light-GEN SG white-GEN SG

Looking at the word-by-word glosses of such sentences it would be hard to guess their meaning, which is determined by the *sui generis* meaning of the construction itself. The key concept embodied in this construction is this: *sud'ba* 'fate'. Galkina-Fedoruk (1958:215) comments, quite perceptively: "The semantics of such sentences is very vivid and clear. (...) They express the idea that some event or process is impossible, that this impossibility is determined by the natural course of things, and that the subjective human will cannot change this course. Consequently, they express an absolute, objective impossibility."

I would add that sentences of this kind seem to have an emotive component: the mysterious power of 'fate' is acknowledged with an (unspecified) emotion; one has to submit to fate, but one is bound to feel something — awe? regret? humility (*smirenie*)? resignation? — when confronted with its inexorable force. To reflect these obscure ideas in an explication, I would propose (as a first approximation) the following:

Ne byvat' Egor'ju na svjatoj Rusi.
'Egor wasn't fated — alas! — to come to holy Russia.'

Ne vidat' Egor'ju sveta belogo.
'Alas, never again was Egor to see the light of day.' ⇒
I know this:
this good thing cannot happen
(Egor cannot come to holy Russia/see the light of day)
people cannot cause it to happen
one cannot know why
I imagine this: I know this:
good and bad things happen to people
because someone wants it
not because people want it
I feel something because of that

In Russian literature, as well as in everyday speech, three key concepts seem to recur remarkably frequently and to have a range of use much wider than any near-equivalents in a 'sober' language like English: *sud'ba* 'fate', *duša* 'soul', and *toska* 'melancholy/longing'. (I haven't done any large-scale counts on this score, but I believe that this is a fruitful topic for investigation.) For *sud'ba*, it is worth recalling in this connection Okudžava's well-known poem "A visiting musician" (I quote after Mel'čuk 1986:35):

[Tebja ne soblaznit' ni plat'jami, ni sned'ju..
Zaezžij muzykant igraet na trube.
Čto mir ves' rjadom s nim, s ego gorjačej med'ju?]
...Sud'ba, sud'by, sud'be, sud'boju, o sud'be.
Bulat Okudžava, "*Zaezžij muzykant*".
'[One cannot seduce you with fancy dresses or food...
The visiting musician is playing his trumpet.
What's the whole world next to him, to his hot copper?]
...Destiny, of destiny, to destiny, by destiny, about destiny.'

In English, the words *destiny* or *fate* are usually used to translate *sud'ba*, but neither of them means exactly the same as *sud'ba*, whose range of use is much wider. For example, the title of Vasily Grossman's remarkable novel *Žizn' i sud'ba* has been rendered in English as "Life and fate", whereas the title of Sergej Bondarčuk's film *Sud'ba čeloveka* has been rendered as "The destiny of man". Both translations are misleading and unsuccessful — unavoidably so.

Given this characteristically Russian preoccupation with *sud'ba*, it seems hardly surprising that an idea of this kind has found its way into the syntactic pattern of the language. Intuitively, the link is obvious. It is time, I think, that we should try to explore such links on an non-*ad hoc* and non-impressionistic basis.

5. Concluding remark

Is there any connection between the celebrated ability of the Japanese to endure pain and confront physical danger (reflected, for example, in the practice of *hara-kiri* or the exploits of the *kamikaze* pilots of World War II) and the inbuilt stoicism of certain Japanese syntactical constructions?

Is there any connection between *stixijnost'*, the anarchic (and at the same time fatalistic) Russian soul, or the novels of Dostoevskij, and the profusion of constructions in Russian syntax that acknowledge the limitations of human knowledge and human reason, and our dependence on 'fate', and hint at subterranean uncontrollable passions that govern the lives of people?

Is the 'no-nonsense' character of English syntax (i.e., the relative absence of 'subjective', 'impressionistic', 'irrational' syntactic constructions) symptomatic (if not causative) of English restraint and sober empiricism?

I confess that questions like these continuously lurked in the back of my mind as I was working on this chapter.

The majority of traditional Whorfian writings on language and culture suffer, as has often and rightly been pointed out, from arbitrariness, subjectivity and a tendency to fantasy unconstrained by any rigorous method. I believe that the type of inquiry which I have proposed and tried to illustrate here delimits one area at least within which Whorfian concerns could be studied with some degree of discipline and purpose. Can this area be broadened? Can bridges be built between ethno-syntax and social anthropology in the broader, extralinguistic sense?

It seems clear that a formal, rigorous analysis of meanings grammaticalized in different languages is a necessary prerequisite for any systematic study of correlations between linguistic and extralinguistic aspects of culture. But even if such correlations proved ultimately impossible to establish, a formal study of language-specific grammatical meanings within a universal framework has the considerable virtue of providing a possible basis for a rigorous semantic typology of world languages in terms of the various cognitive perspectives which they reflect and promote.

Notes

1. It is sometimes said that sentences like:

   John kissed Mary on the lips.

   exemplify a construction which can be called 'complement of inalienable possession', further examples of which could be found in sentences like:

   John broke the window at the top.
   Mary dragged the chair by the legs.

   In my view, such statements are inaccurate and misleading. They do not account correctly for the observable facts. For example, they do not predict the unacceptability of sentences like:

   *John broke the table at the top.
   *Fido bit the table on the leg.

   If we want our constructs (including hypothesized syntactic constructions) to have predictive power, we must base them not on vague, pseudo-scientific and yet unverifiable concepts like 'inalienable possession', but on much more specific, clear and intuitively verifiable ones. Moreover, the exact concepts which are relevant to the syntax of any given language have to be discovered empirically, not postulated *a priori*. Sentences like:

a. John kissed Mary on the lips.
b. John broke the window at the top.

exemplify *different* syntactic constructions, not one construction of 'inalienable possession'. The first of these constructions has to be described in terms of bodies, feelings and attitudes, the second in terms of part, place and change of state. Neither superficial morphological similarity nor vague semantic resemblance is a sufficient basis for identification of syntactic constructions.

Since I have not studied the part/whole constructions of English in any detail I can only express here a very uncertain guess as to what their defining characteristics (i.e., their semantic invariant) may be. Tentatively:

X broke Y at the top. ⇒
one can think of Y as a place
something happened to Y
because X did something
one can think of it as something that happened to part Z of Y
one can say something else about Z because of that
one can say something else about Y because of that

Presumably, the reason why one would not say:

*John broke the table at the top.

is that a table, in contradistinction to a window, is a movable object, and therefore is not thought of as a place. Furthermore, it is not clear what else could be said about the table as a result of the breaking of its top. The sentence:

John broke the window at the top.

is good because in this case it is quite clear how the breaking of a part of the window can cause a new state of the window as a whole (a window with a broken top is a 'broken window', because it is a 'bad' window, a window which cannot fulfil its function).

The construction exemplified by the sentence:

John carried (dragged) the chair by the legs.

has different semantic conditions. Tentatively:

something happened to Y
because X did something
one can think of it as something that happened to part Z of Y
one cannot say anything else about Z because of that
one can say something else about Y because of that

In this case, the object is not thought of as a place, and the part directly affected does not undergo a change of state, but the object as a whole does (i.e. it changes its location).

Syntactic constructions which grammaticalize the part/whole relation are as language-specific as those which grammaticalize the relation between a part of the body and the 'owner' of the body. Often, some of the part/whole constructions which a language possesses use the same morphological exponents as some of the 'bodily' constructions of the same language. This does suggest that the two types are related, but it does not mean that they can be identified.

2. Actually, German is not as uniform in its 'bodily' constructions as English or French. Native speakers of German are often divided in their judgements as to when a dative and when an accusative should be used. This does not seem to mean, however, that there are no clear patterns, but rather that there is a great deal of dialectal variation. The pattern described here has been confirmed, confidently, by several speakers; other speakers, however, seem to be equally confident about different patterns. Obviously the matter requires closer examination.

3. Sentences of this kind have often been discussed in both traditional and modern linguistic works (see, e.g., Havers 1911 and 1931, Paul 1919-20, Isačenko 1965, Krahe 1972 and Abraham 1973). But, to my knowledge, no precise semantic categories, with clear and discrete boundaries, have ever been established (in any case, not before Neumann 1987). For this reason some linguists have even come to deny the existence of such categories (see, for example, García 1975).

4. I have borrowed these sentences — but not their interpretation — from García 1975. In general, I find García's discussion exceptionally subtle and insightful. But she commits, in my view, the same error as Alfonso (1971, cf. also this volume, chap. 4): she attaches too much importance to superficial morphological identities and, as a consequence, fai's to see behind the profusion of Spanish datives the discrete semantic categories which, I believe, are there, hiding behind the deceptive curtain of morphological uniformity and waiting to be uncovered.

3. The semantics of causative constructions in a cross-linguistic perspective

1. Introduction

The literature on the syntax of causative constructions in different languages is huge; the literature on their semantics is very modest. But the use of such constructions is of course largely determined by their meaning. Since little is known about their meaning, a language learner looking for some guidelines to the actual use of such constructions can seldom find any statements anywhere that are clear, precise, and reliable. But it is not just the language learner who would be disappointed by the literature on causatives. The area of causation has an enormous inherent interest from the point of view of the 'philosophy of grammar' and the sociology of language: after all, the causative constructions a language has show how the speakers of this language draw distinctions between different kinds of causal relations, how they perceive and interpret causal links between events and human actions. And yet our knowledge and understanding of 'ethno-causology' is, I think, incomparably far behind that of ethno-zoology, ethno-botany or ethno-geology.

Of course the folk-interpretations of causal links are less accessible to direct observation than those of more tangible, concrete phenomena, but they are not inaccessible to empirical study. The syntax of a language provides a wealth of evidence in this regard — if we can find ways of analyzing this evidence in an illuminating and non-arbitrary manner.

I believe that here as elsewhere — and perhaps even more than elsewhere — the key to such analysis lies in the choice of a suitable semantic metalanguage. In the existing literature on causatives, the semantics of different constructions is usually discussed in terms of ready-made labels such as "direct vs. indirect causation", "contactive vs. distant causation", "strong coercion vs. weak coercion", "factitive vs. permissive causation" or "manipulative vs. directive causation" (cf., for example, Comrie 1974 and

1985, Talmy 1976, Givón 1975, Kachru 1976, Ruwet 1976, Shibatani 1973 and 1976, Xolodovič 1969). There are reasons to think, however, that labels of this kind are often more misleading than helpful, and that they don't have much explanatory or predictive power.

2. Japanese

Consider, for example, Comrie's (1985:334) presentation of the two famous Japanese causative constructions, the so-called *o*- causative and the so-called *ni*- causative, illustrated by sentences (139) and (140) below (Comrie's examples and numbers):

139. *Taroo ga Ziroo o ik-ase-ta.*
Taroo SUB Ziroo DO go-CAUS-PAST
140. *Taroo ga Ziroo ni* [IO] *ik-ase-ta.*
'Taroo made Ziroo go.'

Comrie writes: "Sentence (139), with the direct object postposition *o*, implies greater coercion (e.g. Taroo forced Ziroo to go); (140), with the indirect object postposition *ni*, implies less coercion (e.g. Taroo persuaded Ziroo to go, got Ziroo to go by asking him nicely)." (Cf. also Shibatani 1973:334.)

But this can hardly be reconciled with the fact that both the *o* causative and the *ni* causative sometimes translate the English *let* causative. For example, Kitagawa (1974:50) offers the following sentence, where the *o* causative has to be translated by *let*, and cannot possibly be translated by *make*:

> *Moo uma o turete kaeru zikan datta ga, amari yukaisoo ni kakoi no naka o hashitte iru no de Taroo wa sono mama moo shibaraku uma o hashiraseta.*
> 'The time had come to take the horse back, but, because the horse was running so joyously in the arena, Taroo let (*made) the horse run for a little while more.'

Clearly, coercion — whether strong or weak — is not part of the semantic invariant of the *o* causative. Nor is it part of the semantic invariant of the *ni* causative, which can be used, among others, for permission. In fact both the *o* and the *ni* causative can be used in requests for permission (cf. Iwamoto 1987):

a. *Watashi o ikasete kudasai.*
'Please let me go (don't prevent me from going).'
b. *Watashi ni ikasete kudasai.*
'Please let me go (permit me to go).'

Obviously, the speaker is not asking to be strongly coerced in (a) and to be mildly coerced in (b). The difference lies elsewhere. As pointed out by Kitagawa (1974), the *o* causative attributes "total responsibility" for the event to the causer. This, I suggest, can be represented as follows:

X *ga* Y *o* V-*aseta*. ⇒
X did something
Y did V because of that
not because of anything else

The *o* causative doesn't imply that Y didn't want to perform the action. Rather, as pointed out by Inoue (1976, reported in Iwamoto 1987), the *o* causative describes a situation in which the causee's volition, or non-volition, is ignored. Significantly, exactly the same construction can be used with respect to inanimate causees, when it can be interpreted in exactly the same way: total responsibility for the event rests with the causer. For example (Kitagawa 1974:43):

*Taroo ga yasai o (*ni) kusaraseta*. ⇒
'Taroo let/caused the vegetables (to) rot.'
X did something
V happened to Y (the vegetables rotted) because of that
not because of anything else

As for the *ni* causative, the challenge consists in finding a formula which would apply both to willingly followed directions/instructions and to permission. I propose the following:

X *ga* Y *ni ikaseta*. ⇒
'X had/let/got Y (to) go.'
X did/said something to Y
Y did V because of that
Y wanted it

The crucial feature of the *ni* causative consists in the causee's wanting: the causal link between the causer's action and the causee's action applies to both the *o* and the *ni* causative; but the *ni* causative implies also that Y performed that action willingly, voluntarily. The reasons why Y wanted to

perform the action may vary; sometimes, the action is inherently desirable for Y, and sometimes Y is merely eager to do whatever X wants him to do. I think that the formula proposed above is suitably vague to cover the entire range of possibilities.

Generally speaking, the common use of ready-made labels such as 'direct/indirect causation', 'contactive/distant causation' or 'strongly coercive/weakly coercive causatives' is based on the mistaken (in my view) assumption that there are certain types of causation which can first be described *a priori*, and then identified in individual languages. But detailed semantic analysis shows that the actual causative constructions are usually rather unique in the meaning they encapsulate. What is called 'direct causation' or 'strongly coercive causation' in one language is usually different from what is called 'direct causation' or 'strongly coercive causation' in another. This is not to say that there are no recurring motives, no cross-linguistic similarities in the area of causation. Far from it. The point is that usually causative constructions encapsulate a unique combination of components. The individual components — such as, for example, 'Y wanted it' or 'Y didn't want it' — frequently recur in the world's languages. But the configurations of such components tend to be unique, and cannot be adequately captured in global labels such as 'indirect', 'manipulative', 'distant', and the like.

3. English

Consider, for example, the English *make* and *have* causatives, which are often used to gloss not only the Japanese *o* and *ni* causatives (cf. Shibatani 1973:335ff), but also the Hindi *-aa* and *-vaa* (cf. Saksena 1982:88) and the French 'DO + *faire*' and 'IO + *faire*' causatives (cf. Hyman and Zimmer 1976:194):

a. Hilary made Robin type the letters.
b. Hilary had Robin type the letters.

No matter what labels we choose to characterize the distinctions in questions ('direct vs. indirect', 'strongly coercive vs. weakly coercive', 'contactive vs. distant' etc.) no such labels can predict the actual range of use, which is in each case different. But configurations of simple and intuitively verifiable components can have such power. (Cf. Chappell 1978 and In press.) For example:

Hilary made Robin type the letters. ⇒
Hilary wanted this: Robin will type the letters
Hilary did something because of that
Robin typed the letters because of that
not because Robin wanted it
Robin didn't want it

If the verb of the complement clause is not intentional, the semantic configuration conveyed by the *make* causative is simpler:

Hilary made Robin cry/laugh. ⇒
Hilary did something
Robin cried/laughed because of that
not because Robin wanted it

In the case of *have* causatives, if the verb of the complement clause is intentional, the following combination of components is conveyed:

Hilary had Robin do Z (type the letters). ⇒
Hilary wanted this: Robin will do Z (type the letters)
Hilary said this: I want this: Y will do Z
Robin did Z (typed the letters) because of that
Hilary knew this:
Robin will not say this: I don't want it
Robin cannot say it

In the *have* causative, the causer assumes the causee's 'readiness to serve'; the causee is treated here as a cooperative performer of the causer's will, as someone to whom the causer's will can be communicated (either directly or by an intermediary) and who will be neither unable to understand it nor unwilling to perform it. This explains why, as pointed out by Talmy (1976:107), the causee of the *have* causative normally has to be human:

*I had the squirrel leave its tree.
The trainer made/?had the lion dance.

One could say, vaguely, that both the *make* causative and the *have* causative imply some sort of 'power' relation between the causer and the causee. But clearly, the nature of this relation is in each case perceived differently. The *make* causative implies that the causee is acting against his or her will. The *have* causative doesn't imply that; here, the causee is expected to comply with the causer's will, and there is no assumption, or expectation, of unwillingness on his or her part. Nonetheless, this expected compliance

of the causee is not due entirely to good will: there is an assumption of dependence, reflected in the component 'Y cannot say this: I don't want it'.

Thus, the distinction between the English *make* and *have* causatives is really quite different from that between the Japanese *o* and *ni* causatives. It is also quite different from that between the so-called 'first' and 'second' causative in Hindi.

4. Hindi

Consider, for example, the following Hindi sentences and their English glosses (Saksena 1982:88):

a. *Mai-nee Raam-koo uth-aa-yaa.*
'I made Ram get up.'

b. *Mai-nee Raam-koo uth-vaa-yaa.*
'I had Ram get up.'

Saksena argues that sentence (a), which he translates by means of a *make* causative, shows "contactive causation" and an "involved causer" whereas sentence (b), which he translates by means of a *have* causative, shows "non-contactive causation" with an "un-involved causer". But the labels he employs are not intuitively intelligible and they fail to show the similarities and the differences between the two Hindi constructions and the English constructions employed in the glosses (not to mention the two Japanese constructions, also usually paired with the two English constructions in question). By contrast, the semantic metalanguage based on simple concepts such as 'do', 'happen', 'because' and 'want', can show all these relationships clearly and explicitly. For example:

a. *Mai-nee Raam-koo uth-aa-yaa.* ⇒
I wanted this: Ram will get up
I did something to Ram because of that
Ram got up because of that

b. *Mai-nee Raam-koo uth-vaa-yaa.* ⇒
I wanted this: Ram will get up
I did something because of that
Ram got up because of that

And, more generally:

a. X-*nee* Y-*koo* V-*aa*-Past ⇒
X wanted this: Y will do V

X did something to Y because of that
Y did V because of that

b. X-*nee* Y-*koo* V-*vaa*-Past ⇒
X wanted this: Y will do V
X did something because of that
Y did V because of that

In the case of the English *make* construction (with a human causee) the component 'X did something to Y' doesn't seem to be necessary. It is implied by lexical causatives such as *feed* or *teach*, but not by *make* causatives such as *make eat* or *make study*. For example, it is possible to "make someone clean the toilet" (though not *feed* or *teach* someone) by means of orders or threats conveyed via another person.

On the other hand, in the *make* construction with an inanimate causee, it is essential that the causer is NOT doing anything to the causee. Hence, for example, the following contrast:

a. X opened the door. ⇒
X wanted this: the door will open
X did something to Y (the door)
the door opened because of that

b. X made the door open (by standing in the right spot in front of it and thus activating the photo-mechanism). ⇒
X wanted this: the door will open
because of this, X did something
the door opened because of that
X didn't do anything to the door

And, more generally:

X made $Y_{(inanimate)}$ V ⇒
X wanted this: V will happen to Y
because of this, X did something
V happened to Y because of that
X didn't do anything to Y

I have formulated the last component as 'X didn't do anything to Y' rather than as 'X did something to something other than Y' in order to account for descriptions of 'magical causation', when the magician 'makes something happen' merely by uttering a formula or making a gesture.

5. 'Indirect causation' in English and in French

Not surprisingly, causative situations of the kind discussed above have often been described as instances of "indirect", "mediated", "broken" or "distant" causation (e.g. for example, Talmy 1976:75, Comrie 1985:333, Nedjalkov and Sil'nickij 1969:28). But again, labels of this kind fail to predict the range of use of the construction in question. For example, they fail to predict that the 'indirect' *make* causative in English is used differently from the 'indirect' *faire* construction in French (cf. Ruwet 1976). Thus, compare the following contrasts:

a. *Le colonel a fait fondre (*a fondu) trois sucres dans son café.*
'The colonel "made dissolve" (*dissolved) three lumps of sugar in his coffee.'
The colonel dissolved three lumps of sugar in his coffee.
*The colonel made three lumps of sugar dissolve in his coffee.

b. *Le métallurgiste a fait fondre/a fondu le métal.*
'The metallurgist melted the metal.'

In English, in both (a) and (b) a simple lexical causative is called for, and the 'indirect' *make* causative is inappropriate; in French, however, the simple lexical causative is appropriate only in (b), whereas in (a) the 'indirect' *faire* causative has to be used. Evidently, the so-called 'indirect' *faire* causative in French stands for something quite different from the so-called 'indirect' *make* causative in English.

The reason why the *make* causative is inappropriate in the (a) sentence above is clear, in view of the analysis proposed earlier: the causer can be seen as doing something to the inanimate causee (i.e. to the sugar). Evidently, in French the distinction between the two types of causation is drawn differently. Ruwet (1976:158) suggests that in (b) the metallurgist is seen as doing something to the metal, whereas in (a) the lexical causative cannot be used "due to the impossibility of considering the melting of the sugar in the coffee as resulting from a direct action of the colonel on the sugar". But this explanation begs the question: why is it that in English the colonel can be seen as acting directly on the sugar whereas in French he can't?

I believe that to explain the different behaviour of the French and English causatives we have to identify the unique meaning of each construction, rather than try to rely on language-independent global labels such as 'di-

rect' and 'indirect'. As pointed out by Ruwet (1976:158) himself, in French, "the two constructions, direct transitive and complex factitive, are equally possible when the surface object belongs to that special class of inanimates which includes vehicles, certain machines etc." — that is to say objects which can be seen as "capable of autonomous activity". This suggests that in French the lexical causative attributes the cause exclusively to the causer, whereas the *faire* construction attributes the cause partly to the causer and partly to the causee. More precisely, the *faire* construction implies that the causer has activated some process within the (inanimate) causee which triggers the ultimate result. A situation of this kind can be represented as follows:

a. *Le pilote* [X] *a fait atterrir* [Z] *le Boeing 747* [Y]. ⇒
'The pilot [X] "made" the Boeing 747 [Y] land [Z].'
X wanted this: Z will happen to Y
X did something to Y because of that
something happened in Y because of that
that could happen if X didn't do anything to Y
Z happened to Y because of that

b. *Le pilote* [X] *a atterri* [Z] *le Boeing 747* [Y]. ⇒
'The pilot [X] landed [Z] the Boeing 747 [Y].'
X wanted this: Z will happen to Y
X did something to Y because of that
Z happened to Y because of that
(not because something else happened in Y
that could happen if X didn't do anything to Y)

Thus, the so-called indirect causation in English means that while the agent does something, he doesn't do anything to the causee, before the desired effect occurs; but in French, the so-called indirect causation means that before the desired effect occurs something else has to happen in the causee — a process distinct from what the agent is doing to the causee and from the final effect on the causee. This intervening 'autonomous' process can be seen as occurring in remotely controlled vehicles, but it can also be seen as occurring in substances such as sugar, which — when placed by a person in hot coffee — can be seen as undergoing an internal, semi-autonomous process of dissolving. Consider also the following contrasts (Ruwet 1976:156):

a. *Pierre a fait remuer ses oreilles.*
?Pierre a remué ses oreilles.
b. ?Peter made his ears wiggle.
Peter wiggled his ears.

In English, the *make* causative is not felicitous here because it is not clear that the component 'X didn't do anything to Y' fits the situation. But in French, the *faire* construction encapsulates no such component; on the other hand, it encapsulates the component 'something happened in Y (the ears) because of that', which fits well the somewhat mysterious internal process responsible for the visible result.

As for the French lexical causatives, such as *fondre*, they too seem to differ from the corresponding English lexical causatives such as *melt* or *dissolve*. Apparently, French causative verbs such as *fondre* — in contrast to English causative verbs such as *melt* or *dissolve* — are not compatible with the occurrence of a semi-autonomous process in the causee. To account for this, we have to postulate for the French verbs of this kind an additional component. As a first approximation, this can be done as follows:

Le métallurgiste [X] *a fondu* [Z] *le métal* [Y]. ⇒
X wanted this: Z will happen to Y
X did something to Y because of that
Z happened to Y because of that
it happened not because something else happened in Y
that could happen if X didn't do anything to Y
The metallurgist [X] melted [Z] the metal [Y]. ⇒
X wanted this: Z will happen to Y
X did something to Y because of that
Z happened to Y because of that

6. Italian

Italian is similar to French in some respects (in the area of causation); it differs from it, however, in having what seems to be a kind of all-purpose causative (based on the verb *fare* 'make/do'), with an extremely wide range of use and — apparently — with hardly any semantic specifications built into it. For example, the sentence:

Allora, la faccio venire domani, la mia Elena, a pranzo?
(Ginzburg 1976:48)

'So I should make/have/get my Elena to come to lunch tomorrow?'

is equally compatible with a situation when the speaker considers inviting Elena to lunch as with a situation when he considers forcing Elena to come, against her will.

To see how widely this causative construction can be used consider also the following examples:

Non mi fa mai dormire quel bambino. (Ginzburg 1976:201)
'This baby doesn't *let* me sleep at all.'

Quello nuovo lo farai dormire con la segretaria. (Ginzburg 1976:201)
'I will *have* this new (baby) sleep with the secretary
(i.e. in the secretary's room).'

Fai venire qui Edoardo subito perché la sua ragazza si è suicidata. (Ginzburg 1976:196).
'*Get* Edward here immediately because his girlfriend has committed suicide.'

Ma l'ho fatto salire perché insisteva. (Ginzburg 1976:99)
'I *made* him come in (I *let* him in) because he insisted.'

Mi ha pregato di farla lavorare. (Ginzburg 1976:184)
'She has asked me to "*make*" her work (i.e. to employ her, to *give* her work).'

Given the very wide range of use of the *fare* causative and the apparent lack of semantic constraints, a very broad and unconstrained semantic formula seems to be required in this case. As a first approximation, we could propose simply this:

X *ha fatto* V-INF Y
'X has made/caused Y (to) do V' ⇒
X did something
Y did V because of that
(OR: V happened to Y because of that)

It should be added that while with intransitive verbs the causee is usually in the accusative, and with transitive verbs, in the dative, in some cases the speaker has a choice between an accusative or a dative causee. This choice is clearly associated with a difference in meaning. The exact nature

of this difference, however, remains to be investigated. (Cf. Radford 1977:234.) According to Hyman and Zimmer (1976:194), a similar contrast between an accusative and a dative causee is also available in French, at least for some speakers.

a. *Je lui ai fait manger des épinards.*
I to-him(IO) have made eat some spinach
'I gave him some spinach to eat.'

b. *Je l' ai fait manger des épinards.*
I him(DO) have made eat some spinach
'I made him eat some spinach.'

My informants, however, reject sentences such as (b) above.

7. 'Indirect causation' in Russian

Finally, consider the distinction between 'direct' and 'indirect' (or 'immediate' and 'mediated') causation in Russian (Comrie 1985:335):

a. *Anton slomal paločku.*
'Anton broke the stick.'

b. *Anton sdelal tak, čtoby paločka slomalas'.*
'Anton brought it about that the stick broke.'

As the reflexive form of the verb in sentence (b) suggests, the Russian 'indirect' causative implies an autonomous process in the causee, triggered by an action of the causer. In this respect, it is similar to the French *faire* construction. But the Russian construction implies also that the causer did something to something other than the causee; in this respect, it is similar to the English *make* causative. Thus, the Russian 'indirect' causative has the constraints of both the French and the English causatives built into it. Furthermore, as the use of the subjunctive in the Russian construction suggests, it has uncertainty built into it: we don't know whether the desired action actually occurred or not. In fact, therefore, the Russian construction in question is a purposive one rather than a causative one in the sense in which the English, French, Japanese and Hindi constructions considered here can all be said to be causative. Comrie's gloss is, I think, somewhat misleading in this respect: given a suitable context, the purposive construction can be interpreted as a causative one, but it is not inherently causative.

The relationship between the Russian construction and the other causative constructions considered can be seen from the following formula:

X *sdelal tak čtoby* Z *slučilos' s* Y. ⇒
('X did something so that Z would happen to Y.')
X wanted this: Z will happen to Y
because of this, X did something to something other than Y
X thought this:
if I do this, something could happen in Y because of that
Z could happen to Y because of that
I don't know this: Z will happen to Y

Needless to say, I do not wish to imply that Russian has no causative constructions of any kind. For one thing, it has of course lexical causatives such as *slomat'* 'break'; for another, it has 'pure' causative verbs such as *zastavit'* and *prinudit'* 'force' (not to mention speech act verbs such as *velet'* 'order'). It has also various 'permissive' constructions based on the verb *dat'* 'give', for example:

On dal ej otdoxnut'.
'He let her have a rest.'

The fact remains, however, that the area of intentional, agentive causation is less strongly differentiated in Russian grammar than it is in English, French or Japanese. On the other hand, Russian has a wealth of grammatical devices for expressing accidental causation, non-agentive causation, as for example in the sentence:

Ego ubilo derevom'.
'He was killed by a tree, somehow.'

(Cf. this volume, chap. 2, section 4.) The differences between languages in the amount of attention they give to the area of causation, and in the different 'views' of causation implicit in their grammar, have a great deal of inherent interest and could constitute a basis for a significant semantic typology of grammatical systems. Limitations of space prevent a detailed discussion of this problem in the present study. A few brief observations, however, will be made in the next section.

8. Causation in grammar: towards a semantic typology of grammatical systems

Everybody knows that languages differ in the amount — and kind — of attention they give to different aspects of reality through their lexical systems: Eskimo has numerous words for snow, Arabic for sand, Southeast

Asian languages for rice, and so on. But the idea that languages differ in the amount — and kind — of attention they give to abstract ideas and relations such as causation, time or human emotions, has seldom been seriously explored. Yet it seems obvious that while cross-linguistic divergences in this latter respect are harder to investigate, their significance is probably far greater than that of more visible differences in the area of concrete lexicon (and in particular, of the vocabulary concerned with environmental features).

In the area of causation, divergencies between different languages are very considerable, and very intriguing. At the one extreme, there appear to be languages with hardly any causative constructions at all (apart from purely purposive constructions). Evans (In press) has argued that the Australian Aboriginal language Kayardilt may be a case in point. At the other extreme, there are languages such as English, with a wide range of causative constructions, especially in the area of human interaction: various *make* causatives, *have* causatives, *get* causatives, *into* causatives (e.g. "X tricked/talked/manoeuvred Y into doing Z") and so on. Between these two poles, there is a wide range of variation — both in the amount of attention given to causal relations and in the kind of qualitative distinctions drawn by different languages. The observation that among the European languages considered here, English shows the greatest differentiation in the area of causation — more so than French, Italian or Russian — is entirely in line with Bally's (1920) semantic typology of European languages, advanced in his pioneering early study, *Impressionisme et grammaire.* Bally constrasted two "psychological tendencies" manifested in the syntax of different languages: an "impressionistic" one, focussing on phenomena as they present themselves to the human beings, and an analytical one, focussing on the presumed relations between causes and effects. He argued that the "impressionistic", phenomenological orientation is more in evidence in Russian than it is in German, more in German than it is in French, and more in French than it is in English. Conversely, the analytical causal orientation is more in evidence in English than it is in French, more in French than in German, and more in German than in Russian.

We could complement Bally's observations by saying that Russian syntax pays more attention to accidental, 'inexplicable' causation and to the interplay between human life and the forces of nature (cf. this volume, chap. 2) than does English syntax (with German, Italian and French occupying intermediate positions in this regard); and that the high degree

of attention which the English language gives to causal relations focusses in particular on kinds and shades of human interaction: it is particularly concerned with the interplay between causation and volition. Hence the wealth of distinctions manifested in patterns such as the following ones (see Chappell 1978; see also Wierzbicka 1985c):

X made Y $V_{intentional}$-INF	(e.g. X made Y wash the dishes)
X made Y $V_{non\text{-}intent.}$-INF	(e.g. X made Y cry)
X made Y ADJ	(e.g. X made Y furious)
X had Y V_{int}-INF	(e.g. X had Y wash the dishes)
X had X's Z V_{int}-ed	(e.g. X had her boots mended)
X had Y $V_{non\text{-}int}$-ing	(e.g. X had Y crying)
X had Y V_{int}-ING	(e.g. X had Y staying with her)
X got Y to V_{int}-INF	(e.g. X got Y to wash the dishes)
X got Y ADJ	(e.g. X got Y furious)
X got herself V_{int}-ed	(e.g. X got herself kicked out)
X V_{int}-ed Y into doing Z	(e.g. X talked/tricked Y into doing Z)
X V_{asp}-ed Y V-ing	(e.g. X kept Y waiting)

We could also add that both the focus on causal relations and the special concern with the strategies of human interaction seem to be characteristic of English not only in comparison with other European languages, but also in a universal perspective.

It goes without saying that it is tempting to try to interpret such divergencies in the light of what is known about other aspects of culture and society. In the case of vocabulary, nobody would hesitate to seek such explanations. It is regarded as self-evident that a language would have a particularly rich vocabulary in the area of culturally important objects and concepts. As Kenneth Hale puts it (quoted in Dixon 1980:108), "it is natural to find cultural elaboration reflected in lexical structures". I would argue, however, that "cultural elaboration" is reflected not only in lexical structures but also in grammatical structures. Hale refers specifically to the area of kinship, and links the "flourishing, even vibrant, elaboration of kinship nomenclature" in the Australian language Warlpiri with the important role that the "algebra of kinship" plays in the Warlpiri society.

But of course kinship plays an important role not only in the lexicon of Australian Aboriginal languages but also in their grammar. (Cf. for example Hale 1966, Dench 1982 and In press; Heath, Merlan and Rumsey 1982.) Generally speaking, what Hale calls areas of "cultural elaboration" and

what Dixon (1980:103) calls "areas of semantic specification" don't stop at the boundary between lexicon and grammar but pervade a language as a whole. This may not apply to physical entities and features of the environment (camels, reindeer, snow, sand, rice etc.) but I think it does apply to conceptual fields of special cultural importance. In fact, lexical elaboration of conceptual fields often seems to go hand in hand with grammatical elaboration. Kinship in Australian languages is one case in point. Causal interaction in English is, I think, another.

For example, if one compares English with Russian, one will discover that the English lexicon pays more attention to different strategies of human causation than Russian — just as English grammar pays more attention to this area than Russian grammar. To see this we can compare the sets of English and Russian speech act verbs which could be categorized as 'directives'. People could of course argue whether this or that particular verb should be included, and which Russian verb corresponds most closely to which English one (given the general lack of complete equivalence), but generally speaking it seems clear that the English set is much larger:

order	–	*velet', prikazyvat'*
command	–	*komandovat'*
demand	–	*trebovat'*
direct	–	*raspoŕjažat'sja*
ask	–	*prosit'*
request	–	*?*
beg	–	*umoljat'*
implore	–	*?*
beseech	–	*?*
entreat	–	*?*
plead	–	*?*
propose	–	*predlogat'*
suggest	–	*?*
require	–	*?*
instruct	–	*?*
urge	–	*?*
apply	–	*?*
advocate	–	*?*
intercede	–	*?*
advise	–	*sovetovat'*
counsel	–	*?*

persuade	–	*ugovorivat'*
appeal	–	*?*
charge	–	*poručit'*
decree	–	*?*
enjoin	–	*?*
ordain	–	*?*
prescribe	–	*predpisat'(?)*
book	–	*?*
authorize	–	*?*
commission	–	*?*

Needless to say, if 'causal interaction' is an area more elaborated in English than in Russian, there are other semantic areas which are more elaborated in Russian than in English. As an example, I would mention the field of emotions — in particular, 'active emotions', emotions to which people 'give themselves' almost voluntarily and which they outwardly express. Emotions of this kind are usually designated by verbs rather than adjectives. English has very few (intransitive) emotion verbs of this kind: *grieve*, *rejoice*, *worry*, *pine*, and a few more, and the whole category seems to be losing ground in modern English (*rejoice* being somewhat archaic and elevated, *pine* being usually used ironically, and so on). The fact that all these verbs occur readily in the progressive aspect ("X was grieving/rejoicing") highlights the contrast between their 'active', semi-voluntary character and the passive nature of states such as 'being sad' or 'being ashamed'. By contrast, Russian is extremely rich in emotion verbs of this kind. I will adduce here a selection of characteristic examples — most of them thoroughly untranslatable: *radovat'sja*, *toskovat'*, *skučat'*, *grustit'*, *volnovat'sja*, *bespokoit'sja*, *ogorčat'sja*, *xandrit'*, *unyvat'*, *gordit'sja*, *užasat'sja*, *stydit'sja*, *ljubovat'sja*, *vosxiščat'sja*, *likovat'*, *zlit'sja*, *gnevat'sja*, *trevožit'sja*, *vozmuščat'sja*, *negodovat'*, *tomit'sja*, *nervničat'*, and so on.

It hardly needs to be pointed out that in Anglo-Saxon culture behaviour described as 'emotional' is viewed with suspicion and embarrassment. (It is also worth noting that in English intransitive emotion verbs tend to develop negative, disapproving tones, cf. e.g. *sulk*, *fret*, *fume*, *rave*.) The well-known cultural inhibitions in this area go manifestly hand in hand with linguistic restraint. The opposite is of course true of the Russian culture — and of the Russian language. (Cf. Smith 1976:136).

It is important to note that the difference in question affects not only the lexicon but also the grammar of the two languages. Russian has a syn-

tactic contrast between 'voluntary emotions' (designated by verbs with experiencers in the nominative), 'involuntary emotions' (designated by an adverb-like category, the so-called *kategorija sostojanija* 'category of state', with the experiencer in the dative case), and — in some cases — neutral emotions, (designated by an adjective, with the experiencer in the nominative). For example:

a. *Ivan styditsja.*
'Ivan is "giving himself" to shame (and is showing it).'
b. *Ivanu stydno.*
'Ivan feels ashamed.'
a. *Ivan skučaet.*
'Ivan is "giving himself" to boredom/melancholy (and is showing it).'
b. *Ivanu skučno.*
'Ivan feels bored/sad.'
a. *Ivan grustit.*
'Ivan is "giving himself" to sadness (and is showing it).'
b. *Ivanu grustno.*
'Ivan feels sad.'
a. *Ivan raduetsja.*
'Ivan rejoices.'
b. *Ivan rad.*
'Ivan is glad.'

(For further examples of similar distinctions in Polish and for proposed semantic formulae, see Wierzbicka 1985d and this volume, chap. 7, section 3.1.)

It goes without saying that in any attempts to correlate features of grammar with features of culture and society great care must be exercised, to avoid subjectivism and arbitrariness; and that it is much easier to explore such correlations with respect to lexicon than with respect to grammar. It also goes without saying that investigations of this kind could be misinterpreted as renewed attempts to evaluate languages in terms of their expressive or logical power (in the style of 19th and early 20th century theorists such as Lévy-Brühl 1923 and 1926). One can apply to semantic typology what Hymes (1961:46) has said about 'cognitive styles' associated with different languages, namely, that it "has suffered from friends, who too often have treated the problem apart from the kinds of control that are usually

observed in culture-historical work, or who have given it too great an import, one that the known facts of history would seem clearly to refute. The problem must be divested of such associations, and recognized for what, in the first instance, it is: the problem of describing and interpreting an aspect of culture, one among the other aspects of culture, which can be handled empirically and historically, and which must be handled, if any historical or evolutionary theory of culture is to claim adequacy."

Hymes goes on to point out that "there is a precedent for linking the matter of cognitive styles to typology in the work of Sapir", and he adds that "the value of the link is that the typological context may impose needed rigor on the study of cognitive style, while concern with cognitive style may enhance the place of the semantic dimensions of language in typology."

Syntactic typology which deliberately closes its eyes to semantic dimensions of formal diversity of languages is, ultimately, sterile and unilluminating. The introduction of semantic dimensions involves certain dangers, but it is about time that these dangers should be faced. Rather than avoid facing them we should try to sharpen our analytical tools and to develop safeguards of various kinds. I believe that one safeguard worth adopting is that of studying the apparent 'areas of semantic specification' in the grammar and in the lexicon of a language at the same time (cf. Wierzbicka 1986b). Above all, however, we need a semantic metalanguage for a cross-cultural comparison of meanings, a metalanguage which can be used for describing and comparing all meanings — whether they are encoded in the lexicon or in grammar.

4. The Japanese 'adversative passive' in a typological context (Are grammatical categories vague or multiply polysemous?)

1. Introduction

The so-called 'adversative passive' is one of the most intriguing problems in Japanese linguistics. Traditional grammars of Japanese usually identified a construction, morphologically passive, which represents the person referred to by the subject of the sentence as adversely affected by the action, or event, denoted by the verb. It was pointed out that this construction could be used with both transitive and intransitive verbs, with the same semantic value. Susumu Kuno (who upholds the traditional account of 'adversative passives') cites the following examples (Kuno 1973:22-24, his numbers):

(50) a. *Ame ga fut-ta.*
rain TOP fall-PAST
'Rain fell.'
b. *John ga ame ni fur-are-ta.*
John TOP rain by fall-PSV-PAST
'(Lit.) John was fallen by rain.'

(51) a. *Tsuma ga shin-da.*
wife TOP die-PAST
'The wife died'
b. *John ga tsuma ni shin-are-ta.*
John TOP wife by die-PSV-PAST
'(Lit.) John was died by his wife.'

(52) a. *Kodomo ga asa-hayaku oki-ta.*
child TOP morning-early get-up-PAST
'The children got up early in the morning.'

b. *John ga kodomo ni asa-hayaku oki-rare-ta.*
John TOP child by early-morning get-up-PSV-PAST
'(Lit.) John was gotten up early in the morning by the children.'

(54) a. *Sensei ga kodomo o shikat-ta.*
teacher TOP child ACC scold-PAST
'The teacher scolded the child.'

b. *John ga sensei ni kodomo o shikar-are-ta.*
John TOP teacher by child ACC scold-PSV-PAST
'(Lit.) John was scolded his child by the teacher.'

(55) a. *Mary ga piano o hi-ita.*
Mary TOP piano ACC play-PAST
'Mary played the piano.'

b. *John ga Mary ni piano o hik-are-ta.*
John TOP Mary by piano ACC play-PSV-PAST
'(Lit.) John was played the piano by Mary.'

Kuno (1973:24) comments:

"What is peculiar syntactically about (50), (51), (52) and (54), (55) is that these passive sentences have one extra noun phrase compared to the corresponding active sentences. What is peculiar semantically about these passives is that they mean that the subject of the main sentence is adversely affected. For example, (50b) means that John was adversely affected by rain falling or that, to John's chagrin, it rained. Similarly, (55b) means that John was adversely affected by Mary's playing the piano and thus implies that he was annoyed by the sound."

This traditional view has been forcefully challenged by Anthony Alfonso, first in his influential *Japanese Language Patterns* (1966), and later in a special article devoted to this topic ("On the adversative passive", 1971). Concentrating his attention on the passive of intransitive verbs, he stated his view as follows (Alfonso 1971:1):

"Most textbooks state that the passive Japanese intransitive verb is adversative. Taken as a textbook generalization, this statement has its merits: the data do indicate that this passive is generally used in environments where the subject has been unfavourably affected. But taken as a linguistic rule, namely that this passive is *intrinsically* adversative, the statement is invalid. In *Japanese Language Patterns* we stated that this passive, like any other passive, is a plain statement of fact, and that if any emotional

overtones are present (unfavourable or favourable) they are due to factors other than the form *-areru* itself. We came to this conclusion because we could not reconcile an intrinsically adversative theory with the data as we saw them. There are many instances where this passive is used, and where all the native speakers we consulted failed to find any adversative overtones."

The main body of Alfonso's article consists of an impressive collection of well-chosen examples, which prove conclusively that the passive form of intransitive verbs can indeed be used without any 'adversative' meaning whatsoever. For example, in the following pairs of sentences the very same verb can be used with either negative or positive connotations, depending on the context (Alfonso's numbers):

(20) a. *Hen na ojisan ni waraikakerarete nigedashitaku natta musume.*
b. *Suteki na wakamono ni waraikakerarete terete iru musume.*
a'. A girl wanting to run away because of a funny fellow smiling at her.
b'. A girl coy because of a handsome boy smiling at her.

(21) a. *Yoru kodomo ni nakareru to chotto fuyukai na mono da.*
b. *Kirei na ojoosan ni nakareru to chotto ureshii mono da.*
a'. It's rather unpleasant when your child starts crying at night.
b'. It's kind of nice when a beautiful girl cries because of you.

(22) a. *Kodomo wa inu ni hoerarete naite iru.*
b. *Kodomo wa inu ni jarerarete yorokonde iru.*
a'. The child is crying because a dog is barking at him.
b'. The child is happy because the dog is frisking around him.

(23) a. *Ki kara ochita kemushi ni kata ni tomararete kodomo wa gyotto shita.*
b. *Hato ni kata ni tomararete kodomo wa oohashagi o shite iru.*
a'. The child was frightened when a hairy caterpillar fell from a tree onto his shoulder.
b'. The child is all excited because a pigeon settled on his shoulder.

Alfonso has also shown that the intransitive passive can be used in a totally neutral way, without implying that the event produced any positive or negative effect (while still implying some, though unspecified, effect). For example:

(24) a. *Tsumetai kaze ni fukarenagara shoo uindoo o nozoite aruku.*
b. *Suzushii kaze ni fukarenagara shoo uindoo o nozoite aruku.*
c. *Kaze ni fukarenagara shoo uindoo o nozoite aruku.*
a'. I walk along in the cold wind looking at the shop windows.
b'. I walk along in the cool breeze looking at the shop windows.
c'. I walk along in the wind looking at the shop windows.

Alfonso (1971:5-6) concludes:

"A form which can be used in both favourable and unfavourable environments cannot be intrinsically adversative, it ought to be *intrinsically neutral*. If there are in fact favourable or unfavourable overtones, the reason is to be found not in the passive form itself but somewhere else, like in the nature of circumstances of the happening, in the psychology or experiences of the subject, in the complex and varying attitudes of native speakers towards a given event. (...)

"We hold that the Japanese passive, including the passive of intransitive verbs, merely indicates that 'something occurs to or in the subject beyond its present control, brought about either spontaneously or by an outside source'. Looking back at the data presented one thing that stands out is that those events which caused various kinds of reactions in the subject were not done purposely: they were rather natural, spontaneous, involuntary activities which in fact caused a certain impact in the subject."

In Alfonso's view, the rejection of the 'adversative' theory of the Japanese passive allows him to reach a "much deeper and unified theory which can account for all the instances where this passive is used" (1971:5). Some specialists in Japanese linguistics have found Alfonso's arguments persuasive (see e.g. N. McCawley 1972, but cf. also Howard 1969). Others, however, have remained unconvinced or perhaps unaware and continue to maintain the traditional doctrine, without acknowledging or attempting to repudiate Alfonso's arguments (see e.g. Inoue 1974).

The problem is extremely interesting and important both for intrinsic reasons and because of its wider methodological implications. It can be formulated like this: if one form can be used in a number of different ways, are we entitled to postulate for it a number of different meanings or should we rather search for one semantic common denominator (regarded as the MEANING of the form in question) and to attribute the variety of uses to the interaction between this meaning and the linguistic or extralinguistic context?

At first sight it may seem obvious that the second stand (the one adopted by Alfonso) is methodologically preferable. I would argue, however, that this is not necessarily so, and that the apparent methodological soundness of the second stand may in fact represent a dangerous pitfall. Certainly, meanings must not be multiplied beyond necessity. If all the different uses of a syntactic construction can be reduced to one common denominator (with the differences between them explained in terms of context) then they should be so reduced. But the formal morphological identity of two or more constructions does not mean that these constructions should be viewed as one and the same construction.

Alfonso has shown convincingly that the passive of intransitive verbs can be used without any 'adversative' connotations. But has he shown that the sentences in which it is so used belong to the same SYNTACTIC CONSTRUCTION as sentences which do carry the 'adversative' meaning? It seems to me that he has not. To define a construction in purely morphological terms (e.g. as a construction which contains an intransitive verb in a passive form) is to take a rather narrow view of syntax. Surely, distributional criteria are equally important — and this includes semantic distribution, in so far as it can be stated in discrete and rigorous terms. In the case of the Japanese passive 'with an extra noun phrase', it should be observed that the domain of the 'adversative passive' is different from that of the 'favourable or unfavourable passive', and different again from that of the 'neutral' (unspecified) passive.

In what follows, I am going to argue that Japanese actually has a number of different syntactic constructions which use the same passive morphology, in combination with an 'extra' noun phrase. These different constructions can be identified, and distinguished from one another, in purely distributional terms. Since the distributional facts in question are based on purely semantic distinctions, to establish a number of different passive constructions in Japanese is tantamount to detecting a number of meanings which the language has grammaticalized. I would argue that when we do this we will find that some of those constructions do indeed carry the traditionally recognized 'adversative' meaning, whereas others carry the alternative 'good' or 'bad', and still others, a meaning of purely unspecified effect.

2. Main-verb passives

Going back to Kuno's (1973) examples:

(50) b. *John wa ame ni furareta.*
John TOP rain by fall-PSV-PAST

(51) b. *John wa tsuma ni shinareta.*
John TOP wife by die-PSV-PAST

(55) b. *John wa Mary ni piano o hikareta.*
John TOP Mary by piano ACC play-PSV-PAST

it will be observed that these sentences can be interpreted in only one way: John was adversely affected. We may know from other sources that John loves being in the rain; that he had hated his wife and had been eagerly looking forward to her approaching death; and that he loved to hear Mary playing the piano; in spite of all this knowledge, the sentences (50b), (51b) and (55b) CANNOT mean that John was positively affected by the rain, by his wife's death, and by the sound of Mary playing the piano. This is so in spite of the fact that when embedded in another sentence these very passives CAN be used to refer to a positive effect (examples adapted from Alfonso 1971, Xolodovič 1969):

> *Kodomo no toki ame ni furareganagara gakkoo ni kayotta natsukashii omoide ga aru.*
> 'I have dear memories of those childhood years when I used to walk to school with rain falling on me.'
> *John wa tsuma ni shinarete jiyuu ni natta.*
> 'When his wife died John became free.'

In these sentences the main verb specifies the positive effect of the event referred to by the passive verb of the subordinate clause. This forces us to conclude that there is an essential difference between sentences in which the passive verb is the main verb and those in which it is subordinated. There are verbs whose passive may imply, or at least allow, a positive-effect interpretation if they occur in a subordinate clause, and exclude such an interpretation if they occur in the main clause. For these verbs, the negative effect which their passives imply when occurring in the main clause has to be regarded as a part of the meaning of the syntactic construction itself.

That these negative implications of the main-verb passives are due to the meaning of the relevant construction and not to extra-linguistic factors

emerges clearly from consideration of pairs of sentences like the following:

a. *John wa tsuma ni shinareta.*
John TOP wife by die-PSV-PAST
'John's wife died on him.'

b. *?John wa tsuma ni naorareta.*
John TOP wife by recover-PSV-PAST
'John's wife recovered on him.'

The first one implies that John was NEGATIVELY affected by the event. This may be regarded as predictable from extra-linguistic factors — but if so, then the second should imply that John was POSITIVELY affected. In fact, however, it does not — the sentence is somewhat odd, but if it is accepted by native speakers at all, it is understood as implying a negative, not a positive, effect (and this is the source of its oddity).

Here again main-verb passives differ strikingly from subordinate passives. Thus, while the sentence:

?John wa tsuma ni naorareta.
John TOP wife by recover-PSV-PAST

as it stands can only be interpreted as implying a negative effect, it can nonetheless be embedded in a sentence which explicitly indicates a positive effect:

John wa tsuma ni naorarete yorokonde iru.
John TOP wife by recover-PSV-GER pleased is
'John's wife having recovered, he is pleased.'

Thus, we are forced to posit a special syntactic construction (externally, a main-verb passive with an extra noun phrase) which grammaticalizes the following meaning (the numbers correspond to the summary of constructions at the end of this chapter):

(1) something bad happened to someone (Y)
one can think of it as something bad that happened to someone else (X)
(one can think of Y as X's Y)

Both X and Y in this construction have to be human. Thus, while one can say:

John wa tsuma ni shinareta
John TOP wife by die-PSV-PAST
'John's wife died on him.'

one cannot say:

**John wa ie ni moerareta.*
John TOP house by burn-PSV-PAST
'John's house burned down on him.'

The double 'badness' of the event is an essential part of the meaning grammaticalized by the construction in question — or, to put it differently, a necessary condition of its use. None of the following formulae can underlie the use of the main-verb passives in Japanese:

a. something good happened to someone (Y)
one can think of it as something bad that happened to someone else (X)
b. something bad happened to someone (Y)
one can think of it as something good that happened to someone else (X)
c. something good happened to someone (Y)
one can think of it as something good that happened to someone else (X)

This cannot be predicted from any universal principles of language use. It must be regarded as a rule of Japanese syntax.

The same applies to passives which refer to human action. Compare, for example, the following sentences (the first from N. McCawley 1972):

a. *John wa hitori musume ni Amerikajin to kekkon*
John TOP only daughter by American with marriage
sareta.
do-PSV-PAST
'John's only daughter married an American; John was negatively affected by it.'
b. *?John wa musume ni kanemochi to kekkon*
John TOP daughter by rich-man with marriage
sareta.
do-PSV-PAST
'John's daughter married a rich man; John was affected by it.'

The first implies a negative effect, and is perfectly acceptable. The second, however, does not imply a positive effect, and in fact is very odd. The explanation is simple. In the first case the negative effect implied by the syntactic construction (passive of a verb of doing plus an extra noun phrase)

tallies well with the meaning contributed by the lexical items; in the second, the two are in conflict.

This leads us to posit another syntactic construction, another 'adversative passive': the passive of undesirable action performed by a 'relation'. The meaning grammaticalized in this construction can be formulated as follows:

(2) someone (Y) did something
that someone else (X) didn't want Y to do
one can think of it as something bad that happened to X
(one can think of Y as X's Y)

That is to say: a person is negatively affected by an undesirable action of someone related to him. It will be noticed that in this case the action does not have to be regarded as 'bad' from the agent's point of view. For example, the sentence about the marriage to a American does not imply that this marriage was bound to be a failure (from the point of view of the married couple). The action is bad only from the point of view of the person indirectly affected (in this case, the father).

As we have seen above, there is no parallel construction of 'beneficial action'. The meaning:

someone (Y) did something
that someone else (X) wanted Y to do
one can think of it as something good that happened to X
(one can think of Y as X's Y)

cannot be conveyed by means of a passive.

The formula proposed above as the semantic representation of the 'passive of undesirable action' may seem too narrow in view of the acceptability of sentences like:

John wa Mary ni piano o hikareta.
John TOP Mary by piano ACC play-PSV-PAST
'Mary played the piano; John was negatively affected by it.'

This sentence does not imply that the person responsible for the action (Mary) was related to the person negatively affected (John). It appears, however, that this case (which involves a transitive verb) should be regarded as different from the preceding one (which involved an intransitive verb). It seems that while in the case of sentences with intransitive verbs it is the agent of the undesirable action who is related to the sufferer,

in the case of sentences with transitive verbs it can be either the agent or the patient. Thus, a sentence like:

John wa kodomo ni piano o hikareta.
John TOP child by piano ACC play-PSV-PAST

can be good without meeting the semantic formula proposed for the 'passive of undesirable action performed by a relation' — if it meets the following formula:

(3) something happened to someone/something (Y)
that someone (X) didn't want to happen
because someone else (Z) did something
one can think of it as something bad that happened to X
(one can think of Y as X's Y)

The latter formula would underlie the construction which might be called the 'passive of undesirable action involving one's property or related person'.

Furthermore, there is also a third possibility. If neither the child nor the piano belongs to John the sentence may still be good if it is interpreted as implying that the event occurred in John's PLACE (i.e. in his environment). Obviously, this is the interpretation which Kuno had in mind when he said that the sentence implies that John was annoyed by the sound. This forces us to postulate yet another construction — a passive of undesirable local event. The meaning encapsulated in this construction can be represented as follows:

(4) something happened in the place where someone (X) was
that X didn't want
because someone (Z) did something
one can think of it as something bad that happened to X

A very similar formula would account for sentences like the celebrated:

John wa ame ni furareta.
John TOP rain by fall-PSV-PAST

which can be said to be cases of a passive of undesirable accidental local event. The semantic formula of this passive would read as follows:

(5) something happened in the place (Y) where someone (X) was
that X didn't want
not because someone did something
one can think of it as something bad that happened to X

Alfonso has suggested that the impression that the passive form (when combined with an extra noun phrase) always carries an 'adversative' meaning may be due to the existence of other constructions which have specialized in implying a positive effect (in particular, the *-te morau* construction). However, this suggestion does not explain the asymmetry illustrated by sentences like:

John wa tsuma ni shinareta.
John TOP wife by die-PSV-PAST
'John's wife died; John was negatively affected by it.'
**John wa tsuma ni naorareta.*
John TOP wife by recover-PSV-PAST

because neither of these two verbs *shinu* and *naoru* can occur in the *-te morau* construction. One cannot say:

**John wa tsuma ni naotte moratta.*
John TOP wife by recover-GER received

The *-te morau* construction is restricted to action verbs. There is no construction in Japanese which would allow the speaker to imply that an (agentless) event which involves one person has positively affected another person — there is no construction of 'accidental good fortune', parallel to the 'passive of accidental misfortune'. Thus, the negative implications of a form like *shinareta* and the lack of positive implications in a form like *naorareta* cannot be explained by reference to some other constructions, competing with the passive.

2.1 *Negative versus positive effects*

As mentioned earlier, however, I am not suggesting that ALL main verb passives carry a negative ('adversative') meaning. Main verb passives are not semantically homogeneous: they fall into a number of clearly distinguishable categories which should be regarded as different constructions.

Consider, for example, the following sentences (adapted from Alfonso 1971):

Paama o kakete soto ni detara hito ni
perm ACC having-applied outside to going people by
furimukareta.
turn-look-at-PSV-PAST
'When I went out after having a perm people turned to look at me.'

Eigakan de kawai ko ni tonari ni suwarareta.
cinema at pretty girl by near to sit-PSV-PAST
'In the cinema a pretty girl sat next to me; I was affected by it.'
Musume wa suteki na wakamono ni waraikakerareta.
girl TOP handsome boy by smile-PSV-PAST
'The girl was smiled at by a handsome boy; she was affected by it.'
Kodomo wa kawaii inu ni jaretsukareta.
child TOP lovely dog by frisk-around-PSV-PAST
'A lovely dog frisked around the child; the child was affected by it.'

In these sentences the effect of the action is likely to be interpreted as positive rather than negative. How is that possible in view of the fact that a sentence like:

**John wa musume ni kanemochi to kekkon sareta.*
John TOP daughter by rich-man with marriage do-PSV-PAST

is not acceptable? We concluded earlier that in Japanese a passive can depict an action as undesirable but cannot depict it as desirable. How can this conclusion be reconciled with sentences like these we are considering now? Clearly we need distinctions finer than those introduced so far.

My hypothesis is that those sentences which CAN refer to a 'desirable action' by means of a passive have to meet the following formula:

(6) someone (Y) did something that one can think of
as something that happened to someone else (X)
one can think of it as something good that happened to X

The formula which corresponds to sentences which CANNOT refer to a desirable action by means of a passive differs from this by one component:

someone (Y) did something
one can think of it as something good that happened to
someone else (X)

That is to say, the crucial difference is that between 'Y did something' and 'Y did something that one can think of as something that happened to X'. The passive can imply that the action had a positive effect on someone only if that action can be seen as directly involving the affected person. We have seen that this condition ('the affected person must be directly involved') does not hold for the 'adversative passive'; but it does hold for the 'benefi-

cial passive'. A daughter's marriage to an American does not involve the father directly (it is not the father whom she marries); yet the father can be represented, by means of a passive, as negatively affected. A daughter's marriage to a rich man does not involve the father directly, either (again, it is not the father whom she marries); in this case, however, this means that the father cannot be represented by means of a passive as positively affected.

I would like to suggest that in ALL cases in which a passive can be interpreted as referring to a positive rather than a negative effect, the action in question can be interpreted as directly involving the affected person. Thus, person A may be presented as positively affected by person B's action if B smiles at A, sits next to A or even looks at A. It does not matter what B does, but B must be, in some sense, doing something TO A, and not just something that A wants B to do.

Consider, for example, the following sentences:

Kyoosoo *de* *kodomo* *ni* *ittoo* *ni* *narareta.*
competition in child by first-prize by get-PSV-PAST
'In the competition, my child got first prize; I was affected by it.'

The passive indicates that the parent was affected by his child's victory in a sporting competition. How was the parent affected — positively or negatively? Common sense and common experience suggest that the parent was probably affected positively rather than negatively. But neither common sense nor common experience suggest that to be able to be positively affected the parent must have taken part in the competition — and have been beaten — himself. Yet this, too, is implied by the sentence. That is to say, if the passive is understood as implying a positive effect then it will also be understood as implying the parental participation.

The sentence:

Oyako *no* *kyoosoo* *de* *kodomo* *ni* *ittoo*
parent-child GEN competition in child by first prize
ni *narareta.*
by get-PSV-PAST
'In a parent-child competition I was beaten by my child; I was affected by it.'

indicates that the parent was either negatively or positively affected by his child's victory — both interpretations are equally possible. If the sentence does not specify that the competition in question was a parent-child com-

petition and if the reader or hearer assumes that the parent did not take part in it, the sentence will probably seem to him odd, because the only interpretation possible will be that the parent was negatively affected by the event — and why should a parent be negatively affected by his child's victory? Clearly, it is Japanese grammar which makes the connection between positive effect and personal involvement.

Similarly, consider the following sentences:

a. *Haha wa kodomo ni nakareta.*
mother TOP child by cry-PSV-PAST
'The child cried; the mother was negatively affected by it.'

b. *John wa kirei na ko ni nakareta.*
John TOP pretty girl by cry-PSV-PAST
'A pretty girl cried because of John; John was affected by it.'

The first is most likely to be understood as implying that the mother was negatively affected by her child's crying; the second as implying that John was positively affected by the pretty girl's crying. But this is not the whole difference. The second sentence (if understood as implying a positive effect) also implies that the pretty girl cried OVER JOHN, whereas the first sentence (if understood as implying a negative effect) does not imply that the child cried over his mother. John can be understood as having been positively affected only if the girl's crying had something to do with him (was caused by him or had him as its object). It cannot, for example, be due simply to John's sadistic pleasure in seeing the girl's distress. The mother is understood as negatively affected by an action which does not directly involve her.

Thus, it appears that Japanese treats actions which affect us without involving us in one way and those which both affect and involve us, in another; in the former case only those actions and events which affect us negatively have received special grammatical treatment; in the latter, both good and bad actions have been grammatically recognized. 'If an action (or event) does not involve us directly and yet affects us, it will probably affect us negatively', is the view embedded in Japanese syntax. If it affects us positively, this unusual fact has to be stated explicitly (in a separate clause). If the nature of the event is not specified, it must be interpreted as negative. If, however, the action does involve us directly, then its effect may be either bad or good. If it is good, the speaker will usually give the addressee some hint to this effect (by deploying clues like the word *kirei* in the sentence cited). But the positive nature of the effect does not have to be specified in

a separate clause. Hence, even main-verb passives may imply a positive effect if they refer to an action which involves us directly; in the case of actions which do not involve us directly, a main verb passive cannot be taken as implying a positive effect.

A positive effect can also be implied (or understood as implied) in sentences like the following:

John wa sensei ni kodomo o homerareta.
John TOP teacher by child ACC praise-PSV-PAST
'The teacher praised John's child; John was affected by it.'
John wa raifu seebaa ni kodomo o tasukerareta.
John TOP lifeguard by child ACC rescue-PSV-PAST
'A lifeguard rescued John's child; John was affected by it.'

One might say that in sentences of this kind the person affected (John) is not directly involved in the action (the teacher did not praise John, but John's child; the lifeguard did not rescue John but John's child). This seems to suggest that Japanese has also another positive-effect construction, which grammaticalizes, roughly, the following meaning:

something good happened to someone/something (Y)
because someone (Z) did something
one can think of it as something good that happened to
someone else (X)
(one can think of Y as X's Y)

Apparently, however, there is one further constraint on this construction: the event must be viewed as accidental from the point of view of the beneficiary. Thus, if the teacher praises John's child it is unlikely that this would have been caused by John's request or presumed wish. If the event is not accidental (from the point of view of the beneficiary), a different construction would be used (the *-te morau* construction, see 7a in the summary of constructions at the end of this chapter). Therefore, a more complete semantic formula for the construction under consideration would probably include one further component:

(7) something good happened to someone/something (Y)
because someone (Z) did something
not because someone else (X) wanted it
one can think of it as something good that happened to X
(one can think of Y as X's Y)

In this case Y does not have to be human, as the following sentences show:

John wa sensei ni kare no hon o hòmerareta.
John TOP teacher by he GEN book ACC praise-PSV-PAST
'The teacher praised John's book; John was affected by it.'

John wa tomodachi ni kare no booto o tasukerareta.
John TOP friend by he GEN boat ACC rescue-PSV-PAST
'John's friend rescued John's boat; John was affected by it.'

The corresponding negative construction can be illustrated by the sentence:

John wa tsuma o korosareta.
John TOP wife ACC kill-PSV-PAST
'John's wife was killed; he was affected by it.'

Here, also, Y does not have to be human:

John wa ie o yakareta.
John TOP house ACC burn-PSV-PAST
'John's house was burnt down; John was affected by it.'

In this construction the first noun phrase (the one referring to the indirect victim) has to be human, but the second one (the one referring to the direct victim) does not. This construction contains only three components:

(8) something bad happened to someone/something (Y)
because someone (Z) did something
one can think of it as something bad that happened to someone else (X)
(one can think of Y as X's Y)

Thus, the two constructions (the 'passive of transitive misfortune caused by another person' and the 'passive of transitive good fortune caused, accidentally, by another person') are not fully symmetrical.

2.2 *Neutral-effect passives*

In all the sentences that we have considered so far (i.e. in all the sentences with main-verb passives) the effect implied by the passive was either negative or positive, but not neutral. We will now look at some sentences in which the effect implied by the passive seems to be just that: neutral.

Kanja wa kangofu ni kanbu o fukareta.
patient TOP nurse by affected-part ACC wipe-PSV-PAST
'The affected part of the patient's body was wiped by a nurse; the patient was affected by it.'

Kanja wa ashi o shoodoku sareta.
patient TOP leg ACC disinfection do-PSV-PAST
'The patient's leg was disinfected; the patient was affected by it.'

Akachan wa haha ni yasashiku hoozuri sareta.
baby TOP mother by gently cheek-press do-PSV-PAST
'The mother gently pressed her cheek against her baby's cheek; the baby was affected by it.'

John wa kare no inu ni shi o namerareta.
John TOP he GEN dog by leg ACC lick-PSV-PAST
(Kusuguttakute kare wa waratta.)
tickled he TOP laughed
'John's dog licked his (John's) leg. (This tickled and John laughed.)'

Nothing negative — or positive — is implied by these sentences, although they all imply that the person in question was somehow affected. The first two sentences suggest the picture of a nurse preparing the patient for an injection; the third sentence suggests the picture of a mother caressing her baby without specifying whether the baby liked or disliked the caress; the fourth sentence evokes the picture of a man being licked by his dog and implies that the man felt something because of that but it does not specify whether the feeling was pleasant or unpleasant.

It will be observed that all these neutral-effect main verb passives refer to a bodily effect; all represent a person as affected — not positively or negatively affected, but simply affected — by something that happens to a part of his or her body. In fact they all refer to a sensation caused by something that happened to a part of a person's body, without specifying the nature of this sensation. This 'passive of unspecified bodily effect' could be explicated as follows:

(9) something happened to part Y of someone's (X's) body
because someone else (Z) did something
one can think of it as something that happened to X

A similar neutral bodily effect can also be implied in sentences refer-

ring to events which involve not a part of a person's body but the whole body. Thus, a sentence like:

Kinoo wa kaze ni fukareta.
yesterday TOP wind by blow-PSV-PAST
'Yesterday I was affected by the wind.'

may be interpreted as implying a neutral rather than a negative effect. There is a curious difference in this respect between sentences referring to the wind and sentences referring to the rain. A sentence like:

Kinoo wa ame ni furareta.
yesterday TOP rain by fall-PSV-PAST
'Yesterday I was affected by the rain.'

is generally claimed to imply a negative effect, even though the corresponding sentence referring to the wind does not. If there is indeed an asymmetry here, one possible explanation of it may be this. In common experience, the rain may inconvenience a person in a variety of ways, not necessarily by wetting him. The main-verb passive *furareta* does not imply that John was physically, bodily, in the rain — it implies only that the rain was a nuisance from John's point of view. A wind, however, is less likely to inconvenience people who are not physically exposed to it. For this reason the main verb passive *fukareta* is more likely to be interpreted as a bodily passive — and bodily passives can imply a neutral, unspecified effect.

Thus, the neutral (non-negative) interpretation of a sentence like:

Kaze ni fukareta.
wind by blow-PSV-PAST

is tied up with the bodily interpretation (the affected person is physically exposed to the wind). The prevalent negative interpretation of the sentence like:

Ame ni furareta.
rain by fall-PSV-PAST

is tied up with an unspecified (not necessarily bodily) interpretation of the relation between the rain and the affected person.

Thus it is not enough to distinguish main verb passives from subordinate passives. Also within the group of main verb passives several different constructions have to be singled out: not only do purely adversative passives have to be distinguished from polarized adversative or beneficial ones,

but also both these groups have to be separated from bodily passives (of unspecified effect).

2.3 *Inanimate passive*

There is, moreover, at least one more construction which combines the passive form of the main verb with the presence of an extra noun phrase. We might call this construction the 'inanimate passive'. The inanimate passive is based on the part/whole relation: it presents an inanimate object as indirectly affected by an event which directly affects some of its parts. This is rather similar, of course, to the bodily-effect use of the passive. But the two cases are not exactly parallel. The contrast between sentences like (a) and (b) below shows clearly that 'bodily passives' cannot be subsumed under a more general category of part/whole relations:

(1) a. *John wa inu ni ashi o namerareta.*
John TOP dog by leg ACC lick-PSV-PAST
'A dog licked John's leg; John was affected by it.'

b.* *Teeburu wa inu ni ashi o namerareta.*
table TOP dog by leg ACC lick-PSV-PAST
'A dog licked a leg of the table; the table was affected by it.'

(2) a. *Kanja wa kanbu o fukareta.*
patient TOP affected-place ACC wipe-PSV-PAST
'The affected part of the patient's body was wiped; the patient was affected by it.'

b.* *Teeburu wa haha ni hyoomen o fukareta.*
table TOP mother by surface ACC wipe-PSV-PAST
'The mother wiped the top of the table; the table was affected by it.'

Thus, if the part/whole relation is also grammaticalized by means of a passive construction, this construction must be regarded as a separate one.

It has sometimes been said that the Japanese passive with an extra noun phrase is restricted to animate (human) subjects. For example, Noriko McCawley (1972) has used sentences like the following ones to illustrate this alleged restriction:

> *John wa kodomo ni terebi o itazura sareta.*
> 'John was subject to a child putting his television out of commission.'

* *Terebi wa kodomo ni antenna o itazura sareta.*
'The television set was subjected to a child putting its antenna out of commission.'
Tanakasan wa dareka ni saifu o nusumareta.
'Mr Tanaka had his wallet stolen by someone.'
* *Tanakasan no hashira dokei wa dareka ni furiko a nusumareta.*
'Mr Tanaka's clock had its pendulum stolen by someone.'

According to my informants, however, there are passive sentences (with an 'extra' noun phrase) where an inanimate subject is not necessarily excluded. For example, the following sentences are quite acceptable:

Kuruma wa ressha ni baa o hikkakerareta.
car TOP train by bar ACC pull-off-PSV-PAST
'The train pulled the bumper bar off the car; the car was affected
Kuruma wa dareka ni teppo de enjin o utareta.
car TOP someone by gun with engine ACC shot-PSV-PAST
'Someone shot the car's engine; the car was affected by it.'
Kuruma wa ame ni bodii o arawareta.
car TOP rain by body ACC wash-PSV-PAST
'The rain washed the body of the car; the car was affected by it.'

All these events are viewed as something bad that happened to the car. The fact that the sentences referring to these events are acceptable, and that they imply that the event was 'bad', suggests the existence of a construction whose meaning contains the following components:

something bad happened to a part (Y) of something (X)
one can think of it as something bad that happened to X

However, these two components cannot exhaust the meaning in question, because if they did the sentences starred by Noriko McCawley would be acceptable (which they are not). Clearly, the construction in question is subject to some additional semantic constraints.

I have not been able to collect enough reliable data to be able to establish what these constraints are (my informants were often divided in their judgements). One hypothesis, however, does suggest itself. It appears that the 'bad' event which directly affects a part of an inanimate object and indirectly affects the whole object has to be seen as 'local', that is to say as an event which primarily involves a place. This is particularly clear in the case of meteorological events. As Peirce (1932) never tired of pointing out, a

sentence like "It's raining" has a PLACE for its 'subject' (or topic): the speaker is characterizing his environment by referring to an event, or process, which takes place there and then. We can say, then, that in Japanese a car can be presented as negatively affected by a local event (rain) which involves its parts. I would suggest that the same can be said about the passage of train through an area, and even about a shot: they can be seen as events which characterize a place (at a certain time). By contrast, if a child plays with a television set or a lock or if a dog licks the leg of a table this would hardly be thought of as something that happened to an area.

Thus, a semantic formula which would account correctly for the range or permissible passives with inanimate subjects should, it seems, include the following components:

(10) something bad happened to a part (Y) of something (X)
because something happened in the place where X was
one can think of it as something bad that happened to X

It must be mentioned, however, that in written language, especially in elevated, poetic style, the range of permissible passives is wider. This can be partly explained, no doubt, by an anthropomorphic approach to nature characteristic of poetic language. It is not clear, however, whether all the cases of inanimate passives permissible in poetic language should be seen as instances of personification. Be that as it may, it should be noted that in poetic language passive sentences with inanimate subjects are possible both in cases where the effect implied by the passive is negative and in those where it is positive (examples from Xolodovič 1974):

Matsu wa yuki ni eda o orareta.
pine TOP snow by branch ACC break-PSV-PAST
'The snow broke the branches of the pine-tree; the pine-tree was affected by it.'

Matsu wa hi ni eda o terasareta.
pine TOP sun by branches ACC shine-PSV-PAST
'The sun made the branches of the pine-tree shine; the pine-tree was affected by it.'

One interesting question which poses itself with respect to such inanimate passives is whether the effect implied in them is neutral (unspecified) or polarized, good or bad. At present I do not have enough data to answer this question.

3. Some cross-linguistic comparisons

I have tried to show that the Japanese passive, which has traditionally been treated as a uniform phenomenon, in fact grammaticalizes a number of different and precisely distinguishable meanings, and that it should, therefore, be regarded as a group of different syntactic constructions, not as one construction.

I will now try to show that this situation is by no means unique to Japanese. In particular, I will argue that all meanings grammaticalized in the Japanese passive constructions have close analogues — in some cases, exact equivalents — in other languages, geographically and genetically very distant from Japanese. Moreover, other languages, unrelated to Japanese, tend to use one morphological exponent to codify a set of meanings similar to that served by the Japanese passive.

The clearest example of this is the Indo-European dative. Many Indo-European languages use the dative of nouns, and, especially, of personal pronouns, in a way strikingly similar to that in which Japanese uses its passive (see also this volume, chaps. 2 and 7.)

3.1 *Datives of misfortune*

Let us consider first the concept that misfortunes are 'transitive' i.e. that something bad that happens to one person can be viewed as something bad that has happened to another person (provided that the two persons are somehow related). We have seen that Japanese grammaticalizes this idea in a special construction which may be called the 'passive of misfortune'. A parallel 'dative of misfortune' exists in German. For example, the German sentence:

Ihm ist die Frau gestorben.
to-him is the wife died
'His wife died on him'

means, exactly like its Japanese counterpart:

Kare wa tsuma ni shinareta.
he TOP wife by die-PSV-PAST

that someone's wife died and that this someone was negatively affected by it. The meaning grammaticalized by the two constructions is almost exactly the same. The qualification "almost" is necessary because the German con-

struction, in contradistinction to the Japanese one, is not restricted to situations when both the entities affected by the misfortune are humans:

Ihm ist das Haus abgebrannt.
to-him is the house burnt-down
'His house burnt-down on him.'
* *Kare wa ie ni moerareta.*
he TOP house by burn-PSV-PAST

In German, as in Japanese, this construction is purely 'adversative', that is to say it implies a bad, not a neutral, effect, and has no positive counterpart. Just as one cannot say in Japanese:

? *John wa tsuma ni naorareta.*
John TOP wife by recover-PSV-PAST

to imply that John was positively affected by his wife's recovery one cannot say in German:

* *Die Frau wurde ihm wieder gesund.*

Thus, while both Japanese and German have special constructions which codify the meaning of 'transitive misfortune', neither has a construction which codifies the meaning of 'transitive good fortune'. In English, too, the sentence:

My wife died on me.

has no positive counterpart:

*Fortunately, my wife recovered on me.
*Thank God, my wife recovered for me.

The corresponding active construction (i.e. the construction which grammaticalizes the concept of a misfortune caused by an external agent rather than by fate) is even more widespread in Indo-European languages. It can be illustrated by the following sentences:

Ils lui ont tué sa femme. (French)
Sie haben ihm seine Frau getötet. (German)
Oni ubili emu ženu. (Russian)
Gli hanno ucciso la moglie. (Italian)
'They killed his wife.'

The meaning of these sentences is quite close to that of the Japanese sentence:

Kare wa tsuma o korosareta.

It can be represented, roughly, by the formula:

something bad happened to someone (Y)
because someone (Z) did something
one can think of it as something bad that happened to
someone else (X)
(one can think of Y as X's Y)

Interestingly, this construction does have a positive counterpart in the Indo-European languages considered:

Ils lui ont sauvé sa femme.
Sie haben ihm seine Frau gerettet.
Oni spasli emu ženu.
Gli hanno salvato la moglie
'They saved his wife, he was positively affected by it.'

In contradistinction to the Japanese passive this 'positive' construction is exactly symmetrical to its negative counterpart: there is no implication that the good event was accidental — it may well have been due to the beneficiary's request. This means that the Indo-European 'dative of good fortune caused by someone's action' is less specific than its Japanese counterpart: it covers both those cases when the benefactive action is a gift of fate and those where it is a result of the beneficiary's (expressed) wishes. As we have seen, Japanese allows passives only in the former case, having other means (the *-te morau* construction) for the latter.

The construction which grammaticalizes the concept of a misfortune due to an undesirable action performed by someone related to us is also not without analogues in Indo-European. Thus, just as one can say in Japanese:

Haha wa kodomo ni nakareta.
mother TOP child by cry-PSV-PAST
'The child cried; the mother was negatively affected by it.'

John wa hitori musume ni Amerikajin to kekkon
John TOP only daughter by American with marriage
sareta.
do-PSV-PAST
'John's only daughter married an American; John was negatively affected by it.'

one can say in Polish:

Dziecko mi płacze.
child to-me cries
'My child is crying; I'm negatively affected by it.'

Córka mi uciekła z domu.
daughter to-me ran-away from home
'My daughter has run away from home; I'm negatively affected by it.'

but not:

* *Dziecko mi się śmieje.*
child to-me laughs
* *Córka mi wróciła do domu.*
daughter to-me returned home.

One cannot, however, say in German:

* *Ihm weint das Kind.*
to-him cries the child

3.2 *Datives of affectedness*

Some Indo-European languages are also similar to Japanese in grammaticalizing (and grammaticalizing by means of the same morphological exponent) the concept of an action which affects someone both directly and indirectly (i.e. the concept of affecting someone by doing something to him or her). This covers, among other things, physical closeness and communicative gestures. Thus, both in Japanese and in French one has a choice between sentences like (a) and (b) below:

a. *Kare wa kanojo no ushiro o hashitte ita.*
he TOP she GEN behind ACC running was
Il courait derrière elle.
he ran behind her
'He was running behind her.'

b. *Kanojo wa kare ni ushiro o hashirareta.*
she TOP he by behind ACC run-PSV-PAST
Il lui courait derrière.
he to-her ran behind
'He was running behind her; she was affected by it.'

In both languages, this choice is restricted to sentences referring to

people:

a. *John wa densha no ushiro o hashitte ita.*
John TOP tram GEN behind ACC running was
Il courait derrière le tram.
he ran behind the tram
'He was running behind the tram.'

b. **Densha wa John ni ushiro o hashirareta.*
tram TOP John by behind ACC run-PSV-PAST
**(Le tram) il lui courait derrière.*
the tram he to-it was running behind

Similarly, both in Japanese and in French the speaker has the choice between:

a. *John wa Mary ni waratta.*
John TOP Mary at smiled
Jean souriait à Marie.
John smiled at Mary
'John smiled at Mary.'

b. *Mary wa John ni waraikakerareta.*
Mary TOP John by smile-PSV-PAST
Jean lui souriait à Marie.
John to-her smiled at Mary
'John smiled at Mary; she was affected by it.'

The idea that a person can be viewed as affected by things that happen to parts of one's body is grammaticalized in most Indo-European languages. (For a pioneering study of this phenomenon see Bally 1926; see also Hatcher 1944, Fillmore 1968, Kayne 1975, Wierzbicka 1976b, Chappell 1986b, Neumann 1987, and this volume, chap. 2.) The constructions in question can be illustrated by the following French sentences:

a. *Elle essuyait son front.*
'She wiped his forehead.'

b. *Elle lui essuyait le front.*
she to-him wiped the forehead
'She wiped his forehead; he was affected by it.'

This matches exactly the contrast between the Japanese sentences:

a. *Kanojo wa kare no hitai o fuita.*
she TOP he GEN forehead ACC wiped

b. *Kare wa kanojo ni hitai o fukareta.*
he TOP she by forehead ACC wipe-PSV-PAST

Both the French dative and the Japanese passive carry here the meaning:

> something happened to a part (Y) of someone's (X's) body
> because someone else (Z) did something
> one can think of it as something that happened to X

Different Indo-European languages differ from one another, to a greater or lesser degree, in the semantic constraints which they place on their 'bodily-effect constructions'. On the whole, however, they tend to require that the bodily-effect be localized, i.e. that a person be presented as affected by something that happens to a specified part of his body rather than to the body as a whole. In this respect, the Japanese passive is less restricted. Thus, Japanese sentences which present a person as affected (in an unspecified way) by something that has happened to a specific part of his body have exact equivalents in French or German, but those which present a person as affected by something that has happened to his body as a whole do not:

Kare wa kaze ni fukareta.
he TOP wind by blow-PSV-PAST
'He was affected by the wind.'
* *Le vent lui soufflait.*
the wind to-him was blowing

As I have pointed out in chapter 2, Japanese seems to interpret the concept of 'doing something to someone' more broadly than any of the Indo-European languages considered. Thus, the sentence:

Kare wa kirei na ko ni nakareta.
he TOP pretty girl by cry-PSV-PAST
'A pretty girl cried because of him; he was affected by it.'

cannot be translated into French as:

* *Une jolie fille lui pleurait.*
a pretty girl to-him cried

Furthermore, Japanese seems to be different from French in polarizing the effect under consideration as either 'good' or 'bad' — French sentences which present facts like physical closeness or communicative gestures as affecting the experiencer (addressee) imply an unspecified effect.

3.3 *Inanimate passives*

Inanimate (part/whole) passives also have analogues in Indo-European languages. Compare the following Russian sentences:

Vetvi u sosny slomalis' ot snega.
branches at pine-tree broke from snow
'The snow broke the branches of the pine-tree; the pine-tree was affected by it.'

Vetvi u berezy pokrasneli ot prilivšix sokov.
branches at birch-tree reddened from flowing-up juices
'The branches of the birch-tree reddened from the rising sap; the birch-tree was affected by it.'

Both in Japanese and in Russian the construction in question is rather heavily constrained. The extent to which these constraints overlap is a matter for further investigation.

The only Japanese passive constructions which do not seem to have close equivalents in the Indo-European languages considered are the passive of undesirable action involving one's property, the passive of undesirable local action and the passive of undesirable local event involving a person, which can be exemplified by the two readings of the sentence:

John wa Mary ni piano o hikareta.
'Mary played the piano; John was negatively affected by it.'

and by the sentence:

John wa ame ni furareta.
John TOP rain by fall-PSV-PAST
'John was negatively affected by rain.'

As I have pointed out, Polish has a dative of undesirable action, but this only applies to undesirable action performed by a related person and does not apply to undesirable action involving one's property. As for undesirable local events, the closest parallel that I am aware of exists in English. As Ross pointed out (commenting on a paper of McCawley's, see Fujimura 1973:339) one can say:

He was killed in a train wreck (in an explosion, in a car accident etc.)

but not:

*He was killed in a train arrival.

More significantly, perhaps, one cannot say:

*He was killed (cured) in an electric shock treatment.
*He was killed in a heart attack.

One might try to explain these puzzling facts by positing for English a 'passive of local event', similar — though not identical — to the Japanese 'passive of undesirable local event involving a person'. Its semantic representation would include the following components:

something happened to X
because something happened in the place where X was
not because someone did something

Ross suggested that the NP in this construction "must denote some kind of calamity". One might be inclined to reject Ross's suggestion without further ado on the basis of examples such as:

He was cured in a therapy session.
He was converted in a revivalist meeting.

I think, however, that Ross's position is not necessarily invalidated by examples of this kind because they can be argued to be cases of a different, though related, construction. The construction which Ross apparently had in mind can be described by means of the following formula:

$$N\ V\text{-}PSV\ in\ N_{in}\ N_{ev}$$

whereas the construction illustrated by the alleged counter-examples has to be described by the formula:

$$N\ V\text{-}PSV\ in\ N_{ac}\ N_{ev}$$

(where N_{in} stands for inanimate nouns, N_{ev} for event nouns and N_{ac} for action nouns). Thus, it seems conceivable and even likely that upon further investigation English will prove to have more than one (perhaps even more than two) different non-elliptical 'locative' passives. One of them may prove to be fairly close to one of the Japanese passive constructions. The whole problem requires, however, further study.

4. Conclusion

Traditional grammar was right in viewing morphological categories as multiply ambiguous (though it was deficient in its failure to define and separate the different meanings in precise and verifiable terms).

The explanation for this widespread (though by no means unlimited) polysemy of morphological categories seems quite simple. The number of meanings that the syntax of a language codifies is usually fairly large. The number of available morphological devices is usually much smaller. It is not surprising, therefore, that languages make the same morphological devices perform a variety of tasks. To say this is not to deny the importance of avoiding the postulation of false polysemies. But it is equally important not to overlook the polysemy which is really there. The different meanings of one form may be — and usually are — mutually related. This does not mean, however, that the differences between them should not be stated — provided that they can be stated clearly, and verified by observable facts. The similarity of the different meanings should then be accounted for in terms of common semantic components, not in terms of abstract *Gesamtbedeutungen* which do not fit exactly any of the empirically observable meanings (cf. Birnbaum 1986).

Seen against the background of these principles the Japanese passive has to be recognized as multiply ambiguous — or, in other words, multifunctional.

But if grammatical categories are as highly ambiguous as I have been suggesting, how do hearers manage to disambiguate them? How do they determine which particular meaning the speaker had in mind in any given utterance? It is of course a matter of empirical fact that while cases of real ambiguity (i.e. uncertainty on the hearers' part) do occur, in the vast majority of cases utterances contain a sufficient number of clues to guide the hearer towards the correct (i.e. intended) interpretation. By way of illustration let us survey quickly the clues which help to disambiguate the Japanese passive constructions.

One type of clue is based on the semantic categorization of verbs. Every speaker of Japanese can distinguish action verbs (i.e. verbs of doing, verbs which can be used in reply to the question "What did X do?") from event verbs (i.e. verbs of happening, which cannot be used in reply to the question "What did X do?", but which can be used in reply to the question "What happened?")

Another type of clue is based on the semantic categorization of nouns. In addition to distinguishing nouns referring to people from those referring to inanimate objects, language users can distinguish nouns referring to body parts from those referring to other objects, and nouns referring to parts of inanimate objects from those referring to things not thought of as parts of other inanimate objects. They can also distinguish nouns referring to individuals as such from nouns referring to personal relations. We can symbolize these distinctions as follows:

N_{ag} (potentially agentive, i.e. personal, nouns: *boy, poet*, etc.)
N_{in} (inanimate nouns: *car, bicycle, stone*, etc.)
N_{bp} (body-part nouns: *mouth, head*, etc.)
N_{ip} (inanimate, object-part nouns: *roof, pedals, handle, branch*, etc.)
N_{re} (relational nouns: *wife, sister, friend*, etc.)
N_{lp} (local phenomena nouns: *rain, wind, fire*, etc.)
V_{ac} (action verbs: *hit, kiss*, etc.)
V_{ev} (event verbs: *die, recover*, etc.)
N (nouns in general, unspecified)
V (verbs in general, unspecified)

When the different passive constructions of Japanese are defined in terms of these lexical classes as well as in terms of overt morphological exponents (verbal affixes and case particles) the scope of potential ambiguity shrinks considerably — especially in view of the requirement that two of the entities referred to in the sentence should be related. Thus, if the person (X) referred to by the topic of the sentence is presented as indirectly affected by an event, that event must involve either another person related to X (e.g. X's child), or an object belonging to X (e.g. X's house), or a place related to X (X's place, i.e. the place where X is).

These categories can be thought of as inherent 'syntactic features', but of course such 'syntactic features' are not something independent of and additional to the meaning of the nouns which they characterize: they are simply part of the meaning. This can be seen from the following rough definitions:

poet: SOMEONE who writes poems
bicycle: SOMETHING made by people for someone to be able to go from one place to another, two parts of which are wheels which move when that someone presses with his

feet some other parts of that something (cf. Wierzbicka 1985c)

head: PART OF THE BODY which can be thought of as being above the body (cf. Wierzbicka 1980a)

roof: PART OF SOMETHING made by people for people to be in, which can be thought of as being above the place inside (and protecting it)

rain: IN SOME PLACE water is falling in drops from the sky (not because someone did something)

X's neighbour: SOMEONE ONE CAN THINK OF AS RELATED TO X because this person and X live near one another

Relational nouns like *kodomo* 'child', *tsuma* 'wife' or *tomodachi* 'friend' play a crucial role here. For example, sentences like:

Haha wa kodomo ni nakareta.
mother TOP child by cry-PSV-PAST
John wa kirei na ko ni nakareta.
John TOP pretty girl by cry-PSV-PAST

are likely to be interpreted as belonging to different constructions (the passive of undesirable action performed by a related person and the passive of desirable or undesirable action involving another person) because the subject of the passive verb is relational in one case, and non-relational in the other.

It is still possible that some sentences will fit into more than one of the possible patterns. In such cases the hearer will have to construct, in his head, two or even more than two, alternative semantic representations of the utterances and see which of them fits best the given context. For example, the sentence:

John wa kodomo ni tabako o suwareta.
John TOP child by cigarettes ACC smoke-PSV-PAST

has three alternative interpretations: (1) John's child was smoking cigarettes (the passive of undesirable action performed by a related person); (2) a child was smoking John's cigarettes (the passive of undesirable action involving one's property); (3) a child was smoking cigarettes near John (the passive of undesirable local action).

As for the good/bad distinction, which plays such an important role in

the patterning of the Japanese passive constructions, it is extremely doubtful whether lexical items could be categorized along those lines. But there is no need to hypothesize such a categorization. For example, a sentence of the 'NP_{ag} *wa* NP_{ag} *ni* V_{ev}-PSV' type can only be interpreted as referring to a 'bad' situation. Naturally, a verb like *shinu* 'die' will seem more natural in this context than a verb like *naoru* 'recover', but the reasons for this are cultural, not linguistic. If a group of Japanese came to regard recovery from illness as a bad thing and death as a blessing, they would no doubt find the verb *naoru* more natural than *shinu* in that context.

To conclude: Morphological categories are highly ambiguous, but this does not hamper communication in the least because people do not go about shouting case endings or verbal affixes at one another. Syntactic constructions can be ambiguous, too, but their ambiguity is rather limited. (See Wierzbicka 1980b). The ambiguity of real utterances is even more limited, of course, because these always occur in context.

Summary of Japanese constructions

1. PASSIVE OF TRANSITIVE MISFORTUNE DUE TO FATE
   (e.g. *John wa tsuma ni shinareta*. 'John's wife died on him.'
   **John wa tsuma ni naorareta*. 'John's wife recovered on him.'
   **John wa ie ni moerareta*. 'John's house burned down on him.'
   cf. *Ihm ist die Frau gestorben*.)
   N_{ag} *wa* N_{re} *ni* V_{ev}-PSV ⇒
   something bad happened to someone (Y)
   one can think of it as something bad that happened to someone else (X)
   (one can think of Y as X's Y)

2. PASSIVE OF UNDESIRABLE ACTION PERFORMED BY RELATED PERSON
   (e.g. *John wa hitori musume ni Amerikajin to kekkon sareta*.
   'John's only daughter married an American; John was negatively affected by it.'
   **John wa musume ni kanemochi to kekkon sareta*.
   'John's daughter married a rich man; John was negatively affected by it.')

N_{ag} *wa* N_{re} *ni* V_{ac}-PSV ⇒
someone (Y) did something
that someone else (X) didn't want Y to do
one can think of it as something bad that happened to X
(one can think of Y as X's Y)

3. PASSIVE OF UNDESIRABLE ACTION INVOLVING ONE'S PROPERTY OR A PERSON RELATED TO ONE

(e.g. *John wa Mary ni kare no piano o hikareta.*
'Mary played John's piano; John was negatively affected by it.'
John wa hito ni tsuma o mirareta.
'People were looking at John's wife; John was negatively affected by it.')

N_{ag} *wa* N_{ag} *ni* N *o* V_{ac}-PSV ⇒
something happened to someone/something (Y)
that someone (X) didn't want to happen
because something else (Z) did something
one can think of it as something bad that happened to X
(one can think of Y as X's Y)

4. PASSIVE OF UNDESIRABLE LOCAL EVENT CAUSED BY ANOTHER PERSON

(e.g. *John wa Mary ni piano o hikareta.*
'Mary played the piano; John was negatively affected by it.')

N_{ag} *wa* N_{ag} *ni* N *o* V_{ac}-PSV ⇒
something happened in the place (Y) where someone (X) was
that X didn't want
because someone (Z) did something
one can think of it as something bad that happened to X

5. PASSIVE OF UNDESIRABLE ACCIDENTAL LOCAL EVENT

(e.g. *John wa ame ni furareta.*
'It was raining; John was negatively affected by it.'
* *John no booshi wa ame ni furareta.*
'John's hat was rained on; the hat was negatively affected.')

N_{ag} *wa* N_{lp} *ni* V_{ev}-PSV ⇒
something happened in the place (Y) where someone (X) was
that X didn't want
not because someone did something
one can think of it as something bad that happened to X

6. PASSIVE OF DESIRABLE OR UNDESIRABLE ACTION INVOLVING ANOTHER PERSON

(e.g. *Paama o kakete soto ni detara hito ni furimukareta.*
'When I went out after having a perm people turned to look at me.')

N_{ag} *wa* N_{ag} *ni* V_{ac}-PSV ⇒
someone (Y) did something that one can think of
as something that happened to someone else (X)
one can think of it as something good/bad that happened
to X

7. PASSIVE OF TRANSITIVE GOOD FORTUNE CAUSED, ACCIDENTALLY, BY ANOTHER PERSON

(e.g. *John wa raifu seebaa ni kodomo o tasukerareta.*
'John's child was rescued by a lifeguard; John was positively affected by it.'
John wa raifu seebaa ni bootoo o tasukerareta.
'John's boat was rescued by a lifeguard; John was positively affected by it.'
cf. *Le garde lui a sauvé son enfant.*)

N_{ag} *wa* N_{ag} *ni* N *o* V_{ac}-PSV ⇒
something good happened to someone/something (Y)
because someone (Z) did something
not because someone else (X) wanted it
one can think of it as something good that happened to X
(one can think of Y as X's Y)

7a. PASSIVE OF TRANSITIVE GOOD FORTUNE CAUSED, NON-ACCIDENTALLY, BY ANOTHER PERSON (*-te morau* construction)

(e.g. *John wa raifu seebaa ni kodomo o tasukete moratta.*
'John's child was rescued by a lifeguard because John wanted it; John was positively affected by it.')

N_{ag} *wa* N_{ag} *ni* N *o* V_{ac}-GER *morau* ⇒
something good happened to someone/something (Y)
because someone (Z) did something
because someone else (X) wanted it
one can think of it as something good that happened to X

8. PASSIVE OF TRANSITIVE MISFORTUNE CAUSED BY ANOTHER PERSON

(e.g. *John wa dareka ni tsuma o korosareta.*
'John's wife was killed by someone; John was negatively affected by it.'
John wa dareka ni ie o yakareta.
'John's house was burnt by someone; John was negatively affected by it.'
cf. *On lui a tué sa femme.*)

N_{ag} *wa* N_{ag} *ni* N *o* V_{ac}-PSV ⇒
something bad happened to someone/(something) (Y)
because someone (Z) did something
one can think of it at something bad that happened to someone else (X)
(one can think of Y as X's Y)

9. PASSIVE OF UNSPECIFIED BODILY EFFECT

(e.g. *Kodomo wa haha ni kata o dakareta.*
'The mother was holding the child's shoulders; the child was affected by it.')

N_{ag} *wa* N_{ag} *ni* N_{bp} *o* V_{ac}-PSV ⇒
something happened to part Y of someone's (X's) body
because someone else (Z) did something
one can think of it as something that happened to X

10. PASSIVE OF LOCAL EVENT AFFECTING AN OBJECT VIA ITS PARTS

(e.g. *Kuruma wa ressha ni baa o hikkakerareta.*
'The train pulled the bumper bar off the car; the car was negatively affected by it.')

N_{in} *wa* N_{in} *ni o* V_{ac}-PSV ⇒
something bad happened to a part (Y) of something (X)
because something happened in the place where X was
one can think of it as something bad that happened to X

5. Why can you *have a drink* when you can't **have an eat*?

1. Introduction

Why is it possible to *give the rope a pull* but not to **give the window an open?* to *give someone a kiss* but not **a kill?* to *have a drink* but not **an eat?* to *have a walk* but not **a speak?*

Facts of this kind are often dismissed as idiosyncratic, and thus not subjected to serious study. Transformational grammarians have sometimes worried about the kinds of trees which should be assigned to such periphrastic verbal constructions, but not about why some verbs can occur in them and some cannot — or why some verbs choose *have*, while others choose *give* or *make* (cf. Ross 1967:78-81). Givón's reference (1979:162) to the expressions *give a kiss, give a kick* etc. as idioms reflects a widely-held view;[1] see also Sapir 1931, Prince 1974.[2]

The purpose of this chapter is to show that in fact such verbal expressions, far from being idiosyncratic, exhibit highly systematic behaviour, are governed by strict rules, and constitute a vital part of English grammar. The rules in question are semantic in nature, and reflect different possible conceptualizations of the same situation. If the grammar of a language is seen as a set of rules to generate sentences, regardless of their meaning, then either expressions like *give someone a kiss* will never be generated, or expressions like **give someone a kill* will never be blocked. There is a difference in meaning between *kissing someone* and *giving someone a kiss*, between *walking* and *having a walk*. The task of predicting which verbs have a *have a V* counterpart, which have a *give NP a V* counterpart, which have both, and which have neither is inseparable from that of stating these semantic differences. In fact, the expressions under consideration provide a striking illustration of the futility of all dreams of a non-semantic generative grammar: only a semantically-based grammar can be TRULY GENERATIVE (i.e. PREDICTIVE).

It must be emphasized, however, that semantic rules of the kind studied here are subtle, and harder to bring to consciousness than purely formal rules like those governing agreement or inflectional morphology. This does not mean that such rules are not firm and reliable. They are remarkably so in guiding speakers in their usage, at the unconscious level; but people's JUDGMENTS about these rules are less reliable, and must always be taken with a grain of salt.

A major difficulty lies in the fact that almost any violation of semantic rules can occur in real speech. Creativity, vividness, and humor in speech are achieved largely through violating semantic rules. For this reason, the traditional linguistic question 'Can one say X?' is not a reliable tool in investigating the semantic aspect of grammar. Semantic and grammatical intuitions require two different methodologies for elicitation and analysis. To some linguists this may seem an obvious point; however, in my experience getting it across is often difficult. The widespread insensitivity on this score is closely linked with the belief that semantics is a vague area, not governed by any precise and clearly statable rules.

Furthermore, we must recognize the rule-governed nature of differences in acceptability which cannot be tied to grammatical or lexical differences, but depend on something less tangible. Compare the following sentences (which will be discussed below):

John had a lick of Mary's ice cream.
?Fido had a lick of his master's hand.

This apparently bizarre contrast is in fact perfectly logical and orderly. But the rule which governs it cannot be stated in terms of grammatical and lexical categories alone: it must be stated as a semantic formula which refers to the whole sentence. Such semantic formulae must reflect not only objective features of the situations described (the so-called 'referential' or 'cognitive' meaning), but also the interpretation imposed on them by the speaker. To have full generative (or interpretative) power, the 'structural descriptions' of syntactic constructions must include detailed semantic specifications, taking into account subtle aspects of conceptualization. To state such detailed semantic specifications in a non-ad-hoc way, one needs an independently justified semantic metalanguage.

2. Periphrastic verbal construction with *have* defined

Have is a ubiquitous verb in English. To examine all its different uses and functions would require several bulky volumes. This chapter is limited to one subset of that vast field: the periphrastic verbal constructions. We will look only at expressions in which *have* is combined with a verb stem of the same form as the stem of the infinitive. Formally defined, the constructions under consideration have the form 'NP *have*+AUX *a* V-INF' (where 'NP_1 *had a* V' implies 'NP_1 V-*ed*'). This excludes expressions like *They had an argument*, or *He had a thought* or *a stomach-upset* or *a good dinner*, in which *have* is combined with a deverbal NOUN. Furthermore, it excludes expressions in which *have* is combined with a deverbal noun even when the noun happens to be identical with the stem of the infinitive, but can be proved to be a noun with a zero suffix, rather than a verb stem functioning as a verb. In other words, the verbal stem in sentences like *He had a swim* or *She had a lie-down* is not a noun, despite the fact that it combines with an indefinite article; and it can be distinguished from deverbal nouns with a zero suffix, e.g. *smile, cough*, or *quarrel* in *She has a nice smile; He has a nasty cough; They had a quarrel*.

One could prove the nominal character of the words *smile, cough*, and *quarrel* in the sentences above by showing that these sentences, too, illustrate productive structural patterns — but ones which require NOUNS, not verb stems. Thus one can *have a nasty cough*, but one can also have a headache, pneumonia, glandular fever, a tummy upset, or a severe cold. In short, one can HAVE an illness. The morphological structure of the noun *cough* (N = V-INF) is quite accidental, and is irrelevant from the point of view of its combinability with *have*. The construction IS productive; but it must be represented by the formula 'NP_{human} *has* (*a* ADJ) $N_{illness}$', not by 'NP_{human} *has a* V-INF'.[3]

Expressions like *a pleasant laugh* or *an engaging smile* illustrate another construction where the predicate word must be regarded as a noun, not a verb. This construction, too, is productive, in that any bodily manifestation of the personality can be described in a frame '*have a* $ADJ_{evaluation}$ N':

John has a pleasant voice.
Mary has graceful movements.

But it does not come under the formula '*have a* V-INF':

She has a nice way of walking (?a nice walk).
She has graceful movements (*a graceful move).

Again, *having a quarrel* differs from *quarrelling* in exactly the same way as *having an argument* differs from *arguing*. This means that *quarrel* is a noun, just like *argument*, despite the difference in the form of the suffix (*-ment* vs. zero). *Having a quarrel* and *an argument* both belong to another productive *have* construction: one in which *have* combines with nouns referring to continuous purposeful reciprocal action.

I also exclude from the discussion sentences like this:

Mary had a visit from her in-laws.

Here the action of the verb 'visiting' is attributed to someone other than the subject. It is arguable that the word *visit* in the sentence above is a noun, not a verb. The construction illustrated by the example above is perhaps productive, but it requires action nouns, not verbs:

Mary had an invitation (*invite) from her in-laws.
Mary had a proposal (*propose) from John.

The semantic constraints on this construction would be interesting to investigate; they remain, however, beyond the scope of the present study.

This chapter, then, describes *have* constructions with a verbal (infinitival) stem, e.g. *have a swim, a lie-down, a look, a cry, a wash, a drink, a sip, a cuddle, a chat,* and *a try*. It explains contrasts such as these:

have a lie-down	*have a kneel-down
have a drink	*have an eat
have a try	*have a manage
have a look (for)	*have a find
have a read	*have a write
have a scribble	

Below, I will postulate semantic rules which predict which verbs have periphrastic *have* counterparts, and what the difference in meaning will be between the simple verb and its periphrastic counterpart. (I leave aside semi-idiomatic expressions like *have a go* or *a feed*, which do not have simple-verb counterparts: *X had a walk* implies that *X was walking*; but *X had a go* does not imply that *X was going*, and *X had a feed* does not imply that *X was feeding*.)

Finally, two general points should be made. The first concerns the considerable dialectal differences in the use of the *have a V* frame, especially

between American English and British or Australian English. In particular, the frequency of use, and hence the importance, of this construction in British or Australian English is far greater than in American English, which makes much greater use of the related *take a V* construction (discussed in section 6 below). In Australian English, in particular, the *have a V* construction constitutes a fundamental part of everyday talk. Furthermore, the constraints on the use of the *have a V* frame are more severe in American English than in British or Australian English. It would seem that they are particularly lax in Australian English. For example, expressions like *have a read* or *a kick of the football* are usually rejected by native speakers of American English, but are very frequent in Australia.

My second caveat concerns stylistic constraints on the *have a V* construction. In all dialects, the construction is highly colloquial; technical or high-style verbs cannot be used in it at all. Thus one can *have a pee*, but not **a urinate*; one can *have a think*, but not **a contemplate*; one can *have a chat*, but not **a converse*. These stylistic constraints are not totally independent of semantic factors — because, as we will see later, the *have a V* frame implies a subjective and experiential perspective; it is incompatible with the factual and objective perspective implied by technical or scientific terms, which concentrate on observable events and ignore the experiences or attitudes of the person involved. In what follows, non-colloquial verbs will not be discussed.

3. The over-all semantic invariant of the *have a V* construction

One clear semantic difference between simple-verb and *have a V* constructions is aspectual: the periphrastic construction presents the action (or the process) as limited in time. If one swam for ten hours, one would hardly be said to have *had a swim*; if one spent ten hours in bed, one would hardly be described as having *had a lie-down*. Moreover, one cannot say *?I had a long lie-down* or *a long shave* or *a long look at the letter* or *a long smoke*. Note that one CAN *have a long walk* or *a long swim*; however, *walk* and *swim* are verbs referring to movement in space, and *long* in combination with them refers to space rather than time. The unacceptability of **He had a long swim in his tiny pool* or *a long walk in his 10-by-12 cell* proves that *long* refers to space, not time, with these verbs. This analysis is supported by the fact that while one can *have a long walk* and *a long swim*, one can hardly *?have a lengthy walk* or *a lengthy swim*. Yet NOUNS referring to

actions do combine with both *long* and *lengthy*:

They had lengthy discussions.
They had a lengthy meeting.
He made a lengthy speech.
They had lengthy negotiations.

It is true that one can also *have a long chat*, perhaps even *a lengthy chat*. But *chat* (which will be discussed in more detail below) fits not only the *have a V* construction, but also the construction '*have a N* [continuous, purposeful, reciprocal, action]', which includes nouns like *argument* and *discussion*. One can *have a long chat* as one can *have a long argument* or *a long discussion*. One cannot, however, *?have a long lie-down* or *a long look* (at something), because *lie down* and *look (at)* fit none of the *have a N* constructions; and the *have a V* construction, which they do fit, is incompatible with the idea of a lengthy period of time.

In summary, the *have a V* construction implies that the action goes on for a limited, and in fact rather short, period of time. But it cannot be momentary: it must go on FOR SOME TIME, though not for a very long time. Verbs which cannot take adverbial expressions indicating duration, e.g. *for ten minutes*, cannot occur in this frame: thus **She was getting up for ten minutes; *She had a get-up*.

Furthermore, the action reported in a *have a V* frame cannot have an external goal: it must be either aimless, or aimed at some experience of the agent. The (b) sentences below have external goals, and are less acceptable:

a. John had a walk around the town.
b. ?John had a walk to the post office to post a letter.
a. John had a read (of Mary's letter, of his favorite novel).
b. *John had a write (of a letter to Mary, of his novel).
a. Go outside and have a play.
b. ?Go inside and have a work.

All these facts can be explained if we assume that the *have a V* frame specifically excludes a goal different from the agent himself: if the agent does something in order to affect some other object, then the *have a V* frame cannot be used. One WRITES a letter in order to cause a letter to come into existence, to transform a sheet of paper into a letter (which can be sent to someone); but one READS a letter to cause oneself to know what it contains, and one reads a novel to have a worthwhile experience, to occupy

one's mind, etc. Similarly, PLAYING is aimless, or self-oriented; but WORKING — by definition — has a goal. Walking can be either aimless or motivated by an external goal; but only when aimless can it be described in a *have a V* frame. Even lying down can be externally motivated, but *having a lie-down* cannot: when a soldier lies down in a ditch to prevent an enemy patrol from seeing him, he is not *having a lie-down*. Furthermore, the action described in the *have a V* frame is viewed not only as lacking an external goal, but also as having a potential INTERNAL goal. An action which would have no external goal, but which is described from outside — from the point of view of an external observer, rather than from that of someone who interprets and empathizes — would not be reported in the *have a V* frame either. Thus (a) below is more acceptable than (b):

a. I noticed several women lying down on the ground.
b. ?I noticed several women having a lie-down on the ground.

Finally, the action (or process) must be seen as repeatable. Having a swim (or a read, or a try) is something that can be done again and again. There is something arbitrary about the length of a walk, a lie-down, or a read. Since these activities (when reported in a *have a V* frame) are aimless, devoid of any external goal, they can not only be extended or terminated at will, but can also be resumed at will. Thus actions which cannot be repeated cannot be described in a *have a V* frame. For example, the contrast of *have a bite* or *a lick* or *a taste* vs. *?have an eat* may result at least partly from the contrast in repeatability of the actions in question. One could bite John's sandwich, or lick his ice cream, or taste his soup — not once but twice, or more — but one could eat his sandwich only once.

As a first approximation, then, I postulate the following semantic invariant:

X had a V ⇒
  for some time, not a long time, X was doing something (V)
  it could cause X to come to feel/know something
  X was doing it not because X wanted anything to happen to anything other than himself
  X could do it more than one time

In accordance with my general approach to semantic analysis, I have expressed this invariant without technical terms, in a metalanguage derived exclusively from natural language (in this case, English) and, therefore, intuitively understandable and verifiable — remote though it may be from

natural and idiomatic English.

A translation into a more conventional metalanguage could read: "The *have a V* construction is agentive, experiencer-oriented, antidurative, atelic, and reiterative." To many linguists, conventional labels of this kind seem not only more 'scientific' but also clearer, easier to understand than paraphrases using simple and naïve-sounding words like *something, want*, or *happen*. Let me stress that my paraphrases are not meant to be easy to read — or idiomatic, or stylistically smooth. But I maintain that they are in principle intelligible and intuitively verifiable. Not everything can, or should, be defined; but as Leibniz pointed out, it is crucial that the ultimate units of analysis, which are not defined, should be intelligible *per se* (Couturat 1903:430). Labels such as 'telic', 'agentive' and 'durative' are not intelligible *per se*; they themselves must be defined. But concepts like *something* and *want* cannot and need not be defined; and concepts like *happen, do,* and *because*, though definable, are relatively simple and intuitively clear.[4]

It is not difficult to see which morphological markers are responsible for the individual semantic components included in the formula above. The indefinite article combined with the verb stem has a delimiting and singularizing effect: it suggests a portion of the activity which could be pluralized or repeated. (I speculate that the bareness, and therefore the shortness, of the verb stem has an iconic effect, emphasizing the limitation of the time of the action (cf. Haiman 1985). Those speakers who allow both *giving the blankets an air* and *an airing*, or both *giving the furniture a dust* and *a dusting*, report that the bare stem-form suggests to them an activity or process shorter than that implied by the *-ing* form; they would prefer to *give the blankets a quick air* and *a good airing* rather than vice versa.)[5] Below I will argue that the verb *have* in the *have a V* construction contributes to the elimination of any external goals, and to the concentration of the speaker's attention on the experiences of the person involved in the situation, to the exclusion of everything else.

The proposed formula explains why one cannot say **The book had a lie-down on the table*: the book is not a person, and is not doing anything. It explains why one would not say **Lazarus had a lie-down in his grave*: Lazarus WAS a person, but when lying in his grave, he was not DOING anything; he was not maintaining himself in a lying position by his will. It explains why one cannot say **John had an arrive* or *a depart: arrive* and *depart* are not durative verbs; in other words, *arriving* and *departing* are not

things which one could go on doing 'for some time' (cf. *John walked for ten minutes* but **John arrived for ten minutes*). It explains why one cannot **have a kill of the chicken* or *a break of the mirror* (one cannot kill the same chicken or break the same mirror twice). It explains why one can *have a bite of a sandwich* but not **of John*: if John is being nasty, Jimmy could *bite* him but not *have a bite* of him — because *having a bite* of something, like *having a V* in general, cannot have a goal other than the agent himself.

The semantic formula proposed here as the semantic invariant of the *have a V* construction has considerable predictive power. It does not, however, have FULL predictive power. The filter it provides is not strong enough: many *have a V* phrases would slip through which in fact are not acceptable; e.g.:

a. John had a lie-down.
b. ?John had a kneel-down.

Intuitively, the reason (b) is odd is quite clear: expressions like *have a walk, a lie-down*, or *a swim* imply that the activity is enjoyable, or potentially good for the agent; but kneeling down is not necessarily so. A person confined to bed for a long time could be allowed not only to *have a sit* (for a change), but also to *have a stand-up* (and possibly even *a kneel-down*). But this very need for contextualization provides evidence for a difference between expressions like *have a swim* and *?have a kneel-down*. For some speakers, even the expression *have a walk* is awkward, and less acceptable than *have a stroll*. This fact points in the same direction: strolling is thought of as not only an idle but also a pleasurable activity, one which could cause the agent to feel good.

If the non-existence of expressions like *?have a kneel-down* points to a certain inadequacy of the initial semantic formula, it would seem very easy to remedy this. Apparently, we need only add to our formula one further component: (person X was doing something) 'which could cause X to feel good'. And indeed, *have a walk, a swim, a lie-down* (and many other *have a V* expressions) DO need this additional component. However, we cannot postulate this component for ALL instances of the *have a V* construction; e.g.:

Have a look at this file, would you.
It's awful — just have a listen!
She is a horrible cook — just have a taste of this!

It is clear that *having a look, a listen*, or *a taste* (in contrast to *having a walk,*

a swim, or *a lie-down*) do not imply the possibility of an enjoyable, relaxing, or invigorating effect. Does this mean that at least SOME semantic differences between simple verbs and their counterparts in the *have a V* frame are idiosyncratic, and must be listed in the lexicon?

The rest of this chapter argues that the differences in question are NOT idiosyncratic — that they CAN be described by general rules. In fact, the examples considered so far suggest one such rule rather clearly. Verbs of perception behave differently in one respect from verbs of bodily action: the latter, in the *have a V* frame, imply an action 'which could cause one to feel good'; the former imply an action 'which could cause one to find out (to come to know) something about something'.

One could argue that in the two cases the effect of the *have a V* frame is analogous: it shifts the focus from the action to the potential effect of that action on the agent; moreover, in both cases, it implies a beneficial effect (since obtaining knowledge, too, would be generally described as something good rather than bad). This is true — and, as will be seen later, not surprising, given the semantics of *have* (see section 8 below). Nonetheless if our semantic formulae are to have full predictive power, we must specify in them the kind of benefit implied both by the perception verbs in the *have a V* frame and by the (intransitive) bodily-action verbs used in that frame. Without knowing English, we could not predict that *having a look* does not imply a potentially enjoyable or therapeutic effect in the same way as *having a swim*; we could not deduce it from general principles of universal grammar, human nature, or anything else. The difference between the two subtypes of the *have a V* construction discussed here is natural and understandable; but it remains an empirical fact about English, and must be recorded in the grammar of English.

This means that the *have a V* construction, with its over-all semantic invariant, must be divided into certain subtypes, with their own additional semantic components. So far we have seen two such subtypes, and in what follows I will argue for others. The list of these subtypes is finite, and the conditions governing each of them can be stated in precise, general terms. For each subtype, I propose a semantic formula with full predictive power. For each subtype, moreover, I explain how and why it departs from (or, rather, adds to) the over-all semantic invariant by appealing to the inherent logic of the semantic sub-domain in question. I will also try to show that the differences between the individual subtypes are not entailed by the semantic differences between the verbs alone, but rather by differences between

the relevant semantic domains. I begin with the two subtypes which have already been briefly discussed: *have a swim* and *have a look*.

4. Subtypes of the *have a V* construction

4.1 *Aimless objectless action which could cause one to feel good*

The syntactic formula is:

NP	*have*+AUX *a* V-INF	*MOD[atelic→telic]
human	intransitive (one argument)	
	intentional	
	atelic (*in time *t*)	

Examples are *have a walk, a swim, a run, a jog, a lie-down.*

The verbs in this sub-construction are intransitive; they do not require a second argument, except to designate place. (We will see below that some intransitive verbs can be used in the *have a V* frame as two-argument verbs.) They either require or at least allow an agentive interpretation. If a verb allows an agentive interpretation without requiring it, the *have a V* frame will by itself impose this interpretation (hence the humorous effect of *Lazarus had a lie-down in his grave*). The verb must be durative; i.e., it must allow an adverbial modifier of the 'for time *t*' type. Moreover, it must be atelic; i.e., it cannot refer to any activity which has a natural boundary in the form of an attainable goal, and consequently it cannot allow modifiers of the 'in time *t*' type (cf. Dowty 1979). For example, one cannot **have a get-up* or *a turn-around* — presumably because *get up* and *turn around* are telic verbs (one CAN say *It took the sick man several minutes to get up*, or *It took him a long time to turn around*, but one cannot say **It took him ten minutes to walk*).

Admittedly, intransitive verbs are seldom telic; however, they can easily be MADE telic by means of adverbial modifiers, i.e. they can be used in telic verb phrases. For example, *walking* is atelic but *walking to the post office* is telic (*He walked to the post office in ten minutes* is perfectly acceptable). As has already been pointed out, one can *have a walk*, but one cannot **have a walk to the post office*. Hence the need for the element '*MOD[atelic→telic]', in the formula: the sentence with a periphrastic verbal construction with *have* cannot contain a modifier which would change an atelic verb into a telic verb phrase.

As noted, the activity described in the *have a V* frame cannot have an external goal. This requirement must be distinguished from that of atelicity, because one could conceive of an activity which would lack a natural boundary but still have an external goal. Thus the verbs *work*, *practice*, and *study* are atelic; one cannot say:

*John worked in half an hour.
*John practiced in half an hour.
*John studied in half an hour.

But neither can one say these, at least not in the relevant sense:

*John had a work.
*John had a practice.
*John had a study.

This is presumably because work, practice, and study are, by definition, purposeful.

In general, only two kinds of intransitive verbs of intentional action sound truly natural in the *have a V* construction: first, verbs whose very meaning implies aimlessness (*play*, *stroll*, perhaps *daydream*), and, second, verbs referring to activities which are generally regarded as recreational or relaxing (in particular, those involving the whole body, such as *walk*, *swim*, *lie down*). One could hardly **have a speak* or *a hint* or *a pray*: the verbs *speak*, *hint*, and *pray* do not imply aimlessness; and speaking, praying, and hintting are not regarded as recreational activities.

Not all sentences in the *have a V* frame, of course, meet the conditions stated here. However, the present section is concerned only with intransitive one-argument verbs of intentional action. Other verbs and other semantic domains have slightly different semantic conditions and will be discussed separately. For the present type, I postulate the following semantic formula (numbers refer to Summary at end of chapter):

(1) X had a walk. ⇒
for some time, not a long time, X was doing something (V)
it could cause X to feel good
X was doing it not because X wanted anything to happen to anything other than himself
X could do it for as long as X wanted
X could do it more than one time

This does not mean that the activity which went on for an arbitrary length

of time WAS enjoyed, or that the agent undertook it in order to feel pleasure. One could *have a swim* or *a run* even if one found the activity exhausting and not particularly pleasurable. Nonetheless, swimming and running can well be thought of as invigorating, healthy, and conducive to feeling good.

4.2 *Action aiming at perception which could cause one to know something and which would not cause one to feel bad if it didn't*

The syntactic formula is:

NP	*have*+AUX *a* V-INF	(PREP + N)
human	two arguments	concrete

Examples are *have a look (at), a listen (to), a smell (of), a feel (of), a taste (of).*

This subtype includes sentences with transitive or semi-transitive agentive perception verbs:

John had a look at the file.
Strange mushrooms — have a smell!

All the verbs meeting the 'intention + perception' requirement are durative. The telic/atelic distinction is not clearly applicable here. In a sense, activities like listening or smelling can go on indefinitely, if the sounds and smells persist. But how long could one go on tasting soup? Presumably after a while, the tasting would have to be reclassified as eating. The *have a V* frame entails a more, not less, telic interpretation than the simple verb; (a) below is, if anything, more acceptable than (b):

a. I had a look at all the files in just ten minutes.
b. ?I looked at all the files in ten minutes.

The reason the requirement of atelicity, which applies to the bodily-action verbs, does not apply here, is quite clear: the sensory action aimed at knowledge does, in a sense, have a natural boundary. One *has a taste of the soup* or *a look at the file* to find out something about the soup or the file. Once one has found out what one wanted, the activity should cease.

I suggest that, while all perception (by definition) leads to cognition, the *have a V* frame emphasizes the cognitive component of perception verbs. Thus one could be looking at something fairly aimlessly, without trying to find out anything about it (although the mind would be registering

some properties of the object). But when one *has a look at* something, the construction itself emphasizes the cognitive, knowledge-seeking aspect of the sensory action: usually one *has a look at* something in order to find out something about it. In fact, the expression *have a look at* is often used in the sense of 'examine briefly and superficially'. However, expressions like *have a look at* or *a listen to* do not always imply a cognitive goal on the part of the agent; rather, they emphasize a potential information gain. In other words, I posit for these expressions the component 'X was doing something that could cause X to come to know something about Y', not 'X was doing something BECAUSE X wanted to come to know something about Y'.

As pointed out above, the *have a look* subtype does not imply that the activity could cause the agent to feel good. Nonetheless, it is agent-oriented, because it emphasizes the agent's experience or potential mental gain. Moreover, the *have a V* frame adds to the meaning of the verb the idea of a half-hearted and not totally serious effort. It is no accident that one can *have a look at something*, but not **have a watch of something, an observe of something*, or *an inspect of something*. The expression *have a look at* (*a listen to* etc.) seems to suggest a lack of zeal and commitment. To account for this, we might postulate for this subtype the following semantic component: 'X would not feel anything bad if X did not come to know anything about Y because of that'.

Furthermore, although the verbs of this subtype are transitive (or semi-transitive, with a prepositional object), and although the action described by them has a 'patient' as well as an agent, in fact the 'patient' is not affected by the action at all. Moreover, although for most speakers this subconstruction does allow the occurrence of *of* phrases specifying a patient, its most natural use is without an *of* phrase — i.e. either with an *at* or *to* phrase, or with no explicit patient phrase at all:

Have a look (at this)!
Have a listen!
Have a smell!
Let me have a look (listen, smell, taste)!

This is a further sign of a conceptual backgrounding of the patient. Thus the sentences in question are focused entirely on the agent and his mental gain, not on anything that is happening to the object.

The meaning conveyed by *have a V* sentences of this subtype can be represented by the following formula:

(2) X had a listen (to Y). ⇒
for some time, not a long time, X was doing something (V)
it could cause X to come to know something about Y
X would not feel anything bad if X did not come to know anything about Y because of doing it
X was doing it not because X wanted anything to happen to anything other than himself
X could do it more than one time

Note that this formula is met not only by sentences containing perception verbs in the strict sense (*look, smell, listen*), but also by many other verbs whose meanings do not specify perception, but merely allow the INFERENCE that perception was involved; e.g.:

a. John had a lie-down on the new bed to see if it was comfortable.

We have already seen that the verb *lie down*, when used as a one-argument verb, fits the bodily-action subtype; it therefore implies an action conducive to feeling good. However, when used as a two-argument verb, as in the example above, it fits the specifications of the perception type; it therefore presents the action as conducive not to feeling good, but to coming to know something about the object. Similarly:

b. John had a walk around the garden.
c. (Mother to son in a shoe store:) Johnny, have a walk around in these boots — we must make sure that they are really comfortable.

Example (b), in which *walk* is used as a one-argument verb, presents walking as a potentially enjoyable activity, but (c), in which *walk* is used as a two-argument verb, does not; rather, it presents walking involving object Y (the boots) as conducive to obtaining knowledge about particular properties of that object. In both (a) and (c), the knowledge is expected to come through bodily experience — i.e. through perception, not through verbal channels. These examples show that the semantic differences between the two subtypes do not follow from the semantics of the verbs. The same verb can fit two different subtypes; and if it does, it acquires two possible interpretations. It is not the verb, then, which imposes a specific interpretation on the particular instance of the *have a V* construction; rather, the particular instance of the *have a V* construction imposes a particular interpretation on the verb. Different subtypes of the *have a V* construction must be defined both in terms of certain SYNTACTIC features

of the entire sentence (such as the number of arguments) and of semantic domains — again defined over the entire sentence, not simply in terms of lexical choices.[6]

4.3 *Tentative action which could cause one to come to know something and which would not cause one to feel bad if it didn't*

The syntactic formula is:

NP	*have*+AUX	*a* V-INF	(PREP + NP)
human		intentional	
		two arguments	
		tentative (finding out)	

Examples are *have a try, a look for, a think about*.

This subtype is closely related to the preceding one, and it is not entirely clear that the two should be distinguished: both could perhaps be subsumed under the heading 'action which could cause someone to know something'. In the first, the agent performs an action which could give him — via his senses — knowledge about some object. In the second, the agent could obtain knowledge — but not necessarily via his senses. However, if trying, looking for something, or thinking about something could give us knowledge, then this knowledge would also be acquired directly, through personal action and personal experience, not verbally (through being told by others). We could therefore subsume the two subtypes under the following formula: 'X was doing something which could cause X to come to know something about an object not because someone said anything about that object'. I prefer, however, to describe the two subtypes separately — partly for clarity, and partly because of a minor difference between them which will be discussed below.

Let us consider more closely pairs like *look for something* vs. *have a look for something*, or *try* vs. *have a try*. One obvious and familiar difference concerns the duration of the action: one could look for something (or someone) for hours, even for weeks and months; but *having a look for something* — even *having a good look for something* — cannot be similarly extended in time. Similarly, one could try to do something (e.g. to lose weight) for weeks and months; but *having a try* implies a limited, brief period.

The verbs included in the present subtype are durative, but not necessarily atelic. One could indeed be trying to do something (or be looking for

something) indefinitely, if one were unlucky. But if one succeeds, or finds what one has been looking for, then the activity has reached a natural boundary and cannot be continued.

However, the differences between *looking for* and *having a look for* (or *trying* and *having a try*) go even further, paralleling those between *looking at* and *having a look at*; e.g.,

a. Harry tried to commit suicide.
b. ?Harry had a try at committing suicide.

The (b) example sounds odd (or ironic) because the *have a V* frame emphasizes the cognitive aspect of the action: one usually *has a try* in order to find out whether one can do it. But when one tries to commit suicide, one could scarcely be aiming at self-knowledge (because one would never know if one passed the test successfully).

When one *tries* to do something, one could be desperately keen to succeed; but one who *has a try* seems not to care greatly — he is more interested in finding out whether or not he can do it than in actually doing it. At any rate, this is how the speaker interprets the situation. Thus I postulate for *having a try* the same 'cognitive' component which was postulated for *having a look at:* 'X was doing something which could cause X to come to know something'.

It might be objected that, since one can *have a try* but not **an attempt*, and since *try* and *attempt* are synonymous, the contrast between the two must be idiosyncratic, and not predictable from the meaning. I argue, however, that this objection is unfounded because the assumption of full synonymy between the two verbs is unwarranted. *Attempt* attributes to the agent a desire to succeed; *try* is compatible with that desire, but does not imply it. The subtle semantic difference between the two verbs is highlighted by sentences like:

I tried (*attempted) adding some curry powder to it, but it didn't help.

When one tries doing something, one wants to SEE (to come to know) the effect of doing it; but *attempt* cannot be used in that sense. It is also interesting to note the semantic shift from *try* to *try on:* one tries on a dress, not in order to have it on, but in order to see — to find out — if it fits. I am not saying that the verb *try* INCLUDES in its meaning the component 'because X wanted to come to know' or 'which could cause X to come to know' (this would preclude sentences like *He tried to commit suicide*): I am only

saying that *try* is COMPATIBLE with that component, and that this is why it can occur in the *have a V* frame. *Attempt*, however, is not compatible with that component because it presents the agent's desire to succeed as his sole motive for action; thus it cannot occur in the *have a V* frame.

Let us consider briefly some other verbs which would fit the subtype under discussion. One can *think about Mary* and *of Mary*; and one can *think about a problem* or *of a problem*. But while one can also *have a think about a problem*, it sounds odd to say *?have a think about Mary*, and odder still to say *?have a think of a problem* or *of Mary*. That is, *thinking of X* can be aimless; but *having a think* is purposeful, goal-oriented. The goal, however, is not external. Recall that the *have a V* construction excludes any orientation toward an external goal, and this was represented as part of the over-all semantic invariant shared by all the subtypes: 'X was doing it not because X wanted anything to happen to anything other than himself'. *Having a think* is not a counter-example. One *has a think about* something when trying to make up one's mind, to reach a stand, to arrive at a decision — in short, when trying to determine (to come to know) what one would want to say about it. The goal is internal, mental, cognitive.

Similarly, when one *has a look for* something, one tries to find it; i.e., one wants to COME TO KNOW where the object is. At any rate, the verbs under consideration are compatible with that interpretation; the activities specified could cause the agent to come to know something about something.

I have called the present subtype 'tentative action which could cause one to know something'; and indeed, the expressions included here can all be paraphrased in terms of *trying*. Thus *have a look for Y* means (or implies) *try to find Y*; and *have a think about Y* means (or implies) *try to make up one's mind about Y*. As was pointed out above, one can *have a try*, but not **a succeed*; one can *have a look for something*, but not **a find of something*; one can *have a think about something*, but not **a decide*. This is partly explained by the requirement that the action be durative. But it seems that the tentativeness of the action is a factor: it further shifts the attention from the result to the desire, from the object to the agent/experiencer. If we hear that X *is looking for Y*, we learn something about X, but nothing about Y. If, however, the verb or the sentence implies that the agent is very determined to achieve his goal, and that he is likely to achieve it, then the *have a V* frame ceases to be suitable:

?The police were having [rather than *carrying out* or *conducting*] a search for the lost child.
??John was having a pursue of Mary.

Similarly, one can *have a think* about a problem, but hardly **a study* of the problem. A mother can *look for a child* when she is anxious to find him; but she would *have a look for him* only if her attempt was half-hearted. One *has a look for* (someone or something) only if one is prepared for a negative result, and would not be upset by it.

Thus, to qualify for the *have a V* frame, the action must be described solely from the point of view of the agent/experiencer. At the same time, it seems clear that expressions like *have a try, a look for, a think* do not imply that the activities in question are enjoyable or conducive to feeling good (as described under section 4.1). Nonetheless, the common theme persists: here, too, the *have a V* frame implies a potential mental gain for the agent. I postulate the following semantic formula:

(3) X had a look for Y. ⇒
for some time, not a long time, X was doing something (V)
it could cause X to come to know something about Y
X knew that X might not come to know anything about Y because of that
X would not feel anything bad if X didn't come to know anything about Y because of that
X was doing it not because X wanted anything to happen to anything other than himself
X could do it more than one time

Note that there are two differences between this formula and the one assigned to the *have a look at* type (section 4.1). One difference concerns the presence of an object. One might argue that to *have a think about* something (or *a look for something*) does not entail doing anything to the object in question — that the object is not involved in the action in any way, and that it need not be there. By contrast, *having a look at* something (or *having a smell of* something) entails coming into contact with the object and, in some sense, 'doing something to that object'.

The second, perhaps more serious difference, concerns the agent's awareness of the tentative character of the action. While both the *have a look at* and the *have a look for* types imply a somewhat indifferent attitude, the latter seems also to suggest an awareness that the result of the action

might be negative. This aspect of this type has been represented by means of the component 'X knew that X might not come to know anything about Y because of that'. It is hard to decide, however, whether this awareness is implied by the *have a V* frame, or by the meaning of verbs like *try* and *look for*. On the whole, the differences under discussion are rather negligible; the two subtypes could perhaps be subsumed under one formula.

4.4 *Semi-voluntary action which could cause one to feel better*

The syntactic formula is:

NP	*have*+AUX	*a* V-INF
human		intransitive (one argument)
		intentional
		physiological process

Examples are: *have a cough, a yawn, a cry*.

Sentences like this imply that the agent is experiencing some unpleasant sensation which calls for a physical outlet:

Have a cough (sneeze)!

If the person experiencing this unpleasant state does nothing to suppress the impulse, a natural physiological process will occur. The experiencer could control and prevent this process, but this would require active resistance on his part.

In contrast to walking, swimming or running, the speaker is not presenting coughing or sneezing as activities which are potentially enjoyable or conducive to feeling good. The difference between the two types becomes even clearer when the modifier *good* is used:

John had a good swim.

This implies that the swimming caused John to feel good. But it is questionable whether physiological processes like coughing could make one feel positively good, or that they would be thought of in these terms. They can, however, be thought of as conducive to RELIEF. One could very well say (a) to a child (say, in an airplane), but hardly (b):

a. Come on, have a vomit! You'll feel much better!
b. Have a vomit! You'll enjoy that!

In the next pair of sentences, too, (b) is much less probable than (a) (unless in jest):

a. I've had a good sneeze — what a relief! I feel much better.
b. I've had a good sneeze — how nice! It felt really good.

Consider also the following sentences:

Mary stopped and had a sneeze, then smiled apologetically and continued her talk.
John had a cough and then resumed his typing.

Is John's cough or Mary's sneeze seen as potentially pleasurable? It could be argued that John INDULGED in coughing, and that Mary INDULGED in sneezing; and that therefore both the *have a swim* type and the *have a cough* type can be seen as instances of self-indulgence (R.M.W. Dixon's suggestion, p.c.) But 'self-indulgence' refers here to two different ideas. In voluntary bodily actions like *have a swim*, it refers to 'doing something that could cause one to feel good'; in the case of physiological processes it would refer, roughly speaking, to 'letting something happen in one's body which could cause one to feel better' (or, 'cause one not to feel something bad in one's body').

The temporal characteristics of the bodily-process subtype are the same as those for the other subtypes. One could say:

He's been coughing for several days.

But if one is *having a cough*, it must be done in one relatively short spell. At the same time, the action cannot be momentary: actions which can be momentary, like a sneeze or a yawn, can be reported in the *have a V* frame only when they are rather long (as sneezes and yawns go), or else repeated.

The requirement of atelicity, which holds for the *have a walk* type, does not seem to apply to the *have a cough* type. If one *has a swim* or *a walk*, the temporal extension of the activity is arbitrary; if the agent wanted, he could continue indefinitely. But the physiological processes which we are now discussing often have a natural boundary. *Having a good cough* or *a good sneeze* implies that the action was thorough and unrestrained, and that the natural boundary has been reached. However, the natural boundary of the activity is determined not by an external goal, but by the state of the agent's body. For this reason, it does not interfere with the agent/experiencer-oriented meaning of the *have a V* frame. An external goal is again excluded; and directional phrases which can co-occur with the simple verbs cannot very well co-occur with their periphrastic counterparts (cf. Cattell 1980):

a. He coughed into his handkerchief.
b. ?He had a cough into his handkerchief.
a. He vomited into a plastic bag.
b. ?He had a vomit into a plastic bag.

I postulate for the subtype under consideration the following semantic formula:

(4) X had a cough. ⇒
for some time, not a long time, X was doing something
something was happening in his body because of that
it could cause X not to feel something bad in his body
X was not doing it because X wanted anything to happen
to anything other than himself
X could do it more than one time

We will see below that there is another subtype of the *have a V* construction concerned with 'counteracting something bad' rather than with 'enjoying something good'; this other, 'corrective' subtype includes expressions like *have a wash* or *a shave*.

4.5 *Consumption of small parts of objects which could cause one to feel pleasure*

The syntactic formula is:

NP	*have*+AUX	*a* V-INF	*of* +	NP
human		two arguments		concrete
		intentional		definite
		consumption		(preferably
		no total change		possessed)
		in the object		

Examples are *have a bite, a lick, a suck, a chew, a nibble*.

The verbs included in this subtype are transitive or semi-transitive, but the meaning of the verb ensures that the undergoer of the action is only negligibly affected by it. A lick, bite, or nibble is not enough to make much difference to the object involved; and a chew or a suck would also not affect the object greatly, because of the slow nature of the process. This means that, while the verb is transitive, and the action requires an undergoer as well as an agent, the undergoer can be ignored; the action can be viewed as

really involving only one participant (the agent). However, if someone eats an apple or a sandwich, the object in question is TOTALLY affected, and thus impossible to ignore. This is why one can *have a bite* or *a lick*, but one cannot **have an eat, a swallow*, or *a devour*. The verbs occurring in the present subtype typically allow a prepositional object, which shows explicitly that they are seen as verbs of minimal impact: one can *nibble something* or *at something*; but one can hardly **eat at something* (cf. Anderson 1971).

Note that actions like biting or chewing involve a certain change in the state of the object, even though this change can be dismissed as negligible. Generally speaking, the *have a V* frame allows no change in the state of the object, even a negligible one. One cannot **have a dust of the furniture* or *a trim of the bushes* or *a scratch of the ground* — even though one could argue that, in all these cases, the object is only minimally affected. I have claimed that one reason transitive perception verbs can so naturally occur in the *have a V* frame is that perception does not affect the object; it affects only the agent. As will be seen below, the same requirement, i.e. no change in the object, holds for all the other types of transitive verbs which allow this construction at all (for any speakers). Bodily-consumption verbs constitute the only major exception to this rule — but a very natural one, or at least one which has well-attested parallels in other languages. For example, it is well known that in many Austronesian languages, food about to be eaten is treated grammatically neither as 'alienable possession' nor as 'inalienable possession' (like body parts), but rather as a separate, semi-inalienable category (see Lévy-Bruhl 1915, Crowley 1979, Lynch 1973). After all, bodily consumption involves a process which turns bits of external objects into something which is no longer distinguishable from parts of the agent's body. Small wonder that some languages should refuse to treat the material which is just about to be turned into the content of the body — and, in a sense, into the body itself — as alienable and transferable.

In English, the *have a V* frame, which focuses interest on the agent and his experiences, cannot be used with those verbs which imply a change in another object and thus necessarily draw attention to that object. But small, negligible changes resulting from bodily consumption CAN be disregarded, presumably because those changes concern the agent more than the patient. If John 'has a lick of Mary's ice cream', the ice cream will be only negligibly affected; but John's experience may be most delectable, and anything but negligible. If John trims the bushes very superficially, the bushes may be only minimally affected; but one still cannot say **John had a trim of*

the bushes, because it is not clear how the event could be seen as affecting John more than the bushes.

English has another *have* construction keyed specifically to bodily consumption, defined by the formula 'NP_{human} *have*+AUX *a* N_{food}'. Thus one can *have a sandwich* or *a steak* or *a whisky* or even *a cigarette* in the sense of consuming, not owning, those items (though not **have some poison*, or **accidentally have some dishwashing liquid*). However, **have a record* or *a merry-go-round* or *a book* or *a tub* cannot have the sense of doing something potentially enjoyable with these objects.[7] This latter, non-verbal, *have* construction can be defined, roughly, as follows:

> X took something through his mouth into his body
> it could cause X to feel something good

The existence in English of such constructions, keyed specifically to bodily consumption, shows once more that 'civilized' European languages, in their conceptualization of reality, are much less different from 'exotic' languages than Lévy-Bruhl supposed.

Returning to the *have a V* construction of bodily consumption, note that it is possible to *have a lick of John's ice cream* or *a bite of John's sandwich* — but not to **have a lick of John* or *a bite of John*, even though one COULD lick or bite John. This fact shows clearly that the different subtypes of the *have a V* construction cannot be defined in LEXICAL terms: they must be defined in terms of semantic domains such as consumption, perception, and physiological processes. The differences in meaning between *having a swim, a look, a cry, and a lick* cannot be deduced from the general meaning of the *have a V* frame and the meaning of the individual verbs. Thus the meaning of the verbs *bite* and *lick* does not imply bodily consumption (*licking John* and *biting John* do not imply cannibalism). On the contrary, it is the *have a V* frame which imposes on the expressions *have a bite* and *have a lick* the interpretation which involves consumption. But clearly the *have a V* frame does not impose this interpretation on perception verbs, or on verbs referring to physiological processes, or on verbs referring to bodily action. This means that the *have a V* frame itself must be sub-categorized. Verbs which are compatible with the consumption interpretation will acquire this interpretation when used in the *have a V* frame. This is a fact about English which can be deduced neither from the over-all semantic invariant of that frame, nor from the meaning of the individual verbs (nor can it be deduced, by some 'natural logic', from

the combination of the two). It must be recorded as an empirical fact about English. This fact will be recorded in the form of a separate subtype of the *have a V* construction.

It was suggested above that when the *have a V* frame refers to physical actions involving the whole body (e.g. swimming, running, or walking), the action is presented by the speaker as something that could cause one to feel good. A similar interpretation can also apply to ORAL actions. Expressions like *have a bite* or *a lick* or *a chew* differ from the corresponding simple verbs not only in implying consumption (of minimal amounts), but also in implying a potentially pleasurable experience. If a doctor recommends to a patient that every couple of hours he should chew some foul-tasting tablets, we would hardly say that the patient was supposed to *have a chew of* the tablets. Similarly, if a child were to chew some unsavoury bits of tough, sinewy meat — because he was not allowed to leave anything on his plate — one would hardly describe that child as *having a chew* of the meat. But if a dog is described as *having a chew* of a bone, or of an old slipper, the phrase evokes the idea of enjoyment, as well as of (limited) consumption.

The *have a lick* subtype has the following semantic formula:

(5) X had a lick (of Y). ⇒
for some time, not a long time, X was doing something (V)
taking through his mouth into his body small parts of Y
it could cause X to feel something good
(when X was doing it)[8]
X was doing it not because X wanted to cause anything to happen to anything other than himself
X could do it more than one time

It should be added that expressions like *have a lick* or *a chew* could fit not only this subtype of the *have a V* construction, but also the perception subtype (cf. section 4.2). Consider these sentences:

> This ice cream tastes very strange. I don't know what's wrong with it. Have a lick.

Here *have a lick* does not imply a potentially pleasurable experience; but it does imply potential acquisition of knowledge through perception. This shows once more that the different subtypes of the *have a V* construction, defined over entire sentences, have a reality of their own as part of English grammar, and that they cannot be deduced from the meanings of the verbs alone.

4.6 *Consumption of non-discrete substances which could cause one to feel pleasure*

The syntactic formula is:

NP	*have*+AUX *a*	V-INF	*of* +	NP	*MOD[atelic→telic]
human		transitive		mass	
		intentional		indefinite	
		consumption			
		atelic			

Examples are *have a drink of (orange juice), a smoke, a sip of (wine), a sniff of (petrol).*[9]

It was argued above that one can *have a bite* or *a lick* or *a chew*, but not **have an eat*, because eating involves serious change of the patient, and cannot therefore be seen as a self-absorbed activity, which concerns only one participant — the agent. Furthermore, eating an object (like a sandwich or a steak) would annihilate that object, and therefore the action could not be repeated; but licking, chewing, and biting allow for the preservation of the object, and therefore are compatible with the rule that the action presented in the *have a V* frame should be repeatable.

But if so, why is it possible not only to *have a sip of orange juice* but also *a drink of orange juice?* Is *drink* not related to *sip* in roughly the same way as *eat* is related to *bite*? Given that, in the consumption of solids, only verbs of minimal impact (e.g. *bite, lick* or *nibble*) are allowed to appear in the *have a V* frame, should not the same hold in the consumption of liquids? Since liquids appear to behave differently, with respect to that frame, from solids, it might seem that the difference between *have a drink* and **have an eat* is simply idiosyncratic. But the apparently bizarre difference in behaviour between *eat* and *drink* in fact provides a striking confirmation of the reality of the parameters I have postulated here as the distinguishing features of the *have a V* construction. It is a difference of verbs which refer to unlimited substances vs. verbs which refer to individual objects (and, consequently, verbs which require mass-noun objects vs. verbs which allow countable objects).

The rationale behind this distinction is straightforward. If the *have a V* construction focuses exclusively on the agent and his experiences, then the patient must not be seriously affected. It might seem that the water swallowed by the agent is as seriously affected by his action (and in fact just as

completely annihilated) as the sandwich or the steak he has eaten. But the person drinking water can annihilate only a limited amount of it; he cannot affect water in general. Substances like water are unlimited and indestructible. A sandwich, however, is discrete, limited, and totally destructible.

It might be objected that whoever is eating a sandwich is in fact eating FOOD, and that food is just as unlimited and indestructible as water. But the two cases are not symmetrical. One can say (a), but hardly (b):

a. John was drinking water.
b. ?John was eating food.

The expression *eat food* is tautological, because the idea of food is already contained in the meaning of *eat* (see Wierzbicka 1980a). The verb *eat* requires an object other than *food*. It is true that *eat* ALLOWS mass-noun objects (e.g. *ice cream, porridge*), but it does not require them; in fact, the most usual food eaten (and discussed) by human beings comes in the form of discrete objects — easily affected and destroyed by eating.

It could also be objected that the expression *have a smoke* provides a counter-example to my explanation, because 'smokes' usually come in the form of discrete objects (cigarettes or cigars). If one cannot **have an eat* why should one be able to *have a smoke?* But the two cases are not symmetrical. Someone who is smoking (a cigarette or anything) can always be asked:

What is that stuff you are smoking?

Similarly, someone who is drinking can be asked:

What is that stuff you are drinking?

But it is not always true that, when someone is eating something (e.g. an exotic-looking piece of fruit), one can ask:

What is that stuff you are eating?

This means that smoking can always be understood as smoking some (non-discrete) substance, even if that substance comes in the form of discrete chunks such as cigarettes. But apples, sandwiches, and frankfurters are not seen as discrete chunks of non-discrete substances; they are seen as individual objects.

I am suggesting, then, that English has two distinctly different subtypes of the *have a V* construction dealing with bodily consumption; both defocus the patient, but in different ways. One does it by allowing only verbs of

minimal impact, the other by allowing only verbs which assume a non-discrete (mass-noun) object. The contrast between the two can be illustrated:

John had a bite of Mary's sandwich.
*John had a smoke of Mary's cigarette.

The following are possible, of course:

John had a drag from Mary's cigarette.
John had a puff on Mary's cigarette.

But *drag* and *puff* are verbs compatible with the 'small amount, minimal impact' interpretation, whereas *smoke* fits only the 'unlimited substance' type. The *have a V* frame highlights this, and makes the 'unlimited substance' condition explicit:

John was smoking tobacco/marijuana.
John was smoking a cigarette.
John had a smoke of tobacco/marijuana.
*John had a smoke of a cigarette.

Similarly:

John drank some water.
John drank a glass of water.
*John had a drink of a glass of water.

This means that the 'unlimited substance' type, like the 'objectless action' (section 4.1), demands strict atelicity. Drinking or smoking (like walking or swimming) is something that can be prolonged for as long as the agent wishes; but drinking a glass of water or smoking a cigarette cannot be indefinitely extended (just as walking to the post office or swimming to the shore cannot). Thus one can *have a drink* or *a smoke*, just as one can *have a swim* or *a walk*; but one cannot **have a drink of a glass of water* or *a smoke of a cigarette*, just as one cannot **have a walk to the post office* or *a swim to the shore*.

Both of these are impossible:

*John drank orange juice in ten minutes.
*John walked in ten minutes.

Limited substances are possible objects in this context:

John drank the orange juice in ten minutes.
John drank a litre of beer in ten minutes.

Predictably, they cannot be used in the *have* construction:

*John had a drink of the orange juice.
*John had a drink of a litre of water.

The requirement of atelicity will be included in the semantic formula of the 'unlimited substance' type, as it was for the 'objectless action' type, in the form of the component 'it was something that X could do for as long as X wanted'.

It should be noted that *having a drink*, like *having a bite*, implies a potentially pleasurable experience. One could say that Socrates was ordered to *drink hemlock*, but not that Socrates was ordered to *have a drink of hemlock* (except, of course, ironically). Neither could one say that one has *had a drink* of some rejuvenating and invigorating potion, if that potion had a ghastly taste. Clearly, the action itself must be viewed as a potentially enjoyable experience. For this type, then, the semantic formula is:

(6) X had a drink (of substance Y). ⇒
for some time, not a long time, X was doing something (V)
taking something through his mouth into his body
it could cause X to feel something good
X could do it for as long as X wanted
X was doing it not because X wanted anything to happen to anything other than himself
X could do it more than one time

4.7 *Action superficially involving another entity, which could cause one to feel pleasure*

The syntactic formula is:

NP	*have*+AUX *a* V-INF	(PREP + NP)	*MOD[atelic←telic]
human	intentional		
	two arguments		
	atelic		

Examples are *have a kick of the football, a throw of the boomerang, a read*.

This subtype of the *have a V* construction is restricted to a few dialects of English. It is rarely, if ever, allowed by native speakers of American English; but it is widely used in Australian English, and also well-attested in (some varieties of) British English, and therefore deserves to be described.

Native speakers of English who do not have this subtype in their active grammatical repertoire should be interested in how the same basic parameters which govern their own *have a V* construction (limited time, focus on the agent's experiences, repeatability of the action, and disregard for the patient, if any) have been extended in other dialects to include an additional type.

I have discussed four subtypes of the *have a V* construction which allow transitive or semi-transitive verbs. For each I have argued that, despite the presence of two arguments, the sentence can be focused exclusively on the agent because the second entity mentioned is not affected by the action. Thus, in the case of perception (the *have a look at* type), the agent may come to KNOW something about the patient; but this would affect the agent, not the patient. In the case of tentative action (the *have a try* type), the agent is THINKING about an object; this, again, is more likely to affect the agent than the patient. In the case of consumption of small parts of objects, the object IS affected, but only minimally, and the agent is affected much more significantly: he really 'has' something (in his stomach, or in his mouth) as a result of the action. In the case of the consumption of limited amounts of unlimited substances, the unlimited substance as a whole is not affected at all; but the agent IS affected (again, because of the action, he 'has' something in his body).

Consider, however, sentences like these:

> Johnny let Jimmy have a throw of his new boomerang.
> Jimmy was bored, and as he had nothing else to do, he went outside and had a kick of his football.

Whom, or what, does the action affect — the boomerang and the football, or Jimmy?

It is true that, as a result of the action, the boomerang and the football have been transferred from one place to another; but they have not really been affected. It would have been different if Jimmy had damaged (cut, destroyed, or painted) the objects in question; but a mere change of place does not entail a CHANGE OF STATE. The agent, admittedly, has not come to know anything because of the action, and has not come to 'have' anything in his body either; but he has gained a pleasurable feeling from the action. In a sense, therefore, *having a kick* or *having a throw* affect the agent more than the patient.

In no dialect of English, however, would the following sentences be acceptable:

*John had a kill of the chicken(s).
*John had a break of the window(s).
*John had a torture of the prisoners.
*John had a draw of a horse.
*John had a build of a house.

The action described in the *have a V* frame must be aimless, agent-oriented, repeatable, and for most types indefinitely extendable in time. Torturing could be seen as repeatable and indefinitely extendable in time; but since it aims at inflicting pain on somebody, it does have an external goal, and thus fails to qualify. Killing or breaking can be neither repeated nor indefinitely extended in time (at least not killing or breaking the same object); in any case, they produce such a drastic change in the object that they can hardly count as affecting primarily the agent rather than the patient. Activities like drawing a horse or building a house CAN be repeated; but they can NOT be indefinitely extended in time, because they have an external goal and a natural boundary (reached when the goal is attained). Thus **have a sing of a song, a draw of a horse*, and *a write of a letter* are impossible; but one can *have a whistle* (of some reiterative tune), or *a scribble* or *a read of the Reader's Digest* — because whistling, scribbling, and reading the *Reader's Digest* have no natural boundary.

This subtype, like those discussed above, cannot be defined in purely lexical terms. Thus one cannot say, in Australian English,

*John had a kick of his detestable cousin.

Whether or not kicking implies a noticeable effect depends on the object of *kick* (a football may be seen as unaffected by it, but a person cannot). Some verbs (e.g. *torture*) do imply an intended effect on the patient, and are therefore automatically excluded from the *have a V* construction. Others, however, (e.g. *kick*), are compatible with an intended effect without implying it. Their acceptability in the construction is not simply a matter of lexical classification. The acceptability of *have a V* sentences with *kick* can be predicted only from a semantic formula referring to the sentence as a whole, not from any classification of verbs. Similarly, the first two sentences here are possible in Australian English, but not the third and fourth:

Let's have a sing.
Let's have a draw.
*Let's have a sing of that song.
*Let's have a draw of a horse.

It is not the verbs *sing* and *draw* which are excluded, but the telic verb phrase as a whole.

The following semantic formula accounts for the entire range of *have a V* sentences allowed by this subtype:

(7) X had a kick of the football. ⇒
for some time, not a long time, X was doing something
with thing Y
it could cause X to feel something good
X was doing it not because X wanted anything to happen to anything other than himself
X could do it for as long as X wanted
X could do it more than one time

For this subtype, as for 'objectless-action' (section 4.1) and 'bodily-consumption' subtypes (4.5 and 4.6), the action must be thought of in terms of a potential pleasurable effect. Here as elsewhere, the *have a V* frame does not imply that the agent actually enjoyed the activity, or that he undertook it IN ORDER TO ENJOY himself. It implies only that the activity is thought of (by the speaker) as potentially pleasurable.

4.8 *Self-directed action which could cause one to look better*

The syntactic formula is:

NP	*have*+AUX *a*	V-INF	*PREP + NP
human		trans.→intrans.	
		intentional	
		telic (in time *t*)	

Examples are *have a wash, a shave*.

This subtype constitutes another group which allows transitive verbs, despite the fact that the *have a V* frame implies only one core participant, the agent-experiencer. The verbs of this subtype can in fact also be used intransitively:

John went to the bathroom and quickly washed and shaved.

In the *have a V* construction, these verbs allow no prepositional phrases referring to the object of the action:

*John had a wash of himself.
*John had a wash of his hands.

Thus this subtype allows only intransitive verbs, or transitive verbs which can be used intransitively. Those transitive verbs referring to bodily care which cannot be used intransitively cannot be used in the *have a V* frame:

Mary dried herself.
*Mary dried. (in the agentive sense of *dry*)
*Mary had a dry.
Mary quickly powdered her nose.
*Mary quickly powdered.
*Mary had a quick powder.
Mary quickly made herself up.
*Mary quickly made up.
*Mary had a quick make-up.

Admittedly, one CAN say:

Mary had a shampoo.
Mary had a trim.

even though one cannot say:

*Mary shampooed.
*Mary trimmed.

However, *having a shampoo* or *a trim*, like *having a haircut*, do not imply that the agent does it herself; in fact, they rather suggest that someone else does it for her. *Having a wash*, by contrast, suggests that the agent is doing it to himself; and *have a shave* is ambiguous in this respect. This suggests that expressions like *have a shampoo* or *a haircut* or *a face-lift* are instances of a different, though related, *have* construction (another *have a N* construction), with its own set of constraints — similar, but not identical, to those which hold for the *have a wash* types. Formal constraints on the two types are also different: one cannot **have a face-wash* or *a face-shave*.

Some transitive verbs can be used intransitively, but cannot occur in the *have a V* frame. For example, one can say:

Mary dressed quickly.
John quickly undressed and went to bed.

but hardly:

*Mary had a quick dress.
*John had a quick undress.

This means that, to make correct predictions, we must strictly constrain this

subtype to bodily actions, i.e. those which involve only the body. In this respect, the present subtype is related to the two bodily-consumption types (bodily consumption involves only the body, and something which is to be absorbed into the body). But the bodily-consumption types are based on TRANSITIVE verbs; the present subtype, however, is restricted to INTRANSITIVE verbs (or, strictly speaking, to transitive verbs used intransitively). In fact, it might appear at first glance that *have a wash* and *a walk* could be subsumed as a single type under the general notion of aimless objectless action.

Entities are not to be multiplied beyond necessity, so the fewer subtypes postulated the better. In the present case, however, good reasons exist for keeping the two subtypes apart: the constraints on each are different, and we could collapse them only at the cost of diminishing the predictive power of our formulae.

One such difference is in the area of telicity. In the case of objectless action, it was necessary to exclude telic verbs and verb phrases, to account for the non-acceptability of sentences like:

*John had a walk to the post office to post a letter.

Walk is an atelic verb, as can be shown, e.g., by the 'in time *t*' test:

*John walked in ten minutes.

It can, however, be used in telic verb phrases:

John walked to the post office in ten minutes.

In contrast, the verbs *wash* and *shave*, whether used transitively or intransitively, are telic:

I know I must hurry — I'll shave (wash) in one minute flat, I promise.

This difference between the two groups with respect to telicity shows that we cannot collapse the two groups. The first group bears the semantic component 'X could do it for as long as X wanted'. But we cannot postulate this component for the second one. It is impossible to go on shaving or washing indefinitely, because the amount of hair or dirty skin is finite. It is therefore not an accident that *shave* and *wash*, though intransitive, have transitive counterparts (or, to put it differently, that they are transitive verbs used intransitively, rather than simply intransitive verbs). The activities in question do have an undergoer as well as an agent; and in fact this undergoer is

rather drastically affected by the action, so much so that *shave* and *wash* cannot be used in the *have a kick (of the football)* subconstruction. One cannot say (even in Australia):

* Mary had a wash of the babies — she loves doing that.
* John had a shave of the patients — he always enjoys that.

Only in the case of routine hygienic actions involving one's own body can the undergoer, despite the change of state, be disregarded, because the action can be viewed as involving a single participant. ALL the different subtypes of the *have a V* construction include the component 'X was doing it not because X wanted anything to happen to anything other than himself'. Shaving and washing oneself meet this formula; but shaving or washing someone else, or even shaving or washing a specified part of one's own body (which thus comes to be an independent object of thought) do not.

From an objective point of view, then, the hair shaved off can be said to be quite severely affected — just as an item of food which is bitten, chewed, or sucked can be seen as diminished, disfigured, and in general severely affected by the action. From the speaker's anthropocentric point of view, however, what happens to a person is infinitely more important than what happens to bits of food or hair, or substances which go into and out of the body, and which can be thought of as indistinguishable from the body itself. Thus actions like consumption, defecation, urination, and shaving can be, and usually are, viewed as one-participant actions — to be described in intransitive, one-argument sentences: they are all natural material for the *have a V* frame.

One thing remains to be clarified with respect to the present subtype: the nature of the agent's 'gain'. Is *having a wash* or *a shave* seen as potentially pleasurable, or conducive to feeling something good? Not necessarily. Consider the following sentences:

You look awful — go and have a shave!
What on earth have you been doing with that mud? Go and have a wash.

The difference between *washing* and *having a wash* (or *shaving* and *having a shave*) is analogous to that between *having one's hair cut* and *having a haircut*: with all these bodily-care activities, the *have a V* frame adds a nuance of focusing on a CORRECTIVE effect of the action. One usually has a haircut when one NEEDS it, i.e. when one's hair looks scruffy or untidy; otherwise, one has one's hair cut. For example, when St. Francis

cut St. Clare's golden curls, she did not *have a haircut* (because she was not trying to improve her appearance). Similarly, when recruits have their hair cut on joining the army, they are not *having a haircut*; and when Delilah cut Samson's hair, he was not *having a haircut*.

Of course *having a haircut* is different, both formally and semantically, from *having a wash*: and it does not belong to the *have a V* construction, which is the subject of this chapter. In the relevant respect, however, the two are similar, and the former can help elucidate the meaning of the latter. We could postulate for both the following component: 'X was doing something to some parts of his (or Y's) body which could cause people not to think something bad about his (or Y's) body'.

Note that this component is very similar to the one postulated for the subtype of the *have a V* construction concerned with physiological processes: 'X was doing something (letting something happen in some parts of his body) which could cause X not to feel something bad in his body.' However, the similarity between the 'grooming actions' and the semi-voluntary physiological processes may go even further. While the action of washing or shaving oneself is not always pleasurable (even when reported in the *have a V* frame), the perceivable improvement in one's appearance, smell etc. IS potentially pleasurable. The person who *has a wash* or *a shave* is presumably aware of the improved condition of his body and might well feel better as a result.

The full semantic formula for the present subtype reads:

(8) X had a wash (shave). ⇒
for some time, not a long time, X was doing something
to some parts of his body
it could cause people not to think something bad
about his body
X could feel better because of that
X was doing it not because X wanted anything to happen to
anything other than himself
it was something that one does to cause people not
to think something bad about one's body
X could do it more than one time

This formula does not include the atelic component 'X could do it for as long as X wanted'. It does, however, include a component which shows the routine character of the action: 'it was something that one (usually)

does to cause people not to think something bad about one's body'. This component (also present in the simple verbs *wash* and *shave*, when used intransitively) explains why *having a shave* or *a wash* implies unambiguously the 'key' parts of the body. Thus, when shaving one's legs or washing one's feet, one is not *having a shave* or *a wash* — presumably because these strictly local activities have no effect on the person as a whole, in the way that washing or shaving the 'crucial' parts of the body does.

4.9 *Joint bodily activity which could cause the people involved to feel pleasure*

The syntactic formula is:

NP	*have*+AUX	*a* V-INF	*PREP + NP
human		two arguments	
plural		intentional	
		(whole) body	

Examples are *have a kiss, a cuddle, a dance*.

The *have a V construction* can also be used in expressions referring to group action, e.g. *have a hug* or *a chat*. However, two people cannot be said to **have a kick* or *a bite* or *a stroke* (in the sense of joint mutual action). To arrive at any generalizations in this area, it may be useful to distinguish, at least initially, two different subtypes of joint-reciprocal actions: acts involving contact of bodies, and acts of speech. This section deals with body contact.

Why can two people *have a kiss* but not **a kick?* To begin with, not everyone is happy with the phrase *have a kiss*, as it stands. But (a) is better, and (b) is still better:

a. John and Mary had a kiss and a cuddle in the back seat.
b. John and Mary had a bit of a kiss and a cuddle in the back seat.

This suggests that the joint mutual action cannot be momentary; it must have some duration. A phrase like *in the back seat* helps because it suggests some duration: if two people are kissing while in the back seat, then their kissing cannot be momentary. The addition of *a bit* helps, too, because it shows clearly that what is meant is not one momentary kiss, but a non-discrete, potentially unlimited on-going process. Of course, there is nothing surprising about these facts: the requirement of LIMITED DURATION holds for every type of *have a V* construction, and is included in the

postulated semantic invariant of the entire class.

But these are not possible:

*John and Mary had a kick in the back of a car.
*John and Mary had a bit of a kick and a bite.

The reason is the same as that for the contrast in acceptability between the following:

John and Mary were kissing (cuddling, embracing).
*John and Mary were biting (kicking, stroking, slapping).

The verbs *kiss*, *cuddle*, and *embrace* are transitive; but they can be used intransitively. The verbs *bite*, *kick*, *stroke*, and *slap* are also transitive; but they CANNOT be used intransitively. The *have a V* frame of the joint mutual type allows only those transitive verbs which CAN be used intransitively, and it excludes the presence of an object. One can say (a), but not (b):

a. John and Mary kissed (embraced, cuddled) each other.
b. *John and Mary had a kiss (embrace, cuddle) of each other.

The following are acceptable in Australian English:

Susie had a cuddle of her teddy-bear.
I visited the Browns and had a cuddle of their new baby.

This shows that the verb *cuddle* can be used in the transitive subtype of minimal impact (cf. *have a kick of the football*); but (b) above shows that the same verb used in the *have a V* construction of joint mutual action allows no object phrase.

The contrast between potentially intransitive verbs like *kiss* and *cuddle*, which can be used in the *have a V* frame, and strictly transitive verbs like *kick* and *bite*, which cannot, is thus exactly parallel to the contrast between potentially intransitive verbs of bodily care (*wash* and *shave*), which can also occur in that frame, and strictly transitive verbs of bodily care (*powder* or *make up*), which cannot. The rationale behind this contrast is not hard to grasp. The *have a V* frame presents the situation as including only one core participant. If the situation is seen as involving two different participants doing things to each other, then the *have a V* frame is inappropriate; however, if it is seen as involving a group of people acting jointly, as one body, then the *have a V* frame is perfectly appropriate. The intransitive use of verbs like *kiss* and *embrace* does not result from any

optional transformation (deletion), but from the speaker's conceptualization of the situation as involving a single collective entity. (For an insightful discussion of the difference between 'joint mutual action' and 'reciprocal action', see García 1975:149-153.)

The question now arises: why can two people, kissing or embracing each other, be seen as a group acting as a single entity, while two people biting or kicking each other cannot? The answer takes the following form. Two people could bite (kick, strike, slap) one another simultaneously; but they could not do it truly in unison, i.e. in one single action. But having a kiss or a cuddle does not consist in exchanging kisses or cuddles, simultaneous or otherwise; it consists in ONE event whose different components cannot be separated (cf. J. McCawley 1972:505). The reason joint mutual kissing or embracing is possible — whereas biting or kicking is not — is ultimately physical as well as semantic. When two people kiss, the relevant parts of their bodies (their mouths) can be in the same place; but when two people bite each other, the relevant parts of their bodies (their teeth) cannot be in the same place. When people are cuddling, kissing, or embracing, the relevant part of their bodies meet; but when they bite, kick, or strike each other, this is impossible (cf. Wierzbicka 1980a:258-289, esp. 283-285).

Furthermore, the 'joint mutual action' subtype of the *have a V* construction requires and implies not only contact of PARTS of the bodies, but also contact (and involvement) of the WHOLE BODIES. This is probably another reason *having a kiss in the back seat* sounds better than *having a kiss* tout court. Certainly, the *have a V* frame requires duration; and *in the back seat* adds that. But *having a kick of the football* also requires duration; here the apparent conflict between the momentary character of a kick and the durative meaning of the *have a V* frame is resolved simply by an iterative interpretation of the phrase. Why can *having a kiss* not be similarly interpreted as a series of kisses, without the help of any additional clues (such as *a bit* or *in the back seat*) ensuring the non-momentary character of the action?

The answer is that the expression *have a kiss* needs contextual support for two reasons: first, because it must be interpreted duratively; and second, because it must be interpreted as involving the agents' whole bodies. The image of two bodies in contact in the back seat solves both problems at once. This claim is supported by the following:

a. They could only kiss through a tiny hole in the wall which separated them.

b. ?They could only have a kiss through a tiny hole in the wall which separated them.

Most native speakers consulted agree that (b) is odd, while (a) is not. The hypothesis about the involvement of the whole body explains this fact. The intransitive use of transitive verbs like *kiss* implies a unity of locus of the relevant parts of the body; and the *have a V* frame adds the idea of the contact and involvement of the whole body.

This holistic implication of the *have a V* frame follows from the requirement that the action must be seen as involving only one core participant — one entity spoken about. Two people separated by a wall fit this image less easily than two people clinging to one another. Activities which crucially depend on the movement of individual body parts (legs in kicking, or hands in stroking) also interfere with the image of two people joined together as if they were one entity.

A further piece of evidence in support of the proposed interpretation is the expression *have a dance*. Ray Cattell (p.c.) has pointed out that, when two people *do a dance* together, they can be dancing at a distance from one another; but that when two people *have a dance* together, they must be dancing fairly close to each other (and preferably facing each other). This observation can be explained by the fact that dancing can fit the subtype under discussion — even though *dance* is, or can be, a one-argument verb. People *do a dance* for the enjoyment of the audience; but they *have a dance* (presumably) for their own enjoyment. When their bodies are in contact or nearly so, *having a dance* is like *having a cuddle* or *having a wrestle:* the action is pleasurable, and the pleasure is derived from the unitary action of their joined bodies.[10]

The implication of potential enjoyment holds for all the expressions which belong to the 'joint mutual' type. Here the *have a V* frame presents the action as self-absorbed, self-seeking, hedonistic, and devoid of any deep concern for or interest in the partner. For example, imagine two people who are desperately in love and who must part for a long time. Would they be more likely to *kiss* or to *have a kiss?* Or imagine two gladiators in a Roman circus who have been ordered to put their swords aside and to wrestle for their lives. Would they be more likely to *wrestle* or to *have a wrestle?* The despairing lovers would *kiss*, rather than *have a kiss*; and the morituri gladiators would *wrestle*, rather than *have a wrestle*. *Having a kiss* or *having a wrestle* is not a very serious matter, even for the agent. The *have a V* frame minimizes any possible effect of the action on the patient or partner;

but it also trivializes the importance of the action from the viewpoint of the agent. It presents the action as limited not only in time, but also in significance; it describes it as a mental gain for the agent, but one of a rather minor caliber. The action is presented as somewhat half-hearted and only semi-purposeful; to the extent to which it IS purposeful, it is concerned only with the agent's (fleeting) experience.

This subtype has the following semantic formula:

(9) X and Y had a hug. ⇒
for some time, not a long time
X and Y were doing something together
causing their whole bodies to touch
it could cause them to feel something good
one could think of them as one thing because of that
they were doing it not because they wanted anything to happen to anything other than themselves
each of them was doing it not because he wanted anything to happen to the other person
they could do it for as long as they wanted
they could do it more than one time

4.10 *Joint speech activity which could cause the people involved to feel pleasure*

The syntactic formula is:

NP	*have*+AUX	*a* V-INF	(*about* + NP)
human		two arguments	
		action	
		intentional	
		durative	
		atelic	
		communication	

Examples are *have a chat, a gossip, a laugh*.

Two people can *have a chat, a talk*, or *a gossip*. In Australia, they can also *have a bitch, a beef, a gab,* or *a yarn* (cf. Durie and Wilkins 1980). They cannot **have a discuss, a converse, a consult, a thank, a greet,* or *an interview*$_{(V)}$.

Clearly, the conditions on this subtype include not only reciprocity

(which *greet* or *thank* could satisfy), and not only a common action (which *interview* could satisfy), but also an identity of roles (which *interview* does not satisfy) and a unity of action (which *greet* and *thank* do not satisfy). There is intuitive similarity between chatting or gossiping, on the one hand, and hugging and kissing, on the other — and between greeting or thanking each other, on the one hand, and biting or kicking, on the other. One can EXCHANGE greetings, thanks, bites, or kicks; but these remain separate acts. By contrast, when two people are having a kiss, a cuddle, a chat, or a gossip, there is only a single kiss, cuddle, chat, or gossip. This is the familiar distinction of reciprocal action of two or more people vs. joint mutual action of the members of one group.

Here as elsewhere, the only intransitive verbs which can be used in the *have a V* frame are those which can be used intransitively:

They chatted.	They had a chat.
They gossiped.	They had a gossip.
*They discussed.	*They had a discuss.
*They greeted.	*They had a greet.

This means that the group of people involved in the action must be seen as a single entity, performing a single action; moreover, no other entity can be included in the picture. Two people cannot **have a consult* or *an advise* or *an interview* (i.e. not in the joint-action sense) because the person who consults, advises, or interviews does not have the same purpose, and is not doing the same thing, as the person who IS consulted, advised, or interviewed. Furthermore, two people cannot **have a discuss* because, although the role of the two participants would be the same, the action would have an external goal: the verb *discuss* implies a mental entity (a problem, issue etc.) which the participants want to affect (solve, clarify etc.)

Having a chat or *a gossip* implies an aimless, self-absorbed, pleasurable, non-serious activity. Like all the other *have a V* types, it also implies an activity which is limited in time; and like many (though not all) other types, it implies a limited chunk of an activity which is potentially unlimited in time. One can go on chatting or gossiping for as long as one wants, because the action has no inherent natural boundary. One can hardly **have a long gossip*; and if one can *have a long chat*, it is only because (as was pointed out earlier) *chat* can also be a noun, and as such can be used in the same *have* construction as the nouns *discussion, conversation, argument, quarrel*, and *struggle*. None of these expressions implies a short period of time, and

none of them implies aimlessness and enjoyability: clearly, they are not instances of the *have a V* construction.

Some native speakers of English even have a minimal pair: *have an argument* vs. *have an argue* (cf. Durie and Wilkins 1980). The two differ sharply in style (the second being, of course, much more informal, almost slangy), but they also differ in meaning: *having an argue* is limited in time, devoid of serious purpose, and pleasurable, while *having an argument* implies none of these features.

This subtype has the following semantic formula:

(10) X and Y had a chat. ⇒
for some time, not a long time
X and Y were doing something together
saying things to one another
it could cause them to feel something good
one person could not do it
if no other person wanted to do the same thing
one could think of them as one thing because of that
they were doing it not because they wanted anything to happen to anything other than themselves
each of them was doing it not because he wanted anything to happen to the other person
they could do it for as long as they wanted
they could do it more than one time

The component 'one person could not do it if no other person wanted to do the same thing' excludes reciprocal expressions, e.g. **They had a greet* or *a thank*: greetings or thanks can, but need not, be mutual. Admittedly, this component could also be postulated for verbs like *discuss, quarrel,* or *struggle,* because they too require mutual action. These verbs, however, would be excluded from the *have a V* construction for another reason: they lack the components 'they were doing it not because they wanted anything to happen to anything other than themselves' and 'each of them was doing it not because he wanted anything to happen to the other person'. People discuss things to solve or clarify a problem; they quarrel, struggle, and fight OVER something, and AGAINST someone. (Cf. Wierzbicka 1987b.)

This construction also has the component 'one could think of them as of one thing because of that', which it shares with the 'joint mutual bodily-action' subtype (section 4.9). In the latter, that component is motivated by

the implied union of the bodies. In the case of the joint speech activity, it is motivated by the necessary participation of two (or more) people: kissing or embracing COULD be done by one person, but chatting or gossiping could not.

5. *Have a fall*

Throughout this chapter I have assumed that the verb in the *have a V* construction refers to an intentional or semi-intentional action, rather than to an involuntary event. This means that *have a fall*, for example, is regarded as semi-idiomatic, and not as an instance of the productive *have a V* construction.

However, *have a fall* differs in meaning from *fall*; and the difference between the two is rather parallel to other differences between *have a V* and *V*. Thus Humpty Dumpty could *have a great fall* from the wall; but an apple could not *have a fall* from a tree or a book from a bookshelf. This suggests that *having a fall*, in contrast to *falling*, implies a potential experience. Moreover, *having a fall*, although involuntary, suggests a spontaneous event — i.e. an event originating with the experiencer himself, not with somebody else. One could say (a), but hardly (b):

a. Bill pushed Harry, and Harry fell (down).
b. ?Bill pushed Harry, and Harry had a fall.

Since an action originates, by definition, with the agent, a spontaneous event (such as a self-induced fall) can be seen as akin to action. At the same time, if somebody *had a fall* rather than *fell*, then he is presented as not responsible for the event. If one *falls*, the event is presumably unintended; but it may still be seen as something for which the agent is responsible, because it may be seen as caused by the agent's intention to bring about some other state of affairs. (If one says that Prince Charles *fell from his horse again*, one may be expressing disapproval or scorn; but if one says that Prince Charles *had another fall*, one is more likely to be expressing sympathy.)

Furthermore, *having a fall* seems to imply a certain duration — short, but nonetheless a duration. This might well be the reason one can *have a fall* but not **a slip* or *a trip* or *a stumble*. Note that *fall*, unlike these other verbs, can be used duratively:

Nobody suspected, of course, that at that time Alice was falling down the rabbit hole.
?Nobody knew that at that time John was slipping/tripping/stumbling.

Furthermore, the expression *have a fall* does not allow directional phrases:

Harry fell onto a nail.
*Harry had a fall onto a nail.

Thus *having a fall* parallels all the other *have a V* expressions not only in implying limited duration, but also in focusing on the subject's potential experiences to the exclusion of everything else. I might add that, for some speakers, the involuntary use of the *have a V* frame CAN be extended to other verbs, in particular to *slide* and *tumble*. These speakers are quite happy with sentences like

Harry slipped at the top of the mountain, which was covered with ice, and he had a nasty slide.

One might wonder, therefore, whether *have a fall* really is an idiom. But even if it is, the meaning of this idiom still must be explicated; and once it is explicated, its close semantic similarity to the regular *have a V* construction becomes apparent:

(11) X had a fall. ⇒
for some time, not a long time
something (V) was happening to X
it could cause X to feel something bad
it was happening not because anyone else did anything
it was happening not because X wanted it
it was happening not because X wanted anything to happen to anything other than himself
it could happen more than one time

6. *Have a V* versus *take a V*

Have a V belongs to a family of constructions which includes at least two other members: *take a V* and *give a V*. A full discussion of the *have a V* type would need to include a comparison of this type with the other members of the family; this in turn would require a detailed study of the behaviour of those other members. However, a few brief observations are

in order, especially concerning the relation between the *have a V* and *take a V* types. Compare the sets of expressions in Table 1.

HAVE	TAKE
have a look at	take a look at
have a bath	take a bath
have a walk	take a walk
have a lick	take a lick
have a sip	take a sip
have a play	*take a play
have a read	*take a read
have a cry	*take a cry
have a cough	*take a cough
have a pee	take a pee
have a try	*take a try
have a look for	*take a look for
have a think	*take a think
have a suck	?take a suck
have a chew	*take a chew
have a listen	*take a listen
have a feel	*take a feel
have a chat	*take a chat
have a cuddle	*take a cuddle
*have a dive	take a dive
*have a leap	take a leap
*have a step	take a step

TABLE 1.

All these differences can be predicted from the following semantic formula:

(12) X took a V ⇒
at moment *t*, X moved some part(s) of X's body
because X wanted to do something (V) for a short time
it could cause X to feel/know something
for a short time, X was doing it
X was doing it not because X wanted anything to happen to anything other than himself
X could do it more than one time

In contrast to *have a V*, the *take a V* frame suggests a definite MOMENT of time as the starting point of the action. The action itself need not be momentary (taking a walk or taking a swim is not); on the contrary, it is extended in time, though it lasts only a short time. But there must be a definite initial impulse — momentary, deliberate, and apparently involving physical motion. The relation between *take a V* and *have a V* is similar to that between *take a* $N_{concrete}$ and *have a* $N_{concrete}$: to *take* an object means, so to speak, to grab it and therefore to have it. The initial motion must be deliberate. Semi-voluntary actions like yawning or crying do not lend themselves to description in the *take a V* frame. Some physiological processes, however, can be described in that frame very well, because they are seen as fully voluntary and controllable (cf. *take a piss* etc.) Expressions like **take a play* are odd because they refer to an activity which is not triggered by an initial momentary movement. For the same reason, *take a look* is good, but **take a listen* is bad: the former refers to an initial movement of the eyes and possibly the head in the desired direction, but one does not move ears in order to listen (a rabbit might, but not a human being).

One can *take a ride* on a merry-go-round by hopping onto one of the wooden horses; but one cannot **take a row* (of a boat) (although one can *have a row*), because rowing requires a prolonged action which cannot be seen as resulting in any way from the initial movement. Similarly, one can *take a sip, a lick, a sniff*, or *a bite*; but one cannot **take a chew, a suck*, or *a smoke*. The quick unitary acts of sipping, licking, sniffing, or biting (once) can be seen as resulting from an initial movement of the relevant parts of the body; but the prolonged iterative action of chewing, sucking, or smoking cannot.

Furthermore, the activity described in the *take a V* frame must be seen as unitary, as having a natural beginning and end. It is not an arbitrary chunk of an activity, as those referred to in *have a V* generally are; it is a unitary action. Single brief acts like biting, licking, sipping, or swallowing fit this construction particularly well; but activities which involve a repetition of movements (e.g. walking or swimming) can also be used in this frame — provided they can be seen as unitary, as having a definite extension. Thus one would be more likely to *take a walk around the pond* and to *have a walk in the park* than to *take a walk in the park* or *have a walk around the pond*. The action which one TAKES must not only be limited in time, but must be seen by the agent as such. When one takes a walk, one has a definite idea of what one wants to do and how long it is going to take;

one 'sets oneself going' in a definite direction and for a definite (short) period of time. When one HAS a walk, the action is not only aimless, but also unplanned in terms of space and time. Again, the image of grabbing some desirable object is helpful: this entails that the agent KNOWS what he is going to have, takes the initiative, and knows what he is doing; but when he merely 'has' something, the ideas of decision, initiative, and planning are absent. Consider *take a nap* vs. **take a sleep*. 'A nap' is not only short, but also controllable: the agent is not entirely unconscious; he can plan and control the length of the potentially pleasurable experience to which he is treating himself. But 'a sleep' is not similarly controllable; its length is not similarly foreseeable and plannable.

Finally, joint action like kissing or wrestling does not fit the *take a V* frame because of the required initial impulse of will. It would be strange for two people to decide on the same joint action at exactly the same moment, with no prior act of communication; and even if they did, their decision would not really be joint — two people can do the same thing, but they cannot share the same impulse of will. Even two lovers whose hearts beat in perfect unison cannot **take a kiss*: they may have an identical impulse at the same time, but not a JOINT impulse. Moreover, they cannot preplan the act jointly, at the same moment, without exchanging any signs. (Expressions like **take a chat* are of course excluded anyway, because chatting does not result from initial movement.)

The above discussion of *take a V* is necessarily very sketchy. However, even this brief discussion is sufficient to show that *take a V* is also governed by rules; that these rules are semantic; and that they can be stated in a metalanguage based on intuitively understandable natural language, so that their predictive power can be tested, and their relationship to other, related constructions can be clearly seen.

Having spelled out the differences in meaning between the *take a V* and *have a V* patterns, one is tempted to speculate on the cultural implications of these differences. Why is the *take a V* pattern particularly widespread in American English, while the *have a V* pattern has a particularly wide range of use in Australian English? When one thinks of the hedonistic connotations of *have a V*, and the decisive, pre-planned, goal-oriented ring of *take a V*, one must be reminded of what has been written in many books about the national character, dominant lifestyles and prevailing ethos of Australia and North America. According to the stereotype, in the more relaxed and less ambitious 'lucky country' of the South, people like to

indulge in, and talk about, 'having a swim', 'having a lie-down', 'having a kick of the footie', 'having a yarn', and other relaxing, pleasurable activities (cf. the references quoted in Wierzbicka 1986b). The North American stereotype is of course different: it stresses decisiveness, determination, competitiveness, quick and goal-oriented action, and so on. The grammatical contrast between 'taking a dive' or 'a leap' and 'having a lie-down' or 'a swim' seems to epitomize the contrast between the two cultural stereotypes in question.

7. Comparable constructions in other languages

It should be pointed out that English is by no means unique in having a special construction referring to self-centered, pleasure-seeking human activities. Similar meanings have also been grammaticalized, though in different ways, in several Slavic and Romance languages. For example, in Polish a similar effect is achieved by means of a reflexive pronoun in the dative case:

Jan leżał na trawie.
John was lying on the grass

Jan leżał sobie na trawie (i marzył).
John was lying to-himself on the grass (and was daydreaming)
'John was lying pleasurably on the grass, daydreaming.'

Comparable constructions in Russian, Italian, and Spanish also use a reflexive pronoun in the dative case — but the conditions on their use are different in each language; and so, of course, are the exact meanings codified in them. For example, in Polish the idea of an agent enjoying a self-absorbed and aimless activity excludes the possibility of mentioning an object, as if a specified object interfered with the image of a totally self-absorbed agent, or with the emphasis on the agent's experiences:

Podjadł sobie.
he-ate to-himself
'He ate an enjoyable amount of something.'

* *Zjadł sobie kanapki przygotowane przez matkę.*
'He ate with pleasure the sandwiches prepared by his mother.'

Czyta sobie.
he-is-reading to-himself
'He is reading pleasurably.'

* *Czyta sobie list od żony.*
'He is reading pleasurably the letter from his wife.'

However, in Italian the idea of a self-indulging, self-absorbed agent REQUIRES that an object be mentioned — something which the agent is 'using' for his own enjoyment. It is the presence of an object, clearly subordinated to the agent's self-seeking, self-indulging aims which highlights the pleasurable nature of the action. For this reason, even intransitive verbs like *dormire* 'sleep' can be used in this construction only when they are transitivized, with the SITUATION treated as the object:

Giovanni si è mangiato un piccione intero.
Giovanni to-himself has eaten a pigeon whole
'Giovanni ate (up) a whole pigeon; (he enjoyed it).'

Giovanni si sta guardando la televisione.
Giovanni to-himself is watching the television
'Giovanni is watching the television; (he's enjoying it).'

* *Giovanni si sta leggendo.*
'Giovanni is reading (pleasurably).'

* *Giovanni si dorme.*
'Giovanni is sleeping (pleasurably).'

Ecco che se la dorme.
here (he is) that to-himself it is-sleeping
'Here he is sleeping pleasurably through it (the situation).'

In Spanish, the requirement that an object used by the self-seeking agent should be mentioned explicitly seems to be even stronger than in Italian. Not only are objectless sentences bad:

* *Juan se está leyendo.*
Juan to-himself is reading

but also sentences in which an object IS mentioned are bad if the object does not refer to something that the agent could have actually absorbed or assimilated. Thus one cannot say:

* *Juan se está mirando la televisión.*
Juan to-himself is watching the television

But one CAN say:

Juan se miró un programa de televisión.
Juan to-himself watched a program of television
'Juan watched a TV program (to his own enjoyment/advantage).'

Juan se leyó un libro.
Juan to-himself read a book
'Juan read a book (to his own enjoyment/advantage).'

Juan se comió una manzana.
Juan to-himself ate an apple
'Juan ate an apple (to his own enjoyment/advantage).'

8. Conclusion

Sentences in the *have a V* frame are not a jungle of idiosyncrasies, but exhibit orderly and systematic behaviour. We need to distinguish ten different subtypes (*have a walk, have a look at, have a try, have a cough, have a bite, have a drink, have a kick, have a wash, have a kiss,* and *have a chat*); and we must postulate not one generative formula, but ten. At the same time, the 'structural descriptions' proposed for these constructions are closely related. This means it is no accident that several different meanings have been grammaticalized in English by means of the same formal device. The joint contribution of *have* and of *a V* always results in a notion of action seen as repeatable experience, involving only one core participant: the agent/experiencer. This does not mean that the frame takes only intransitive verbs. It allows transitive verbs, too, but only if the sentence with a transitive verb permits an interpretation compatible with the requirement of one core participant: the agent/experiencer. Only two types require one-argument verbs: the type which refers to aimless and objectless individual action conducive to feeling good, and that which refers to potentially therapeutic, semi-voluntary, 'corrective' individual action. Two types refer to action which is aimed at acquiring unimportant (but mildly interesting) knowledge and which involves an object (an object of thought) without affecting it in any way. Two types refer to potentially pleasurable bodily consumption, which affects some patients but only negligibly so, and which can be viewed as affecting above all the agent/experiencer. One type (dialectally restricted) refers to aimless action which uses an external object for the agent's potential (mild) enjoyment, and which affects the object only superficially. One type refers to 'grooming' actions, directed at

one's own person; these actions do affect the object; but since the object is identical with (some parts of) the agent/experiencer, the action can still be viewed as involving only one entity. Two types refer to group action. In one, the partners join their bodies and act as one, using both their bodies as a source of potential enjoyment; both partners can be viewed as patients as well as agents, but there is no patient or object distinguishable from the jointly operating agents/experiencers. In the other group-action type, the agents engage in an aimless and potentially pleasurable group activity which could not be performed individually, and which therefore must be viewed as performed by ONE collective agent (without any patient). Thus, although ten different types have been postulated, they are clearly all variations on the same theme.

The polysemy of the *have a V* frame parallels the extensive polysemy of various grammatical devices in other languages, e.g. the Russian instrumental case (Wierzbicka 1980b) or the Japanese passive (this volume, chap. 4; see also Chappell 1983 for similar conclusions concerning Chinese). At the same time, the interrelatedness of the different meanings served by the *have a V* frame parallels that of the different meanings served by the Russian instrumental or by the Japanese passive. This, I suggest, is how morphology works: a versatile grammatical exponent can serve a large number of different meanings — not on its own, but in collaboration with other indicators, such as the semantic and syntactic category of the nouns and verbs occurring in a given construction. At the same time, the different meanings served by the same morphological exponent are not disparate — are not widely and unpredictably different from each other; on the contrary, they are usually very closely related and have a common core, i.e. a partial semantic invariant. It is not an accident that the constructions exemplified by the expressions *have a walk, a throw, a suck, a cuddle*, and *a chat* exhibit a similarity of form: this reflects a similarity of meaning.

One question, however, deserves further discussion: why *have?* If these constructions indeed have a close mutual relationship, it is understandable that they share the same form; but why should it be *have* rather than something else? To answer this question, we must look at some other — intuitively more basic — uses of *have*. Consider this example:

John has a house.

Is this sentence transitive or intransitive? Superficially, it seems transitive: it has the direct object *a house*. Yet, as is often pointed out, *have* sentences

cannot be passivized, even when their direct objects are definite; moreover, their translation equivalents in many other languages are INtransitive. For example, in Russian one says:

U menja kniga Ivana.
at me book-NOM Ivan-GEN
'I have Ivan's book.'

using the same construction which is used to indicate location:

U menja Ivan.
at me Ivan-NOM
'Ivan is with me (at my place).'

In fact, in English too, some *have* sentences have close intransitive counterparts which focus explicitly on location:

a. John has the children.
b. The children are with John.

Example (b) answers the question 'Where are the children?' But (a) does more: it says where the children are, but it also suggests that John has a certain power over them (he can do with the children what he wants). A similar difference can be observed in the following pair:

a. John has the book in his office.
b. The book is in John's office.

Both sentences say where the book is, but (a) adds the information that John can do with it what he wants.

A prototypical transitive sentence has two predications, which can be separated from each other (cf. Wierzbicka 1975):

John killed Harry. ⇒
Harry died
because
John did something to him

But in a *have* sentence, a predication made about the object cannot be conceptually separated from a predication about the subject: what is said about the object is a way of saying something about the subject. For example, what the sentence *John has the children* says about the children is that they are with John and under John's control. One could say, then, that the verb *have* can make a predication about one entity into a predication about another entity (a person). This role of *have* is particularly clear in sentences like

a. John has blue eyes.

The only explicit predicate mentioned here, i.e. *blue*, applies to the eyes, not to John. Yet John, not his eyes, is the sentence's main topic. To talk about John's eyes as such, one would say

b. John's eyes are blue.

Something similar can be said about one-argument *have* sentences like this, different as they are from two-argument *have* sentences such as (a) above:

John has been ill.

Is this one predication or two? Only one predication is made explicitly ('at some time before now John was ill'); but another predication is implied: something can be said about 'John-now' because of that. Here too, then, one predication is used as a means of making another, although now both predications are made about the same entity.

Thus we can see what *have* does: in a sentence with two arguments, it converts a predication about the object into an (implicit) predication about the subject; in a sentence with one argument, it expands one simple (explicit) predication into a composite one; in both cases, it implies something about the subject, over and above what is said explicitly.

Let us return to pairs such as:

a. John walked.
b. John had a walk.

We can say that (a) makes a single predication about John ('at some time, he walked'); but (b), while making the same explicit predication, hints at something else, at something more: John experienced something because of his walk. But this added predication applies exclusively to the subject.

Let us look in turn at some periphrastic *have* constructions with a transitive verb:

John had a kick of the ball.
John had a lick of the ice-cream.

Here *have* works as a detransitivizer: the object is de-emphasized, the predication concerning the object is backgrounded, and at the same time the emphasis on the agent increases. The simple predication about John ('he did such and such') expands into a much fuller account of his intentions, feelings, and experiences.

It appears, then, that in all the different *have* constructions, regardless of the degree of their complexity, *have* has a similar function. It says, roughly: look for a hidden predication about the subject; view the explicit predication as implying something else about the subject; pay no attention to the object (if there is one). Whatever the sentence says is meant to characterize the subject alone. If the subject is human, this hidden predicate tends to be interpreted as concerning the subject's experience; if the verb refers to a voluntary action, then the experience tends to be interpreted as potentially beneficial.

The specific semantic value of expressions like *have a walk, a drink*, or *a look* results not only from the presence of *have*, but also from the characteristic contribution of the verb stem combined with the indefinite article. It is intuitively clear that such expressions are semantically related not only to the other uses of *have*, but also to other constructions containing the element *a V*: *give a kiss* or *a sigh*, or *take a walk*.

I suggest that, while *have* signals the presence of an implied predicate ascribed to the subject, the verb stem in combination with the indefinite article carries aspectual meaning (cf. Sapir 1949:114-15): it delimits the duration of the action or event, and presents it as repeatable. The explications of the different *have* constructions refer to the temporal and aspectual characteristics of the event described by the verb; this is precisely because of the semantic contribution of *a V*, not because of the semantic contribution of *have*.

Have contributes the idea of a hidden predicate ascribed to the subject; the *a V* component contributes the idea of a repeatable action, with clear temporal boundaries. These two contributing factors, however, are not mutually unrelated: as has been argued, the stress on the repeatability of the action entails a requirement of no change in the patient (one cannot kill the same chicken twice), and thus helps to de-emphasize the patient and to establish emphasis on the subject's experience.

This 'experiencer' perspective manifests itself in an interesting interaction among transitivity, mood, and person. We have seen that, in all the subtypes of the *have a V* construction, the object of the main verb (if any) tends to be de-emphasized — either by deletion, by the use of a preposition of less impact (such as *at* instead of *of*), or by the choice of a verb of minimal impact. But many of the examples used also show that the *have* constructions tend to favour the imperative, the future tense, verbs with modal auxiliaries, a non-3rd person, and the singular:[11]

May I have a look?
Let me have a kick!
Have a good cry!
?The women had a swim (listen, lick, cough).

This combination of factors is, of course, well known from another context: it constitutes the most favoured environment for the antipassive and similar constructions in ergative languages (cf. Blake 1977, Dixon 1979, Kibrik 1979-80). The functional similarity between the English *have a V* construction and the antipassive of the ergative languages is striking, despite the obvious differences: the antipassive highlights the agent at the expense of the patient, and so does *have a V*.[12] And since every agent is also a potential experiencer (see Givón 1979:337), the heightened emphasis on the agent naturally draws attention to the subjective dimension of the action — to the agent's intentions, wishes, and feelings. For this reason, the antipassive and antipassive-like constructions tend to favour non-indicative mood, as well as non-past and non-3rd person (cf. Wierzbicka 1981).

However, one interesting difference exists between the antipassive-like and the *have* constructions: the antipassives are also favoured (or actually required) in the durative or habitual aspect, whereas the *have* constructions constitute a kind of 'anti-durative'. Consider the following sentences:

May I have a borrow of your pencil?
May I have a use [ju:z] of your pen for a moment?
*May I have a take of your pen (for a moment)?

The first two, though highly colloquial, are acceptable to many speakers, in striking contrast to the third. The reason for this contrast is clear: *borrow* implies short-term use, whereas *take* could mean something permanent. What is even more interesting, however, is a further temporal difference between *borrow* and *have a borrow*: the latter implies a further reduction of the time in question. One could *borrow* an object for a month, but one would *have a borrow* only when immediate short-term borrowing was envisaged.

The patient can be de-emphasized in two different ways: either by generalizing, when the identity of the object is irrelevant:

I eat very slowly.

or by minimizing the effect of the action on the object involved, as in:

Have a borrow of my pencil (a sip of my wine).

The *have a V* device combines a heightened subject perspective with a RESTRICTION on time, rather than with a generalization.

Thus, *have a V* constructions constitute an interesting counter-example to the generalization which correlates perfective aspect with high transitivity (see Moravcsik 1978, Hopper and Thompson 1980).[13] As Sapir (1949:114) pointed out, expressions like *have a swim*, a *sip*, or *a look* can be viewed as analogues to perfective aspect. At the same time, however, they embody a heightened emphasis on the subject; therefore, with transitive verbs, they de-emphasize the object, and so combine a perfective meaning with very low transitivity.

In summary, the over-all semantic invariant postulated for all the different subtypes of the *have a V* construction is as follows (see also section 4.2):

(13) X had a V ⇒
for some time, not a long time, X was doing something (V)
it could cause something (good) to happen in X
that nobody else would know about
X was doing it not because X wanted anything to happen to anything other than himself
X could do it more than one time

The tentative formula proposed at the beginning of this chapter included the component 'which could cause X to come to feel/know something'. However, in that form the formula was disjunctive ('feel/know'), and did not show what the two alternative possibilities share. The present version formulates the same component differently: 'which could cause something (good) to happen in X that nobody else would know about'. This concept seems to capture the common denominator of experience (including emotion) and awareness, of 'feel' and 'know'.

The element 'good', given in parentheses, is not a part of the semantic invariant itself, but it is part of most of the subtypes, and is compatible with the meaning of all of them. Of the ten more specific explications, six contain the element 'good' (those assiged to *have a swim, a lick, a drink, a kick, a kiss*, and *a chat*); two contain the element 'better' (those assigned to *have a cough* and *a wash*); and two contain the element 'not bad' (those assigned to *have a try* and *a look at*); see also section 7 above.

Notes

1. This is not to deny that anyone has ever suspected a hidden order in this apparent jungle of idiosyncrasies, and tried to reveal that order. Green 1974 and Cattell 1977 represent most notable efforts in this direction, and R.M.W. Dixon is continuing his work toward the same objective. See also Harris 1969, Nickel 1968, Prince 1974, Makkai 1977, and Cattell 1984.

2. Prince (1974) has addressed herself specifically to the problem of predicting which verbs can occur in the *have a V, take a V*, or *give a V* frames. She decides, however, that the restrictions in question are "idiosyncratic" (p.23) — and, moreover, that attempts to establish any generalizations in this area are "undesirable" (p.75). She also suggests that "the language seems to be in a state of change in this matter, and different dialects (or even idiolects) exhibit such great differences as to make such a prediction not only impossible but misleading and undesirable. For any given dialect (or idiolect) at any given moment, such restrictions could be considered merely as arbitrary grammatical ones."

   The fallacy of 'transitional stages' in language development, when all order supposedly breaks down and all the regularities dissolve, was conclusively exposed by Schuchardt (1885). From the speaker's point of view, no stage of language development is 'transitional'; from the linguist's point of view, every stage is (or can be seen as such). The distinction between those stages when a language works as a system governed by rules and those when it is in a 'stage of change' — therefore is no longer governed by any rules — seems to me naïve and untenable.

3. Note also the following pairs of sentences:

   a. I want you to have a choice.
      I want you to have a choose.
   b. Can I have the use [ju:s] of your pen?
      Can I have a use [ju:z] of your pen?

   It is clear that *choice* and *use* [ju:s] are deverbal nouns, but that *choose* and *use* [ju:z] are verb stems, not deverbal nouns with a zero suffix, despite the fact that they are combined with an article. Cf. also the comment of Kruisinga (1932, 3:96), quoted by Cattell (1984:20): "although *dig* is generally a verb, we can say *to give a person a dig in the ribs*. In the latter expression *dig* is used as a noun, so that the verb *dig* has been converted into a noun. The speaker of Modern English, however, still feels that the word is 'properly' a verb."

4. The question of the 'availability of words' for a semantically revealing paraphrase of constructions like *have a V* or *give a V* was discussed by Harris (1969:46), whose comments deserve quotation:

   "The most difficult search for a predicate source is in the case of verb operators on nominalized verbs: *have a look, give a look, make a trip*, etc. They almost all have the meaning of some bounded segment of activity, as is also seen in their time-duration adverbs: *He walked all day, *He had a walk all day*. We would expect to derive these nominalizations from a predicate (or a choice of predicates) that state the bounding, but words that would preserve acceptability-ordering are hard to come by in this case: *I had a walk.* ← *My walking was an event* (or: *was in an amount*)."

   Harris' comments are echoed by Prince (1974), who contrasts the artificial "information language" devised by herself, in which "everything is sayable", with natural language, in

which words are not available for an adequate explication.

I would claim that in natural language, too, everything is sayable — and, what is more, that everything said is verifiable, because the formulae constructed in ordinary language are intuitively understandable. Harris' and Prince's explications are not very illuminating because they have no clear meaning:

> I had a short walk. ⇒ My walking had an extent and the extent was short.
> I had a read of it. ⇒ My bounded reading of it was/occurred in the past.

As I argue, intelligible words are not unavailable. Harris' original insight concerning the *have a V* construction can be expressed in a perfectly intelligible (if unidiomatic) formula constructed in ordinary language.

5. Cf. Jespersen's (MEG 6:119) remark: "In not a few instances, sbs [substantives] formed from vbs [verbs] without change of form compete with sbs formed by means of derivative endings, especially Latin formatives. There is often a difference in sense, the role of the shorter word being generally to denote a single occurrence."

6. The idea that one could account for the acceptability (or otherwise) of different sentences in the *have/take/give/make* (etc.) *a V* frame in terms of a classification of lexical items (verbs or deverbal nouns) was put forward and tentatively implemented by Nickel (1968). He distinguishes the following classes of *nomina actionis:* nouns denoting movement (N_{mov}), vision (N_{vis}), the action of speaking (N_{dic}), sounds (N_{snd}), the action of cleaning (N_{cl}), the action of drinking (N_{dr}). Although Nickel (1968:9) stresses that "this is a very tentative and ad-hoc classification, and must not be taken as a genuine semantic analysis", he nonetheless regards it as a "convenient way to account for the different range of collocability of the function verbs themselves". In his opinion, "the semantic classes to which the nouns used in complex structures belong can be used as parameters to differentiate the verbs *give, have, take, and make*". To this end, he offers the following table:

	N_{mov}	N_{dic}	N_{vis}	N_{snd}	N_{dr}	N_{cl}
give	+	+	+	+	−	+
have	+	+	+	−	+	+
make	+	+	−	+	−	−
take	+	−	+	−	+	−

In my view, classificatory attempts of this kind are misconceived because they are based on a wrong assumption about the nature of the constructions in question.

7. The expression *have a woman* (and more obscene versions of the same) can be regarded as a semi-idiomatic extension of the same basic pattern. It is meant to convey a tough-minded attitude to 'consumption' of women, with the emphasis on the agent's pleasurable bodily experience, and with total disregard for the patient.

8. With intransitive verbs of intentional action (e.g. *walk*), the *have a V* frame presents the action as conducive to 'feeling good'; but with transitive verbs (e.g. *lick*), it seems to present it as conducive to 'feeling something good' (while doing it) rather than to 'feeling good' (while doing it or afterward).

9. Petrol-sniffing for narcotic use is common in parts of Australia.

10. *Doing a dance* and *having a dance* also differ with respect to telicity. The former implies a natural boundary, reached when the whole dance, thought of as a finite entity, has been

performed; but the latter implies an activity which can be continued for as long as the partners want.

11. Third-person sentences in the *have a V* frame are frequent in novels in which the narrator adopts the hero's point of view, and has access to the hero's consciousness. In ordinary speech, however, they are largely confined to the participants of the speech act (*you* and *I*).

12. The main function of antipassive is no doubt parallel to that of passive: passive promotes the object and demotes the subject, while antipassive does the opposite. A language like English, in which the subject encodes the primary topic anyway, has no need for an antipassive in the strict sense of the word. True, the object can be demoted from a secondary position within the core of the sentence to a peripheral position outside the core (cf. Wierzbicka 1980b); but the subject cannot become any more topical than it is. A human subject, however, can acquire further prominence through an added emphasis on his/her inner experiences.

13. A similar counter-example is provided by the following contrast in Russian:

On vypil moloka.
he drank-PF milk-GEN
'He drank some milk.'

*On pil moloko. (*moloka)*
he drank-IMPF milk-ACC (*milk-GEN)
'He was drinking milk.'

On s"el kaši.
he ate-PF porridge-GEN
'He ate some porridge.'

On el kašu.
he ate-IMPF porridge-ACC (*porridge-GEN)
'He was eating porridge.'

In sentences like these, verbs in the imperfective aspect require an accusative object, whereas verbs in the perfective aspect can take a genitive (partitive) object.

Summary of construction subtypes

1. AIMLESS OBJECTLESS ACTION WHICH COULD CAUSE ONE TO FEEL GOOD

(e.g. *have a walk, a swim, a run, a jog, a lie-down*)

X had a walk. ⇒

for some time, not a long time, X was doing something (V)
it could cause X to feel good

X was doing it not because X wanted anything to happen to anything other than himself
X could do it for as long as X wanted
X could do it more than one time

2. ACTION AIMING AT PERCEPTION WHICH COULD CAUSE ONE TO KNOW SOMETHING AND WHICH WOULD NOT CAUSE ONE TO FEEL BAD IF IT DIDN'T
(e.g. *have a look (at), a listen (to), a smell (of), a feel (of), a taste (of)*)

X had a listen (to Y). ⇒
for some time, not a long time, X was doing something (V)
it could cause X to come to know something about Y
X would not feel anything bad if X did not come to know anything about Y because of doing it
X was doing it not because X wanted anything to happen to anything other than himself
X could do it more than one time

3. TENTATIVE ACTION WHICH COULD CAUSE ONE TO COME TO KNOW SOMETHING AND WHICH WOULD NOT CAUSE ONE TO FEEL BAD IF IT DIDN'T
(e.g. *have a try, a look for, a think about*)

X had a look for Y. ⇒
for some time, not a long time, X was doing something (V)
it could cause X to come to know something about Y
X knew that X might not come to know anything about Y because of that
X would not feel anything bad if X didn't come to know anything about Y because of that
X was doing it not because X wanted anything to happen to anything other than himself
X could do it more than one time

4. SEMI-VOLUNTARY ACTION WHICH COULD CAUSE ONE TO FEEL BETTER
(e.g. *have a cough, a yawn, a cry*)

X had a cough. ⇒

for some time, not a long time, X was doing something
something was happening in his body because of that
it could cause X not to feel something bad in his body
X was not doing it because X wanted anything to happen
to anything other than himself
X could do it more than one time

5. CONSUMPTION OF SMALL PARTS OF OBJECTS WHICH COULD CAUSE ONE TO FEEL PLEASURE
(e.g. *have a bite, a lick, a suck, a chew, a nibble*)

X had a lick (of Y). ⇒
for some time, not a long time, X was doing something (V)
taking through his mouth into his body small parts of Y
it could cause X to feel something good
(when X was doing it)
X was doing it not because X wanted to cause anything to happen to anything other than himself
X could do it more than one time.

6. CONSUMPTION OF NON-DISCRETE SUBSTANCES WHICH COULD CAUSE ONE TO FEEL PLEASURE
(e.g. *have a drink of (orange juice), a smoke, a sip of (wine), a sniff of (petrol)*)

X had a drink (of substance Y). ⇒
for some time, not a long time, X was doing something (V)
taking something through his mouth into his body
it could cause X to feel something good
X could do it for as long as X wanted
X was doing it not because X wanted anything to happen to anything other than himself
X could do it more than one time

7. ACTION SUPERFICIALLY INVOLVING ANOTHER ENTITY, WHICH COULD CAUSE ONE TO FEEL PLEASURE
(e.g. *have a kick of the football, a throw of the boomerang, a read*)

X had a kick of the football. ⇒
for some time, not a long time, X was doing something
with thing Y

it could cause X to feel something good
X was doing it not because X wanted anything to happen to anything other than himself
X could do it for as long as X wanted
X could do it more than one time

8. SELF-DIRECTED ACTION WHICH COULD CAUSE ONE TO LOOK BETTER
(e.g. *have a wash, a shave*)
X had a wash (shave). ⇒
for some time, not a long time, X was doing something to some parts of his body
it could cause people not to think something bad about his body
X could feel better because of that
X was doing it not because X wanted anything to happen to anything other than himself
it was something that one usually does to cause people not to think something bad about one's body
X could do it more than one time

9. JOINT BODILY ACTIVITY WHICH COULD CAUSE THE PEOPLE INVOLVED TO FEEL PLEASURE
(e.g. *have a kiss, a cuddle, a dance*)
X and Y had a hug. ⇒
for some time, not a long time
X and Y were doing something together
causing their whole bodies to touch
it could cause them to feel something good
one could think of them as one thing because of that
they were doing it not because they wanted anything to happen to anything other than themselves
each of them was doing it not because he wanted anything to happen to the other person
they could do it for as long as they wanted
they could do it more than one time

10. JOINT SPEECH ACTIVITY WHICH COULD CAUSE THE PEOPLE INVOVLED TO FEEL PLEASURE
(e.g. *have a chat, a gossip, a laugh*)

X and Y had a chat. ⇒
for some time, not a long time
X and Y were doing something together
saying things to one another
it could cause them to feel something good
one person could not do it
if no other person wanted to do the same thing
one could think of them as one thing because of that
they were doing it not because they wanted anything to happen to anything other than themselves
each of them was doing it not because he wanted anything to happen to the other person
they could do it for as long as they wanted
they could do it more than one time

11. *HAVE A FALL*

X had a fall. ⇒
for some time, not a long time
something (V) was happening to X
it could cause X to feel something bad
it was happening not because anyone else did anything
it was happening not because X wanted it
it was happening not because X wanted anything to happen to anything other than himself
it could happen more than one time

12. *TAKE A V*

X took a V ⇒
at moment *t*, X moved some part(s) of X's body
because X wanted to do something (V) for a short time
it could cause X to feel/know something
for a short time, X was doing it
X was doing it not because X wanted anything to happen to anything other than himself
X could do it more than one time

13. CORE OF *HAVE A V* CONSTRUCTIONS

X had a V ⇒

for some time, not a long time, X was doing something (V)
it could cause something (good) to happen in X
that nobody else would know about
X was doing it not because X wanted anything to happen to anything other than himself
X could do it more than one time

6. The semantics of 'internal dative' in English

1. Introduction

This chapter takes a look at the English 'internal dative', with the purpose of identifying the meaning of this syntactic construction, and of showing that by stating this meaning in precise terms (in the proposed semantic metalanguage), we can both explain and predict the range of application of the construction. A number of subtypes of the construction emerge, with a shared semantic core. We then proceed to a consideration of broader issues of transitivity, looking at the syntactic properties of various speech act verbs. The construction to be considered here can be illustrated with sentences such as the following ones:

John offered Mary a rose.
Bill knitted his son a jumper.
Fred fried Betty an egg.

Usually, sentences of this kind are described in terms of a hypothetical transformation (or a set of transformations) known as 'dative movement'. For my part, however, I see no need to postulate any hypothetical (and unverifiable) 'movements' between the semantic structure and the surface structure. Instead, I prefer to try to state empirically observable generalizations.

As a first approximation, the construction in question can be represented by means of the following broad formula:

$$NP^1_{human}\ V_{action}\ NP^2_{human}\ NP^3_{concrete}$$

'NP_{human}' stands for a person or for something treated like a person (or a group of people). 'V_{action}' stands for a verb which can occur in frames such as 'what he did was V'; for example, *owe* in "I owe you a dollar" is not an action verb. '$NP_{concrete}$' stands for persons, material things, places and also for recognizable and repeatable sequences of acts regarded as individual

objects, such as *a song, a game, a joke, a story*. Identifiable sequences of this kind are treated in English as concrete objects, which have an enduring identity, not as transient events. One can say:

She sang him the same song twice.

but not:

?*She gave him the same kick/kiss twice.

The latter 'sentence' belongs to a different construction, used more felicitously in sentences such as:

Betty gave Bill a kiss/a kick.

This construction, although closely related to the one analysed in this chapter, does not fit its structural description because, first, it includes an auxiliary verb (*give*) instead of an action verb, and second, because its direct object is an action noun. English also has other constructions with two prepositionless objects, and with different constraints on the subject, the verb and the two objects. Although related to the construction which is the topic of this chapter, they are not discussed here.

2. Semantic constraints on the 'internal dative' construction

However, if foreigners trying to learn English were instructed to construct English sentences freely in accordance with the formula proposed above, they would quickly get into trouble, as the following sentences show:

?Johnny coloured Grandma a picture.
?Jimmy broke Johnny a pencil.
?The gangsters killed him a sister.

Clearly, to give our formula full predictive power we must constrain it somehow. The literature abounds in attempts to state the constraints on 'internal dative' sentences, the most significant attempt being of course Green (1974). Rather than try to survey and discuss these attempts fully here, I will proceed to state my own hypothesis. In my view, the constraints are semantic, and follow, to some extent, from the meaning of the simpler construction on which the one under discussion is based:

$$NP^{1}_{human}\ V_{action}\ NP^{2}_{concrete}$$

The simple transitive construction with an action verb, with a human sub-

ject (NP^1) and a concrete direct object (NP^2) conveys, roughly, the following meaning:

NP^1 did something to NP^2

A ditransitive sentence (with an 'internal dative') has the following two implications:

a. person NP^1 did something to NP^2
because NP^1 wanted something to happen to person NP^3
b. something happened to person NP^3 because of that
(one can say what)

A ditransitive sentence with an 'external dative' lacks the second of these implications. In addition, the ditransitive construction with an internal dative implies that what happened to NP^3 (the 'internal dative') is viewed by the speaker as more important or more interesting than what happened to NP^2 (the 'direct object'). This third semantic component of the ditransitive construction with an internal dative can be spelled out explicitly:

c. saying this, I think more of (what happened to) NP^3 than of
(what happened to) NP^2

The reality of this third component, which compares both 'objects' (NP^3 and NP^2) with one another, is confirmed by the fact that the 'less important' object (NP^2) cannot be deleted:

*Bill knitted his son.
*Jack fried Betty.

This prohibition against deleting the direct object holds also for those transitive verbs which in principle can occur without a direct object (provided that they are not accompanied by an 'internal dative'):

Jim was reading a story.
Jim was reading Sue a story.
Jim was reading a story to Sue.
Jim was reading to Sue.
*Jim was reading Sue.

I contend that the internal dative cannot occur without a direct object because the very presence of the 'internal dative' implies a comparison of the indirect object with a direct object. But a comparison, to make sense, requires the presence of two things, two objects to be compared (cf. the Russian joke *Kakaja raznica meždu vorob'em?* 'What's the difference

between a sparrow?') The two objects of the ditransitive sentence with an internal dative can be distinguished, informally, as the target person (NP^3) and the patient (NP^2). It can be said, then, that both the target person and the patient are somehow affected by the action, the patient directly and the target person indirectly, but the speaker's attention is focussed primarily on the effect of the action on the target person (cf. Shopen 1974).

The internal dative construction seems to carry also an implication that the effect of the action could be expected to be good for the target person. Even sentences such as:

Bill made Fido a muzzle.
Tim sent Tom some poison.
The warden issued the prisoners handcuffs.
Dejanira knitted Heracles a poisoned shirt.

seem to imply that the effect of the action was desirable from the target person's point of view. Sentences such as:

Jane refused Jim a cigarette.
Jack denied Jean the sweets.

don't imply that the action was desirable (from the target person's point of view), but they, too, imply that the patient was desirable. It is true that sentences such as this (Green 1974:173):

This will spare you embarrassment.

do not imply that speaker views embarrassment as desirable. But sentences of this kind do not fit the 'structural description' of the construction under discussion, since they do not contain an ACTION verb. When *spare* is used as an action verb, the internal dative does carry the implication that the patient is desirable, as in Green's (1974:93) sentence:

Can you spare a poor hippie a dime?

And so on — apparent exceptions can be found easily, but they generally turn out to be more apparent than real. I think, therefore, that the full semantic representation of the 'internal dative' construction should include the component:

one could think this: Y will be good for Z

The following sentences, suggested to me by Tim Shopen (p.c.) as apparent counter-examples:

He sold her a faulty piece of equipment (the rotten so-and-so).
He sent her a case of rotten apples.

nearly convinced me that the construction carried no implication of potential desirability. After further consideration, however, it seems to me that these 'counter-examples' do not really contradict my formula. In fact they seem to imply that the 'bad Y' was NOT what could be expected (something good for Z).

Given that the internal dative construction implies a hierarchy of interest, what determines that hierarchy? Is it up to the speaker to choose which of the two effects of the action he will focus upon, its effect upon the patient or its effect upon the target person? In fact, the grammar of English does constrain the speaker's freedom in this respect, and it does so in two ways. Broadly speaking, the target person can be focussed upon, over and above the patient, if (1) the effect of the action on the target person is tangible, i.e. specifiable (and potentially desirable); and (2) the effect of the action upon the patient does not involve a drastic change of state. In other words, if the action drastically changes the patient (in particular, if it destroys the patient), then the effect of the action upon the patient cannot be regarded as negligible, not even in comparison with the effect of the action upon the target person. If the patient is only superficially affected, then the effect of the action upon the target person can be regarded as greater, provided that it is quite clear what this effect is. Sentences such as the following ones:

?Break me a stick.
?Kill me a spider.

are unacceptable because, first, the patient does get drastically changed, and second, the nature of the effect of the action upon the target person is not clear. A sentence such as:

*They killed me a sister.

is even more bizarre, because the action can't be seen as potentially desirable.

The two conditions on the internal dative (the patient condition and the target person condition) are logically linked: a sentence with an internal dative has, so to speak, two direct objects intead of one, neither of these two objects being a direct object in the full sense of the word. In other words, a sentence of this kind represents a 'divided transitivity'. Instead of

one entity presented as affected by the action it presents two such entities, each affected to a certain degree. But if the effect of the action is presented as divided between two entities instead of being concentrated in one, the main object (the direct object) cannot be presented as very strongly affected (as some of the effect goes, so to speak, to the direct object).

Green (1974:89-96) cites a number of 'internal dative' sentences which my informants find unacceptable, such as "They're going to kill Reagan a hippie", "Crush me a mountain", "She explained him her behaviour". But a semantic formula like those proposed here can also explain this: individual speakers will vary in their judgments as to whether a given situation satisfies the conditions (stated in the formula) for the use of a particular construction.

The verb *feed*, which can be used in the internal dative construction, appears to contradict the patient condition advanced here. A sentence such as:

Mrs. Brown fed Bobby horse meat.

focusses on Bobby's diet, not on the fate of the meat, but we can hardly deny that a rather serious change in the meat can be inferred. In fact, however, this apparent exception fits a broader generalization: in constructions which disallow a serious change in the patient the effect of eating upon the food is often disregarded, because from the speaker's anthropocentric point of view the effect of eating on the eating person is infinitely more relevant than its effect on the food (no matter how drastic the latter may be from an 'objective' point of view). (Cf. this volume, chaps. 5 and 10.)

3. Semantic subtypes

So far, the two semantic conditions on the 'internal dative' construction have been stated in very general terms. In fact, however, they can be stated in a much more specific way. I contend that there are a number of specifiable semantic contexts which allow the 'internal object' construction. They are: (1) Transfer; (2) Speaking of future having; (3) Making; (4) Preparing; (5) Entertaining; (6) Telling; (7) Teaching; and (8) Showing. The labels given here are very approximate and are introduced only for convenience. The real meaning of each subtype will be stated below. Some of these subtypes are major, in the sense that a great many different verbs can be used in them; others are minor, with very few verbs which meet the

semantic condition in question, or only one such verb. The subtypes are defined, however, in terms of those semantic conditions, not in terms of verbs which meet them. All these specific contexts define semantic variants of the same construction:

$$NP^{1}_{human}\ V_{action}\ NP^{2}_{human}\ NP^{3}_{concrete}$$

(defined in section 2 above).

3.1 *Transfer*

Jim threw Betty an apple.
Sue bought Fred a bicycle.
Bill sent Ann a parcel.

In sentences of this kind, the effect of the action on the patient is negligible: the patient is not changed by it at all, it is merely transferred from one person to another. As far as the target person is concerned, the expected effect of the action is fully specified: the target person is expected to HAVE an object because of it. The semantic formula which can be said to 'generate' sentences of this subtype reads (the number refers to the summary of constructions at the end of this chapter):

(1) X did something to Y
wanting Z to come to have Y
something happened to Y because of that
one could think this (at that time):
Z will come to have Y because of that

Thus, the action is viewed as causing the target person to HAVE something, at least potentially. For example, if I send someone a parcel he will not necessarily get it, but I expect that he will. There is a subtle difference in this respect between 'external' and 'internal' dative, brought out nicely by Green's examples (1974:107):

Did you really write a thank-you note to Santa Claus?
Did you really write Santa Claus a thank-you note?

Both the 'external' and the 'internal' dative sentences imply that the agent wanted the target person to come to have the object moved, and neither of them implies clearly that he/she actually succeeded. Hence, both constructions are ascribed the component:

X did something to Y
because X wanted Z to have Y

and neither is ascribed the component:

Z came to have Y because of that

Nonetheless, the internal dative construction carries an implication that there was a real prospect of Z coming to have Y because of the action. I have represented this implication by means of the component:

one could think this: Z will come to have Y because of that

Some verbs which can occur in the internal dative construction (for example, *give*) imply that the agent's goal with respect to the target person was actually reached:

?John gave Mary a rose but she never got it.

Generally speaking, however, this is not the case. The internal dative construction implies that a specifiable (and potentially desirable) effect on the target person can be expected; if a few verbs imply, in addition, that the action did have the expected effect, this is best regarded as due to the meaning of the lexical items themselves.

I must stress, however, that when I say HAVE I mean it literally. In the literature on internal dative the notion of having has often been mentioned, but it has been interpreted very loosely. For example, Green (1974:99) says: "The kind of having involved in the communication expressions (...) and intended in the performance expressions (...), as in (95a-c):

95a. Peter will telephone Beverly the news.
95b. Peter will read the news to Beverly.
95c. Peter will play Beverly a Bach fugue.

is neither physical possession of any sort nor belonging, but possession which is perceptual, and, again, inalienable." As far as I am concerned, sentences such as Green's (95a-c) don't refer to any possession at all; the target person doesn't come to HAVE anything in the literal sense of the word *have*. When I say in an explication that Z has Y, I mean it quite literally: Z is a person, Y a thing, a person, or a place, and Z can do with Y what Z wants to (cf. Wierzbicka 1976b:139). On the other hand, the term *transfer*, used as a convenient label for the present subtype, is not meant to be taken literally: it covers both a change of place as in:

Paul threw Fido a stick.

and a change of ownership, as in:

Grandfather left me a farm.

The explication proposed does not use the term *transfer* at all. In this method of semantic analysis, the explications are intended to show the real meaning. The labels are merely for convenience in identifying subtypes of constructions.

3.2 *Speaking of future having*

The internal dative construction can also be used with a number of speech act verbs which refer to 'future having' (Green's term and Green's observation, but my interpretation). The verbs which fit this subtype include, among others, *promise, offer, allow, allot*, and also some 'negative' verbs such as *refuse* and *deny*.

Bill promised Sue a watch.
Jack refused Jill an ice-cream.

The semantic formula proposed for this subtype reads:

(2) X said something to Z about Y
wanting Z to think/not to think this: I will have Y
Z could/couldn't think this because of that

3.3 *Making*

Jack fried Jill an omelette.
Jill knitted Jack a jumper.
Tim carved Johnny a dragon.
I'll fix you a sandwich.
I'll draw you a picture.
I'll write you a cheque.

Here, the direct object designates something that comes into existence as a result of the action. The material used (eggs, wood, wool) does undergo a change, but it is not the material itself but rather the product which is designated by the direct object. The direct object designates something which does not undergo any change, drastic or otherwise, because it only comes to exist because of the action. As for the target person, the expected effect is fully specified: he/she is expected to come to HAVE the newly created

object. I posit, therefore, the following semantic formula:

(3) X did something to some M (material)
wanting Z to come to have something (Y)
one could think this (at that time):
Z will come to have Y because of that

3.4 *Preparing for use*

Jim fried Betty an egg.
I'll grill you a trout.
Betty ironed Jim a shirt.
Mother buttered Johnny a piece of toast.
Daddy peeled Sally an orange.
?I will roast you a missionary.

Sentences of this kind might seem to contradict the generalization advanced in this chapter, because they describe situations in which the referent of the direct object IS affected, and sometimes very seriously affected: a fried egg looks rather different from a raw one; for a trout, to be alive or to be grilled is not a trivial matter either. I would claim, however, that in fact the subtype under discussion does not contradict the earlier generalization. Arguably, an orange, peeled, still remains an orange, a shirt, ironed, is still the same shirt, and so on.

Most importantly, however, what really counts here is not the objective weight of the change, but its weight relative to the linguistic conceptualization. Semantically, eggs are not so much 'breakable oval things with a smooth surface' (which, when fried, cease to be breakable oval things with a smooth suface) as 'a kind of thing that people eat (coming, originally, in the form of breakable oval things with a smooth surface etc.)'. An egg, thought of primarily as potential food, doesn't cease to be conceivable of as potential food when it is fried: on the contrary. Similarly, for a person to be roasted alive would represent a rather serious change, but for a trout, to be grilled, means to improve its status as potential food rather than to undergo a radical change of state. Needless to say, this is a highly anthropocentric perspective, but that is precisely the perspective reflected in natural language (see Wierzbicka 1985c).

If the change cannot be regarded as superficial (from a conceptual rather than a physical point of view), then the internal dative construction

is not felicitious; for example, it can't be used when the action changes an object from 'unusable to usable', it can be used only when the action changes an object from 'usable' to 'even more usable' or 'even better usable':

?He fixed her a car.
?He rebuilt her a house.

In fact, the quicker and the more superficial the change which makes an object 'ready to use', the more felicitous the sentence which describes it. Consider, for example, the following pairs:

a. She ironed him a shirt.
b. She washed him a shirt.
a. She fried him an egg.
b. She roasted them a turkey.

The differences are subtle and not all informants are able to pinpoint them, but to many the (b) sentences seem slightly less felicitous than the (a) ones. It should be stressed, however, that the change should be not only superficial but also thought of as making an object ready for use. The following sentences are only marginally acceptable:

?She coloured him a picture.
?She polished him a spoon.
?She decorated him a room.

It is not clear in what way decorating a room, polishing a spoon, or colouring a picture makes the room, the spoon or the picture 'ready to use'. On the other hand, it is clear why a shirt, ironed, becomes more ready to wear, or why an egg, fried, becomes more ready to eat. (A shirt washed doesn't become as obviously 'ready to use' as a shirt ironed, because it may be wet.)

It should be pointed out that the felicitousness of an internal dative sentence does not depend on the verb as such. In the pair:

I'll fix you a sandwich.
?I'll fix you a car.

the first sentence is good because it fits one of the semantic formulae which define this construction; the second is bad because it doesn't fit any of the formulae. In the pair:

I'll fry you an omelette.

I'll fry you an egg.

both sentences are good, but for different reasons: the first fits one semantic formula ('making'), the second another ('preparation for use'). The sentence:

?I'll fry you a maiden.

may be felicitous if addressed to an ogre, but not otherwise, not even if addressed to a non-cannibalistic sadist: a sadist may enjoy watching a maiden being fried, but it is not clear in what way this might make her 'ready for use'. Consider also the following eloquent examples (Jean Harkins, p.c.):

I'll open you a bottle of beer.
?I'll open you a room.
?I'll open you a door.

I propose for this subtype the following semantic formula:

(4) X did something to thing Y
wanting Z to come to be able to do something to Y
(that people do to things of that kind)
one could think this (at that time):
Z will come to be able to do it to Y because of that

3.5 *Entertaining*

Read me a story.
Betty sang Bill a song.
Jim played Mary a mazurka.
?She danced him a waltz.
??The magician performed us a trick.

Sentences belonging to this subtype describe activities performed for the enjoyment of an audience. Sentences of this kind require that the activity should consist of a recognizable and repeatable sequence of different parts (normally, audible parts), that it should be thought of as potentially pleasurable for an audience to follow, and that it could be expected to be perceived by the target person.

Since the action consists in performing a recognizable audible sequence of events, it can be thought of as having a patient: for example, by singing a song we can be said to be doing something to that song. Obviously, how-

ever, by performing the song we are not affecting it. Thus, the patient condition of the internal dative construction is met. As far as the target person is concerned the potential effect of the action is fully specified: the target person could be expected to PERCEIVE it (normally, to HEAR it). Thus, both conditions of the internal dative construction are met. I posit for this subtype the following semantic formula:

(5) X did something
wanting Z to hear Y and to feel something good because of that
one could think this (at that time):
Z will hear Y and feel something good because of that

3.6 *Telling*

Bill wired Sue the news.
I'll read you that letter.

In this subtype, as in the previous one, the direct object designates something that is immaterial: it is a message. A message can be expressed, i.e. materialized, many times, without getting affected by its successive materializations. Thus, sentences describing the 'emission' of messages meet the patient condition of the internal dative construction. The target person condition is met, too, as the 'emission of messages' implies a specifiable potential effect on the target person: the target person can be expected to come to KNOW something because of the action. Even if the message contains a lie, the addressee can at least be expected to come to know what the speaker wanted to say. I propose for this subtype the following formula:

(6) X said something to Z
wanting Z to come to know Y because of that
one could think this (at that time):
Z will come to know Y because of that

3.7 *Teaching*

I'll teach you a game.
Sam taught Fido a trick.
I showed him the solution.

This subtype is very similar to the preceding one and could be subsumed under the same formula, as KNOWING HOW is, arguably, a kind of

KNOWING. I am not sure, however, that teaching tricks or teaching games does involve causation of knowing. If Fido has been taught a new trick does it really mean that Fido 'knows how' to perform that trick? Perhaps he has merely acquired a skill (an ability to do something) without any knowledge? Without wishing to resolve the issue here, I tentatively propose for the present subtype the following formula:

(7) X did something
wanting Z to be able to do Y because of that
one could think this (at that time):
Z will be able to do Y because of that

3.8 *Showing*

Tim showed Sam a picture.

The internal dative construction can also be used to describe a situation when the agent does something to an object to enable another person to SEE it. The semantic formula for this subtype reads:

(8) X did something to Y
wanting Z to come to be able to see Y
one could think this (at that time):
Z will come to be able to see Y because of that

4. Apparent exceptions

At first sight, the semantic constraints hypothesized in this chapter may seem insufficient to account for the whole range of relevant data. In fact, any set of semantic constraints may seem insufficient, in view of the fact that some apparent synonyms seem to differ from the point of view of their ability to occur in an internal dative construction. For example:

Jim told his parents the news.
*Jim announced his parents the news.
Jane gave them §100.
*Jane donated them §100.
(?) The Maître d'[hôtel] chose us a French wine. (Green 1974:75)
*The Maître d'hôtel selected us a French wine.

In fact, however, the alleged 'synonyms' are never fully synonymous: as a

rule, they differ in the very respect which determines whether or not the speaker can place the target person above the patient. Thus, *donate* implies that the target person is not really a person, but an institution contributed to by a large number of people; consequently, it can hardly be viewed as significantly affected by a single donation. The very idea of 'donation' implies that the recipient can only be affected by a large number of them, not by a single contribution.

Similarly, *announce* differs from *tell* in its illocutionary purpose. The illocutionary purpose of *tell* is (roughly):

(I say this because) I want to cause you to know

That of *announce* is (roughly; see Wierzbicka 1987b):

(I say this because) I want this important fact to be known

One announces an important fact to make it known. In contrast to *tell*, the verb *announce* focusses on the object of the communication, not on a specific person whom one wants to inform. This can be proved by the following contrast:

The Prime Minister announced his resignation.
*The Prime Minister told his resignation.

With *announce*, the addressee can be deleted, because the focus is on the message, but with *tell* the addressee usually cannot be deleted (see however section 7.1 below). Furthermore, with *tell*, but not with *announce*, the message can be 'demoted' from a direct object to an oblique phrase:

She told them about it.
*She announced them about it.

Finally, as mentioned earlier, *announce* requires an important message, whereas *tell* is compatible with a trivial one.

The pair *choose* and *select* exhibits a similar semantic difference. One *selects* a few items out of many by comparing all the items with one another (on the basis of some inherent criteria) and 'taking' some while rejecting the others; one *chooses* an item or a few items on the basis of the personal inclination of the intended recipient. One may *select* a wine (out of many) but one normally doesn't *select* one's spouse: one *chooses* a spouse because one decides which person one wants to marry on the basis of a positive attraction rather than by comparing a number of candidates and rejecting less suitable ones. On the other hand, "Selected Writings" of a writer, com-

piled by taking some and rejecting the others, are normally not called "Chosen Writings". Thus, *select* focusses on the objects compared, while *choose* focusses on the target person.

And so on. In any pair of supposed synonyms only one of which can occur in the internal dative construction, some demonstrable semantic differences can be detected which explain the syntactic difference between them. By using the internal dative construction the speaker signals: 'in saying this I am thinking more of (what happened to) Z (the target person) than of (what happened to) Y (the patient)'. But verbs such as *announce, donate* and *select* are incompatible with this message: by virtue of their meaning they signal a different perspective. If the meaning of a lexical item used in a sentence is incompatible with that of the syntactic construction, the resulting sentence must be infelicitous. Thus, careful analysis of supposed counter-examples in fact provides new evidence for the validity of the original hypothesis.

5. The semantic core

Syntactic constructions have a meaning, a meaning which can be stated in precise and intuitively revealing formulae. Syntactic properties of lexical items provide clues to their semantic structure; far from being semantically arbitrary they are in fact amazingly sensitive to subtle nuances of meaning. On the other hand, the semantic constraints on syntactic constructions must be stated not in terms of individual lexical items but globally. The same verb (e.g. *read, tell* or *fry*) can satisfy the semantic conditions of two different constructions or subconstructions and have, consequently, two different sets of syntactic and semantic properties.

The internal dative construction discussed in this chapter is in fact a family of subconstructions (defined not in terms of classes of verbs but globally), with a shared semantic core. This core is:

person X did something to Y
wanting to cause something to happen to person Z
(one could think this: it will be good for Z)
something happened to Z because of that
Y didn't become a different kind of thing because of that
saying this, I think more of Z than of Y

6. The semantic basis of transitivity

The syntactic difference between a transitive and an intransitive sentence reflects the semantic difference in the number of the participants in the situation spoken of: to put it crudely, one-participant sentences are intransitive, two-participant sentences can be transitive. But this is, of course, far too crude a simplification. What matters is not only the number of actors on the stage, so to speak, but also the number of actors currently in the limelight. If there are two actors on the semantic stage but only one is in the limelight, the sentence can be intransitive, e.g. *John was eating (drinking, smoking, reading etc.)* All of these activities presuppose a 'patient' as well as an agent, but the sentence is intransitive because the speaker is not interested in the patient and ignores it.

As is well-known, the intransitive use of transitive verbs is restricted by a number of semantic factors (cf. Hopper and Thompson 1980). Depending on the lexical and morphological make-up of the sentence the speaker may have a greater or a lesser degree of freedom to ignore the patient. For example, if the action has a very drastic effect on the patient, so that the patient undergoes a radical change as a result; it is harder for the speaker to ignore this patient semantically and syntactically. Moreover, even a drastic change is easier to ignore if the patient is inanimate, shapeless, 'unimportant', than if it is human, individual, and 'important'. Thus, *eat, drink* or *smoke* are easier to use intransitively than *break* or *cut*; and *cook* is easier to use intransitively than *kill* (cf. *She was cooking* vs. *She was killing*). Furthermore, if there are two actors on the semantic stage, both of them can be in the light but to a varying degree. The patient may be of interest as well as the agent, but to a lesser extent. In a case like this, too, the syntax of the sentence tends to reflect its semantics, the degree of interest in the second participant being reflected in the degree of the sentence's transitivity.

7. Three participants on the stage — but how many in the limelight?

As far as two-participant sentences are concerned what has been said above would probably be accepted by most linguists as uncontroversial. What I am trying to do here is to extend the same basic idea to three-participant sentences. Using symbols A for agent, P for patient and T for target person (which would include, roughly, addressees, recipients and

beneficiaries), I would say that the speaker can place all three of A, P and T in the limelight, or he can place A and P in the limelight, leaving T in obscurity or semi-obscurity, or even place A and T in the limelight, leaving P in obscurity or semi-obscurity. Again, the lexical and morphological make-up of the sentence will put some limits on the speaker's freedom of choice. For example, *give* allows A, P and T to be all three in the limelight, but *donate* denies this possibility to T. The reason seems to me obvious: as pointed out earlier, the T of *donate* stands for an institution which can hardly be seriously affected by a single contribution, and in any case it is hard to think of the agent as 'doing something' directly to that institution (usually one hands the money donated to an institution to an intermediary, a door-to-door collector, so that one would *donate* it to an institution, but *give* or *hand* it to the collector). The interaction between the donor and the institution is indirect, abstract and devoid of any tangible effect.

I believe that similar semantic reasons explain most of the other restrictions on the so-called 'internal dative' construction. The internal dative indicates that the speaker views the T as crucially involved in the situation, and as significantly affected by the action. This central position can be accorded to T only at the expense of the position of P. If P is seen as dominating the act then T can't be regarded as having the central position. In fact, the emphasis on P can even be so great as to leave T no room in the speaker's range of vision, not even in the marginal position of an external dative. On the other hand, the position of T can be so significant that it may leave no room for P in the centre of the speaker's field of vision; or the speaker may be able to keep both T and P in the centre of his field of vision, but have no option of viewing T as more marginal to the situation. And so on.

I will confine myself here to illustrating the close correlation between the syntactic and the semantic aspects of ditransitivity with lexical evidence, and more particularly, with evidence from the domain of speech act verbs. (For more detailed semantic and syntactic analysis of the verbs mentioned in this chapter see Wierzbicka 1987b.) With speech act verbs, A (Agent) stands for the speaker, T (Target) stands for the addressee, and P (Patient) stands either for the speech itself or for some correlate to the speech (its content or its referent). For example in the sentence:

Max told Hilary a joke.

P stands for 'a joke', i.e. for an utterance or a sequence of utterances. In

the sentence:

Max announced his decision to his parents.

P stands for 'his decision', i.e. for the content of Max's utterance(s). In the sentence:

Max introduced his fiancée to his grandfather.

P stands for 'his fiancée', i.e. for the referent of Max's utterance.

7.1 *'External dative' only*

Consider first the verbs *reveal* and *confess*. Why can one "tell someone a joke" but not "reveal someone a secret" or "confess someone one's sins"? The Latin origin of *reveal* and *confess* can't be seriously proposed as an explanation, because there are many verbs of Latin origin — e.g. *assign*, *promise* or *allocate* — which CAN occur in the internal dative construction. Presumably, in all three cases (*tell, reveal* and *confess*) T is affected by the action (he comes to know something). But *reveal* and *confess* differ from *tell* in their implications with regard to P: *revealing* a secret to somebody crucially affects the secret, as well as the addressee, because the secret comes into the open. Similarly, if I *confess* my sins to somebody my sins cease to be secret, they cease to be a burden on my soul, they may even be 'washed away' by an act of absolution. It is quite different with *tell*: *tell* doesn't imply that the message is secret, as *reveal* does, and it doesn't imply that the message is a guilty one, as *confess* does. The message of *tell* can be quite trivial, and it need not to be affected by the speech act. For example, if I tell John a joke, it is likely that this will affect John (he will laugh), but it will not affect the joke. And even if the message is not trivial, for example, if I tell John 'the truth', John will probably be affected, because he will come to know the truth, but there is no implication that 'the truth' in question will be affected, e.g. in the sense of becoming public, or coming into the open, as a secret does when it is *revealed*.

The relative unimportance of T in comparison with P implied by verbs such as *reveal*, *confess* or *announce* is reflected in the omissibility of T, as well as in its inability to be 'promoted' to the internal dative position:

He revealed that he had spent ten years in jail.
He confessed that he had spent ten years in jail.
He announced that he was going to retire.
*He told that he had spent ten years in jail.

On the other hand, even *tell* can be used without any T if the relative importance of P is lexically guaranteed. Thus, if P refers not to the content of the message but to the NATURE of this message (such as its being true or false; or as belonging to a specific genre: story, joke etc.), T can be omitted.

John told a story/lie.

In a case like this, the P is a kind of meta-P, and, consequently, it is a specially characterized P, a P of relatively high status — a P important enough to occupy, together with A, the speaker's entire range of vision.

7.2 *A non-omissible external dative*

An interesting and somewhat unusual case is presented by the verb *confide*, which syntactically places P above T (only P can be a direct object, and T can't have an internal dative status), and which nonetheless requires the presence of a T phrase in the sentence:

Mary confided her troubles to Frances.
Mary confided to Frances that she thought she was pregnant.
*Mary confided Frances that she thought she was pregnant.
?Mary confided that she thought she was pregnant.
?Mary confided her troubles.
*Mary confided Frances her troubles.

But this unusual syntactic behaviour is perfectly understandable in the light of the semantics of the verb *confide*. The primary goal of *confide* concerns the P, not the T: the speaker wants to express some specific thoughts rather than to influence a specific person; he wants to 'unburden himself' by expressing his thoughts rather than to cause a specific addressee to know something. To that extent, *confide* is similar to *confess*, and, not surprisingly, neither of them allows its T the high status of an internal dative. Nonetheless, in the case of *confess* the T is omissible, whereas in the case of *confide* it isn't. The semantic rationale for this difference is transparent: in the case of *confide* the identity of the T is more important than it is in the case of *confess*, because *confide* implies a special personal trust in that particular addressee. For example, one can *confess* one's sins to any priest, but one can *confide* one's troubles only to a trusted friend. As a result, *confide* can also share the syntax of expressions belonging to the same semantic class as *trust*:

He confided in Jane.
He put his trust in Jane.
He placed his hopes in Jane's resourcefulness.
He has confidence in Jane.
He has faith in Jane.
He believes in Jane.

All these words imply an expectation that the target person will cause good things to happen, or at least, will not cause bad things to happen.

7.3 *A human P and a non-omissible external T*

Speech act verbs which allow an external dative but not an internal dative include an interesting category of verbs whose direct object refers to a person rather than to a message, such as *denounce*, *refer* or *introduce* (each in the relevant meaning):

He denounced his neighbours to the police.
Miss Brown referred John to Dr Peterson.
Johnny introduced his younger brother to the Principal.
**He denounced the police his neighbours.*
**Miss Brown referred Dr Peterson Johnny.*
**Johnny introduced the Principal his younger brother.*

Denounce (in the relevant sense) implies that something bad could happen to P, as a result of the action. *Refer* (in the relevant sense) implies that the 'patient' (in both the linguistic and the everyday sense of the word) could go and see the T as a result of the action. *Introduce* (in the relevant sense) implies that the action will enable the P to have free access to the T (who is, in some sense, a more 'important' person). Thus, in all these cases the meaning of the verb ensures that the action has to be seen as more important for P than for T, and as one which would affect P more than T.

Interestingly, for these verbs, too, the T phrase is obligatory, even though it can't achieve the high status of an internal dative; the action is more important for P than for T, but its importance consists precisely in being directed at that particular T. For example, it is probably more important for a boy to meet the Principal than vice versa, but the importance of this event for the boy depends on who the person he meets is (what matters is not being introduced to just anybody, but being introduced to that particular person). Some verbs in the class under discussion, e.g. *denounce*,

may seem to be able to be used without a T phrase, for example:

He denounced his bourgeois parents (at a party meeting).

But in fact, a sentence without a T phrase illustrates a different meaning of *denounce*, which does not require a human direct object, and which doesn't imply any bad consequences for the P:

In all ages, priests and monks have denounced the growing vices of society. (Henry Adams, quoted in Merriam-Webster 1972)

In this sense, *denounce* is closer to *condemn* than to *inform on*. It implies that the thing denounced is 'bad' (in the speaker's view), but it doesn't imply that something bad could happen to it as a result of the speech act.

7.4 *'P-only' speech act verbs*

In fact, some speech verbs focus so exclusively on the message that they don't allow an addressee phrase at all:

They declared war on Germany. (?to T)
The Parliament proclaimed him Shah. (?to T)
He renounced the pagan religion of his ancestors. (?to T)
He professed his faith in Jesus Christ. (?to T)

Predictably, these are verbs which imply that the message is important or valid by itself, regardless of the identity of the audience. For example, *proclaim* implies that an important new state of affairs is forthcoming. *Declare* (with a noun, not a *that*-clause, as a DO) implies that the speech act 'creates' the fact referred to by the DO (introduces the state of war, opens the meeting, etc.). *Renounce* implies that the speech act by itself puts an end to some important commitment, specified in the DO. *Profess* implies that its DO specifies an important and positive aspect of the agent's inner life (a faith, a belief, an intention, etc.).

7.5 *'T-only' speech act verbs*

It is also possible for a speech act verb to imply that the speaker focusses exclusively on T, so that there is no room for P in his range of vision. Syntactically, such verbs are monotransitive verbs, with T rather than P treated as their direct object. *Inform* and *notify* are examples of this category, as one can say neither:

*He informed her his engagement.

nor:

*He informed his engagement to her.

One can only say:

He informed her of his engagement.

with the P as an oblique object. The semantic rationale for his behaviour is clear, as both *inform* and *notify* imply the speaker's intention to influence a specific person, and embody assumptions about that particular person. Thus, if I inform person T of P, I assume that this particular person T doesn't know P, and I want to cause him to know it. There is no implication that P is unknown to people generally, as in the case of *reveal*, *confess* or *announce*, and there is no intention to make P known (to cause P to come into the open); the goal of the action is defined in terms of this particular person. At the same time, one can't simply omit ('delete') the P, as one can 'delete' the T in the case of verbs such as *announce*, and as one *has* to do with the T of verbs such as *proclaim* or *renounce*. The reason is that the only way to affect the T implied by speech act verbs such as *inform* or *notify* is via a particular thing which is being said: the speaker wants to cause that particular addressee (T) to know something, namely that particular thing (P).

7.6 *Internal dative only*

The theory that internal-dative sentences are 'derived' from their external-dative counterparts looks particularly unconvincing, not to say bizarre, when one considers the fact that a number of verbs allow an internal dative construction without allowing its external dative counterpart. *Allow*, *refuse*, and *deny* belong to this category:

John denied Mary access to the children.
Dr Brown allowed John two cigarettes a day.
The Dean refused John permission to go to an overseas conference in the middle of the term.

Sometimes it is possible to force an external dative variant under contrastive stress:

Dr Brown allowed two cigarettes a day to John, and five cigarettes a day to Sebastian.

or when the T phrase is so long and so complex that it has to be placed at the end of the sentence:

> Dr Brown allowed two cigarettes a day to patiènts who were on antibiotics or who were undergoing chemotherapy.

But in an unmarked context, the internal dative construction is clearly preferable, and in fact most informants regard it as the only acceptable version.

From a semantic point of view, this behaviour of verbs such as *allow*, *refuse* or *deny* is perfectly understandable, as they all imply a specifiable and emotionally charged effect on T, without implying any specifiable effect on P:

> A allowed T P ⇒
> T could do something because of this
> that T wanted to do
> A denied T P ⇒
> T couldn't do something because of this
> that T wanted to do
> A refused T P ⇒
> T couldn't do something because of this
> that T wanted to do

Moreover, the P of such verbs does not stand for a specific, identifiable entity which could be affected by the speech act:

> *John denied Mary the flower.
> *Father refused John the ball.
> *Mother allowed Mary the doll.

It is interesting to compare verbs such as *allow*, which normally doesn't occur with an external dative, with semantically fairly close verbs such as *offer* or *promise*, which can take either an external or an internal dative. *Offer* and *promise*, too, imply a specifiable effect on T, and no doubt this is why they can have an internal dative:

> A offered T P ⇒
> T could have P because of this
> (A thought T would want to have P)
> A promised T P ⇒
> T could think because of this
> that A would have to do something that T wanted A to do

But first, this effect is not quite as tangible as in the case of *allow*, *refuse* and *deny*, which imply that as a result of the speech act, T could (could not) do what T wanted to do. *Offer* and *promise* imply a more hypothetical effect: T could THINK that A would be obliged to do what T wanted A to do (*promise*), T could have P which A THOUGHT P would want to have (*offer*). Secondly, the P of *offer* and *promise* can be concrete and specific, and so the effect of the action on that P can be much more tangible than it is in the case of *allow*, *deny* or *refuse:*

John promised/offered/*allowed/Mary his watch.

Consequently, in the case of *offer* and *promise* the speaker has a greater room for maneuvre (conceptually, and therefore syntactically); he can present T as being slightly more, or slightly less, affected, in comparison with P. On the other hand, verbs such as *propose* and *suggest*, which can often be used interchangeably with *offer*, are normally used with an external dative only (and most commonly are used without any T phrase whatsoever):

*John proposed Mary a cup of tea.
*John suggested Mary a cup of tea.
John proposed/suggested a cup of tea.

No doubt this is due to the fact that *propose* and *suggest* don't imply any specifiable effect on T (if A *proposes* or *suggests* a P to T this doesn't imply that T can have that P because of that, as is the case with *offering*).

8. A semantic common denominator

Summing up the discussion so far, we can say that an internal dative construction requires a specifiable effect of the action on T and is incompatible with the presence of a component implying the relative unimportance of T or of a component stressing the special importance of P. For example, *suggest*, *praise* or *repeat* can't have an internal dative because they don't imply any specifiable effect on the T:

*He repeated his teacher Sam's story.
*He praised his mother Mary's book.
*He suggested Mary a change.

Verbs like *prove*, *identify*, and *reveal* do imply a specifiable effect on P, and this effect on P is independent of that particular T: "A proved P to T"

implies that "A proved P", and this implies that P has been shown to be valid, not just for A, but generally valid. Similarly, "A identified P to T" implies that A identified P, and this implies that A has made it possible for people in general — not just for T — to know what P was.

Verbs like *reveal* or *confess* do imply a specifiable effect on T, and they don't perhaps specify that the identity of T is irrelevant, but they do imply that the identity of P is of special importance; and this, too, is incompatible with the implicit claim embodied in the internal dative construction which says that the speaker views the situation in terms of its effect on T, not in terms of its effect on P. It must be stressed, however, that the acceptability of a sentence is estimated in terms of its overall semantic coherence, not merely in terms of the compatibility of the syntactic construction and the meaning of the verb. A potential clash between the meaning of the construction and the meaning of the verb can be either emphasized and strengthened, or softened and minimized by other aspects of the sentence's grammatical and lexical make-up. Just as the sentence:

Let me open you a bottle of beer.

is more acceptable than:

?John opened Mary the room.

so the sentence:

?I recommend you this wine.

is more aceptable than:

*John recommended Mary pontoon craft houseboats.
*John recommended the Director Sebastian.

If the sentence suggests an immediate and self-explanatory use of P by T, the internal dative version sounds better, because the overall semantic interpretation is more compatible with the meaning contributed by the construction itself. *Recommend* by itself doesn't imply a specifiable effect on T, but a combination of factors such as 1st person A and 2nd person T, the present tense, the semantic category of P (beverage), and the determiner *this*, all suggest a direct interaction between A and T, and an immediately forthcoming action (of T upon P), of a predictable and familiar kind.

9. One semantic invariant or eight distinct subtypes?

But if all the apparent complexities and apparent idiosyncrasies in the use of the internal dative can be reduced to one common denominator (roughly, action seen in terms of its effect upon T rather than in terms of its effect upon P), then why postulate a set of distinct subtypes, such as those proposed in section 3 above? My answer is simple: because although a common denominator can be stated, the precise interpretation of this denominator is language-specific. Other languages — for example Polish or French — have distinctions similar to that between an external and an internal dative, and many of the subregularities of the English ditransitivity have exact counterparts in Polish or French. But some subregularities found in English don't have their counterparts elsewhere, and vice versa. To account for all the non-occurrences, as well as for all the occurrences, characteristic of a given language, we must spell out all the language-specific subregularities. Possibly, the same 'pragmatic principles' govern the use of the internal dative in English and the use of the prepositionless dative in Polish or French, but the interpretation of these principles is in each case different, and must be described in terms which are language-specific.

In fact, the 'arbitrary', grammatical rather than pragmatic, character of English ditransitivity can be illustrated from English alone. As I mentioned earlier, for many native speakers of English sentences referring to audible entertainment such as:

She played him a mazurka.
She sang him a lullaby.

are better than sentences referring to visual entertainment such as:

?She danced him a jig.
?She performed him a striptease.
?The magician did them a couple of tricks.

It seems to me that this link between audible entertainment and internal dative is not predictable from the 'T over P' principle. To give now at least a couple of examples of contrast between the English internal dative and its counterpart in other languages, let me point out that in English one can say:

She washed him a cup (to drink from).

but not:

*She washed him his hair.

But in Polish, or in French, a (prepositionless) dative would be entirely appropriate in this case. Similarly, in Polish one could say the equivalent of:

Mother tied Betty (a) bow (in her hair).
Father fixed Jimmy (his) tie.
Grandma smoothed Lizzie (her) dress;

but the English internal dative cannot be used like this. And these are not idiosyncrasies, these are not exceptions; these are perfectly clear regularities, statable in the form of rigorous semantic formulae (see this volume, chap. 7). If the choice is between writing off all such regularities as 'idiosyncrasies' and 'accidents' or capturing them in the form of simple and rigorous semantic formulae, with considerable predictive power, I opt for the latter approach. If only 'radical semantics' (to use Georgia Green's appealing term), can capture and state such regularities, I opt for radical semantics.

Summary of English internal dative constructions

1. TRANSFER
(e.g. *Jim threw Betty an apple.*)
X did something to Y
wanting Z to come to have Y
something happened to Y because of that
one could think this (at that time):
Z will come to have Y because of that

2. SPEAKING OF FUTURE HAVING
(e.g. *Bill promised/refused Sue a watch.*)
X said something to Z about Y
wanting Z to think/not to think this: I will have Y
Z could/couldn't think this because of that

3. MAKING
(e.g. *Jack knitted Jill a jumper.*)
X did something to some M (material)
wanting Z to come to have something (Y)

one could think this (at that time):
Z will come to have Y because of that

4. PREPARING FOR USE
(e.g. *Jim fried Betty an egg.*)
X did something to thing Y
wanting Z to come to be able to do something to Y
(that people do to things of that kind)
one could think this (at that time):
Z will come to be able to do it to Y because of that

5. ENTERTAINING
(e.g. *She read us a story.*)
X did something
wanting Z to hear Y and to feel something good because of that
one could think this (at that time):
Z will hear Y and feel something good because of that

6. TELLING
(e.g. *Bill wired Sue the news.*)
X said something to Z
wanting Z to come to know Y because of that
one could think this (at that time):
Z will come to know Y because of that

7. TEACHING
(e.g. *Sam taught Fido a trick.*)
X did something
wanting Z to be able to do Y because of that
one could think this (at that time):
Z will be able to do Y because of that

8. SHOWING
(e.g. *Tim showed Sam a picture.*)
X did something to Y
wanting Z to come to be able to see Y
one could think this (at that time):
Z will come to be able to see Y because of that

Part 2: The semantics of morphology

7. The meaning of a case: a study of the Polish dative

1. Introduction

The basic assumption of this chapter is that cases have meaning and that this meaning can be stated in a precise and illuminating way. In assuming this, I adopt of course the position advocated and brilliantly implemented by Roman Jakobson (1936/1971). My further assumptions, however, are those introduced and justified in Wierzbicka 1980a, 1980b, 1981 and this volume, chap. 8 (see also chap. 6): (1) that a case has one core meaning, on the basis of which it can be identified cross-linguistically (as, say, 'dative' or 'instrumental'), and a language-specific set of other, related meanings, which have to be specified in the grammatical description of a given language; and (2) that all the meanings of a case — like all other meanings — can be stated in intuitively understandable and intuitively verifiable paraphrases in a semantic metalanguage based on natural language.

1.1 *The core meaning of dative*

For the purposes of this chapter, dative can be identified as the case used to designate the recipient in sentences of GIVING in Indo-European languages such as Latin, Russian or German. This is not to say that in ANY given language the case of the recipient will be regarded as dative: in those languages in which the recipient (as a human participant) is treated like a direct object, over and above the thing given, the core meaning of the case marking the recipient is different from its counterpart in European languages, and, consequently, it cannot be regarded as the same case.

I think a useful definition of dative can be based on the following semantic structure (the numbers correspond to the summary of constructions at the end of this chapter):

(1) X did something to thing Y
wanting person Z to come to have Y
something happened to Y because of that
one could think this (at that time):
Z will come to have Y because of that

This formula is meant to suggest that, in the speaker's mind, the target of the action, i.e. the intended recipient, is less affected than the thing transferred; it is not even clear whether the intended recipient does come to have that thing in the end. For example, the sentence:

Ewa rzuciła jabłko Adamowi.
'Eve threw Adam:DAT a/the apple.'

does not imply that Adam necessarily caught, and got, the apple. It implies, on the other hand, that something did happen to the apple, and also that the apple came within Adam's reach, so that it became likely that Adam would get it. In this respect, dative differs from a prepositional phrase. Sentences such as:

Ewa rzuciła jabłko do Adama.
'Eve threw an/the apple to Adam:GEN.'
Adam kupił jabłko dla Ewy.
'Adam bought an/the apple for Eve:GEN.'

imply that something happened to the apple, but they don't imply that as a result the intended recipient did become able to have it. It appears that sentences with a prepositional target contain one semantic component less than their counterparts with a dative:

(1a) X did something to thing Y
wanting person Z to come to have Y
something happened to Y because of that

1.2 *Language-specific extensions of the core use*

Assuming that we can identify the dative case in a language, if there is one, it soon becomes obvious that the case in question has uses absent from some other languages which have a dative. For example, while Polish, German and French can all use a dative to designate a person caused to SEE something, or a person caused to KNOW something, as well as a person caused to HAVE something, German, but not Polish, can also use it to

designate a person caused to FEEL something, and French, but not Polish, can use it to designate a person caused NOT to KNOW something:

Ewa dała mu jabłko.
Eve lui a donné une pomme.
Eva hat ihm einen Apfel gegeben.
'Eve gave him:DAT an apple.'

Eva schlug ihm ins Haupt.
* *Ewa uderzyła mu w głowę.*
'Eve hit him:DAT in the head.'

Eve lui a caché la verité.
* *Ewa ukryła mu prawdę.*
'Eve hid him:DAT the truth', i.e. 'Eve hid the truth from him.'

I conclude that attempts to assign the Polish dative — or any other dative — a unitary meaning, necessarily have a limited explanatory potential. If we want to be able to predict the entire range of uses that the dative has in a particular language, we have to establish a full list of semantic constructions permitting the use of dative in this language. When such lists are compared, the overlap between different languages will often be considerable; nonetheless each SET of uses is language-specific and has to be stated, explicitly, as such.

2. Polish datives with external causes

The Polish dative has a very wide range of uses. It will be convenient to divide this range, roughly, into two broad classes: datives which involve external causes and datives which do not. Within each broad class, several subclasses have to be distinguished. In this section (section 2) I will discuss datives with external causes, and in the following one (section 3), datives without external causes. An exhaustive study of the use of the dative case in Polish would of course have to include lexically governed datives. Considerations of space have precluded any discussion of this topic in this chapter. I believe, however, that the basic principles determining which verb will govern dative case are also semantic, and are closely related to those determining the use of the 'free' dative discussed here.

2.1 *Causing to have, or not to have*

I have proposed 'causing to have' (with the 'datum', rather than the recipient treated as the direct object of the action) as the prototypical use of dative. In this prototypical use, something happens to an object because an agent is doing something to it, intending another person to come to have it because of that.

However, in Polish dative can also be used when the agent is not acting upon an object to be had by the recipient, in particular, it can be used when the object to be had is CREATED through the action, as in the following sentences:

Adam usmażył Ewie omlet.
'Adam fried Eve:DAT an omelette.'
Ewe uszyła Adamowi spodnie.
'Eve sewed Adam:DAT a pair of trousers.'

For 'patientless' sentences of this kind the following semantic formula can be proposed:

(2) X did something to some M (material)
wanting Z to come to have something (Y)
something happened to M because of that
one could think this (at that time):
Z will come to have Y because of that

It should be noted that in some other languages dative can be used even more broadly, covering cases of 'spontaneous' acquisition as well as those of acquisition due to somebody else's transitive action:

Ein Hund ist uns zugelaufen.
a dog has us:DAT run-to
'A dog has "adopted" us.'

(cf. Neumann 1987). But in Polish, one can't say this using a dative:

* *Przybłąkał nam się pies.*

Similarly, one can say in French:

Une lettre lui parvint.
a letter him:DAT arrived
'A letter reached him.'

But in Polish one can't say this using a dative:

* *List mu przyszedł.*

On the other hand, one can use dative for 'spontaneous loss':

Pies mi uciekł.
dog me:DAT ran away
'My dog has run away (on me).'

List mi zginął.
letter me:DAT got-lost
'I lost a letter.'

Wino nam się skończyło.
wine us:DAT finished
'We've run out of wine.'

The following (rough) semantic formula can be assigned to sentences of this kind:

(3) Z came not to have Y
not because someone did something to Y

Admittedly, one can also use dative in sentences such as the following ones, in which spontaneous acquisition does seem to be involved:

Syn nam się urodził.
son us:DAT was-born
'A son was born unto us.'

Krowa nam się ocieliła.
cow us:DAT calved
'Our cow has just calved.'

This dative, however, seems to be restricted to situations when something comes into existence in a place rather than is acquired from outside. It can be called, therefore, 'dative of emergence' and can be assigned the following formula:

(4) Z came to have Y
because Y came to be in Z's place
not because Y came from some other place

Furthermore, it appears that Polish has what might be called a 'dative of addition'. Thus, while one cannot say:

* *Przyszło nam wielu studentów.*
came us:DAT many students

one can say:

Przybyło nam studentów.
came-more us:DAT students:GEN PL
'Our student numbers have increased.'

The relevant meaning can perhaps be formulated as follows:

(5) Z came to have more Ys than before
not because somebody did something to some Ys

The victim of a loss which does involve an agent can also be designated by a dative:

Adam ukradł Ewie jabłko.
Adam stole Eve:DAT apple
'Adam stole an/the apple from Eve.'

It is worth noting in this connection that the so-called internal dative in English, which can fulfill many functions of the Polish, Russian or Latin dative, can be used for agentive acquisition (roughly, 'giving'), but not for agentive loss (roughly, 'taking'):

Eve gave Adam an apple.
*Eve stole Adam an apple.

A sentence such as:

Adam took Eve some apples.

is acceptable, but only on the interpretation that Eve is a recipient, not a loser. (Cf. this volume, chap. 6.)

Finally, Polish (unlike, say, French) doesn't have a dative of straight (stative) possession:

Les bijoux m'appartenaient.
**Klejnoty mi należały.*
jewels me:DAT belonged
'The jewels belonged to me.'

It does, however, have a dative of CONTINUED possession:

Zostało mi $10.
was-left me:DAT $10
'I had $10 left.'

This is in keeping with the 'dynamic' nature of the Polish dative, which

seems to always imply a change, or a possibility of change.

2.2 *Causing to see*

Here, the prototype example is *pokazać* 'show':

Ewa pokazała Adamowi jabłko.
'Eve showed Adam:DAT an/the apple.'

But the condition is semantic, not lexical; in principle, any verb could be used as long as the sentence meets the semantic formula:

(6) X did something to Y
wanting Z to come to be able to see Y
one could think this (at that time):
Z will come to see Y because of that

For example:

Piotr zademonstrował Pawłowi swój wynalazek.
Peter demonstrated Paul:DAT his invention
'Peter demonstrated his invention to Paul.'

2.3 *Causing to hear for pleasure and causing to know*

Dative can be used in Polish to refer to an intended hearer, provided that the audible action is performed for the hearer's pleasure. Thus, one can say:

Jas zaśpiewał Kasi piosenkę.
'Johnny sang Kate:DAT a song.'
Kasia przeczytała Jasiowi bajkę.
'Kate read Johnny:DAT a fairy tale.'

I propose for this construction the following semantic formula:

(7) for some time, X was doing something
wanting Z to hear Y and to feel something good because of that
one could think this (at that time):
Z will hear Y and feel something good because of that

This may seem to be too restrictive, as dative can also be used in Polish to refer to the addressee of speech not intended as entertainment, as in the sentence:

Jaś powiedział Kasi prawdę.
'Johnny told Kate:DAT the truth.'

However, the two uses — the dative of entertained audience and the dative of addressee — cannot be subsumed under one 'dative of hearer', because in Polish the intended hearer can't always be referred to by a dative, as it apparently can in French:

C'est bien fait, cela t'apprendra, lui cria son passager.
(Delange 1948:28)
* *Dobra robota, to cię nauczy, krzyknął mu pasażer.*
'Well done, that will teach you, his passenger shouted him:DAT', i.e. 'to him.'

Nor can one use a dative in Polish when the object of speaking (i.e. what is said) is not specified, as one can in French:

J'obtiens beaucoup plus de mes interlocuteurs en ne leur parlant pas l'anglais. (Delange 1948:98)
* *Więcej osiągam od moich rozmówców nie mówiąc im po angielsku.*
'I get more out of my interlocutors when I don't speak them:DAT English', i.e. 'when I don't speak English to them.'

In Polish the addressee can be referred to by a dative only if the action (speech) has a tangible result for the addressee, that is to say, if a specific message is conveyed:

Powiedziała mu prawdę.
'She told him:DAT the truth.'

Powiem ci sekret.
'I'll tell you a secret.'

Powiedział mi dzień dobry.
'He said me:DAT hello.'

The object of speaking doesn't have to be articulated speech, as long as the message conveyed is clear, as in the following folk song:

Nie chodź do lasu czypać bzu, i nie wierz chłopcu jako psu,
Bo każdy chłopiec ma w sobie jad, kiedy cię kocha powiedz mu: at!
'Don't go to the forest to pick lilac, and don't trust a boy any more than you'd trust a dog, for every boy has poison in him,

when he loves you say to him: *at!*' (a contemptuous interjection)

Since the same verb, for example *powiedzieć* or *mówić* 'say, tell', can or cannot be used with a dative depending on the overall meaning of the sentence, it is clear that the constraint in question is not lexical but semantic.

To account for these facts, a further dative construction has to be postulated for Polish: causing to know. It should be noted that in this construction hearing is not really essential; the message can be conveyed by some other means than audible speech.

Napisz mi całą prawdę.
'Write me:DAT the whole truth.'
Opisał mi wszystko dokładnie.
'He described me:DAT everything.'

Both these constructions — the dative of entertained audience and the dative of intended addressee — have their counterparts in the use of the 'internal dative' in English (cf. chap. 6):

She sang him a song.
She played him a sonata.
She told him the truth.

The distinction between speech conveying a message and speech not necessarily conveying a message, marked in Polish by the use or non-use of dative, is signalled in English lexically as well as syntactically:

She told him the truth.
She said something in Chinese.

But the exact conditions on 'causing to know' are not the same, as in Polish one can say:

Powiedziała mu dzień dobry.
she said/told him:DAT hello
'She said hello to him.'

whereas in English one can't say:

*She told him hello.

Apparently, in English the message has to be specified explicitly, whereas in Polish, it can be merely implied (as good wishes are implied by a greeting). This difference can be captured in semantic formulae as follows:

English internal dative:
X said Y to Z
wanting Z to come to know Y
one could think this (at that time):
Z will come to know Y because of that
Polish dative:
(8) X said something to Z
wanting Z to come to know Y because of that
one could think this (at that time):
Z will come to know Y because of that

In another respect, however, the use of dative in Polish is more restricted than the use of 'internal dative' in English: in Polish, one can use a dative to refer to a person caused to KNOW THAT, but not to refer to a person caused to KNOW ABOUT. Thus, while one can say in English, or in French:

She taught him geography.
Elle lui enseignait la géographie.

one can't say in Polish:

* *Uczyła mu geografii.*

It is also interesting to note that while Polish allows a dative to be used in reference to a person caused to KNOW, it doesn't allow it to be used in reference to a person caused NOT to KNOW. (Cf. section 1.2.)

2.4 *Causing to be able to do something*

This use of dative, too, has a counterpart in the English 'internal dative' construction (cf. this volume, chap. 6):

Piotr otworzył Pawłowi puszkę sardynek.
'Peter opened Paul a tin of sardines.'
Piotr usmażyl Pawłowi jajko.
'Peter fried Paul an egg.'
Piotr uprasował Pawłowi koszulę.
'Peter ironed Paul a shirt.'

But in English, this usage of 'internal dative' appears to be restricted to situations when the thing acted upon is to be used directly by the target person, i.e. when the expression referring to it is the direct object of the target

person's expected action as opposed to an object with an interposed preposition. In Polish, however, the dative is acceptable for both types of objects:

Piotr przysunął Pawłowi krzesło.
'Peter pulled a chair for Paul (to sit on).'
?Peter pulled Paul a chair.

Piotr umył Pawłowi filiżankę.
'Peter washed a cup for Paul (to drink from).'
?Peter washed Paul a cup.

Piotr zatemperował Pawłowi ołówek.
'Peter sharpened a pencil for Paul (to write with).'
?Peter sharpened Paul a pencil.

Furthermore, in Polish the dative can refer to a person who is expected to do something to the object, without necessarily 'using' it for any guessable purpose. Thus, one can say:

Przetnij mi ten sznurek!
cut me:DAT this string
'Cut this string for me!'

Potrzymam ci młotek.
I'll hold you:DAT hammer
'I'll hold the hammer for you.'

The semantic formula proposed for the Polish construction reads:

(9) X did something to thing Y
wanting Z to be able to do something to Y
one could think this (at that time):
Z will be able to do something to Y because of that

2.5 *Causing a change in the object*

Dative can be used in Polish to refer to a person seen as affected by a change in a thing belonging to him or her, as in the following sentences:

Ewa zreperowała Adamowi maszynę do pisania.
Eve repaired Adam:DAT typewriter
'Eve repaired Adam's typewriter for him.'

Adam zepsuł Ewie zegarek.
Adam ruined Eve:DAT watch
'Adam ruined Eve's watch.'

The change of state doesn't have to be guaranteed lexically (as it is in the sentences above):

a. ?*Pies polizał mi but.*
dog licked me:DAT shoe:ACC
'The dog licked my shoe.'

b. *Pies polizał mi bułkę.*
dog licked me:DAT bread roll:ACC
'The dog licked my bread roll.'

Sentence (a) is odd because it is hard to see what effect the action could have on the object; but sentence (b) is perfectly acceptable because the action can easily be interpreted as causing the object to become inedible.

A further constraint seems to be that the change in the object has to be seen as either 'bad' or 'good'. Thus, sentences about destroying or repairing someone's possessions lend themselves particularly well to this use of dative. If the change is not inherently 'bad' or 'good', the dative will still imply that it was either desirable or undesirable. Thus, a sentence such as:

Adam ufarbował Ewie sukienkę.
Adam dyed Eve:DAT dress:ACC
'Adam dyed Eve's dress.'

will be interpreted as reporting a useful or a harmful act (a service or a disservice). A sentence such as:

?*Pomalowałam budę Reksowi.*
I painted kennel:ACC Rex:DAT
'I painted Rex's kennel for him.'

sounds odd because it implies that Rex (a dog) wished for the kennel to be painted. Syntactically, sentences of this kind don't have to have a direct object; what matters is that the semantic formula is met:

(10) X did something to Z's thing Y
Y came to be different because of that
it was bad/good for Z

Dative can also be used if a spontaneous, agentless, change occurs in a person's possessions. It appears, however, that in sentences of this kind the

change has to be seen as 'bad':

Mleko wylało mi się na sukienkę!
milk spilled me:DAT (itself) on dress
'Milk got spilled on my dress!'

Buty mi się podarły.
shoes me:DAT tore
'My shoes wore out (on me).'

Samochód mi się zepsuł.
car me:DAT broke
'My car broke down (on me).'

I propose for sentences of this kind the following semantic formula:

(11) something bad happened to Z's thing Y
not because someone did something to Y
Y came to be different because of that
it was bad for Z
(one could think this (at that time):
Z will feel something because of that)

It is true that agentless sentences can also imply a welcome change in an object, as in the sentences:

Ciasto ładnie mi się upiekło.
cake nicely me:DAT (itself) baked
'My cake came out nicely.'

Jabłonie pięknie nam obrodziły w tym roku.
apple trees nicely us:DAT bore fruit this year
'Our apple trees bore us lots of fruit this year.'

However, positive sentences of this kind imply partly luck and partly the beneficiary's success in doing something. In chapter 2 I have called this construction 'the dative of lucky agent.' (See also Wierzbicka 1985d.) It is less like the dative of affected possessor than it may seem, as the object of a 'lucky agent's' action does not have to belong to him. There is, on the other hand, a symmetrical construction of 'unlucky agent':

Mięso mi się przypaliło!
meat me:DAT got-burnt
'The meat got burnt (on me)!'

Mleko mi się wylało!
milk me:DAT itself spilled
'The milk spilled!'

I postulate for the dative of lucky and unlucky agent the following semantic formulae:

(12) Z was doing something to thing Y
something happened to Y at that time
not because someone did something to Y
it was good/bad for Z
(one could think this (at that time):
Z will feel something because of that)

2.6 *Causing something to happen to a related person*

A person can be seen as affected by an action undergone neither by himself nor by one of his possessions but by a person related to him. In Polish this, too, triggers the use of dative, with the proviso that the effect of the action has to be seen as either bad or good. Thus, one can say:

Zbałamucił mi siostrę.
he seduced me:DAT sister.
'He seduced my sister.'

Wyleczył mi dziecko.
he cured me:DAT child
'He cured my child.'

Przekabacił mi siostrę.
he 'converted'(pejorative) me:DAT sister
'He "converted" my sister (to some deplorable views).'

but hardly:

?*Przekonał mi siostrę.*
he convinced me:DAT sister
'He convinced my sister.'

On the other hand, no matter how 'bad' or 'good' the effect of the action on the patient is, a dative can't be used unless the action produces a specifiable change of state. Thus, one can say:

Zabili *(zamęczyli)* *mu* *żonę.*
they killed (tormented to death) him:DAT wife
'They killed (tormented to death) his wife.'

but hardly:

?*Torturowali* *(męczyli)* *mu* *żonę.*
they tortured (tormented) him:DAT wife
'They tortured (tormented) his wife.'

Thus, the following semantic formula seems to be called for:

(13) X did something bad/good to person Y related to person Z
Y came to be different because of that
it was bad/good for Z
one could think this (at that time):
Z will feel something because of that

Dative can also be used to refer to a person affected by an agentless event involving a related person, provided that the effect is bad, both for the person directly involved and for the one indirectly affected. Thus, one can say:

Żona *mu* *umarła.*
wife him:DAT died.
'His wife died (on him).'

but not, unless in jest,

?*Żona* *mu* *wyzdrowiała.*
wife him:DAT recovered.
'His wife recovered.'

A further example (a list of 'transitive' misfortunes):

Dwóch mi synów w rekruta wzięli, jeden mi chłopak w rzece utonął, jeden najmłodszy spalił mi się na strychu śpiący ...
(Konopnicka 1979:24)
'Two of my sons were taken into the army (me:DAT), one boy drowned in a river (me:DAT), the youngest one burnt to death in the attic, while asleep (me:DAT) ...'

However, in the case of agentless events involving a related person it is not necessary that there should be a change of state in the person directly involved. One can say, for example:

Dzieci mi chorują.
children me:DAT are sick.
'My children are sick ("on me").'

The semantic formula for the agentless subtype would read, then:

(14) something bad happened to person Y related to person Z
it was bad for Z
one could think this (at that time):
Z will feel something because of that

This usage can be extended to undesirable actions of related people, as in the sentence:

Córka uciekła mu do Ameryki.
daughter fled him:DAT to America.
'His daughter ran away to America (on him).'

It appears that the undesirable actions of this kind must have lasting effects, and also that they have to be seen as strictly objectless (i.e. they have to be described by intransitive or reflexive verbs.) Thus, one cannot say:

**Córka mu popełniła morderstwo (samobójstwo)*
daughter him:DAT committed murder (suicide)
'His daughter got killed/his daughter killed herself.'

One can say, however:

Córka mu się zabiła.
daughter him:DAT REFL killed
'His daughter got killed/killed herself.'

The following semantic formula can be proposed for this subtype:

(15) person Y related to person Z did something
that Z didn't want Y to do
(Y came to be different because of that)
it was bad for Z
(one could think this (at that time):
Z will feel something because of that)

2.7 *Dative of warning*

Dative can be used in the imperative (and in other irrealis contexts) to refer to a 'related person' (normally, a child) whom another person (nor-

mally, the speaker) feels responsible for and wants to protect:

Tylko mi się nie przewróć!
only me:DAT yourself don't fall down
'Just don't fall down (on me)!'

Tylko mi nie zachoruj!
only me:DAT don't get sick
'Just don't get sick (on me)!'

Typically, sentences of this kind include the word *tylko*, 'only', which implies: 'I want this one thing, nothing more'. The following formula might be proposed to account for this usage:

(16) you could cause something bad to happen to you
I don't want it to happen
I know that it would cause me to feel something
I think this: I should cause it that bad things don't happen to you

This usage can be extended to situations when the addressee could do something bad which the speaker himself would 'have to' punish:

Tylko mi się nie buntuj!
only me:DAT yourself don't rebel
'Just don't get it into your head that you can rebel against me.'

(I'm not sure what the exact conditions on this usage are.)

2.8 *Causing a change in a body part*

A dative construction can be used in Polish to refer to a person whose body part has undergone a change due to somebody's action:

Adam zabandażował Ewie rękę.
Adam bandaged Eve:DAT hand
'Adam bandaged Eve's hand (for her).'

It is not enough for the body part to be affected; there really has to be a specifiable change of state:

Pies odgryzł Adamowi ucho.
dog bit off Adam:DAT ear
'A dog bit off Adam's ear.'

Pies ugryzł Adama w ucho.
dog bit Adam:ACC in ear
'A dog bit Adam in the ear.'

**Pies ugryzł Adamowi ucho.*
dog bit Adam:DAT ear

Furthermore, this change of state has to be seen as lasting, i.e. not merely momentary. Thus, one can't say in Polish, as one can in French:

Elle lui saisit (prit, lâcha) la main.
she him:DAT grabbed (took, let go) the hand

**Chwyciła (wzięła, puściła) mu rękę.*
she grabbed (took, let go) him:DAT hand
'She grabbed (took, let go) his hand.'

Admittedly, there are some apparent counter-examples to this rule, such as:

Piotr uściskał Pawłowi rękę.
Peter squeezed Paul:DAT hand
'Peter shook Paul's hand.'

Każdy pannie swojej czule, ucałował dwa paluszki,
each maiden:DAT his tenderly he kissed two fingers
różowiutkie ich koniuszki. (Brzechwa 1964:20)
two rosy their ends
'Each tenderly kissed his maiden's rosy fingertips.'

A handshake or a kiss doesn't cause a different state in the relevant body part, and yet a dative can be used. I think, however, that sentences of this kind are acceptable because they fit one of the semantic formulae given earlier: that of an action conveying a message. Actions such as shaking a man's hand or as kissing a lady's fingertips are symbolic, and they convey clear messages. This interpretation is supported by the fact that in non-symbolic contexts the same verbs don't allow a dative:

**Pocałowała mu policzek.*
she kissed him:DAT cheek
'She kissed him on the cheek.'

Thus, despite the apparent counter-examples, the dative of affected body part has to be given the following formula:

(17) X did something to Z's body part Y
Y came to be (look) different because of that
one could think this (at that time):
Z will feel something because of that

Interestingly, Polish does not allow dative to be used in sentences describing routine bodily actions, whether or not these actions cause a change in the state of a body part. Thus, one doesn't say in Polish, as one does in German or French:

?*Myję sobie zęby.*
I clean myself:DAT teeth
Ich putze mir die Zähne.
Je me lave les dents.
'I clean my teeth.'

The Polish sentence could be used only if the action was not routine, and not ordinary (for example, if one was cleaning a denture; see this volume, chap. 2, section 2.7).

2.9 *Causing contact with a body part*

One can't say in Polish:

a. **Piotr dotknął Pawłowi ramienia.*
Peter touched Paul:DAT shoulder:GEN
'Peter touched Paul's shoulder.'

but one can say:

b. *Piotr położył Pawłowi rękę na ramieniu.*
Peter put Paul:DAT hand:ACC on shoulder
'Peter put his hand on Paul's shoulder.'

Neither (a) nor (b) implies a change in a body part. Nonetheless, (b) is acceptable while (a) isn't. The reason is, I think, that (b), but not (a), fits another dative construction: one which explicitly refers to an object or body part coming into contact with a part of a person's body. Thus, sentence (b) mentions a hand coming into contact with someone's shoulder; but no such mention of a moving object (or body part) is made in (a). The agentive version of this construction can be represented as follows:

X did something to Y
Y came into contact with a part of Z's body because of that
one could think this (at that time):
Z will feel something because of that

The presence of an agent, however, is not obligatory, as the following sentences show:

Książka spadła mu na głowę.
book fell him:DAT on head
'A book fell on his head.'

Woda lała mu się na twarz.
water was pouring him:DAT REFL on face
'Water was pouring on his face.'

Consequently, a simpler semantic formula can be proposed:

(18) Y came to be in contact with a part of Z's body
one could think this (at that time):
Z will feel something because of that

But an actual contact with a body part is not strictly necessary for dative to be able to be used: it is sufficient that an object should come to be so close to a body part that contact becomes possible (for example, if the person moved that body part). Thus, one can also say in Polish:

Pineska wpadła mi do łóżka.
drawing pin fell me:DAT to bed
'A drawing pin fell into my bed.'

Ewa wrzuciła Adamowi chrabąszcza za kołnierz.
Eve threw Adam:DAT beetle behind collar
'Eve put a beetle down Adam's shirt.'

Kamień przeleciał mi koło ucha.
stone flew me:DAT near ear
'A stone flew close to my ear.'

Sentences of this kind are acceptable because they meet the following formula:

(19) thing Y came to be in the place
where some parts of Z's body were
Y could come into contact with Z's body because of that

one could think this (at that time):
Z will feel something because of that

I think that this construction encodes the idea of a 'personal sphere' around a person, suggested by Bally (1926). I have explicated this personal sphere in terms of potential contact with a person's body, and his potential feelings caused by that.

If a sentence makes it quite clear that contact did not occur but that nonetheless a person's 'personal sphere' was violated, dative can still be used, with the proviso, however, that a specific body part is mentioned. Thus, one can't say in Polish as one can in French (cf. this volume, chap. 2, section 2.5):

* *Kręcił jej się dookoła.*
he was turning her:DAT himself around
Il lui tournait autour.
he her:DAT was turning around
'He was turning around her.'

One can say, on the other hand:

Ciagle stoisz mi za plecami.
always you stand me:DAT to back
'You are constantly standing behind my back.'

Kamień przeleciał mi koło ucha.
stone flew me:DAT near ear
'A stone flew close to my ear.'

Another type of dative can be used when something changes in the position or state of an object which is maintained in contact with a person's body (clothes, glasses, a watch, etc.), causing a change in the person's appearance:

Kapelusz zsunął jej się z głowy.
hat slipped down her:DAT itself from head
'Her hat slipped down from her head.'

Sznurowadło ci się rozwiązało.
shoelace you:DAT itself got undone.
'Your shoelace has come undone.'

For sentences of this kind the following semantic formula can be proposed:

(20) something happened to thing Y
which was in contact with a part of Z's body
Y (or some parts of Y) came to be in a different place
because of that
one could think this (at that time):
Z will look different because of that

A dative can also refer to a person whose body part is being looked at or investigated (cf. chap. 2, section 2.6):

Mama zajrzała Jasiowi do gardła.
mum looked Johnny:DAT in throat
'Mum had a look at Johnny's throat.'

Doktor zbadał mu serce.
doctor examined him:DAT heart
'The doctor examined his heart.'

Adam patrzył Ewie na nogi.
Adam was looking Eve:DAT at legs
'Adam was looking at Eve's legs.'

This use extends to investigation of things worn on the body, or otherwise regarded as extensions of the body:

Matka zajrzała Jasiowi do kieszeni.
Mother looked Johnny:DAT to pocket.
'Mother looked into Johnny's pocket.'

It can't be extended, however, to possessions not worn on the body:

**Matka zajrzała Jasiowi do szuflady.*
mother looked Johnny:DAT in drawer
'Mother had a look inside Johnny's drawer.'

**Jaś obejrzał Józiowi zabawki.*
Johnny examined Joe:DAT toys
'Johnny examined Joe's toys.'

Nor can it be extended to knowledge or perception (as opposed to actions seeking knowledge or perception). Thus, one can't say in Polish as one can in Italian:

**Widziałem mu zęby.*
I saw him:DAT teeth

Gli vidi i denti.
him:DAT I saw the teeth
'I saw his teeth.'

* *Zauważono mu ranę.*
they found him:DAT wound
Gli hanno scoperto una ferita.
him:DAT they have found a wound
'They found that he had a wound.'

Thus, the following formulae have to be added to our inventory:

Examining the body:
(21) X did something to some parts of Z's body
(or to something that was in contact with some parts of Z's body)
wanting to come to know something about them
one could think this (at that time):
Z will feel something because of that

Looking at the body:
(22) X looked at some parts of Z's body
one could think this (at that time):
Z will feel something because of that

Given that dative is so widely used to refer to potential experiences, how is it possible that it is not used in sentences like the following:

* *Piotr uderzył Pawłowi w twarz.*
Peter hit Paul:DAT in face
'Peter hit Paul in the face.'

I have said earlier that in Polish, dative can be used in sentences involving 'causing to have' or 'causing to see' but not 'causing to feel'. Are sentences discussed in the present section compatible with that claim? I think that they are. The frame:

X:NOM V-ed Z:DAT Y:ACC

implies that Y is seen as more affected than Z. It is not always clear who or what in any given situation should be regarded as more affected: a person affected through a body part or the body part itself. Usually, if the body part is very drastically affected — say, broken — and if at the same time the effect can be seen as strictly local, the body part will be presented as more

affected.

Adam złamał Ewie rękę.
Adam broke Eve:DAT arm:ACC
'Adam broke Eve's arm.'

**Adam złamał Ewę w rękę.*
Adam broke Eve:ACC in arm
'Adam broke Eve's arm.'

However, if the effect can be regarded as global (especially, if pain is implied), the person will tend to be viewed as more affected than the body part, and it will tend to be referred to by the accusative, not by the dative:

Adam zranił Ewę w rękę (w brzuch).
'Adam wounded Eve:ACC in hand (in stomach).'

?*Adam zranił Ewie rękę.*
Adam wounded Eve:DAT hand:ACC

**Adam zranił Ewie brzuch.*
Adam wounded Eve:DAT stomach:ACC

Verbs which present a physical action as an interpersonal act, as communication of feelings, may well be seen as focusing on the affected person more than on the affected body part. Polish has grammaticalized this view, since it requires the affected person to be the direct (accusative) object of personal verbs such as *uderzyć* 'hit', *pocałować* 'kiss' or *pogłaskać* 'stroke':

Ewa uderzyła (pocałowała, pogłaskała) Adama w głowę.
'Eve hit (kissed, stroked) Adam:ACC on the head.'

**Ewa uderzyła (pocałowała, pogłaskała) Adamowi głowę.*
'Eve hit (kissed, stroked) Adam:DAT head:ACC.'

On the other hand, verbs which signal contact with a body part without explicitly referring to emotions don't allow the affected person to be treated as the primary object of the action (and to be referred to in the accusative):

*Ewa dotknęła Adamowi czoła (*Adama w czoło).*
Eve touched Adam:DAT forehead:GEN (*Adam in forehead:ACC)
'Eve touched Adam's forehead.'

Certainly, it can be assumed that a person touched will feel something. However, if the feeling is not presented as the goal of the action but merely

as its potential by-product, it is understandable that the person affected may fail to be seen as central to the event, i.e. as the direct object of the action.

3. Datives without external causes

Datives without external causes cover unintentional changes in the body and unintentional processes in the mind. I will start with unintentional processes in the mind, which affect feelings, thoughts and 'wantings'. (The distinction between datives which have external causes and datives which don't is somewhat arbitrary and has been introduced here for convenience. I don't attach much importance to it. The distinctions which I regard as objectively valid and non-arbitrary are those between different dative constructions posited here and portrayed in the explications.)

3.1 *Unintentional feelings*

Polish has three different ways of presenting emotions: as active and subject to control, as neutral and unspecified, or as passive and involuntary. Voluntary emotions are signalled by means of active verbs, often reflexive in form, with a nominative subject (= experiencer):

Adam żałował (cieszył się, martwił się, smucił się).
'Adam regretted (rejoiced, worried, was sad).'

Neutral emotions are signalled by means of the same or related verbs used in a passive form and with a prefix indicating perfectivity:

Adam był ucieszony (zmartwiony, zasmucony).
'Adam was pleased (worried, saddened).'

Involuntary emotions are signalled by means of impersonal constructions, with the experiencer in the dative. The predicate takes the form of an adverbial with a copula which usually gets deleted in the present.

Adamowi było żal (wstyd, smutno).
'Adam felt regret (felt ashamed, felt sad).'

The following semantic formulae can represent the essence of these distinctions:

Neutral:
X felt something

Voluntary:
X felt something
because X was saying to himself things
which could cause one to feel it
Involuntary (dative):
(23) X felt something
not because X wanted it

As the English glosses above indicate, English sometimes draws distinctions of this kind, too (cf. *He worried* vs. *He was worried*.) But in English these distinctions are sporadic and marginal; in Polish they are much more systematic and much more richly developed.

3.2 *Unintentional cognitive processes (thoughts and 'imaginings')*

Dative in Polish can signal the occurrence of involuntary thoughts and images, as in the following examples:

Przyszło mi do głowy …
'It occurred to me …'
Przypomniało mi się …
'I recalled …'
Zdawało mi się …
'It seemed to me …'
Śniło mi się …
'I dreamed …'

This is not a fully productive category, but it is more than a collection of disparate expressions. Some of the expressions in this class have an active, controllable counterpart, with the experiencer in the nominative:

Przypomniałem sobie …
'I recalled …'
Śniłem …
'I dreamed …' (archaic or poetic)

The dative of unintentional cognitive processes may also occur in another version, with the object of thought in the nominative:

Przypomniała mi się córka.
'I was reminded of my daughter.'

Marzyły mi się dalekie podróże.
'I dreamed of long journeys.'
Przyszła mi do głowy pewna myśl.
'An idea occurred to me.'

A tentative semantic formula for the dative of unintentional cognitive processes reads:

(24) X thought/imagined something
because something happened in his mind
not because X wanted it

3.3 *Unintentional 'wantings'*

Volitional processes, too, can be presented as either controllable or not controllable. Again, this semantic difference is associated with the grammatical difference between a nominative (and a verb agreeing with it in number and gender) and a dative (with an impersonal, non-agreeing form of the verb):

Chciałem śpiewać.
'I wanted to sing.'
Chciało mi się śpiewać.
'I felt like singing.'

There are hardly any verbs other than *chcieć* 'want' which can participate in this contrast, and the expression *chce mi się* (with any combination of persons, numbers and tenses) should perhaps be regarded as semi-idiomatic. It is too closely parallel to the other dative constructions, however, not to be regarded as at least semi-regular.

A semantic formula for this subtype is not easy to propose. As a first approximation, I propose the following.

Chce mi się robić X. ⇒
(25) I feel this: I want to do X
not because I want to want it

(For further discussion of this problem see Wierzbicka 1969.)

It should be noted that the dative construction contrasts not only with a nominative one but also with an accusative one. Thus, one can also say in Polish:

Korci mnie, żeby to zrobić.
it itches me:ACC in order to do it
'I feel tempted to do it, I can hardly resist it.'

The accusative construction presents the experiencer as not only not in control but as a helpless, passive victim of the experience. It implies that the experiencer is acted upon by a force different from himself, no matter that this force is internal, not external: it is perceived as a kind of 'foreign body' in the mind. (For further discussion, see the next section.)

3.4 *Unintentional sensations*

Polish has several different grammatical patterns for describing uncontrollable sensations. Some of these use the accusative as the case of the experiencer, and some use the dative.

Duszno mi.
stuffy:ADV me:DAT
'I feel I can't breathe very well.'

Mdli mnie.
it nauseates me:ACC
'I feel sick (nauseated).'

The semantic difference between the two patterns can perhaps be described, rather loosely, as one between a purely subjective sensation and a sensation caused by an objective state (of the body). The accusative implies that the experiencer is directly affected by some processes independent of him: something is going on in his body which makes him feel something. The feeling is perceived as caused by an 'alien' force, by a tangible internal cause. The dative, on the other hand, doesn't imply any internal cause. The sensation of the dative experiencer is likely to be seen as a reaction to an external situation. The minimal pair of quasi-synonymous expressions:

Mdli mnie.
it nauseates me:ACC
Niedobrze mi.
unwell:ADV me:DAT
'I feel nauseated.'

is illuminating in this respect. I think that if one feels slightly sick in

response to something unsightly one would be more likely to use the dative expression. One might say, for example:

Jak ty wyglądasz! Niedobrze mi się robi jak na ciebie patrzę!
'You look disgusting! It makes me feel sick to look at you!'

But if one attributes one's nausea to a specific internal cause (such as some exceedingly sweet food eaten in excess, or prolonged hunger) one would be much more likely to use the accusative expression.

It is also highly suggestive that intense sensations, such as pain or itchiness, require the accusative:

*Boli mnie/*mi brzuch.*
hurts me:ACC/*DAT stomach:NOM
'My stomach hurts.'

*Swędzi mnie/*mi noga.*
itches me:ACC/*DAT leg:NOM
'My leg itches.'

Intense sensations of this kind make one feel that there is a direct and localized physical cause (i.e. an analogue of an agent acting upon a patient). This localized physical cause can be viewed as a 'bad' state of the body, or of a particular body part. Thus,

Ząb mnie boli.
tooth:NOM me:ACC hurts
'I have a toothache.'

implies that there is something wrong with the tooth. But clearly, nothing of this kind is implied in dative sentences, such as:

Niewygodnie mi.
uncomfortable:ADV me:DAT
'I feel uncomfortable.'

Zimno mi w nogi.
cold:ADV me:DAT in legs
'My feet are cold.'

The sensations described in sentences with a dative experiencer may be unpleasant, but nothing is implied about a 'bad' state of the body or a part of the body.

In general, however, dative doesn't imply that the sensation is neces-

sarily unpleasant. One can say:

Ciepło	*mi.*	*Wygodnie*	*mi.*
warm:ADV	me:DAT	comfortable:ADV	me:DAT
'I feel warm.'		'I feel comfortable.'	

'Accusative sensations', on the other hand, appear to be necessarily unpleasant.

'Dative sensations' sentences often have counterparts in which no experiencer is mentioned (and, consequently, no dative is used):

Zimno. Duszno.
'It is cold.' 'It is stuffy.'
Zimno tu. Duszno dzisiaj.
'It's cold in here.' 'It's stuffy today.'

Sentences of this kind describe an environment (time and/or place) in terms of potential experiences. They suggest that if an experiencer IS mentioned his experiences can be seen as due to the general state of the environment. This is not to say that 'dative sensations' are necessarily due to the environment. For example, the sentence:

Szumi	*mi*	*w*	*uszach.*
it rings	me:DAT	in	ears

'My ears are ringing.'

may or may not be due to the situation outside (temperature, altitude, etc.). But the sentence implies that the speaker is not attributing the sensation to any specific localized cause.

It was noted earlier that in Polish, in contrast to, say, German, an action which aims at and necessarily causes a sensation (e.g. hitting) can't take a dative patient/experiencer:

*Uderzyła go/*mu w twarz.*
'She hit him:ACC/*DAT in the face.'

In the present section, we noted that feelings and sensations CAN trigger the use of dative — on the condition, however, that neither a human agent nor a localized inanimate causer is mentioned. If a sensation is due to another person's action or to some other localized cause (such as a bad state of a body part), the nominative-accusative construction has to be used.

On the basis of the foregoing discussion the following semantic formulae can be tentatively proposed:

'Accusative sensations':
Z feels something bad in his body (or: in part Y of his body)
because of something bad that is happening in some parts
of his body
not because someone is doing something to it

'Dative sensations':

(26) Z feels something in his body (or: in part Y of his body)
not because someone is doing something to it
not because something is happening in some parts of his body

3.5 *Unintentional processes in the body*

A related dative construction is used for uncontrollable bodily processes described regardless of any concomitant sensations. The person involved is not necessarily aware of these processes; it seems however that the processes have to be perceivable (to qualify for a dative description), and the normal assumption would be that the person involved perceives them too.

Burczało mu w brzuchu.
rumbled him:DAT in stomach
'His stomach rumbled.'

Odbiło mu się.
belched him:DAT itself
'He belched.'

Serce biło mu głośno.
heart was beating him:DAT loudly
'His heart was beating loudly.'

As in the constructions discussed earlier, a body part which is the locus of an unintentional process can be referred to either in the nominative or in a prepositional phrase. The verb agrees in gender and number with the nominative noun, if there is one; otherwise it takes an impersonal form.

I would propose for sentences of this kind the following formula (ignoring the difference between nominative and prepositional phrase):

(27) something happened in Z's body (or: in part Y of Z's body)
not because Z wanted it
one could think this (at that time): Z will feel it

3.6 *Unintentional changes in the position of body parts*

Any unintentional change in the position of a part of a person's body (e.g. when a person is asleep or dozing) can be seen as an event concerning that person, and thus can trigger the use of dative:

Głowa opadła mu na piersi.
head sank him:DAT on chest
'His head sank onto his chest.'

Ręka zsunęła mu się z oparcia fotela.
arm slipped him:DAT itself off arm rest
'His arm slipped off the arm rest.'

It appears that sentences of this kind require the presence of a third noun phrase, which provides a reference for the change in the spatial position of the body part. One doesn't say:

? Głowa mu opadła.
? Ręka mu się zsunęła.

The following formula might be proposed for this subtype:

(28) part Y of person Z's body moved
and came to be in a different place because of that
(coming to be/not to be in contact with thing W because of that)
not because Z wanted it

3.7 *Unintentional changes in appearance*

Dative can be used in Polish to refer to a person whose appearance has undergone an unintended change due to an internal process — a usage which goes well beyond the range of acceptable uses of dative in German or French. (Cf. this volume, chap. 2, section 2.4.)

Włosy mu posiwiały.
hair him:DAT grew grey
'His hair grew grey.'

Nos mu się wydłużył.
nose him:DAT itself got longer
'His nose seemed long and gaunt (after illness).'

* *Les cheveux lui sont devenus gris.*

* *Das Haar wurde ihm grau.*

The meaning embodied in this construction can be represented as follows:

(29) part Y of Z's body came to look different
because of something that happened in Z's body
not because someone did something to it
one could think this (at that time):
Z will look different because of that

3.8 *Unintentional features of appearance*

Generally speaking, the appearance of body parts, whether permanent or temporary, cannot be described in a dative construction:

* *Włosy mu są rude.*
hair him:DAT is red
'His hair is red.'

* *Włosy mu są przetłuszczone.*
hair him:DAT is greasy
'His hair is greasy.'

Nonetheless, when the appearance of body parts is described in dynamic terms, as if it were a result of an ongoing process, the dative construction *can* be used:

Włosy mu się kręcą.
hair him:DAT curls
'He has curly hair.'

Nos ci się błyszczy.
nose you:DAT shines
'Your nose is shining.'

Brzuch mu wystaje na pół metra.
belly him:DAT sticks out for half metre
'His belly sticks out for half a metre.'

I think that the features in question have to be seen as inherently changeable and liable to change spontaneously. Furthermore, they seem to be described in terms of a changeable optical impression, rather than in terms of an objective inherent feature. Thus, the sentence:

Włosy mu się kręcą.

seems to imply that the hair looks as if its appearance was due to a process of curling, and the sentence:

Broda sięgała mu do pasa.
beard reached him:DAT to waistline
'His beard reached his waistline.'

seems to imply that the beard looked as if it had gradually come to reach the waistline.

I'm not quite sure how to formulate semantic conditions on this use.

3.9 *Unintentional speech*

Generally speaking, 'unintentional action' may sound like a contradiction in terms, and it is not encoded in Polish by a dative construction:

**Tak mi się jakoś pobiegło, mimo woli.*
thus me:DAT itself somehow ran, involuntarily
'Somehow I ran, involuntarily.'

Unintentional action is of course possible in the sense that one may cause an unintended effect while doing something intentionally. In such cases, however, the agent is still viewed in Polish as responsible, and the event is described in a nominative construction:

Niechcący uderzyłem Ewę.
unintentionally hit-1SG Eve-ACC
'I:NOM/deleted hit Eve, unintentionally.'

**Niechcący uderzyło mi się Ewę.*
'I:DAT hit Eve, unintentionally.'

There is one exception, however: unintended speech. One can use a dative to refer to the speaker who SAID something unintentionally:

Tak mi się jakoś powiedziało — naprawdę wcale tak nie myślę.
'Somehow "it said itself to me" — I don't really think that.'
Tak mi się napisało — sam nie wiem dlaczego.
'It "wrote itself to me" like that — I don't know why.'

Presumably, verbs of speech (or communication) such as these follow in this respect the model of the non-agentive pattern in which words are treated as entities with a life of their own:

Cholera, wyrwało mu się.
hell it burst out him:DAT itself
'"Hell", he burst out.'

Interestingly, more specific verbs of speaking — speech act verbs or manner of speech verbs — cannot occur in this construction:

* *Tak mi się poprosiło.*
'Somehow "it asked itself to me".'
Tak mi się jakoś szepnęło.
'Somehow "it whispered itself to me".'

Presumably, only non-specific speech verbs (in a broad sense of the term 'speech') are seen as compatible with the idea of unintentionality: one whispers in order not to be overheard, one asks in order to receive, and so on, so an intention is built into the meaning of these more specific speech verbs. The formula proposed for this subtype reads:

(30) person Z said something (Y)
not because Z wanted it

3.10 *Agent viewed as experiencer*

An agent can also be referred to by means of a dative if the fact of the action is presupposed and the focus is on its subjective dimension, i.e. on the way the agent experiences it. Two possibilities are provided for: an action which 'goes well' and an action which 'goes badly'. The restriction is not lexical but semantic: any adverb can be used as long as it lends itself to an interpretation in terms of 'well' or 'badly'.

Dobrze mi się tutaj pracuje.
well me:DAT itself here works
'My work is going well here.'

Świetnie mi się spało.
wonderfully me:DAT itself slept
'For some reason I slept very well.'

Marnie mi się dzisiaj pisało.
poorly me:DAT itself today wrote
'For some reason I wrote badly today.'

It appears that the 'badness' or 'goodness' of the experience is attributed

by the speaker to the environment in which the action took place, more particularly, to its place or time. It seems also that the action has to have considerable duration. A sentence such as:

Dobrze nam się szło.
well us:DAT REFL went
'We had a nice walk.'

cannot be taken as referring to a quick walk of five minutes. In fact, some verbs other than action verbs can be used in this construction as well, provided that they refer to long term conditions.

Jak wam się tutaj mieszka?
'How does it live itself to you here?'
i.e. 'Do you like living here?'

Jak mu się tam żyje?
'How does it live itself to him there?'
i.e. 'How is he getting on over there?'

This construction, which embodies a purely subjective perspective, is largely restricted to first person in statements and second person in questions. If third person is used, it usually indicates 'free indirect style', i.e. narration carried from a point of view situated inside the protagonist's consciousness. The meaning grammaticalized in this construction can perhaps be represented as follows:

(31) I think you know that for some time, not a short time,
I was doing something (V)
I felt that for some reason I could/couldn't do it well
not because of something that I was doing
(I think it is because of something that one could know about
that place/time)

4. Conclusion

We have seen that dative can be used in Polish in a wide variety of constructions. Do these constructions have anything in common? Clearly, the formula proposed at the outset as the core meaning of dative could not be regarded as the semantic invariant of the whole family. In fact, it appears that what links all the different dative constructions is a common theme, so to speak, rather than a clear-cut set of semantic components.

Loosely speaking, the use of dative implies a situation which is not controlled by a person Z but which is likely (though not certain) to have an effect on Z. Thus, whether a person is offered something, shown something, told something, or whether things happen in or near his body, he is likely to be affected by these events, and affected in ways in which things — as opposed to people — cannot be affected (i.e. mentally). Things can only be affected when something happens to THEM, but people can also be affected when something happens to SOMETHING ELSE, because they can react mentally to it.

One could try to sketch, then, a unitary semantic formula for dative along the following lines:

> something happened
> not because person Z wanted it
> one could think this (at that time):
> person Z will think/feel/know something because of that

But if we formulate the semantic rationale of dative constructions as broadly as that, it will perhaps apply to Russian, German or Latin as well as it does to Polish. In fact, however, each of these languages embodies a unique interpretation of this common theme and allows a unique range of uses (despite the considerable overlaps). To ensure that our description of dative has full predictive power it is necessary to specify the precise set of semantic formulae which can generate no more and no less than the entire range of dative sentences acceptable in a given language.

Summary of Polish dative constructions

1. CAUSING TO HAVE
(e.g. *Rzuciła mu jabłko*. 'She threw him an apple.')
X did something to thing Y
wanting person Z to come to have Y
something happened to Y because of that
one could think this (at that time):
Z will come to have Y because of that

2. CAUSING TO BE AND TO HAVE
(e.g. *Uszyła mu koszulę.* 'She sewed him a shirt.')
X did something to some M (material)
wanting Z to come to have something (Y)
something happened to M because of that
one could think this (at that time):
Z will come to have Y because of that

3. COMING NOT TO HAVE
(e.g. *Pies mi uciekł.* 'My dog has run away.')
Z came not to have Y
not because someone did something to Y

4. COMING TO BE
(e.g. *Syn nam się urodził.* 'A son was born unto us.')
Z came to have Y
because Y came to be in Z's place
not because Y came from some other place

5. COMING TO HAVE MORE
(e.g. *Przybyło nam studentów*. 'We've got more students.')
Z came to have more Ys than before
not because somebody did something to some Ys

6. CAUSING TO SEE
(e.g. *Pokazała mu jabłko*. 'She showed him an apple.')
X did something to Y
wanting Z to come to be able to see Y
one could think this (at that time):
Z will come to see Y because of that

7. CAUSING TO HEAR FOR PLEASURE
(e.g. *Zagrała mu walca*. 'She played him a waltz.')
for some time, X was doing something
wanting Z to hear Y and to feel something good because of that
one could think this (at that time):
Z will hear Y and feel something good because of that

8. CAUSING TO KNOW
(e.g. *Powiedziała mu prawdę*. 'She told him the truth.')
X said something to Z
wanting Z to come to know Y because of that
one could think this (at that time):
Z will come to know Y because of that

9. CAUSING TO BE ABLE TO DO SOMETHING
(e.g. *Usmażyła mu jajko*. 'She fried him an egg.')
X did something to thing Y
wanting Z to be able to do something to Y
one could think this (at that time):
Z will be able to do something to Y because of that

10. CAUSING A CHANGE IN SOMEONE'S POSSESSION
(e.g. *Zepsuła/zreperowała mu zegarek*. 'She wrecked/repaired his watch.')
X did something to Z's thing Y
Y came to be different because of that
it was bad/good for Z

11. ACCIDENTAL CHANGE IN SOMEONE'S POSSESSION
(e.g. *Zepsuł mi się zegarek*. 'My watch broke.')
something bad happened to Z's thing Y
not because someone did something to Y
Y came to be different because of that
it was bad for Z
(one could think this (at that time):
Z will feel something because of that)

12. LUCKY/UNLUCKY AGENT
(e.g. *Ciasto mi się przypaliło./Ciasto ładnie mi się upieklo*.
'My cake got burnt./My cake came out nicely.')
Z was doing something to thing Y
something happened to Y at that time
not because someone did something to Y
it was good/bad for Z
(one could think this (at that time):
Z will feel something because of that)

13. CAUSING A CHANGE IN A RELATED PERSON
(e.g. *Zabili/uratowali mu syna*. 'They killed/saved his son.')
X did something bad/good to person Y related to person Z
Y came to be different because of that
it was bad/good for Z
one could think this (at that time):
Z will feel something because of that

14. SOMETHING BAD HAPPENING TO A RELATED PERSON
(e.g. *Żona mu umarła*. 'His wife died "on him".')
something bad happened to person Y related to person Z
it was bad for Z
one could think this (at that time):
Z will feel something because of that

15. BAD ACTIONS OF RELATED PERSONS
(e.g. *Syn mu się rozpił*. 'His son turned into a drunk.')
person Y related to person Z did something
that Z didn't want Y to do
(Y came to be different because of that)
it was bad for Z
(one could think this (at that time):
Z will feel something because of that)

16. WARNING
(e.g. *Tylko mi się nie przewróć*. 'Watch your step, don't fall.')
you could cause something bad to happen to you
I don't want it to happen
I know that it would cause me to feel something
I think this: I should cause it that bad things don't happen to you

17. CAUSING A CHANGE IN A BODY PART
(e.g. *Zabandażowała mu rękę*. 'She bandaged his hand.')
X did something to Z's body part Y
Y came to be (look) different because of that
one could think this (at that time):
Z will feel something because of that

18. COMING INTO CONTACT WITH A BODY PART
(e.g. *Coś mu spadło na głowę*. 'Something fell on his head.')
Y came to be in contact with a part of Z's body
one could think this (at that time):
Z will feel something because of that

19. COMING CLOSE TO A BODY PART
(e.g. *Kamień przeleciał mu koło ucha*. 'A stone flew past his ear.')
thing Y came to be in the place
where some parts of Z's body were
Y could come into contact with Z's body because of that
one could think this (at that time):
Z will feel something because of that

20. ACCIDENTAL CHANGE IN APPEARANCE
(e.g. *Sznurowadło mu się rozwiązało*. 'One of his shoelaces came undone.')
something happened to thing Y
which was in contact with a part of Z's body
Y (or some parts of Y) came to be in a different place
because of that
one could think this (at that time):
Z will look different because of that

21. EXAMINING THE BODY
(e.g. *Zajrzała mu do gardła*. 'She looked into his throat.')
X did something to some parts of Z's body (or to something that was in contact with some parts of Z's body)
wanting to come to know something about it/them
one could think this (at that time):
Z will feel something because of that

22. LOOKING AT THE BODY
(e.g. *Patrzył jej na nogi*. 'He was looking at her legs.')
X looked at some parts of Z's body
one could think this (at that time):
Z will feel something because of that

23. UNINTENTIONAL FEELING
(e.g. *Żal mu było*. 'He felt regret.')
X felt something
not because X wanted it

24. UNINTENTIONAL THOUGHT
(e.g. *Przypomniało mu się to*. 'He was reminded of it.')
X thought/imagined something
because something happened in his mind
not because X wanted it

25. UNINTENTIONAL WANTING
(e.g. *Chce mi się śpiewać*. 'I feel like singing.')
I feel this: I want to do X
not because I want to want it

26. UNINTENTIONAL SENSATION
(e.g. *Zimno mi*. 'I am cold.')
Z feels something in his body
not because someone is doing something to it
not because something is happening in some parts of his body

27. UNINTENTIONAL PROCESS IN THE BODY
(e.g. *Odbiło mu się*. 'He belched.')
something happened in Z's body
not because Z wanted it
one could think this (at that time): Z will feel it

28. UNINTENTIONAL CHANGE IN POSITION OF BODY PART
(e.g. *Głowa opadła mu na piersi*. 'His head sank onto his chest.')
part Y of person Z's body moved
and came to be in a different place because of that
(coming to be/not to be in contact with thing W because of that)
not because Z wanted it

29. UNINTENTIONAL CHANGE IN APPEARANCE
(e.g. *Włosy mu posiwiały*. 'His hair had turned grey.')
part Y of Z's body came to look different

because of something that happened in Z's body
not because someone did something to it
one could think this (at that time):
Z will look different because of that

30. UNINTENTIONAL SPEECH
(e.g. *Tak mi się powiedziało*. 'I don't know why I said it.')
person Z said something (Y)
not because Z wanted it

31. AGENT VIEWED AS EXPERIENCER
(e.g. *Dobrze mi się dzisiaj pracuje*. 'My work is going well today.')
I think you know that for some time, not a short time,
I was doing something (V)
I felt that for some reason I could/couldn't do it well
not because of something that I was doing
(I think it is because of something that one could know about
that place/time)

8. The semantics of case marking

1. Introduction

This chapter is based on the assumption that linguistic analysis must distinguish grammatical categories from grammatical marking. It is crucial to recognize (as linguists normally do in this particular case) that in English sentences such as:

Hilary kicked and hit Robin.

both *kicked* and *hit* are in the past tense, even though only in the first verb is this past tense overtly marked; or that in the sentence

They bought five cows and five sheep.

both *cows* and *sheep* are in the plural, even though only the first noun has an overt plural marker. Similarly, it is crucial to recognize that in Russian sentences such as:

Mať i otec b'jut dočˇ i synišku.
'The mother and the father are beating the daughter and the little son.'

or

Maša pročla otkrytku i pis'mo.
'Mary read the postcard and the letter.'

not only the words *synišku* and *otkrytku*, but also *dočˇ* and *pis'mo* are in the accusative case, even though only the first two are overtly marked as such (the forms *dočˇ* and *pis'mo* being identical with the forms of the nominative case; as Mel'čuk 1977:13 notes, an 'indeclinable' noun such as *kofe* has in fact all the cases that other Russian nouns have, although the exponents of these cases are, in the case of *kofe* and other so-called indeclinable nouns, homonymous).

The principle that grammatical categories must be distinguished from

grammatical marking was firmly established in traditional grammar, and also in the structuralist tradition (cf. e.g. Huddleston 1975). In recent linguistic writings, however, it has been largely lost sight of, in particular with respect to case ('surface case'). The failure to distinguish the case ('surface case') from case marking had as one of its more unfortunate consequences a theory that cases do not encode but merely 'distinguish' syntactic and semantic categories (cf. Comrie 1975 and 1978). I have tried to show in earlier publications (Wierzbicka 1980b and 1981; see also Mallinson and Blake 1981) that this theory is fallacious and that in fact cases, like other morphological categories, do encode meanings. An accusative case may be marked by an overt inflection or by a zero — from the point of view of the case value, the kind of marking is irrelevant.

This does not mean, however, that grammatical marking is in any sense 'arbitrary'. An accusative such as *doč'* or *pis'mo* in Russian, or *templum* (ACC=NOM) in Latin is just as good an accusative as *syna* or *otkrytku* (or *puerum* or *filiam* in Latin), and has the same range of meanings and the same core meaning. But the fact that neuter and inanimate masculine nouns in Russian generally do not mark the accusative overtly (i.e. have an accusative identical in form with the nominative) has too many parallels in other languages to be arbitrary.

It could be said, of course, that the 'discriminatory' theory of case, while fallacious with respect to case as a grammatical category, is valid with respect to case marking. Thus, it might be suggested that the nominative form of the accusative case of neuter nouns in Latin or of neuter and inanimate masculine nouns in Russian can be explained in terms of a relative need (or absence of need) to distinguish agents from patients (cf. Ward 1975).

I do not wish to dispute the validity of such a suggestion. I should like to point out, however, that a 'discriminatory' theory of case marking cannot explain why one case can take different case marking depending on the semantic class of the noun or on the speaker's intention, even though all the alternative markings may be unique to the case in question. If all the different 'allomorphs' of a case are distinctive, why should the choice still depend on the semantic class of the noun or on the intended conceptualization?

It seems more illuminating to postulate, as a general proposition, that case marking may have its own semantics: different markers of the same case may differ in terms of meaning. Thus, a given case marker may carry not only a certain case meaning (say, accusative, or genitive) but also

an additional meaning, such as animacy, countability or respect. These additional meanings cannot be explained in terms of a need to distinguish syntactic categories from one another. Rather, it must be acknowledged that case markers often have a positive semantic function: they encode certain specific and precisely stateable meanings. (The idea that 'case allomorphy' may have a semantic basis was, of course, advocated by Jakobson 1936, 1958; however recent writings on 'case marking' have confused the concept of case with that of a case marker, or case exponent, and this has obliterated Jakobson's insights into both the semantics of case and the semantics of case marking: 'case allomorphy'.)

In this chapter, I will try to elucidate the semantics of case marking on the basis of a number of examples drawn from Russian and Polish.

2. The Russian accusative case

Consider the following two sentences:

a. *Ivan* *uvidel* *Moskvič.*
Ivan-NOM saw (a) Moskvič-MASC SG-ACC=NOM
'Ivan saw a Moskvič (a brand of car).'

b. *Ivan* *uvidel* *Moskviča.*
Ivan-NOM saw (a) Moscovite-MASC SG-ACC=GEN
'Ivan saw a Moscovite (inhabitant of Moscow).'

In a sense, both the grammatical and the lexical structure of the two sentences is identical. Yet the meaning is different. The difference in meaning is signalled by the difference in case marking: the genitive-like form of the accusative in (b) signals an animate referent, the nominative-like form of the accusative in (a) signals an inanimate one. From the point of view of the grammatical category of case, the two forms (the ACC=NOM and the ACC=GEN) are fully equivalent. They are simply different 'allomorphs' of the same case. Nonetheless, these 'allomorphs' carry with them important grammatical and semantic information. One could say that one variant (the ACC=GEN) is a cumulative marker of accusative case and animacy, the other variant (the ACC=NOM) is a cumulative marker of accusative case and inanimacy. Differences in case marking cannot, by definition, convey differences in case (because either they are differences in case marking or differences in case); but differences in case marking can convey differences in some other grammatical category (for example, in animacy; cf. Mel'čuk 1980).

3. The Russian 'partitive'

Traditional grammars of Russian say that masculine mass nouns in Russian can take, depending on the noun and also on the context and the speaker's intention, one of two alternative inflections, *-a* or *-u*, for example *čaška čaju* 'a cup of tea' vs. *zapax čaja*, 'the scent of tea'. In several modern accounts, however, it has been claimed that the nouns which have this choice have in fact two genitive cases, genitive I and genitive II ('partitive'). Of course, the choice between *-a* and *-u* is open to only a small minority of nouns, and therefore to postulate two genitive cases would mean to posit massive homonymy. But as Kuznecov (1953:74) points out, an objection based on these grounds alone would not be valid. "After all, cases which differ in form for some nouns do not have to differ for all nouns (...). We postulate the existence of two different cases rather than of one case if at least one group of nouns has two different forms which convey different syntactic meanings."

I entirely agree that considerations of homonymy alone should not dissuade us from postulating two different cases if the positing of two cases is justified for even a small minority. However, I would argue that two forms of a noun can differ in syntactic meaning without necessarily differing in case. For example, as pointed out earlier, the forms *Moskvič* (ACC=NOM) and *Moskviča* (ACC=GEN) differ in animacy without differing in case. The fact that forms such as *čaju* and *čaja* differ in syntactic meaning does not mean that they differ in case. It is possible that they differ in CASE MARKING rather than in CASE, while at the same time differing in another grammatical category ('partitiveness').

The claim that forms such as *čaju* and *čaja* differ in case encounters very serious difficulties, at least with respect to contemporary Russian. In older Russian, for those nouns for which a choice was possible at all, the so-called partitive meaning was expressed by *-u*, whereas other meanings serviced by the genitive case were expressed by *-a*. But in present-day Russian the use of the *-a* inflection has greatly expanded, and the so-called partitive meaning, too, has come to be increasingly expressed by *-a*. This means that sentences such as the following ones are increasingly frequent:

Prinesi čaju i limonada!
'Bring some tea (*-u*) and lemonade (*-a*)!'
Prinesi krepkogo čaja i limonada!
'Bring some strong tea (*-a*) and some lemonade (*-a*)!'

Prinesi limonada i jablok!
'Bring some lemonade (*-a*) and some apples (GEN PL)!'

In the sentences above, the form *limonada* is clearly used in the so-called partitive sense; nonetheless, the ending chosen is *-a*, not *-u*.

If we assume, as I think we must, that the conjuncts in a conjoined NP have the same case (whatever their case marking), we will have to conclude that both the *-a* and the *-u* inflections mark the same case: the genitive. At the same time, it is clear that the choice of *-u* rather than *-a* has semantic implications: the ending *-a* can be used for the 'partitive' meaning as well as for a number of other meanings, but *-u* signals unambiguously the 'partitive' (cf. *čaška čaja* 'a cup of tea', *čaška čaju* 'a cup of tea', *zapax čaja* 'the scent of tea', **zapax čaju* 'the scent of tea'). As I would like to put it (in preference to the traditional label 'partitive') the ending *-u* carries with it the following meaning: 'I think of X as something of which one could say how much of it there is there but which one couldn't count'.

The traditional label 'partitive' is opaque and it is not clear in what sense phrases such as *mnogo snegu* 'a lot of snow' or *net čaju* 'there is no tea' are 'partitive'. Jakobson's label *'Gestaltlose'*, 'shapeless', is perhaps more self-explanatory (and therefore more verifiable), but it does not fit well phrases such as *mnogo narodu* 'a lot of people'. A large group of people does not have to be 'shapeless' (they may form a circle or a line), and it does not have to constitute a part of anything. It seems that what all the *-u* genitives really have in common is a conceptualization in terms of uncountable quantity. The expression *mnogo narodu* suggests a lot of people, more than it would be practically possible (for the speaker) to count; the *-u* forms of mass nouns such as *čaj* 'tea', *sok* 'juice' or *saxar* 'sugar' suggest specifiable quantitites of 'stuffs' which are not composed of separate objects and which therefore could not be counted.

On the other hand, the ending *-a* implies neither countability nor uncountability. In contexts such as:

V prodaže net ni kitajskogo ni cejlonskogo čaja.
'There is neither any Chinese nor any Ceylonese tea (*-a*).'

the ending *-a* is more appropriate than *-u* (cf. Jakobson 1936:63) because the sentence is concerned with different KINDS of tea, and KINDS of tea CAN be counted. The ending *-a* does not imply countability but it does not imply uncountability either.

As Lomonosov pointed out (quoted in Kuznecov 1959:22), the fluctua-

tion between *-a* and *-u* was finally resolved for countables in favour of *-a*. But inherent uncountables such as 'stuffs' can be conceptualized in two different ways, depending on whether they are viewed in terms of quantity or in terms of quality. 'Stuffs' themselves cannot be counted, they can only be weighed or otherwise measured in non-discrete terms. But KINDS of stuffs CAN be counted. Forms such as *soku* 'juice' (*-u*) or *saxaru* 'sugar' (*-u*) imply that an inherently uncountable 'stuff' (juice or sugar) is thought of in terms of its (uncountable) quantity; forms such as *soka* 'juice' (*-a*) or *saxara* 'sugar' (*-a*) imply that an inherently uncountable 'stuff' (juice or sugar) is thought of either in terms of its (uncountable) quantity or in some other terms — possibly, in terms of its (countable) KIND. That is to say, as Jakobson suggested, the *-u* forms are semantically marked, the *-a* forms semantically unmarked.

4. The Russian genitive plural

4.1 Russian has a number of classes of *pluralia tantum* which designate what might be called 'aggregates'. One such class includes the names of 'dual' objects such as *nožnicy* 'scissors' or *štany* 'trousers'. Another class includes names of objects with several (countable) symmetrical parts, such as *vily* 'garden fork', *nosilki* 'stretcher', *nary* 'board bed', or *grabli* 'rake'. Another class includes names of 'stuffs' consisting of, or containing, lots of uncountable 'bits', such as *ščі* 'cabbage soup', *pomoi* 'dishwater', *opilki* 'sawdust', *otrubi* 'shavings', *očeski* 'combings', or *ostatki* 'leftovers'.

In addition to these grammaticalized classes of 'aggregates' a new class of 'aggregates' seems to be in the process of being born in Russian. So far, however, the class in question exists only in the form of semantically motivated case marking. The marking which I have in mind is the zero ending of the genitive plural of masculine nouns. An increasing number of nouns which in the 19th century took the ending *-ov* now take a zero ending. The gradual movement towards the zero ending has affected the following semantic categories (cf. Graudina 1964a or Gorbačevič 1971):

(a) fruit and vegetables, e.g. *pomidor* 'tomato', *apelsin* 'orange';
(b) units of measurement, e.g. *gramm* 'gram', *vol't* 'volt';
(c) members of cohesive human groups, especially nationalities and military units, e.g. *gruzin* 'Georgian', *dragun* 'dragoon';
(d) objects typically occurring in pairs, e.g. *nosok* 'sock', *sapog* 'boot'.

At first sight, the collection of categories listed above may appear to be heterogeneous and to lack a common denominator. On closer inspection, however, a unifying semantic principle can be detected: all these categories include countables viewed as members of groups or collocations. Thus, words such as *sapogi* 'boots' or *noski* 'socks' designate pairs of objects, i.e. two-member sets of objects which are physically separate but conceptually united. As Panov (1968:81-82) points out, even the recent loanwords *kedy* 'plimsolls' and *golfy* 'long socks' follow the same pattern. Names of dual objects, however, such as *štany* 'trousers' or *očki* 'glasses', continue to take the ending *-ov* (*štanov, očkov*). It would be difficult to imagine a clearer clue to the conceptualization behind the zero marking: evidently, it signals objects which are physically separate from one another but which are viewed as members of sets.

The class of names of (cohesive) human groups clearly fits the same generalization. Semantically, words such as *Angličane* 'the English', *krest'jane* 'peasants' or *meščane* 'the bourgeois (PL)' are more basic than the corresponding singulars: *Angličanin, krest'janin, meščanin. Angličanin* 'Englishman' designates a member of the class of *Angličane* 'the English', and *krest'janin* 'peasant' designates a member of the class of *krest'jane* 'peasants'. The singulative suffix *-in* added to the stem in the singular indicates overtly that the singular is derived semantically from the plural, rather than vice versa.

People (e.g. a peasant or an Englishman) are separate, discrete entities. But when they are viewed as social classes such as *krest'jane* 'peasants' or as ethnic groups such as *Angličane* 'the English' they are viewed as collective bodies. The increasingly frequent zero ending on the genitive plural of such nouns reflects the double conceptualization: separate, but 'collocated'.

Names of fruit and fruit-like vegetables such as *pomidor* 'tomato' or *apelsin* 'orange' refer to objects which are physically separate, and it is not obvious why they should be conceptualized as 'aggregates'. Aren't they just as separate and individual as handkerchiefs or knives (*platok* and *nož*), whose names never take the zero ending?

In fact, however, there is a very good reason why tomatoes or oranges should be viewed as less individual than handkerchiefs or knives: tomatoes or oranges are frequently thought of in Russia in terms of BUYING, and one does not buy such things individually. In fact, one does not even buy them in groups (such as five oranges or seven tomatoes), one buys them by

the kilogram, as if they were 'stuffs' rather than individual entities. Knives, on the other hand, are usually bought individually, and in any case they are thought of primarily in terms of using, not in terms of buying. Handkerchiefs do tend to be bought in groups, but they are counted rather than weighed (one buys half a dozen handkerchiefs rather than half a kilo), and in any case, they are thought of in terms of using rather than in terms of buying. One might say, of course, that oranges and tomatoes are thought of, primarily, in terms of eating, not in terms of buying, and this is undoubtedly true. But they are also thought of, and discussed, in terms of buying — more so than more durable objects of use. (What does one do with oranges or tomatoes in an urban society? First one buys them and then one eats them, and that's about it.) When they are thought of in terms of eating, they are thought of as individual entities; but when they are thought of in terms of buying they are thought of not as individual entities but as 'aggregates' of such entities.

In support of this suggestion it might be pointed out that one would be unlikely to use the zero ending on the genitive plural of the noun *arbuz* 'watermelon' or even of the noun *grejpfrut* 'grapefruit' (?*pjat' arbuz*, 'five watermelons', ?*pjat' grejpfrut,* 'five grapefruits'). The reason is, I suggest, that watermelons and even grapefruits are bought individually, not by the kilogram. In fact, (according to my own observations) when oranges or tomatoes are counted rather than weighed, their names too tend to take the ending *-ov* at least part of the time. Comrie and Stone (1978:61) report that "observations carried out in Russian shops in 1962-3 showed that the zero forms predominated overwhelmingly in the case of *abrikos* 'apricot', *baklažan* 'aubergine', *granat* 'pomegranate', *mandarin* 'tangerine', *pomidor* 'tomato'. Not a single instance of *apelsinov* or *baklažanov* was recorded". (Cf. also Panov 1968:82.) But observations carried out in shops are necessarily biased, because in shops oranges or apricots are sold by the kilogram, not singly. Even if *kilogram apelsin* 'a kilogram of oranges' is more likely than *kilogram apelsinov*, *pjat' apelsinov* 'five oranges' might be more likely than *pjat' apelsin*. (According to my informants, this is precisely the case.)

I have called the category under discussion 'fruit and fruit-like vegetables' rather than simply 'fruit and vegetables', as Graudina (1964b) or Comrie and Stone (1978) do, because non-fruit-like vegetables are treated in Russian as 'foodstuffs' rather than as discrete objects. Vegetables such as potatoes, carrots, beetroots, cabbage, cauliflowers or turnips are all treated in Russian as mass nouns, presumably because they are thought

of as choppable, i.e. as 'stuffs' rather than as individual objects; and so are vegetables such as horseradish, onions and garlic. For example, one says *kilogram kartoški* (GEN SG) 'a kilogram of potatoes', not **kilogram kartošek* (GEN PL), although one says *kilogram pomidor* (GEN PL) 'a kilogram of tomatoes', not **kilogram pomidora* (GEN SG). (Cf. this volume, chap. 10.)

Finally, units of measurement such as *gramm* 'gram' or *vol't* 'volt' are clearly countable (in fact they have been invented in order to be counted), and yet they are not fully individualized. Normally, one talks of grams and volts in terms of how many, i.e. in terms of countable multiplicities rather than in any other way. (One does not talk about a particular gram or volt: "this gram" or "that volt").

Recent counts have shown that all the categories of (masculine) nouns which take a zero ending in the genitive plural occur much more often in the plural than in the singular. The overwhelming predominance of the plural form of these nouns in speech has even led some scholars to the conclusion that the nouns in question are in some sense *pluralia tantum*. Thus, Graudina (1964a:208) says that words of this kind designate "either measurable (and measuring) objects and dual objects, or mass-like objects and collective objects, referred to only by means of a plural form."

I think, however, that this conclusion is not justified. Truly mass-like objects designated by (masculine) *pluralia tantum* do not take a zero ending in the genitive plural. One says *bobov*, not **bob* 'broad beans' (GEN PL), *pomoev*, not **pomoi* 'dishwater' (GEN PL), *ostatkov*, not **ostatok*, 'leftovers' (GEN PL), and so on. It is only 'aggregates of countables', or as Kuznecov (1959:70) put it, 'countable aggregates', which take the zero ending. As pointed out earlier, the contrast between dual objects composed of two separate parts such as *sapogi* 'boots' and dual objects composed of inseparable parts such as *štany* 'trousers' offers a clear clue to the semantics of the zero ending: a pair of boots constitutes an 'aggregate of separate countable objects', but a pair of trousers does not. The fact that one says *sapog* (GEN PL) but not **štan* (GEN PL) shows the relevance of the separateness of the members of the aggregate as a factor responsible for the zero marking.

Jakobson (1957) suggested that the zero ending of the genitive plural of masculine nouns indicates that for the nouns which take it the plural is the unmarked category. It seems to me that this insight tallies well with the semantic interpretation proposed here. The idea of an unmarked plural implies the presence of a (marked) singular, so *pluralia tantum* cannot have

an 'unmarked plural'. The opposition between a singular and a plural suggests countability, but the unmarked character of the plural suggests that the countables in question are thought of as members of an aggregate.

But the difference in grammatical meaning between the 'neutral', semantically unmarked, ending *-ov* (GEN PL) and the semantically marked zero ending (GEN PL + 'aggregate of countables') does not entail a difference in CASE. The fact that nouns with the 'neutral' ending *-ov* and nouns with a semantically marked zero ending are perfectly conjoinable, supports this:

> *Ja videl mnogo Angličan i Francuzov.*
> 'I saw many English people (GEN PL, zero ending) and French people (GEN PL, *-ov*).'

Vinogradov (1947:144) has suggested that forms of the so-called (inverted commas) 'genitive plural' with a zero ending belong in fact not to the genitive proper but to the 'partitive' or 'quantitative' case which in the singular takes *-u* as its exponent.

I have argued earlier that there is only one genitive case in contemporary Russian and that the *-u* forms express a grammatical category different from case. But whether one decides to regard the *-u* form as a separate case or as an exponent of something other than case, I would argue that the meanings of the two categories (the one conveyed by *-u* in the singular and the one conveyed by zero in the plural) are quite different. As I have argued earlier, *-u* expresses uncountable quantity ('I think of it as of something of which one could say how much of it there is there but which one could not count'). Zero, on the other hand, indicates a countable multiplicity. Clearly, the two meanings are different and mutually incompatible. This is not to deny that there is a link between them. They are similar in deemphasizing or even denying individuation. The *-u* form shows that the noun does not refer to separate individual entities (which could be counted), and the zero form shows that the noun refers to an aggregate, not to individual entities thought of as merely individual entities. But when the meanings of the two categories are stated in precise terms, they are clearly different, though not unrelated:

-u: I think of it as something of which one could say how much of it there is there but which one could not count;

-ø: I think of it as something that can be thought of either as one thing or as separate things of the same kind which could be counted.

From the point of view of case, the zero ending is an 'allomorph' of the same case as the ending *-ov* (the genitive). Nonetheless, the zero 'allomorph' is an exponent of an additional grammatical meaning ('aggregate of countables'). Thus, the case marking of the genitive plural (zero vs. *-ov*) is semantically motivated, as the case marking of the genitive singular (*-u* vs. *-a*) is semantically motivated, although the semantic motivation is in each case different.

It should be added that the category of 'uncountable quantity' signalled by the *-u* ending of the genitive singular of masculine nouns, is in the process of dying out in Russian; but the category of 'countable aggregate' signalled by the zero ending of the genitive plural of masculine nouns, is increasing in significance. Today, nouns referring to 'countable aggregates' can be either marked as such (by the zero ending in the genitive plural) or not (if they take the neutral ending *-ov*). But the use of the semantically marked zero ending for such nouns is increasing, and so the category of the 'aggregates of countables' is establishing itself in Russian more and more strongly.

4.2. Finally, I would like to point to an interesting parallel from English. I would venture to suggest that English, too, pays some attention to 'aggregates of countables', having partly grammaticalized and partly lexicalized that concept, though on a much smaller scale than Russian.

First, consider the grammar of measure words in English. It is well known that in many non-standard dialects of English words such as *year, month, mile, pound,* or *foot* do not take in the plural any overt marking (in other words, they behave almost exactly like measure words in Russian). For example, in working-class Australian English one says *five year*, not *five years, five mile,* not *five miles*. According to Shnukal (1978) the phenomenon of zero marking of plurals in measure nouns is receding (in Australian English), and currently it is maintained regularly only for seven lexical items (*pound, foot, week, mile, year, month* and *ton*). Thus, one says *seven pound* but *seven dollars*. In Appalachian English, however, the zero marking on the plural of measure nouns seems to be a productive phenomenon (cf. Wolfram and Christian 1980).

What does the zero marking signal? Clearly, not a lack of countability, because the nouns in question are countable *par excellence*, like their counterparts in Russian: countability constitutes their very *raison d'être*. While being very high in countability, however, measure nouns are low in indi-

viduation. Typically, one does not talk about a particular yard, mile or pound ("the yard", "the mile", "the pound"). One counts such things, but one does not take an interest in them individually.

When one comes to think about it, the analogy with nouns such as *sheep, deer* or *fish* is quite striking, although at first any suggestion that the zero marking in nouns of this kind may be semantically motivated would no doubt be rejected (by many) as sheer madness.

And yet is it not clear that sheep, while highly countable (so much so that certain cultures have developed special counting systems for counting sheep, cf. Araujo 1975) are not highly individualized — much less so than potential pets such as cats and dogs, or large domestic animals such as horses or cows? A sheep's typical mode of existence is as a member of a flock. It is important for the shepherd or the farmer to know the number of sheep in the flock, but it is unusual for him to take an interest in each individual sheep, and to be able to tell one from another. (In fact, sheep are believed to be so notoriously lacking in individual characteristics that counting sheep is supposed to be a sleep-inducing device, due to the sheer monotony of the process.)

The same holds for fish. It is important for the fisherman to know how many fish he has caught, but it would be unusual for him to take an interest in each individual fish, and to be able to tell them from one another. (Perhaps in some fishing-oriented cultures fishermen do count fish rather than sheep to induce sleep?)

The contrast between domestic *ducks* on the one hand and wild *duck* on the other (cf. Quirk and Greenbaum 1973:86) is particularly telling. The hunter counts the birds he has shot but he normally would not treat them as individuals. Domestic ducks, on the other hand, do have their individuality. The grammatical marking reflects this.

I am not claiming, needless to say, that words such as *sheep* or *fish* in English form a productive grammatical category. They do not (except perhaps in the speech of hunters). The view which treats animals such as sheep or fish or wild duck as unindividualized countables (two *sheep*) rather than as fully individualized ones (*two *sheeps*) has been lexicalized in only a handful of words. Nonetheless the zero marking in these words 'makes sense'. It is semantically motivated, and motivated in roughly the same way as the zero marking of the genitive plural of masculine nouns in Russian.

5. The genitive marking of the accusative in Polish

5.1 In Polish, masculine animate nouns have an accusative identical in form with the genitive, whereas masculine inanimate nouns have in principle an accusative identical in form with the nominative. However, a minority of inanimate nouns have an accusative identical in form with the genitive, not with the nominative. The nouns which exhibit this unorthodox behaviour fall into a number of semantic categories (cf. Szober 1923, Doroszewski 1963, Decaux 1966).

(a) the names of dances: *krakowiaka, mazurka, mazura;*
(b) the names of games: *grać w brydża, tenisa, krykieta* 'play bridge, tennis, cricket'; *bawić się w chowanego, berka* 'play hide-and seek, chasey';
(c) the names of some actions: *buziaka* 'kiss', *całusa* 'kiss' *szturchańca* 'a dig in the ribs', *kuksańca* also 'a dig in the ribs', *klapsa* 'spank', *kopniaka* 'a kick', *prztyczka w nos* 'a flick on the nose';
(d) the names of some items of food: *cukierka* 'lolly', *lizaka* 'lollipop', *ogórka* 'cucumber', *pomidora* 'tomato', *kotleta* 'cutlet', *biskwita* 'biscuit', *precla* 'pretzel';
(e) the names of items of money: *dolara* 'dollar', *złotego* 'zloty' *franka* 'franc';
(f) the names of certain physical or mental defects or negative states: *mieć bzika, hysia, fioła, kota* 'to be crazy, to have a craze'; *mieć kaca* 'to have a hangover'; *mieć zeza* 'squint'; *mieć pecha* 'to have bad luck'; *mieć stracha, mieć boja* 'to be scared'; *mieć guza* 'to have a bump/lump'; *mieć siniaka* 'to have a bruise'; *mieć raka* 'to have cancer'.

This collection of categories may seem heterogeneous and bizarre, and to the best of my knowledge no explanation has ever been advanced as to why these particular categories should behave in the same unorthodox way. On the contrary, the behaviour of these categories has been explicitly described as puzzling and incomprehensible. (Cf. Comrie 1978:36, whose general hypothesis that "the Genitive-Accusative rule developed in order to distinguish those direct objects that are particularly [likely] to be confused with subjects from subjects" cannot explain the genitive marking on inanimate masculine singular *o*-stems, 1978:41.)

In my view, however, the set in question only appears to be haphazard,

and in fact is governed by a simple semantic rule. To understand this rule, one must look first at the use of genitive objects in Polish (i.e. objects which take not merely the genitive marking but the genitive case).

The genitive case is used in Polish to mark the direct object in negative sentences, the 'partitive' object (in the case of mass nouns or plural count nouns) and also what I will call the object of quick use.

Dała mu nóż (w prezencie)/Nie dała mu noża w prezencie.
'She gave him a knife-ACC as a present/She didn't give him a knife-GEN as a present.'
Dała mu całą zupę./Dała mu zupy.
'She gave him all the soup-ACC/She gave him some soup-GEN.'
Dała mu jabłka./Dała mu jabłek.
'She gave him the apples-ACC/She gave him some apples-GEN.'
Daj mi nóż (w prezencie)./Daj mi noża (na chwilę).
'Give me a knife-ACC as a present/Give me a knife-GEN (for a moment).'

The genitive of 'quick use' can be used not only with names of instruments and tools such as knives, pencils or hammers, but also with names of other objects which can be seen as lending themselves to quick use:

Daj no mi świeczki/latarki.
'Give me (particle) a candle-DIM-GEN/torch-GEN.'

The implication is that the speaker wants to do something quickly and needs a light for just a moment. Similarly, sentences such as:

Ojciec wziął kija/pasa.
'The father took a stick-GEN/belt-GEN.'

imply an intention to use the stick or the belt in question to give someone (present) a beating, whereas their counterparts with an accusative object have no such implications.

It appears that the construction is further constrained by being applicable preferably to small objects. Thus, the sentence:

Daj mi młotka!
'Give me a hammer-DIM-GEN!'

sounds better than

?*Daj mi młota!*
'Give me a (big) hammer-GEN!'

and even

Daj mi świeczki!
'Give me a candle-DIM-GEN!'

sounds better than

?*Daj mi świecy!*
'Give me a (big) candle-GEN!'

Furthermore, it appears that the object of quick use should be indefinite and unqualified:

?*Daj mi tej świeczki!*
'Give me this candle-DIM-GEN.'
?*Daj mi długiego noża!'*
'Give me a long knife-GEN.'

It is easy to understand how this meaning of 'quick use of a small object of any kind' could have developed out of the partitive meaning. In fact, Delbrück (1893) treated the construction in question as a variety of the partitive. Moravcsik (1978:265) follows Delbrück on this point, adding indefiniteness of the object as an additional factor facilitating the use of the genitive in this construction. I think, however, that the constraint on this construction can be formulated in more specific terms: what matters is not only that the action should be limited in time and that the object should not be focussed upon, but also that the action should consist in using the object momentarily, as a means to an end, and perhaps to an end which is not very serious.

For example, one can *wziąć pasa* 'take a belt-GEN' or *wziąć kija* 'take a stick-GEN' to give someone a beating, but one could not **wziąć miecza* 'take a sword-GEN' or *wziąć rewolwera* 'take a revolver-GEN' to kill someone. Furthermore, while the expressions *wziąć noża* or *wziąć pasa* are fully acceptable, they would not be applied in a situation when a very serious action (such as an operation) is intended. A sentence such as:

?*Chirurg wziął noża i przeciął wrzód.*
'The surgeon took a knife-GEN and cut the abscess.'

sounds as comical as the sentence:

?*Kat wziął miecza i obciął głowę mordercy.*
'The executioner took a sword-GEN and cut off the murderer's head.'

The premeditated, pre-planned character of an action such as an operation or an execution also contributes to the semantic clash: the genitive of 'quick use' implies a spontaneous action, as well as a quick one. Thus, if a surgeon acts upon an impulse then a genitive object CAN be used, especially with respect to a minor intervention.

To account for all these facts I would include in the semantic representation of the 'genitive of quick use' some component such as 'I don't think of it as a big thing'.

The semantic constraints in question are linked with a stylistic one. The genitive form of the object such as *noża* sounds very informal, very colloquial. It does not fit formal, institutionalized situations such as an operation. The seriousness of the situation is incompatible with both the 'non-serious' meaning and the casual, non-serious style of the genitive object construction. The 'non-serious' style and the 'non-serious' meaning work together and, so to speak, reinforce one another.

We can return now to the problem of the genitive marking of inanimate objects in the accusative case. The meaning of the genitive of 'quick use' provides, I suggest, a clue to the semantics of that marking.

5.2 If we leave aside all the idioms and set expressions (to which we will return later) then it appears that the unorthodox behaviour of all the different types of masculine inanimate nouns can be explained in terms of one simple semantic rule: inanimate nouns whose accusative is equal in form to the genitive rather than to the nominative imply a quick and 'not serious' action.

In the case of games and dances the validity of this explanation is self-evident: a game is restricted in time and, by definition, is devoid of a serious purpose, and so is a dance.

In the case of actions such as *buziak* 'a kiss' or *kuksaniec* 'a nudge', time is restricted even further, since all the actions whose names take an accusative equal in form to the genitive are not only restricted in time as dances or games are, but are simply momentary. The non-seriousness of these actions is of a different kind than in the case of dances and games, but it is still very clear. For example, the name of a serious kiss, *pocałunek*, takes an accusative equal in form to the nominative; it is only a light, playful, inconsequential *buziak* (or *całus*) which takes an accusative equal to the genitive. The words *kuksaniec* 'a nudge', *szturchaniec* also 'a nudge', or *klaps* 'a spank' all imply light, non-serious actions, and the word *prztyczek*

'a flick' even more so. It is true that a *kopniak* 'a kick' has more weight than the other actions in that class, but even *kopniak* suggests a contemptuous rather than a brutal act. In fact, the phrase *dać kopniaka* 'to give a kick-ACC=GEN' implies, above all, contempt, not physical force. If by kicking somebody one inflicts serious damage, the expression *dać kopniaka* would not be used. (For example, it would not be applied to an SS-man or an NKVD-man brutally kicking a prisoner.)

Nouns referring to small edible objects imply a quick and not very momentous action of eating, and not 'serious' eating, but the kind of eating involved in having a snack or a sweet. It seems that the smaller and the more pleasurable the object is the more likely it is that a genitive-like direct object will be used. For nouns such as *drops* (a small round sweet the size of a life-saver, etymologically a loan from English, with the plural form *drops* reinterpreted as a singular) or *papieros* 'cigarette' the genitive-like DO is virtually obligatory:

*Daj mi dropsa/*drops.*
'Give me a life-saver-ACC=GEN/*life-saver-ACC=NOM.'
Daj mi cukierka/?cukierek.
'Give me a sweet-ACC=GEN/?sweet-ACC=NOM.'
Daj mi lizaka/?lizak.
'Give me a lollipop-ACC=GEN/?lollipop-ACC=NOM.'
*Chodźmy na papierosa/*papieros.*
'Let's have a cigarette-ACC=GEN/*cigarette-ACC=NOM.'
Daj mi herbatnika/?herbatnik.
'Give me a biscuit-ACC=GEN/?biscuit-ACC=NOM.'

One noun, particularly expressive and particularly suggestive of non-seriousness, seems to exist exclusively in that one genitive-like form: *loda* ('ice-cream'). The standard word for ice-cream is *lody*, a *plurale tantum* and a mass noun, but the colloquial word, used especially by children, and only as a direct object, is *loda*:

Kup mi loda!
'Buy me an ice-cream!'

The form *loda* (a singular and a countable) implies a quick act of small-scale indulgence.

In fact, for these nouns for which the genitive-like form of the DO is more or less obligatory, it should presumably be regarded as the accusative case rather than as the genitive case. (I will return to this problem later.)

For larger and less obviously pleasurable items, however, a choice is available between a nominative-like and a genitive-like form of the DO, with an associated semantic difference. For these nouns, therefore, it seems more justified to regard the genitive-like form as the genitive rather than as the accusative case:

Zjadłbym kotleta/?kotlet.
'I feel like a cutlet-GEN/?cutlet-ACC=NOM.'
Jaś zjadł dzisiaj swój kotlet.
'Johnny has eaten his cutlet-ACC=NOM today.'

The genitive suggests a pleasurable snack, the accusative suggests a large item of seriously consumed 'serious' food. I might add that if the speaker is concerned about what happened to the food item then the accusative is definitely preferable to the genitive:

Ojej! Kot zjadł mój kotlet!
?Ojej! Kot zjadł mojego kotleta!
'Oh no! The cat has eaten my cutlet!-ACC=NOM/?-ACC=GEN.'

To see that the size of the object is crucially important, compare the following sentences:

*Jaś zjadł omlet/*omleta.*
'Johnny ate an omelette-ACC=NOM/*omelette-ACC=GEN.'
*Jaś zjadł pierożka/*pierożek.*
'Johnny ate a pierożek-ACC=GEN/*pierożek-ACC=NOM.'
(a pierożek being the size of a small spring roll)
Jaś zjadł naleśnika/?naleśnik.
'Johnny ate a pancake-ACC=GEN/?pancake-ACC=NOM.'
Jaś zjadł befsztyk/?befsztyka.
'Johnny ate a beefsteak-ACC=NOM/?beefsteak-ACC=GEN.'
Jaś zjadł kotleta/?kotlet.
'Johnny ate a cutlet-ACC=GEN/?cutlet-ACC=NOM.'

As a rule of thumb we might suggest that anything that one would not be expected to want to eat more than one of, would take a nominative-like DO in the accusative case rather than a genitive-like DO in the accusative case. But other factors are involved as well. Thus, the names of fruit generally take *-a*, and this applies even to watermelons — possibly because fruit is regarded as less serious food than steaks or omelettes. The speaker's attitude is also important. For example, the colloquial and highly expressive

word *schaboszczak* (a loving word for a piece of pork — the most favourite of Polish dishes and almost a symbol of good life) normally takes a genitive-like form of the DO:

Dzisiaj mieliśmy schaboszczaka/?schaboszczak.
'Today we had a schaboszczak-ACC=GEN/?ACC=NOM.'

The names of items of money form another interesting group of nouns which take a genitive-like DO.

*Daj mi dolara/*dolar!*
'Give me a dollar-ACC=GEN/*dollar-ACC=NOM.'

I have suggested that small food items evoke (in Polish) the idea of a quick and potentially pleasurable action: eating (or, more generally, consumption, since cigarettes are also included). Obviously money does not have to evoke the idea of eating, but the link between a single banknote or coin and a quick 'non-serious' action is also easy to grasp: the idea of getting, or having, or giving, a single dollar or a single dime naturally brings to mind the idea of a quick, potentially pleasurable and non-serious action (i.e. of spending the money in question on something small).

5.3 I conclude that the genitive-like marking of the accusative of inanimate masculine nouns is semantically motivated, and this semantic motivation links it with the genitive construction of 'quick use for non-serious purpose'. For some nouns, the genitive-like form of the DO is in contrast with a nominative-like variant, and for these nouns (such as *kotlet* or *ogórek*) it might be more justified to analyze the genitive-like DO as the genitive case rather than as the genitive-like form of the accusative. This means that the construction of the genitive of quick use is spreading to items of food. For other nouns, such as *drops*, the genitive-like form should probably be analyzed as the accusative case, because these nouns have no other form which could be regarded as their accusative case (no accusative equal in form to the nominative). For nouns such as *papieros* or *cukierek*, for which the genitive-like form of the DO is almost obligatory (but not quite) TWO analyses seem to be called for: the genitive-like form of the DO should be analyzed as either genitive case or as accusative case. By postulating two alternative analyses we would be describing the situation as a change in progress. (The fact that one case system can change into another means that at some stage the same set of data will be open to two alternative analyses: one presenting two forms as differing in case marking

and the other presenting them as differing in case.)

When we compare the semantic implications of the genitive marking of the accusative case DOS, with those of the genitive case DOS, the link is clear: quick action without serious consequences. Furthermore, neither the genitively marked genitive case objects nor the genitively marked accusative case objects are affected by the action. Objects used temporarily are not affected by the fact of having been used. The money spent changes the owner but is not physically affected by the transfer. Actions denoted by a genitive-like accusative case are not affected because they are ACTIONS, not objects of an action. The same applies, of course, to games and dances. The only exception is food: no matter what the case marking on the words for food, the food IS seriously affected by the action of eating. But this apparent exception conforms to a more general rule, the same rule which allows the speakers of English to say:

John had a lick/bite of Mary's ice-cream.

while forbidding them to say:

*Fido had a lick/bite of Mary's hand.

As I have pointed out elsewhere (see this volume, chap. 5) sentences about eating are often treated as sentences of low transitivity, because due to our anthropocentric bias we tend to view eating exclusively from the consumer's point of view, not from the point of view of what happens to the food.

Generally speaking, the genitive-like FORM of an accusative DO signals a 'lower transitivity' (in the sense of Hopper and Thompson 1980), just as the genitive CASE of DO signals a 'lower transitivity'. But the fact that the genitive-like form of the DO is semantically motivated, and that the semantic motivation of this form links it with the genitive case, does not invalidate the distinction between cases and case forms. On the contrary, it highlights the relation between the two. Facts of this kind provide a clue to the logic of recurring case syncretisms.

5.4 Polish has also a number of set expressions, semi-idioms, each of which includes the verb *mieć* 'have' and an abstract noun in the genitively marked accusative case. The expressions in question do not refer to actions, and the noun included in them is an abstract one, so they cannot be said to share the common denominator of all the other expressions with genitive-like accusative case objects, discussed earlier. Nonetheless, there is a clear

semantic link between the present type and those discussed earlier. Expressions with the verb *mieć* 'have' and an abstract noun in the accusative case with a genitive-like form all refer to, roughly speaking, human disabilities viewed as not very serious. The subset designating mild craziness is almost open ended: *mieć bzika, hyzia, fioła, kota* and so on, and can be viewed as a series of more or less slangy substitutes for the highly informal but not slangy model *mieć bzika* (an ironic and deprecating expression implying a non-serious craziness or a craze). The same ironic and deprecating attitude is conveyed by the expression *mieć kaca* 'to have a hangover' and *mieć stracha* 'to be scared', both referring to temporary negative states, and also by the expression *mieć pecha* 'to be unlucky', which refers to a negative condition, temporary or permanent, which is pitiable but not tragic. The expressions *mieć zeza* 'to be cross-eyed', *mieć guza* 'to have a bump on the forehead etc. from having been hit' and *mieć siniaka* 'to have a bruise' refer to minor physical defects, localized and viewed as not serious.

The only apparent exception to the suggested semantic generalization is provided by the expression *mieć raka* 'to have cancer', which does not convey the minimising, 'non-serious' attitude conveyed by the others; but then *rak*, in its primary meaning, is an animate noun (meaning 'crab'), and animate nouns generally have an accusative equal in form to the genitive, even in secondary, non-animate, meanings. Presumably, the same explanation holds for brand names of cars, whose accusative case is also equal in form to the genitive — possibly a usage extended from human names such as Ford or Renault.

6. The nominative plural in Polish

In Polish, the nominative plural has a number of 'allomorphs', conditioned by a number of different factors (phonological, morphological and semantic). The whole picture is rather complicated and I will not try to present it fully (cf. Doroszewski 1963 or Decaux 1966), restricting my attention to human masculine nouns with a hard stem. These can take one of the following three endings: *-i, -y* and *-owie*. (Human masculine nouns with a soft stem can take either *-owie* or *-e*). Of these, *-i* is neutral, in the sense that it implies nothing beyond 'human male'. The ending *-owie* is marked, implying, in addition to 'human male', also 'importance' or 'dignity'. The ending *-y*, which is otherwise characteristic of non-human masculine nouns, implies contempt. Significantly, nouns with the *-y* ending

have also non-human agreement, i.e. the verbs and adjectives governed by them occur in the form in which they occur when they are governed by non-human masculine nouns (as well as by any neuter or feminine nouns, human or non-human). Nouns with either *-i* or *-owie* endings have a special human-masculine ('virile') agreement, i.e. they impose a special 'virile' form on the verbs and adjectives governed by them. (In plural or conjoined noun phrases a single human male referent triggers the 'virile' agreement.)

Some human masculine nouns have a choice between two or even three of these endings, whereas others are more or less strictly restricted to one of them.

Abusive or deprecatory nouns such as *łobuz* 'rascal', *cham* 'lout, oaf, slob, shit' or *drab* 'ruffian' virtually require the contemptuous ending *-y*, and so do contemptuous names of certain nationalities, such as *Szkop* 'German' (contemptuous), *Szwab* 'German' (contemptuous and hostile) and *Rusek* 'Russian' (contemptuous).

For nouns which are inherently status-endowed (given Polish cultural attitudes), such as *profesor* 'professor', *-owie* is virtually required. Thus, *profesorowie* is virtually the only possible nominative plural of *profesor* and hence it is unmarked vis-à-vis the highly unusual *profesorzy* (where the ending is *-i*, in the underlying form), but it does convey a respectful attitude (so semantically, it is marked). Normally, an inherently neutral noun such as *Żydzi* 'Jews' can be lowered to a contemptuous *Żydy*, but is not raised to a respectful *Żydowie*. Nevertheless, the unusual respectful form *Żydowie* CAN be used to achieve a special effect of conspicuous high respect, as in Norwid's poem entitled *"Żydowie polscy"* 'The Polish Jews'. An inherently respectful word such as *profesor* or *astronom* can (with difficulty) be lowered to a neutral form such as *profesorzy* or *astronomi* (with an *-i* ending) but hardly to a contemptuous form such as *?profesory*, *?astronomy* (unless in a joke).

An inherently contemptuous word such as *łobuz* 'rascal' can be raised (with difficulty) to a marked neutral form such as *łobuzi*, but not to a respectful form such as **łobuzowie*. For example, Julian Ejsmond used the unusual form *łobuzi* in his poem entitled 'To my little sons':

> *Kiedy będziecie już duzi / Moi najdrożsi łobuzi...*
> 'When you grow up, my dearest rascals...'

It must be noted, however, that it is only a minority of human masculine nouns which can take the *-owie* ending, even if on semantic grounds

they would seem perfectly eligible. Thus, one cannot say **biskupowie* 'bishops', **adwokatowie* 'barristers', **prałatowie* 'prelates', *fizykowie* 'physicists', **genetykowie* 'geneticists' or *?docentowie* 'associate professors'. The ability to take the *-owie* ending depends not only on the meaning of the noun but also on its form. I would suspect that, generally speaking, it is only those nouns whose very FORM suggests a human referent, and, moreover, a human referent of high standing, which can take *-owie*. Thus, the choice of the *-owie* ending is available to nouns of foreign origin ending in *-ał, -or, -er-, -nom* or *-log* (e.g. *generał* 'general', *kardynał* 'cardinal', *profesor* 'professor', *senator* 'senator', *inżynier* 'engineer', *minister* 'minister', *agronom* 'agronomist', *astronom* 'astronomer', *geolog* 'geologist', *biolog* 'biologist'), since these final segments carry with them, at least potentially, the desired semantic implications (or at least they alert the addressee to the possibility of such implications). I call them 'final segments' rather than suffixes, because in Polish words with these final segments are only semi-analysable into morphemes. But the exact nature of the constraints in question requires further study.

On the other hand, words such as *biskup* 'bishop', *prałat* 'prelate', *adwokat* 'barrister', *student* 'student' or *matematyk* 'mathematician' do not suggest by their very form (i.e. the final segment) a human referent, let alone a human referent occupying a prestigious position (cf. *słup* 'pole', *krawat* 'necktie', *atrament* 'ink' or *patyk* 'stick'), and this is, I suggest, why they do not qualify for the respectful inflection *-owie*.

Among the words of native origin, two semantic categories take (obligatorily) *-owie*: proper names (*Michałowie, Janowie, Nowakowie*) and kinship terms (*synowie* 'sons', *ojcowie* 'fathers', *wujowie* 'uncles', *dziadkowie* 'grandfathers', and so on).

The contemptuous ending *-y* can be used with proper names for a jocular effect, as in the children's rhyme:

Tańcowały dwa Michały, / Jeden duży, drugi mały.
'Two Michaels were dancing, one big and one small.'

But the effect sought and achieved is humorous, not contemptuous. In the area of kinship terms one (hard stem) noun which does not take *-owie* is the word *kuzyn* 'distant cousin', which can be regarded as being outside the field. The word *wnuk* 'grandson' tends to take *-owie* when applied to adults or adolescents and *-y* when applied to small children (grandchildren) of both sexes. The privileged status of human proper names and kinship

terms has of course many parallels among the languages of the world (cf. Silverstein 1976).

Outside these two categories, *-owie* has survived in a handful of native words which imply high status, such as *król* 'king', *pan* 'lord', *apostoł* 'apostle' and *uczeń* 'discipline, student'. The ending *-owie* is also used by several nouns with the suffix *-ek*, such as *skoczek*, 'parachutist', *majtek* 'seaman' or *nurek* 'diver', where it does not seem to have any semantic implications, beyond 'NOM PL, human male'.

The ending *-owie* is also available to all the members of the minor class of the masculine human nouns of the *-a* declension (a declension generally reserved for the feminine gender), provided that they are eligible for it on semantic grounds; i.e. to nouns such as *wojewoda* 'voivode', *starosta* 'prefect', *sędzia* 'judge' or *hrabia* 'count'. Since the only masculine nouns which belong to this class (to the *-a* declension) are human, one might say that here again the very form of these words (i.e. their formal characteristics) marks them as potential candidates for the *-owie* status. It should be added, however, that many masculine nouns of the *-a* declension are disparaging or contemptuous; they exploit the feminine gender associations of the *-a* declension to imply a lack of virility or supposedly virile qualities (such as courage, decisiveness etc.). Nouns of this kind include *niedołęga* 'bumbler', *niedorajda* 'bungler', *ciapa* 'weakling', *gapa* 'halfwit' or *niedojda* 'nitwit'. Naturally, these nouns cannot take the ending *-owie*, and have to take *-y*.

Finally, among the names of nationalities and ethnic groups some take *-owie* and some take *-i*, and the choice is determined by a number of factors, phonological, morphological and semantic. For example, monosyllabic nouns such as *Belg, Gall, Celt* or *Fin* tend to take *-owie* (which is the only disyllabic ending among the three). But on the other hand, *-owie* in ethnonyms seems to imply distance and lack of familiarity, so the names of peoples closely related to Poland in historical terms (neighbours, friends, enemies, etc.) take *-i*, even if the name in the singular is monosyllabic, such as *Szwed* 'Swede' or *Czech*. There are also a number of suffixes which preclude the use of *-owie* such as *-czyk* or *-in*.

In any case, *-owie* in the names of ethnic groups does not seem to differ from *-i* in terms of dignity or respect, as it does in common nouns. On the other hand, the contemptuous *-y* (with the concomitant non-human agreement) can be used with ethnonyms to achieve exactly the same semantic effect as elsewhere. As mentioned earlier, contemptuous names of nationalities such as *Szkop, Szwab* or *Rusek* virtually require *-y*.

What exactly is the meaning of *-owie*? Traditionally, grammars of Polish describe *-owie* as a *'końcówka godnościowa'*, an 'honorific' ending. But the fact that *-owie* is required by proper names and kin names would suggest that it is, above all, a signal of an individual treatment given to each member of a group. The link between such an individual treatment and a potential honorific value is clear.

7. Conclusion

The nominative plural of human nouns in Polish provides a particularly clear example of semantically motivated case marking. It is inconceivable that human proper names or kin names in Polish should be assigned a case system different from that of common nouns (as is generally done in Australian linguistics, cf. e.g. Dixon 1980) — first, because there are innumerable grammatical rules which refer to the nominative as a case, regardless of the case marking, and second, because the 'privileged' status of proper names and kin names is also available to or required by various categories of common nouns. (The current practice of assigning different case systems to different classes of nominals in Australian languages has been challenged by Goddard 1982; see also Mel'čuk 1979b.)

A description which would treat the semantically motivated marking of the nominative plural in terms of different case systems would immensely and absurdly complicate the account of Polish grammar. In fact, no such description has ever been proposed for Polish.

If, however, it is once accepted that case marking may be semantically motivated then the question arises whether it is EVER justified to propose different case systems for different classes of nouns, and nominals in general. Shouldn't one rather postulate a single system for all the nominals, thus allowing for a simple statement of all the grammatical rules which refer to case (such as case agreement; cf. Zaliznjak 1973) while at the same time carefully describing the semantics of the case markers as such?

The semantics of case marking is, in my view, a fascinating and most fruitful area for future investigation. Typological studies in this area have hardly begun. The 'discriminatory' theory of case marking has played a mixed role in this respect. In so far as it contributed to the obliteration of the distinction between case and case marking, it was harmful. It was also harmful in obliterating the positive character of cases as encoders (rather than distinguishers) of syntactic and semantic categories. It was useful in so

far as it stimulated an interest in universal tendencies in case marking. But the explanations which it offered were inadequate and misleading.

For example, why is it that human masculine nouns in Polish have an accusative plural equal in form to the genitive while non-human masculine nouns and all neuter and feminine nouns have an accusative plural equal in form to the nominative?

Comrie (1978) explains this fact in terms of a greater need to distinguish agents from patients for human masculine nouns than for all other nouns. But if so, why should the NOMINATIVE plural of human masculine nouns differ from that of all other nouns in triggering a special kind of 'virile' agreement in verbs and adjectives? The point is that in INTRANSITIVE sentences, too, human masculine nouns behave differently from all other nouns. How can this be explained in terms of a discriminatory theory of case marking?

Furthermore, human masculine nouns — and no other nouns — are differentiated, in Polish, in terms of 'status', and this differentiation in terms of status is linked to one case only — the nominative. Why is that? Clearly, what is needed to explain such facts is a SEMANTIC theory of case marking. The 'discriminatory' theory of case marking simply won't do.

One of the main questions which an adequate theory of case marking will have to answer is this: what sorts of meanings can be expected to 'attach themselves' to a particular case?

On the basis of the data discussed in the present paper one would suggest that differences in countability are likely to attach themselves to the genitive, a case whose core meaning involves the concept of quantity (or part).

Differences in status and 'importance' are likely to attach themselves to the nominative. After all, the nominative grammaticalizes the concept of topic, of the entity thought of and spoken of. But the entity thought of must be thought of in a certain way (in terms of sex, status, importance, animacy, number, and so on). Thus, the nominative will naturally attract meanings which have to do with the identification of the referent and with the speaker's attitude towards it.

The accusative is primarily the case of the 'patient', i.e. of the entity viewed as affected by the action. Differences in the marking of the accusative can be expected to have something to do with the nature of the effect. People are likely to be distinguished (in the accusative case) from things, because the same action would affect people and things in very different

ways. People are also likely to be distinguished from animals because in the case of people one expects a psychological effect, beyond the mere physical sensation which would be attributed to both people and animals. A serious effect is likely to be distinguished from a minor one, a lasting effect from a temporary one, and a total change of the object from a partial one. And so on.

Phenomena of this kind have of course been widely reported in recent literature (cf. especially Moravcsik 1978 and Hopper and Thompson 1980), but they were usually studied under the heading 'the marking of the object', so that differences in case marking as such were not distinguished from differences in case. For example, direct objects in the genitive case were not distinguished from direct objects in a genitive-like form of the accusative case.

Once the traditional concept of case ('surface case') has been fully restored, and once the notion of case has been clearly sorted out from the notion of case marking, it becomes possible to study, with some purpose and precision, the semantics of either.

9. What's in a noun? (or: How do nouns differ in meaning from adjectives?)

1. Introduction

What's the difference in meaning between a noun and an adjective? The traditional answer to this question says that nouns designate 'substances', whereas adjectives designate 'qualities'. Needless to say, this is the kind of answer that most contemporary linguists find exasperating and dismiss as totally unhelpful. Since, however, they find it hard to replace the traditional formula with anything more satisfactory, they often dismiss at the same time the idea that the distinction between nouns and adjectives has any semantic basis whatsoever.

This seems a rather foolish thing to do. As Jespersen (1924:74) pointed out more than half a century ago:

"(...) though the formal distinction between substantive and adjective is not marked with equal clearness in all the languages considered, there is still a tendency to make such a distinction. It is also easy to show that where the two classes are distinguished, the distribution of the words is always essentially the same: words denoting such ideas as *stone, tree, knife, woman* are everywhere substantives, and words for *big, old, bright, grey* are everywhere adjectives. This agreement makes it highly probable that the distinction cannot be purely accidental: it must have some intrinsic reason, some logical or psychological ('notional') foundation (...)"

Jespersen himself found the distinction between 'substance' and 'quality' of little value, but being convinced that the distinction between the two classes must have a semantic basis, he proposed a different answer (1924:75):

"(...) I find the solution of our problem in the view that on the whole substantives are more special than adjectives, they are applicable to fewer

objects than adjectives, in the parlance of logicians, the extension of a substantive is less, and its intension is greater than that of an adjective. The adjective indicates and singles out one quality, one distinguishing mark, but each substantive suggests, to whoever understands it, many distinguishing features by which he recognizes the person or thing in question. What these features are, is not as a rule indicated in the name itself; even in the case of a descriptive name one or two salient features only are selected, and the others are understood: a botanist easily recognizes a *bluebell* or a *blackberry* bush even at the season when the one has no blue flowers and the others no black berries."

But the solution offered by Jespersen is not without difficulties either. After all, similar meanings may be encoded in one language in a noun, but in another language, in an adjective. It is more than easy to come up with examples such as these:

English:	Russian:
male (ADJ)	*samec* (N)
female (ADJ)	*samka* (N)

What is more, within one language one can often find synonyms one of which is a noun and the other an adjective. For example:

round / circle
stupid / fool
holy / saint
It is round./*It is a round.
It is a circle./*It is circle.
He is stupid./*He is a stupid.
He is a fool./*He is fool.
He is holy./*He is a holy.
He is a saint./*He is saint.

And in addition to synonyms, it is of course often the case that two words of strictly comparable meanings (perhaps two antonyms, or two co-hyponyms) would differ in their part-of-speech status, one being an adjective, and the other a noun. For example:

grown-up / child
sick / cripple
blind, deaf / hunchback
She is grown up.[1]/*She is child.

She is sick./*She is cripple.
She is a cripple./*She is a sick.

It might seem that facts of this kind provide sufficient evidence to show that nouns don't have to differ in meaning from adjectives.

Lyons (1977) offers an answer along the following lines: Yes, indeed, the boundary between the two classes is arbitrary. One cannot distinguish a noun from an adjective on purely semantic grounds. Nonetheless once the two classes have been separated in a given language on formal grounds, one might say that each class has a semantic core. Classes of adjectives, and classes of nouns, can be identified cross-linguistically on the basis of the common semantic core.

In Lyons' view the common core of the class of adjectives can be distinguished from the common core of the class of nouns more or less in the way outlined by Jespersen:

"We will assume that, within the framework of naive realism, it is possible to draw a distinction, at the extremes at least, between the relatively simple perceptual properties which are distributed among individuals and the more complex conjunctions and disjunctions of properties in terms of which individuals are categorized as members of particular classes." (Lyons 1977, 2:447).

In principle, Lyons' approach seems to me very reasonable (see Wierzbicka 1979). Nonetheless, I think it leaves some important questions unanswered.

From Lyons' discussion it would seem to follow that the difference in part-of-speech status between *man* and *red*, or between *stone* and *red*, reflects a semantic difference; but the difference in part-of-speech status between *cripple* and *sick* or between *round* and *circle* is semantically arbitrary. I do not think that this is right. It would be hard to disagree that *man* and *stone* are more 'focal' nouns than *beauty*, and one might add, more 'focal' than *cripple* or *circle*. But I would be very reluctant to conclude from this that there is no semantic rationale for giving some 'quality concepts' a nominal, rather than an adjectival, designation. On the contrary — it seems to me that if some 'quality concepts' acquire a nominal designation, instead of an adjectival one, there must be a good SEMANTIC reason for it. And if one 'quality concept' acquires two designations, one nominal and one adjectival, it is not because the part-of-speech status doesn't matter, semantically, but because the concept in question splits into two, related, but not identical concepts, one of which is semantically more suited to being desig-

nated by a noun than by an adjective.

This is, then, the main thesis of this chapter: despite the appearances to the contrary, nouns do differ in meaning from adjectives, not just core nouns from core adjectives, but, probably, all nouns from all adjectives, and the two classes differ in a systematic, largely predictable manner. In suggesting that nouns differ from adjectives on semantic grounds I don't mean that nouns designate, primarily, concrete things that can be seen and touched. After all, core adjectives such as *black, white, big, small, long* or *new*, too, designate things that can be seen and touched. The real semantic difference between nouns and adjectives lies not in the range, or kind, of referents, but in the kind of semantic structure.

To simplify the discussion, I shall limit it to concrete nouns and adjectives, i.e. to nouns and adjectives which can be applied to people, animals and material things.

2. Description versus categorization

Let's consider a pair such as *sick* and *cripple*. One important difference between the two meanings is that *sick* refers to a temporary state, whereas *cripple* indicates a permanent condition.

It is true that *sick* differs in a similar way from *blind* and *deaf*, which are nonetheless adjectives, too:

He is chronically ill.
*He is chronically blind/deaf.

One can be temporarily deaf or blind, but there is no expectation of temporariness built into these words, as there is in the case of *sick*. One can cancel this expectation adding a modifier such as *chronically* to *sick*, but there is no need to do so with *blind* or *deaf*. On the other hand one would be more likely to say:

She was temporarily deaf.

than

?She was temporarily sick.

But if so, then why are *blind* and *deaf* adjectives, whereas *cripple* is a noun? I think the reason why a meaning like *cripple* is more likely to be encoded in a noun than meanings such as 'blind' or 'deaf' are, is that the condition in question (being a cripple) is not only (seen as) permanent, but

also that it is highly visible, noticeable. One can't tell looking at a person whether he or she is deaf or not, and often one can't even tell whether or not he or she is blind. But a cripple is more easily identified as such.

For the same reason, it is not surprising that *hunchback* is a noun, not an adjective. Of course there are many kinds of human characteristics which are highly visible and which are nonetheless designated in English by adjectives, not by nouns, e.g. *cross-eyed* or *freckled*. But these conditions are relatively minor and relatively trivial. Nor is it surprising that many other languages parallel English on this point, to a greater or lesser extent. For example, in Russian the word for 'cripple' (*kaleka*) is also a noun, there is a noun for 'hunchback' (*gorbun*), the words for 'blind' and 'deaf' are adjectives (*slepoj, gluxoj*), and there are no nouns designating a cross-eyed or a freckled person.

In Japanese, the words for 'blind' (*mekura*), 'deaf' (*tsunbo*) and 'mute' (*oshi*) are adjectives, but the words for 'cripple' (*izari*) and 'hunchback' (*semushi*) are basically nouns. Thus, one can say in Japanese:

Asoko ni mekura (tsunbo, oshi) no hito ga iru.
'There are blind (deaf, mute) people over there.'

but hardly:

?*Asoko ni izari (semushi) no hito ga iru.*
'There are cripple (hunchback) people over there.'

(See, however, section 5 below.) It is true that the words for 'blind', 'deaf' and 'mute' can be substantivized:

Asoko ni mekura (tsunbo, oshi) ga iru.
'There are blind (deaf, mute) over there.'

but the adjectival construction (*mekura no hito*, etc.) is also available. By contrast, the words for 'cripple' and 'hunchback' are normally, or at least preferably, used as nouns, as in English:

Asoko ni izari (semushi) ga iru.
'There are cripples (hunchbacks) over there.'

Similarly, the contrast between *clever* (an adjective) and *genius* (a noun) is repeated in many other languages: for example, in Japanese *riko-na* 'clever' is an adjective, whereas *tensai* 'genius' is a noun; in Russian, *umnyj* 'clever' is an adjective, whereas *genij* 'genius' is a noun; and so on. Evidently, cleverness tends to be thought of as just one property among

many; but 'genius' is so conspicuous that it tends not to be treated on a par with other properties, but rather, to be taken as a basis for a separate category of human beings.

What I am suggesting, then, is that human characteristics tend to be designated by nouns rather than adjectives if they are seen as permanent and/or conspicuous and/or important. The common denominator is, I think, this: a noun indicates a categorization; an adjective, on the other hand, indicates a mere description.

In fact this is why ordinary speakers are so often afraid and resentful of nouns as means of characterization. How often does one hear sentences such as these:

I am NOT an alcoholic! I simply drink!

The pattern can be represented as follows:

I am not an X! I may be X-y, but I am not an X!
I am not an X! I may do X, but I am not an X!

Their linguistic sense tells people that being called an X is not the same thing as being described by means of the cognate adjective or verb, not even one that a linguist might call 'synonymous' with the noun X. (Cf. Korzybski 1933 and Hayakawa 1974.)

A description implies the presence of a number of characteristics, all on the same level of importance. Thus, one might describe a person as tall, thin, blond, freckled, and so on. But if one categorizes a person as a hunchback, a cripple, a leper, a virgin, or a teenager, one is not mentioning one characteristic among many; rather, one is putting that person into a certain category, seen at the moment as 'unique'. One is putting a label on that person, as one might put a label on a jar of preserves. One might say that a noun is comparable to an identifying construction: 'that's the kind of person that this person is'. An adjective, on the other hand, is comparable to a simple predicate compatible with many other such predicates: 'this person is X, Y, Z'.

To take some other examples, consider ways of referring to the colour of a person's hair. The hair may be black, brown, blond, grey or red, and from a physical point of view these colours are on a par. But from a psychological, social and cultural point of view they are not, and the differences in accessibility to nounhood reflect these psycho/socio-cultural differences. Thus, a person (whether a man or a woman) can be called a *redhead*, but not a **blackhead*, a **blondhead* or a **greyhead* (but, a

greybeard). Furthermore, a woman can be called a *blonde*, (*Max married a voluptuous blonde*), but a man can hardly be referred to as a *?blond* (*?Jane married a tall blond*). Clearly, for a woman, being a blonde can be seen as important enough to serve as a 'label', i.e., as a basis for categorization ('that's the kind of woman Max has married: a voluptuous blonde'). But for a man, being blond is not seen as a feature important enough to serve as a label, as a basis for categorization.

It is true that the adjective *blond* differs from the other adjectives which can be used to describe the colour of hair in being able to be applied to a person, as well as to a person's hair:

Michelle is blonde/*black/*brown/*red.

But first, *grey* can also be applied to a person:

Rosemary is only 35, and she is already grey.

and yet one can't say:

*Rosemary is a grey.

and second, innumerable adjectives which are commonly used to describe people can't be used as a noun:

*Maxine is a fat/a tall/a slender.

I think that, generally speaking, an adjective can be used as a noun if, for cultural reasons, the property described by this adjective is seen as constituting 'a type'. For example, the word *brunette* evokes an image of a woman who has not only dark hair, but also 'the kind of temperament and personality style that women with dark hair are expected to have'. (Presumably, vivacious, passionate, sophisticated, smart etc.).

What this suggests is that a noun designates 'a kind of (person, thing, or whatever)', rather than merely a single property. An adjective applied to a person, or a thing, doesn't imply that this person or this thing is seen by the speaker in terms of a category, defined by this adjective. For example, if I say:

Max is fat.

I don't wish to imply that Max is the kind of person, or the kind of man who is fat. I merely mention fatness as one of many things that can be said about Max — not as something which 'defines' Max for me, not even from the point of view of appearance. On the other hand, if I say:

Suzie is a fattie.

I do put a label on Suzie — I do categorize her, at least from the point of view of appearance, in terms of her fatness; I present her as belonging to a certain type, defined by fatness.

Even a phrase such as "a (bright) six-year-old" means, it seems to me, more than 'someone who is six years old'. If it didn't mean more than that, then why wouldn't one say:

A (bright) fifty-four-year old asked me that question?

In fact, the phrase "a *n*-year-old" conveys the idea that people (usually, children) of a specified age form a recognizable category, with respect to which one can have certain expectations. Six-year-olds, or three-year-olds, can be thought of as forming an imaginable KIND. But "fifty-four-year-olds" can hardly be thought of in this way.

From a logical point of view, any property shared by some members of a set can be used as a basis for classification; for example, we can classify people on the basis of their sex, their age, their religion, the colour of their hair or their eyes, and so on. But natural language differs in this respect from logic: it usually provides a quantity of words designating properties which are not 'meant' to be used for categorizing (adjectives). A linguist studying natural language should find out the inherent function of different kinds of words by studying these words, and their use, not by engaging in *a priori* logical considerations.

3. The notion of 'kind'

I submit that what most nouns (prototypical nouns) do is to identify a certain kind of person, a kind of thing, a kind of animal. These kinds are identified in language in positive terms, not in terms of their mutual differences. For example, the words *man, woman* and *child* identify certain kinds of people, each of them with a certain positive image. I think that popular descriptions which suggest that the word *man* means HUMAN +MALE +ADULT or that *child* means −ADULT +HUMAN (cf. e.g. Bierwisch 1970), miss a crucial point about the semantics of human categorization, embodied in natural language. The meaning of a noun cannot be represented as a set of 'features', because the basic function of a noun is to single out a certain KIND, a kind which may be partly described in terms of features but which cannot be reduced to a set of features.[2]

As Putnam (1975) has argued, the word *lemon* cannot be defined as 'anything that is roundish, yellow, sour, comes from a tree, and so on', because it is always possible to imagine something that meets all the required characteristics, and which, nonetheless, people will refuse to categorize as a lemon. To be a lemon, a thing must come from a lemon tree. If it does come from a lemon tree we will agree to call it a lemon even if it contradicts some of our expectations. It is conceivable that somebody will grow sweet 'lemons', or orange 'lemons', and that these 'lemons' will be called, if not *lemons*, then at least *sweet lemons* or *orange lemons*.

Returning to human beings, I would suggest that concepts such as *human, adult, female* or *male* are of an entirely different order from concepts such as *man, woman* and *child*. In particular, *male* and *female* are pure 'distinguishers', which are used to distinguish members of two abstract sub-classes from one another rather than to identify certain positive, imaginable kinds.

It is true that even these words (*male* and *female*) can be sometimes used as nouns, but their use as nouns is severely limited. They are mostly used as nouns in generic sentences, when a stereotype statement is made. For example:

> In any institution, males will have better-paid jobs
> than females.

One would hardly use the word *male*, however, for purposes of continuous reference to an individual (human) person (see section 4 below):[3]

> ??The male kept shouting and screaming.
> ?The female begged him to stop, but this had no effect on him.

The word *youth* can be used easily in continued reference, but of course *youth* doesn't stand for 'anybody young', and not even for 'anybody young and male' (a young man is not necessariy describable as a *youth*). Rather, it stands for a certain category of people, namely people in a transitional stage between boyhood and manhood.

To recapitulate, nouns embody concepts which cannot be reduced to any combination of features. They stand for categories which can be identified by means of a certain positive image, or a certain positive stereotype, but an image which transcends all enumerable features.

This doesn't mean, however, that the semantics of individual nouns should be, or could be, described without reference to any 'features'. Far from it. As I have tried to show in a number of concrete semantic

analyses (see Wierzbicka 1985c) even the names of everyday objects such as *jar, bottle, bicycle* or *skirt* require a large number of features (referring to shape, size, proportions, function, and so on). But, the point is that although these different features have to be enumerated in an empirically adequate definition, in the semantic formula they have to be subordinated to a general taxonomic statement referring to KIND. (For an illustration, see the definitions of *tiger, radish* and *jumper* at the end of this chapter; for discussion and justification see Wierzbicka 1985c.)

I suggest, then, that there are at least two crucial and interrelated semantic differences between nouns and adjectives. First, nouns tend to designate 'kinds of things' endowed with certain properties; whereas adjectives designate properties as such. Second, as Jespersen pointed out, a noun tends to suggest a rather large number of properties (even though its meaning cannot be reduced to those properties); an adjective, on the other hand, designates (what is seen as) a single property. Of the two differences between nouns and adjectives (a cluster of properties vs. a single property; kind vs. property) the first is perhaps less important than the second, because while it seems clear that any adjective used as a noun acquires immediately the force of a 'label' ('a kind of'), it is less clear that any such adjective starts immediately to suggest more than a single property. Nonetheless the latter effect is certainly very common, too. For example, the adjective *blond* suggests a single property (blond colour of the hair), but the noun *blonde* suggests, as we have seen, at least two (blond hair + womanhood), and probably more (sexy, glamorous, etc.) The adjective *young* suggests a single property (young age); but the noun *youth* suggests at least two (young age + male sex).

The tendency for the 'intension' of adjectives to increase and for their 'extension' to decrease under substantivization is indubitable, and, apparently, universal. For example, in English, colour adjectives can be applied to all visible entities, but expressions such as *the blacks* or *the Reds* can only apply to people, and, moreover, to well specified categories of people (Negroes, communists). Similarly, in Russian, the adjectives *slepoj* 'blind' or *gluxoj* 'deaf' can be applied to animals as well as to people; but when substantivized, they can only apply to people:

staryj slepoj kot
'(an) old blind cat'
Slepoj ulybnulsja.
'(The) blind (person) smiled.'

* *Slepoj pokačal xvostom.*
'(The) blind (one) wagged (his) tail.'

The same seems true of Japanese:[4]

mekura no hito
'(a) blind person'
mekura no inu
'(a) blind dog'
Mekura ga waratta.
'(The) blind (person) smiled.'
* *Mekura ga shippo o futta.*
'(The) blind (one) wagged (his) tail.'

One may well wonder if there are any nouns which contain in their meaning nothing but a reference to KIND plus a single property. At first sight, the existence of words such as *fattie, fool, cripple, hunchback* or *teenager* may seem to suggest that the answer should be in the affirmative. On further inspection, however, it becomes clear that words of this kind tend to develop at least one additional feature: 'human' or 'personal'. Furthermore, if we compare de-adjectival nouns such as *ślepiec* 'blind (man)' in Polish with the nearest adjectival noun phrases such as *ślepy człowiek* 'blind man', we will notice significant difference in, so to speak, the syntax of the semantic components. In *ślepiec,* the blindness is semantically superordinate; in *ślepy człowiek* it is semantically subordinate.

As a parallel, of a sort, one might mention here French expressions such as *un bijou d'enfant* (literally, 'a jewel of a child') or *un monstre de femme* (literally, 'a monster of a woman'), where the syntactic reversal between the head and the modifier serves the purpose of giving the property a special semantic prominence. The triads:

un enfant charmant – un enfant bijou – un bijou d'enfant
une femme horrible – une femme monstre – un monstre de femme

reflect an increasing semantic prominence given to the property in question. (Cf. Bally 1920.)

It is understandable, therefore, that changes in social sensibilities, and in the prevailing outlook, have caused many shifts from nouns to adjectives, in many European (and not only European) languages. Thus, *nomina personae* based on human disabilities, such as *leper* in English or *ślepiec* 'blind (man)' in Polish, have tended to decrease in use in modern times,

giving way to adjectives or to descriptive phrases (e.g. *a mongol - a mongoloid (child) - a child with Down's syndrome*), which de-emphasize the importance of the disability as a defining characteristic of the person.

It is also important to note that a semantic derivation of a noun from an adjective whereby nothing seems to be added to the meaning of the adjective (other than the idea of categorization) tends to be accompanied by the emergence of expressive components. For example, both *fattie* and *fatso* add expressive components to 'fat'. *Fool* adds an expressive component to *stupid*. *Liar*, derived from a verb, and apparently referring to a single property (that of lying), adds an expressive component to the meaning of the verb. And so on. (Cf. Bally 1909.)

4. Semantic nouniness and syntactic nouniness

The fact that nouns derived from names of other predicates (adjectives or verbs) tend to develop an expressive component makes them less than fully nounlike in their syntactic possibilities. In particular, it restricts their usability in referring expressions in general, and in definite descriptions in particular. For example, while one can easily say:

She is a liar/fool/fatso.
You liar!/You fool!/You fatso!

it is hard to say, seriously:

The liar/fool/fatso sat down.

One could say, of course:

The fool deleted all my files.

but here the word *fool* would not be used in a referring or categorizing function (the court fool); rather, it would be used as a predicate, and would imply that the person referred to has already been identified (and is now called 'a fool' because of his foolish action).

As I have argued in detail elsewhere (see Wierzbicka 1970), nouns or noun phrases which contain an expressive component are not suitable for use in definite descriptions (because the speaker's feeling can't help the addressee to identify the object referred to). Expressive nouns such as *liar*, *fool* or *fatso* are useful for expressive speech acts, such as, for example, abuse, and also for use in emotion-charged evaluative speech acts such as accusations or enthusiastic praise:

You are a liar! You are a darling!
You fool! You angel!

One might also say:

I am married to a liar!
You are married to a fool!

meaning that the person I am married to is a liar and that the person the addressee is married to is a fool, and therefore using these words as predicates. But it would be hard to use nouns such as *liar* or *fool* in referring, even in indefinite descriptions:

?A liar called here today asking about you.
?A fool proposed to Mary yesterday.

It is possible to say, of course:

Some fool proposed to Mary yesterday.

but again, this sentence would imply that the person referred to must be a fool BECAUSE he proposed to Mary, not that he was categorized as a fool regardless of this particular action.

It is not an accident that nouns which are semantically atypical in designating a single property rather than a cluster of properties are also syntactically atypical, in being unsuitable for use in definite descriptions, and indeed in referring expressions of any kind. The point is that a single property is seen as not very suitable as an exclusive basis for categorization: if a person is rather stupid, if he or she tends to lie, if he or she is fat, all these properties coexist, objectively speaking, with many other properties.

In natural language, the world tends to be categorized into a number of kinds, each kind characterized by, but not reducible to, a cluster of properties. (Cf. Rosch 1978.) If a speaker goes against this tendency and categorizes a person in terms of a single property, using a noun such as *fool, fatso*, or *liar*, he does it, so to speak, on purpose: he wants to stress, hyperbolically, the property in question, and his own emotional reaction to it; he wants to exaggerate that property, and to show that in his eyes it looms so large that it determines his way of seeing the referent, to the exclusion of other properties. In other words, to convey an adjectival meaning such as 'fat' or 'stupid' in a noun, is a kind of expressive device, suitable for enacting more or less expressive speech acts, but not very suitable for fulfilling the two prototypical functions of a noun, i.e. referring and categorizing. (Pure referring is the main function of a pronoun; nouns

refer and categorize at the same time.)

Adjectives are much easier to use as nouns (i.e. in referring expressions) in the plural than they are in the singular. They are also easier to use in indefinite noun phrases than they are in definite noun phrases. For example, one can easily talk about the relationships between blacks and whites, but it is harder to talk about a particular person using the word *black* or *white* as a noun.

?A white sat in the black section of the bus.

And one could hardly ever refer to a woman or a child as *the black*. This means that *black* or *white* never becomes a one-hundred-percent noun; it can only be used semi-predicatively. But *black* and *white* are a good deal more 'nouny' than words such as *illegal*, which can be used only in the plural, and in the generic sense (cf. Hewson 1972):

The illegals tend to take jobs that nobody else would accept.
*The illegal, caught by the police, started to cry.

Referring noun phrases, which are meant to identify, can fulfil this function only by placing the referent within a certain KIND — not just within a certain class, but within a recognizable, imaginable KIND (e.g. a woman, a man, a child; a tiger; a bird; a flower; a tree). An adjective defines, perhaps, an abstract class but it does not define any recognizable kind. I think the reason why an adjective can't serve as a basis for identification is that an adjective doesn't delimit its intended referent, whereas nouns typically do. If we were asked to count everything red in a room we might be in trouble, because we wouldn't know how to delimit one red thing from another. For example, if there is a red tracksuit there, i.e. a pair of red pants and a red top, should one count the tracksuit as one red thing or as two red things?

A noun can place the intended referent within a certain imaginable kind (e.g. tracksuit; or: pants), and so it can make delimitation, identification and counting possible. An adjective may restrict the domain to which the intended referent belongs, and help to identify this referent within that domain, but it can't replace that initial placement within an imaginable domain (i.e. a KIND).

5. Core adjectival concepts

Although individual properties can be regarded as 'adjectival meanings' rather than 'nominal meanings', the accessibility to nounhood depends also on the nature of the property. It seems that, generally speaking, shapes are more likely to be described by nouns than colours and sizes. For example, in English one can say:

I can see a square/circle/triangle.

even though one can't say:

*I can see a red/blue/big/small/wide/long.

Similarly, Russian has nouns for 'circle' (*krug*), 'square' (*kvadrat*), and 'triangle' (*treugol'nik*), but not for 'something red', 'something small' or 'something wide'. And Japanese has nouns such as *maru* 'circle', *shikaku* 'square' or *sankaku* 'triangle', but it doesn't have nouns for things of a specified colour, or size. For example, one can say in Japanese, as one can say in Russian or in English:

Shikaku (maru) o kaite kudasai.
Narisuj kvadrat (krug).
Draw a square (circle).

but one can't say:

**Akai (*ookii) o kaite kudasai.*
**Narisuj krasnoe (*bol'šoe).*
*Draw a red (*big).

The reason is not that shapes, unlike sizes, are inherent qualities (rather than relative ones), because so are colours: *big* means, roughly, 'bigger than average (of this kinJ)', but *red* doesn't mean 'redder than average', just as *circle* doesn't mean 'rounder than average' (see Wierzbicka 1971 and 1972).

I think the reason why shapes are more 'nouny' than either sizes or colours is that shapes DELIMIT certain portions of reality and make them into countable entities, whereas neither sizes nor colours do that.

It is interesting to note, in this connection, that in languages with classifiers, classifiers are often based on shape, but hardly ever on colour. (Cf. for example Friedrich 1970, Denny 1976, Dixon 1982a.) This suggests that it is common for people to think of things of different shapes as different

KINDS of things, whereas differences in colour are normally not thought of in these terms. Thus, in many languages a red piece of fruit and a yellow piece of fruit will be treated as belonging to the same KIND if they are both roundish (for example, an apple and a lemon), but two yellow pieces of fruit will be treated as belonging to different kinds, if one of them is round and the other, oblong (for example, a lemon and a banana).

It is also relevant to note that in languages with small, closed classes of adjectives, size and colour occupy a prominent place among properties which are deemed worthy of being designated by adjectives (see Dixon 1977), whereas adjectives of shape, such as 'round', are not. In fact, Dixon's list of adjectival concepts which tend to recur among the adjectives in languages with minimal adjectival classes is so revealing that it is worth citing here *in extenso*. Dixon (1977:23) writes:

"A survey of 17 languages with small adjective classes, together with the morphologically-determined subsets in Rotuman, Yurok and Acooli, yielded the following result:

'large' occurred in all 20 languages	'good' in 13
'small' in 19	'bad' in 14
'long' in 14	'black' in 13
'short' in 15	'white' in 14
'new' in 15	'red' in 8
'old' in 14	'raw, green, unripe' in 7"

In addition to the contrast between colour and size, conspicuously present in the list, and shape, conspicuously absent from it, three other features of this list seem to me particularly noteworthy.

First, there is a striking contrast between the prominent place of the pair 'old' and 'new' in the list, and the absence of the pair 'old' and 'young'. Dixon (1977:56) suggests that "the AGE, DIMENSION, VALUE and COLOUR type are likely to belong to the adjectival class, however small it is". It would seem, however, that it is not so much 'age' as 'newness' which tends to be treated, universally, as one of the core adjectival concepts. Presumably, a new spear, or a new pot, will tend to be distinguished from an old one, within the same 'cultural kind' of spears or of pots. But for human beings age tends to be treated as a crucial determinant of KIND, rather than as one feature among many. For this reason, even languages with large adjectival classes often possess nouns for an old person, or for an old man and for an old woman, for example:

French:
viellard 'old man'

Russian:
starik 'old man'
starec 'old man' (connotations of dignity and respect)
staruxa 'old woman' (slightly negative)
staruška 'old woman' (slightly positive)

Japanese:
toshiyori 'old person'

Ewe:
àblèwɔ́ 'old woman' (connotations of wisdom)
nyágā (ɖèɖì) 'old woman' (Felix Ameka, p.c.)

Similar nouns appear to exist in languages with small adjectival classes, or with no adjectival classes at all. For example, in Thai, where adjectives can hardly be distinguished from verbs, there is an adjective (verb?) which means 'old' and which can be applied to people as well as to inanimate objects, but there is also a noun meaning simply 'old person': *phû-thâo* (*phû:* means 'person' but *thâ* occurs only in this compound; Tony Diller, p.c.) In Australian Aboriginal languages, where adjectives behave very much like nouns (so that it is sometimes difficult to formulate entirely grammatical criteria to distinguish the two classes, cf. Dixon 1980), the words for human age categories, such as 'young (initiated) man' or 'old person' tend to be, nonetheless, more 'nouny' in their grammatical behaviour than words for 'unripe', 'fresh', 'new' or 'old' applied to plants or artefacts. (Cf. for example Donaldson 1980.)

Second, while words for 'new' (as well as for 'unripe') often appear even on the shortest lists of adjectives, words for 'child' are conspicuously absent from such lists. In fact, even languages with large and open adjectival classes tend to possess nouns, and not to possess adjectives, for 'child', for example:

Russian: *rebenok*
French: *enfant*
Japanese: *kodomo*

From a social and cultural as well as biological point of view, children constitute a special category of human beings, and this category is so important that it normally can't be treated as one arbitrary class among others (as fat

people, or red-haired people, or sick people can be treated). By contrast, 'adults' are normally not treated as a 'kind' of human beings, i.e. as a complex natural category. Rather, they are treated as an artificial, arbitrary class based on a single, negative feature of 'not being a child any longer'. For this reason, in language after language, 'adults' are designated by an adjective, or a substantivized adjective, not by a noun:

English:	
adults, 'grown-ups'	children
adult persons	*child persons
grown-up people	*child people
She is grown up.	*She is child.
French:	
les adultes	*les enfants*
les personnes adultes	**les personnes enfants*
Japanese:	
otona	*kodomo*
otona no hito	**kodomo no hito*
Russian:	
vzroslye	*deti*
vzrozlye ljudi	**deti ljudi*
German:	
die Erwachsene	*Kinder*
die erwachsene Leute	**Kind(er) Leute*

Thirdly, in language after language we can find nouns for such important and conceptually rich categories of human beings as 'men' and 'women', or 'boys' and 'girls', or 'babies'; whereas adjectives for 'babies' seem to be non-existent, and adjectives for 'boys' and 'girls', and especially for 'men' and 'women', seem rare and euphemistic. For example, in Japanese the use of the phrases *onna no hito* 'female person' and *otoko no hito* 'male person' for 'woman' and 'man' seems to be motivated by a cultural need to emphasize a person's personal dignity and right to respect over and above their sex, and to avoid 'personal remarks' of any kind.

The cultural attitude which codifies 'euphemistic' expressions such as *onna no hito, otoko no hito, onna no ko* 'female child', and *otoko no ko* 'male child' for women, men, girls and boys, can be compared to the attitude of some Australians whose highly sensitive conscience on the sub-

ject of race makes them use the term *Aboriginal person* in preference to *Aborigine*. Similarly, the modern term *disabled person* seeks to de-emphasize the significance of a person's handicap or disability *vis à vis* their basic status as 'person' (seen in terms of human dignity and human rights). It is interesting to note, in this connection, that while the Japanese word for 'cripple', *izari*, is basically a noun, so that many native speakers of Japanese find the phrase *izari no hito* 'cripple people' awkward, as the phrase *cripple people* is awkward in English, nonetheless some Japanese informants say that personally they prefer to use the word *izari* as an adjective rather than as a noun, because that way it sounds more 'polite'. In other words, of two sentences such as:

a. *Asoko ni izari ga iru.*
'There are cripples over there.'
b. *Asoko ni izari no hito ga iru.*
'There are "cripple persons" over there.'

(a) is more acceptable linguistically (see section 2 above), but (b) is more acceptable socially and culturally.

I conjecture that the curious absence of colloquial nouns for 'man' and 'woman' in Japanese is related to the general 'indirect' and 'impersonal' style of social interaction, to the avoidance of the use of personal pronouns, to the avoidance of physical contact between the interlocutors, even during greetings and leave-taking (cf. Barnlund 1975; see also Wierzbicka 1985b), and to numerous other linguistic and non-linguistic devices aimed at respecting each person's 'personal sphere' and preserving interpersonal distance.

6. Where do nouns 'come from'?

The whole issue of the semantic differences between nouns and adjectives (or indeed verbs) is closely linked with the problem raised some years ago by generative semanticists (see Bach 1968 and McCawley 1970) of 'where do noun phrases come from'. It was claimed at that time that a noun phrase such as *an anthropologist* 'came from' something like 'an X who is an anthropologist'. Since it was suggested that all nouns (or at least all 'concrete' nouns) have the same kind of semantic structure, the implication was that, for example, *a woman* 'came from', roughly, 'an X who is a woman', which in turn 'came from', roughly, 'an X who is human, female and adult'.

I think that the speculations in question did contain an important insight, but that paradoxically, what was claimed as true of all nouns was the least valid for the most 'nouny' nouns, i.e. for the very core of the category 'noun'. Even if words such as *fool, liar, fattie, redhead,* or *hunchback* could be derived, in some sense, from predicates, I don't think that words such as *woman, man, child, flower,* or *bird* could possibly be so derived. What the account proposed by Bach and McCawley overlooked was the crucial notion of KIND embodied in the meaning of nouns, and especially in the meaning of prototypical nouns, a notion absent from the meaning of adjectives or verbs. Bach (1968:121) summarizes his argument as follows:

"To summarize, I have argued on the basis of many pieces of evidence that it is reasonable to suppose that all nouns come from relative clauses based on the predicate nominal constituent. Further I have proposed that the referential indices assumed to occur with nouns in current theory be replaced by a system of operators and variables much like those used in logic but clearly different in detail, and that these elements rather than actual pronouns or the like be used to tie together the sentences underlying a single complex utterance. I have tried to show that the distinctions between such parts of speech as nouns, adjectives, and verbs have no direct representation as such in the base, but are the results of transformational developments in one or another language. Finally, I have suggested that the current theory of grammar be modified so that the role of the lexicon is to map into phonological shape structures derived via the major transformations. The base component suggested here looks in some ways very much like the logical systems familiar from the work of modern logicians like Rudolf Carnap, Hans Reichenbach, and others. In particular, such systems do not have any subdivision of 'lexical items' into nouns, verbs, and adjectives."

Presumably, the author himself would no longer agree with the letter of his own remarks, but I disagree with their spirit as well. The structure of natural language is fundamentally different from that of logical systems. The distinction between nouns, adjectives, and verbs is a good case in point. Nouns, at least prototypical nouns, differ from adjectives in incorporating the notion of 'kind'. Furthermore, they differ from adjectives in incorporating 'substantival' notions of 'thing' or 'person'. A 'kind' is a relational notion: a 'kind' is a kind of 'something', that is to say, a kind of thing, or a kind of person. For example, a concept such as 'flower' cannot be reduced to a combination of an indexical sign and a predicate, along the

lines of 'a flower is an X that flowers', because conceptually, a flower is a 'KIND OF THING that grows from the ground' (for a full definition of the concept 'flower' see Wierzbicka 1985c); and neither 'kind' nor 'thing' (or 'person') can be reduced to indexical signs and/or predicates. In fact, there are good reasons to think that 'thing' and 'person' are among universal semantic primitives. (See Wierzbicka 1972 and 1980a; see also Bogusławski 1966:24).

7. What are adjectives for?

Is there anything that an adjective can do that neither a verb nor a noun can? Presumably not, since there are languages which don't have a special class of 'adjectives', and which, one would assume, can convey everything that other languages can. But if so, then what is the point for a language in developing a special class of adjectives, morphologically distinct from the more fundamental classes of nouns and verbs, and usually situated, in some way, between nouns and verbs?

Adjectives can be used for predication, and they may even have special forms for doing just that, such as the so-called short form in Russian:

novyj dom	*krasivaja devočka*
'(a) new house'	'(a) pretty girl'
Dom byl nov.	*Devočka byla krasiva.*
'The house was new.'	'The girl was pretty.'

Nonetheless, predication can be performed equally well, or better, by verbs, for which it is the primary function. (Presumably, there are no verbs which can't be used as predicates, but there are many adjectives which can't; cf. Bolinger 1967.)

Adjectives can be used for categorization and for reference, and again, a language may have special forms or special constructions for just that purpose (for a referential and categorizing use of adjectives). The English generic construction, exemplified by the sentence:

The rich will never understand the poor.

can serve as an example. (Cf. Hewson 1972.) The use of neuter forms of adjectives in Latin, German or Russian, is another:

Si	*parva*	*magnis*	*comparare*	*licet* ...
if	small:NEUT:PL:ACC	big:NEUT:PL:DAT	compare	one can

'If one can compare small things with big things ...'

Nonetheless, categorization and reference can be achieved much better by nouns. (For example, in English the substantivization of adjectives illustrated above is a very limited process.) What is, then, the *raison d'être* of adjectives as a special word class?

The traditional answer is, of course, 'attribution', and I think that basically this answer is correct. I think, however, that it would be desirable if this answer could be made clearer and more explicit. If transformational grammarians have insisted on treating the differences between 'attribution' and 'predication' as a matter of surface structure, and if they deemed it possible to derive attribution from predication, it may well have been due to the lack of an adequate semantic analysis which would have made the differences between the two functions explicit. Consider the following sentences:

> The main street was wide and lined with trees.
> Your dear wife gave me that.
> Poor grandma couldn't say a word.

The position of the adjectives *main, dear* and *poor* within the subject phrases mirrors their semantic role as elements which help establish the topic about which something is to be said, rather than as parts of the predication. The exact role of the adjective within the noun phrase depends of course on a number of factors, and especially on its restrictive or non-restrictive character. But whether the adjective helps identify the referent within the category defined by a noun, or whether it signals the speaker's attitude to the referent, or whatever, it can always be seen as adding a feature to the (normally) multi-dimensional image evoked by the noun.

It would not be correct to say, therefore, that nouns categorize and adjectives subcategorize. Nouns such as *animal, fish* or *flower* categorize, and so do, on a different level, nouns such as *dog, trout* or *rose*, and even, on yet another level, nouns such as *spaniel, poodle* or *boxer*. Thus, sub-categorization is a kind of categorization, and it is best performed by nouns, in so far as only nouns can establish multi-dimensional images, i.e. KINDS. (Cf. Rosch 1978.)

Adjectives, which stand for single features, can be freely used to enrich the image evoked by the noun. The use of nouns in such an 'attributive' or 'enriching' function is naturally limited, not only because the combination of two composite images is often threatened by incompatibilities or irrelevancies, but also because each noun suggests its own basic categoriza-

tion. Phrases such as *child-bride* or *gorod-geroj* 'city hero' (Russian) evoke two super-imposed images rather than one composite image, because each noun preserves its own basic categorization.

The semantic difference between a noun, which creates a category, and an adjective, which adds a feature without creating a new category, is of course reflected in the characteristic morphology of adjectives and nouns. In languages which have nominal gender (such as Latin, Russian, Swahili or Avar) a noun has, normally, its own inherent gender; but an adjective doesn't have an inherent gender, and in a sentence it assumes the gender of the noun it modifies. This 'gender agreement' between an adjective and a noun signals a unique categorization which is created by the noun and which the adjective leaves untouched. By contrast, a nominal modifier preserves its own gender, and thus signals a double categorization, as in the Polish phrase *dziewica-bohater* 'maiden(FEM)-hero(MASC)', used in Adam Mickiewicz's poem "*Śmierć pułkownika*":

> *To Litwinka, dziewica-bohater,*
> *wódz powstańców, Emilija Plater.*
> 'It's a Lithuanian woman, maiden-hero,
> the leader of the insurgents, Emilija Plater.'

Furthermore, adjectives tend to be endowed with a morphology which conveys quantitative evaluation. This is often manifested by the so-called category of 'degree', as in the Latin triplets: *altus, altior, altissimus* 'high, higher, highest' or *celer, celerior, celerrimus* 'fast, faster, fastest'. Nouns don't have a similar category, and it is worth considering why.

According to Donaldson (1980:70), in the Australian Aboriginal language Ngiyambaa there are two kinds of nominals, reduplicating and non-reduplicating ones. "Nominals which do not reduplicate are normally translated by English nouns, and those which do undergo reduplication are normally translated by adjectives." Donaldson reports that "when rejecting a reduplicted version of a nominal which cannot be reduplicated, Eliza Kennedy [the informant] would explain 'Either it is that, or it isn't'. It was therefore nonsensical to reduplicate, which is equivalent to prefacing the form with 'more-or-less' or 'somewhat'. Thus **miri-miri* was rejected, because one cannot have a 'more-or-less dog', while *gi:dja-gi:djan* 'more-or-less green, greenish' is an acceptable form."

However, nouns, too, are subject to referential indeterminacy. The line dividing dogs from cats may be sharp, but there is no sharp line divid-

ing *boys* from *men* or *stariki* (a Russian noun for 'old men') from men who are not yet regarded as old. Why is it, then, that an adjective such as *young* or *staryj* (Russian 'old') can be inflected for degree but referentially indeterminate nouns such as *boy* or *starik* 'old man' can't?

I think that one important reason lies in the multi-factor character of a typical noun. Nouns such as *boy* or *starik* can't be readily inflected for degree because they evoke more than one feature and it would not be clear which feature is being quantitatively assessed. Atypical nouns which focus on a single feature, such as *hero* or *saint*, are more readily accessible to comparison and 'measurement', of a kind, than more typical ones:

X is a greater hero/saint than Y.
?X is a greater boy than Y.

Nonetheless, Eliza Kennedy's comment is also relevant. Despite the referential indeterminacy of many nouns, the very notion of 'kind' embodied in them suggests a conceptualization in terms of different and normally non-overlapping categories. A deed can be viewed as more or less heroic; but if a person is labelled as a 'hero' this is normally viewed as a qualitative distinction, despite the lack of any rigorous criteria on which such a categorization could be based.

From this point of view, it might be argued that verbs are closer to adjectives than nouns are, in so far as verbs don't embody the notion of 'kind' either, and as they normally specify one feature, not several. And indeed, the fact that in many languages which have the category of gender, verbs, too, 'agree' with nouns in gender (though usually on a much smaller scale than adjectives) highlights this similarity between adjectives and verbs. But verbs, unlike adjectives, tend to be inflected for tense. This suggests that the feature signalled by a verb is normally seen as transient, as a temporary state of affairs, characterizing a particular time as much as a particular entity. For this reason, verbs are particularly suited to predicative use, as natural vehicles of new information. (The question "What's new?" refers normally to events, to changes in the surrounding world.) On the other hand, adjectives tend to refer to features which either are 'timeless' or which are viewed without any reference to time. For example, in the two sentences:

a. Her red cheeks emanated youth and good health.
b. Her cheeks were red.

the attributive (i.e. prototypically adjectival) use of the word *red* suggests a

permanent feature of the cheeks, and probably old information, whereas the predicative (i.e. prototypically verbal) use suggests new information, and can be taken as referring to a transient state.

Furthermore, even in a predicative position, a verb tends to suggest changeability, in a way that an apparently 'synonymous' adjective does not. For example, in the Latin pair of sentences (cf. Bally 1920):

a. *Rosa rubra est.*
'(The) rose is red(ADJ).'
b. *Rosa rubet.*
'(The) rose is-red(V).'

the adjective *rubra* suggests a permanent property of the rose, whereas the verb *rubet* suggests a momentary feature of the scenery. Exactly the same is true of the Russian pair of sentences:

a. *Parus bel.*
'(The) sail (is) white.
b. *Beleet parus odinokij v tumane morja golubom.* (Lermontov)
'(A) lonely sail "whites" (is-visible-as-white, V)
in (the) blue mist of (the) sea.'

Presumably, it is the inherent link of verbal content with time which makes the category of degree by and large inapplicable to verbs. One can say, of course:

> The gap between A and B widened more than that between C and D.

as one can say:

> The gap between A and B is wider than that between C and D.

but the comparison carried out by means of the verb is harder to process, since the verb implies, to begin with, a temporal scale, and so that static scale on which the comparison between the two entities is based is superimposed upon a dynamic scale referring to changes in time.

On the whole, then, nouns tend to have an inherent category of gender, related to the notion of 'kind' encoded in them; adjectives tend to have a category of degree, related to their static and 'uni-dimensional' character; and verbs tend to have the categories of tense and mood, related to their temporal orientation and predicative function.

The prototypical roles of nouns, adjectives and verbs can be rep-

resented by means of the following semantic formulae:

(1) I am thinking of someone/something [NOUN]
(2) I am thinking of it as [ADJ]
(3) I want to say this about it: [VERB]

Component (1) reflects the intended 'reference', component (2) corresponds to 'attribution'; and component (3) spells out the 'predication'. The prototypical function of each of these roles could be represented as follows:

(1') wanting to cause you to think of it
I say: imagine [NOUN]
(2') wanting to cause you to think of it
in the way I am thinking of it
I say: imagine [ADJ NOUN]
(3') wanting to cause you to know it
I say: [(this ADJ NOUN) VERB]

For example, in the sentence:

> The old man knew he was going far out, and he left the smell of the land behind and rowed out into the clean early morning smell of the ocean.
> (Hemingway, *The old man and the sea*, 1952:13)

the noun *man* enables the addressee to identify and to categorize the referent; the adjective *old* enables the addressee to think of the referent, and to visualize him, in the way the speaker is thinking of him and visualizing him; and the verb phrase *knew he was going far out* enables the addressee to know what the speaker wants to say about him.

8. Final illustration

To conclude, I will introduce one final example, which provides a good illustration of the problems discussed in this chapter.

Prima facie, designations of nationality seem to demonstrate that the distinction between nouns and adjectives is semantically arbitrary. For why do we usually say:

> John is an American/an Australian.

in preference to:

> John is American/Australian.

whereas we don't hesitate to use the adjectives *Irish* or *English* with reference to human subjects? (Cf. Bolinger 1967.)

John is Irish/English.

It might be suggested that this difference can be explained by the existence of nouns such as *Irishman* and *Englishman*, but not **Americanman* or **Australianman*. But this explanation collapses if one considers that adjectives such as *German* or *Russian* can also be used perfectly well in predications about human subjects:

Alexander is German/Russian.

I think the real explanation is different: the point is that there is a subtle semantic difference between 'adjectives of nationality' such as *Irish, English, German,* or *Russian,* and 'nouns of nationality' such as *American* or *Australian*.

To see this difference, consider the minimal pair *Polish* and *Pole*. A sentence such as:

Adam is Polish.

may well refer to someone who has lived most of his life in Australia or in England, and who identifies with his country of residence as much as he does with Poland. The adjective *Polish* specifies his 'ethnicity', but it doesn't categorize him as someone 'belonging to Poland'. By contrast, a sentence such as:

Adam is a Pole.

does just that. The adjective specifies one feature (ethnicity). The noun categorizes the person. This doesn't mean that it is impossible for someone to say:

I am an Australian, and I am a Pole.

But a person who says this emphasises, on purpose, his double categorization, and emphatically rejects the expectation that a person will belong to just one national category.[5]

It seems to me that the answer to the question posed above is that 'adjectives of nationality' do, and 'nouns of nationality' don't, identify one specific feature, ethnicity. An American can be Irish or German, at least to some extent, so being an American identifies a certain category of people, without specifying one single feature on which this categorization is based (such as ethnicity).

Why is it, then, that words such as *American, Australian* or *Canadian* differ in their degree of adjective-ness from words such as *Irish, English, German,* or *Russian*? Certainly, an American lives in or 'comes from' America, as a Pole lives in or 'comes from' Poland. But beyond this description in terms of place of origin, the nouns *American* or *Pole* evoke vaguely a whole lot of other characteristics, which can't be summarized in a single feature such as ethnicity.

For the same reason, I suggest, one is more likely to say:

He is Spanish/Portuguese/Dutch/Chinese/Japanese.

than:

?He is Brazilian/Argentinian/Indonesian/Rhodesian/Zimbabwean.

Evidently, old nations, with an old history and a well-established sense of national identity, can be viewed as bearers of intangible, unique characteristics, which would have to be defined (if they could be defined at all) in qualitative rather than spatio-temporal terms. But relatively new and heterogeneous nations, such as Americans, Canadians, Australians, Brazilians or Indonesians, are viewed differently, as peoples who can be identified in spatio-temporal rather than qualitative terms.

Thus, if a Chinese couple, or a Jewish couple, settles in Australia, their children, born in Australia, can still be regarded, and regard themselves, as 'Chinese' or 'Jewish'. They may well be thought of as 'Australians', but they can also be thought of as 'Chinese' or 'Jewish'. On the other hand, if an American or a Brazilian couple settles in Australia, their children, born in Australia, can hardly be regarded as 'Americans' or as 'Brazilians'. Words such as *American, Australian* or *Brazilian* tend to be used as adjectives only in combination with nouns which impose a certain qualitative interpretation on the adjective. For example, one can speak of the 'American way of life', 'American culture', 'American cities' or 'American cigarettes', on the assumption that the referents differ in intuitively clear (though not necessarily definable) ways from other ways of life, other cultures, other cities, and other cigarettes. But it would be odd to speak of 'American forks', 'American chairs' or 'American leaves', since it is hard to imagine what unique quality could be meant, in such contexts.

Neither can one speak, of course, of Irish, Polish, Greek or Chinese forks, chairs, or leaves. One can speak, however, of a person as 'Irish', 'Polish', 'Greek' or 'Chinese', on the assumption that when applied to

people these latter adjectives do evoke something that can be thought of as a unique single feature, a unique single 'quality'.

Thus, the apparent arbitrariness of grammatical distinctions which separate words such as *American* and *Australian* from words such as *English* or *Irish* is an optical illusion: in fact, these distinctions show once more that there is more in a noun than meets the eye; there is more in a noun than there is in an adjective.

9. Concluding remarks

Generally speaking, the present discussion of the differences between adjectives and nouns lends, I hope, further support to the new emphasis on the non-arbitrariness of grammar (including 'surface grammar'), which is becoming one of the dominant characteristic features of linguistics in the last quarter of the twentieth century. (Cf. for example Bolinger 1977, Dixon 1977, García 1975, Haiman 1985, or Wierzbicka 1980b.) It is becoming increasingly clear that differences and similarities in grammatical behaviour, provide remarkably reliable clues to differences and similarities in meaning. In particular, the 'subdivision of lexical items into nouns, verbs and adjectives' is not a result of meaningless transformational developments. Rather, it is a reflection of, and a guide to, subtle aspects of meaning.[6]

But if we wish to use the distinction between adjectives and nouns as evidence for the semantic motivation of grammatical distinctions in general, then one final problem has to be faced: what of languages like Warlpiri, which don't distinguish morphologically between adjectives and nouns (see e.g. Hale 1983)? If the morphological uniformity of the broad class of 'nominals' (including translation equivalents of both 'nouns' and 'adjectives') is an icon of a semantic uniformity, then perhaps one would have to say that a language like Warlpiri doesn't have 'true nouns', i.e. doesn't have words encapsulating complex taxonomic meanings of the kind illustrated in the definitions appended to this chapter; or, that it doesn't have 'true adjectives', i.e. words corresponding in meaning to English words such as *good, bad, big* or *small*.

To me, and I presume to many other linguists, these two conclusions (and particularly the first one), would seem intolerable. Intuitively, one would want to insist that Warlpiri words such as *maliki* (roughly, 'dog') or *wita* (roughly, 'small') correspond reasonably closely to English words such

as *dog* or *small*. I am not saying that *maliki* must mean exactly the same as *dog*, or that *wita* must mean exactly the same as *small* — far from it (see Wierzbicka 1985c). But a claim that the semantic relationship between *maliki* and *wita* is radically different from that between *dog* and *small* seems counter-intuitive. It would be hard to believe that categories such as 'natural kinds' (cf. Putnam 1975), 'cultural kinds' (cf. Lyons 1981) or 'basic level objects' (cf. Rosch 1978) apply to English and to some languages similar to English, but don't apply to Warlpiri, because of its (supposedly) radically different semantics.

Alternatively, one could suggest that the morphological uniformity of nominals in a language like Warlpiri is semantically deceptive. This, however, might be taken as an argument against the thesis of iconicity, and as further evidence of the 'arbitrariness of grammar'.

My own tentative conclusion is this. Words for 'natural kinds' such as *dog* or *radish* or for 'cultural kinds' such as *jumper* or *jug* differ profoundly in their semantic structure from words for single properties, such as *small, good* or *black*. Morphological differences between nouns and adjectives — wherever they exist — reflect and signal differences in the semantic structure.

But the absence of morphological differences between words for *dogs* and *jugs* on the one hand and words for *good, small* or *black* on the other, doesn't indicate an absence of significant semantic differences. Rather, I would hypothesize that the Warlpiri word *maliki* has essentially the same kind of semantic structure as the English word *dog*; and that the Warlpiri word *wita* has essentially the same kind of semantic structure as the English word *small*. The difference in the semantic structure between 'nouns' and 'adjectives' can be expected to be reflected somewhere in the syntactic behaviour of the two hypothetical classes, so that the difference in meaning will be reflected in some aspects of the grammatical behaviour, if not in the grammatical form. (For relevant data and ideas see Austin 1981, Bavin and Shopen 1983, Dixon 1980, Goddard 1983, Wilkins 1984, and Simpson, In press.) Kaytej (another Central Australian language, Harold Koch, p.c.) shows an apparent lack of grammatical distinctions between 'nouns' and 'adjectives', so that, for example, the same word *akely* seems to correspond to both 'child' and 'little', and the same word *amarle* 'girl, woman' seems to correspond to both 'girl' and 'female'. And yet from the available data it would appear, as Koch points out, that even in Kaytej there are at least some words, such as *arelhe* 'woman' or *arntwenge* 'child', whose use is

primarily nominal, not adjectival.

Even if most hypothetical 'nouns' in a language seem to behave exactly as the prototypical adjectives in this language do, and vice versa, as long as it can be established that there is at least a handful of core 'nouns' whose syntactic behaviour differs in some respect from that of prototypical adjectives, this may be a sufficient basis for postulating the existence of two distinct classes. The fact that the words from the adjectival class will be able to be used as arguments, just like nouns, won't detract from the validity of this distinction. After all, phemomena of categorical 'transposition' (Tesnière 1959), categorical 'translation' (Bally 1922) or 'syntactic derivation' (Kuryłowicz 1936), which allow, for example, the use of bare adjectives as arguments, are widespread even in those languages where the distinction between adjectives and nouns is perfectly clear-cut (such as Latin or Russian).

In general, the possibilities of substantivization of adjectives differ from one language to another. For example, Russian allows it on a larger scale than English, and Middle English allowed it on a larger scale than Modern English (cf. Hewson 1972). Nonetheless, it seems justified to assert that in terms of semantic structure, the difference between nouns and adjectives in Russian is probably the same as it is in English, and that Modern English doesn't differ in this respect from Middle English.

I suggest, then, that it is not only the distinction between 'nominals' and verbs which is universal (see e.g. Dixon 1977, Schachter 1985, Langacker 1987); but that the category of 'noun' as such may also be universal — and that it may be definable in terms of a *sui generis* semantic structure.

Definitions

RADISH

A KIND OF THING THAT PEOPLE EAT
IMAGINING THINGS OF THIS KIND PEOPLE COULD SAY THESE THINGS ABOUT THEM:

ORIGIN

they grow in the ground
people cause them to grow in many places
because they want to have them for people to eat

APPEARANCE

they are roundish but they can have a pointed bottom end
they have some green leaves growing out of them above the ground

they are red outside and white inside

the skin is smooth

SIZE

they are not too big for a person to be able to put a whole one
    into the mouth
but as they are hard
they may be too big for a person to be able to eat them easily putting
    them whole into the mouth

HOW EATEN

they have a strong taste
and people eat them, without cooking, with some other things,
    not sweet things
to cause those other things to taste better
or without any other things, eating no more than a few of them
because they taste good and are pleasant to bite

when one eats them, they make a little noise
of the kind that hard things pleasant to eat make when one eats them

one doesn't eat the leaves
one doesn't have to remove the skin before eating

TIGER

A KIND OF ANIMAL
IMAGINING ANIMALS OF THIS KIND PEOPLE COULD SAY THESE THINGS ABOUT THEM:

HABITAT

they live in the jungle
in places which are away from places where people live
in parts of the Earth where they don't live people can see them in a zoo

SIZE

they are similar to cats in the way they look and in the
    way they move
but they are much bigger than cats
being more like people in size than like cats

APPEARANCE

they have black stripes on a yellowish body
they have big sharp claws and big sharp teeth

BEHAVIOUR

they attack other animals and people and kill and eat them
they can move quickly and without noise like cats
and they can move easily in places where other big animals can't
so that they can come close to people without people noticing them, and
    attack people

RELATION TO PEOPLE

people are afraid of them, and think of them as fierce animals
[people also think of them as animals who know what they want
    and who know how to get it, and whom one can't help admiring
    because of that]

JUMPER (Australian and British usage)

A KIND OF THING MADE BY PEOPLE FOR PEOPLE TO WEAR
IMAGINING THINGS OF THIS KIND PEOPLE COULD SAY THESE THINGS ABOUT THEM:

PURPOSE

they are made for people to wear on the upper half of the body,
    below the head
when it is cold
to be warm

MATERIAL

they are made of wool or of something similar to wool in
    the way it looks and in warmth
so that they can be warm and stretchy

SHAPE

they are made in such a way that they can stretch
so that when they are on the body all their parts can be
close to the body causing the person to be warm
and so that one can put them on and take them off quickly
by pulling them over the head
and so that they are comfortable to wear and easy to handle

HOW WORN

people can wear them on top of something else put on the body
in order to cover the body
so that when one gets too warm one can take them off

Notes

1. The word *grown-ups* (usually in the plural) is often used as a noun by children. In adult language, however, *grown-up* tends to be used as an adjective. The word *adult* can be used as a noun but it can also be used as an adjective.

2. I am not claiming that all nouns have the same kind of semantic structure. In Wierzbicka (1985c), I have discussed a number of English nouns whose semantic structure differs from that assigned to nouns in this chapter, and I have tried to show that the *sui generis* semantic structure of those nouns is reflected in their *sui generis* grammatical behaviour. I think similar remarks could be made about various other types of nouns — in particular, about de-verbal nouns referring to actions, processes and events. There are many different semantic types of nouns, and the semantic differences between these types tend to be reflected in grammatical differences.

   I would claim, however, that these different types of nouns are not all on the same level. There is what might be called a prototypical type, which forms the core of the entire category. Nouns which belong to this core designate discrete, concrete entities, such as people, animals or human artifacts. These nouns, I would claim, have the prototypically 'nouny' semantic structure, described briefly in this chapter, and studied in detail in Wierzbicka (1985c).

   The existence of different semantic types of nouns, some of them closer to the core than others, may make an impression of a 'category squish' in the sense of Ross (1972b). I think that Ross' writings on this subject contained valuable insights; at the same time, however, they created a false impression that the phenomena in question were fundamentally non-discrete. In fact, I believe the apparent 'squishes' are manifestations of underlying discrete semantic categories.

3. Substantivization of adjectives is a very complex phenomenon which cannot be discussed in any detail here. Mustanoja (1960:643) distinguishes what he calls "total conversion into a noun" (where the adjective acquires the total morphology of a noun, with the plural

ending) from what he calls "partial conversion", as in the case of *the poor, the young*. (For an interesting discussion, see Hewson 1972.) For my part, I think that several more distinctions would have to be drawn, to capture all the generalizations in this area. For example, John Verhaar (p.c.) raises the question why one can say *He is a real male* but not *He is a real poor*. Interesting, and relevant, as such questions are, they cannot be investigated within the scope of this chapter.

4. Native speakers of Japanese are not always entirely happy about applying the adjective *mekura* to animals. However, the noun *mekura* cannot apply to animals at all, so the general point made here seems valid for Japanese, as it is for English or Russian.

5. Cf. also the following contrast from one of Primo Levi's (1982:58) novels:
   Pavel Jurevič Levinski teneva molto al suo patronimico, e meno al suo cognome troppo rivelatore: lui era un russo ebreo, non un ebreo russo.
   'Pavel Jurevič Levinski was very attached to his patronymic, and less to his too-revealing surname: he was a Jewish Russian, not a Russian Jew.'

6. In January 1967, very shortly before his death, I had a chance to discuss the relationship between meaning and form with Uriel Weinreich. Weinreich said, among other things, that in his view different parts of speech were associated with different kinds of meaning. I opposed his view, pointing to (what seemed to me to be) synonyms with different part-of-speech membership, and he didn't insist. Twenty years later, I would like to acknowledge, belatedly, that he was right and I was wrong.

10. Oats and wheat: mass nouns, iconicity, and human categorization

1. Introduction

For many linguists, it is axiomatic that the relationship between the grammatical behaviour of a word and its meaning is arbitrary. The tenet of arbitrariness of grammar was formulated forcefully by Bloomfield (1933:266). The relevant passage deserves to be quoted *in extenso:*

"The grammar of a language includes (...) a very complex set of habits (taxemes of selection) by which every lexical form is used only in certain conventional functions; every lexical form is assigned always to the custom-ary form-classes. To describe the grammar of a language, we have to state the form-classes of each lexical form, and to determine what characteristics make the speakers assign it to these form-classes.

"The traditional answer to this question appears in our school gram-mars, which try to define the form-classes by the CLASS MEANING — by the feature of meaning that is common to all the lexical forms in the form-class. The school grammar tells us, for instance, that a noun is 'the name of a person, place, or thing'. This definition presupposes more philosophical and scientific knowledge than the human race can command, and implies, further, that the form-classes of a language agree with the classifications that would be made by a philosopher or scientist. (...) Similarly, school grammar defines the class of plural nouns by its meaning 'more than one' (person, place, or thing), but who could gather from this that *oats* is a plural while *wheat* is a singular? Class-meanings, like all other meanings, elude the linguist's power of definition, and in general do not coincide with the meanings of strictly-defined technical terms. To accept definitions of mean-ing, which at best are makeshifts, in place of an identification in form terms, is to abandon scientific discourse."

There are some things in this passage which today, half a century after it was written, strike one as being obvious misconceptions. For example,

why should the meanings of words in natural language coincide with those of "strictly defined technical terms"? Obviously, the scientific meaning of words such as *water, salt* or *fruit* is quite different from their everyday meaning, and both are equally valid in their respective spheres of use. A definition of the scientific term *fruit,* which implies that cucumbers or pumpkins are fruits, must be carefully distinguished from the definition of the everyday concept *fruit*, which should imply that cucumbers and pumpkins are NOT fruits (cf. Wierzbicka 1985c).

Similarly, the fact that classifications embodied in ordinary language do not coincide with those made by a philosopher or a scientist does not make the former any less interesting or less worthy of serious study; nor does it make them impossible to describe. It is not true that meanings (everyday meanings) "elude the linguist's power of definition", or that definitions are "at best makeshift devices" (cf. Weinreich 1966:192).

However, while many linguists today would reject out of hand Bloomfield's approach to lexical meaning, they might still agree with him unreservedly on the subject of grammatical meaning. The Bloomfieldian dogma that form-classes are semantically arbitrary is still widely accepted in contemporary linguistics. (For some noteworthy recent exceptions to this general view see Hirtle 1982, Langacker 1987 and Köpcke 1987.) Mass nouns are often cited as the clearest possible evidence of this 'arbitrariness', and the pair *oats* and *wheat* has become the standard example, and the ultimate 'proof'.

A couple of quotes:

"It is easy enough to show that grammatical distinctions are not semantic ones by indicating the many cases where there is not a one-to-one correspondence. An often quoted example is that of *oats* and *wheat*. The former is clearly plural and the latter singular. (...) Further examples are to be found in *foliage* versus *leaves*, in English *hair* which is singular versus French *cheveux*, plural. These distinctions are grammatical and do not directly correspond to any categories of meaning." (Palmer 1971:34-35).

"(...) by a convention of English, *pants* is plural. Interestingly enough, this is not an isolated case; compare *trousers, breeches, shorts, slacks*, etc. This whole group of words are grammatically plural with no evident semantic justification. (...) The distinction between these subclasses of nouns is purely arbitrary. Consider *rice* and *beans*. Both refer to articles of food consisting of numerous small particles. Yet one is a mass noun and the other a count noun." (Gleason 1969:224).

Philosophers, who have written very extensively on the distinction between mass nouns and count nouns, have followed the linguists in denouncing it as arbitary and inexplicable. For example, Ware (1979:22) writes:

"Turning now to why it is that words sometimes have count occurrences and sometimes mass occurrences, we are immediately faced with the problem of a tremendous amount of variation that appears unnecessary and inexplicable. (...) There is a count/mass difference between 'fruit' and 'vegetable', but they apply to things that for all accounts and purposes seem to be alike. Nor can I see anything that would explain the count/mass difference between 'footwear' and 'shoe', 'clothing' and 'clothes', 'shit' and 'turd', or 'fuzz' and 'cop'."

It is the purpose of this chapter to challenge the Bloomfieldian dogma and to explore the opposite view: that form-classes are semantically motivated, and that differences in grammatical behaviour reflect iconically differences in meaning. As my test case I will take the very area which apparently gives the tenet of arbitrariness the strongest possible support: mass nouns. In particular, I accept the challenge of *oats* and *wheat*.

2. Preliminary discussion

Consider first pairs such as *rice* versus *peas* or *flour* versus *noodles*. Is there any reason why *peas* and *noodles* should differ from *rice* and *flour* in grammatical form and behaviour? Is there any reason why we do not have, instead, *pea* and *noodle* as names of foodstuffs:

*We bought pea and noodle for lunch.

alongside *rices* and *flours?:*

*We bought rices and flours.

To me, it seems perfectly clear that there is indeed a very good reason for this: individual particles of the foodstuffs called *peas* or *noodles* are much bigger than the particles of the foodstuffs called *rice* or *flour*; the conceptualization of a foodstuff either as composed of individual entities or as internally homogeneous depends crucially on how big those constituent entities are.

It is true that the ways of conceptualizing various substances are partly language-specific. For example, in Russian the words for peas and beans (*gorox, gorošek, fasol'*) are mass nouns, just like the words for rice and

flour (*ris, muka*) are. Nonetheless, the word for broad beans has already a plural form (*boby*), and plural verb agreement, like *oats*. Thus, while the boundary between 'stuffs' seen as consisting of individual entities and 'stuffs' seen as homogeneous is drawn differently in different languages, nonetheless the general iconic principle is clear: other things being equal, stuffs consisting of bigger, more conspicuous individual entities are more likely to be viewed as 'multiplicities' and designated by plural nouns than stuffs consisting of smaller, less conspicuous entities. (A plural opposed to a singular indicates a multiplicity of things; a plural not opposed to a singular indicates a multiplicity of 'thinglike' — i.e. separate or semi-separate — parts.)

This is not to say that size is the only relevant factor. For example, in English *garlic* differs grammatically from *radishes* or *olives* in a way contrary to that which would be predicted on the basis of size: individual olives are, and radishes tend to be, smaller than individual 'heads' of garlic. What is relevant in this case is not the relative size but the differences in eating habits: olives are, and radishes tend to be, eaten individually, one by one, whereas garlic is chopped up and used as an additive to other foods.

Onion/s, unlike *garlic*, is a countable noun. This grammatical difference can be explained in terms of the difference in size and the difference in eating habits: normally, neither onions nor 'heads' of garlic are eaten individually, like radishes or olives, but onions can sometimes be cooked or pickled and served whole, whereas garlic is never served like that. In Russian both *luk* 'onion' and *česnok* 'garlic' are mass nouns. The word for radish has two variants: the mass noun *rediska* and the countable *rediska/rediski*. Obviously, the difference between *luk* 'onion' (mass noun) and *rediski* 'radishes' (countable) cannot be explained in terms of the relative size of the denotata (onions are bigger than radishes); it can, however, be explained in terms of habitual eating behaviour: radishes are often eaten individually, whereas onions are normally chopped. However, although individual onions are treated in Russian as less interesting than individual radishes, they are nevertheless treated as more interesting, more worth talking about than individual 'heads' of garlic: while both *luk* 'onion/s' and *česnok* 'garlic' are mass nouns, there is nonetheless a derived word for an individual onion: *lukovka*, or *lukovica*; in the case of garlic, eaten chopped or in cloves, there is no parallel word, and if one wants to count individual 'heads' of garlic a special classifier *golovka* 'little head' is usually used. All these differences make sense in terms of the differences in normal use of

different kinds of food.

In general, vegetables provide particularly clear evidence for non-arbitrariness of grammatical differences. For example, why is *pumpkin* (as the name of a foodstuff) singular whereas *carrots* is plural? Why is *cabbage* singular whereas *Brussels sprouts* is plural?

We had pumpkin/cabbage for dinner.
*We had carrot/Brussels sprout for dinner.

Big as individual pumpkins or heads of cabbage are, grammatically they go with rice and flour, not with beans, noodles, carrots or Brussels sprouts. The reason is transparent: one can see several carrots, several Brussels sprouts, several noodles or several beans on one's plate, but not several pumpkins or several cabbages. Individual grains of rice are too small to attract much attention from the human consumer, and individual pumpkins or heads of cabbage are too big.

3. The logic of names of fruits and vegetables in Russian

Russian provides particularly interesting evidence for the non-arbitrariness of the mass/count distinctions in the area of fruits and vegetables. I regard this example as particularly instructive because it shows clearly both the universal semantic principles behind the mass/count distinction and the language-specific character of the details of their execution in practice.

In Russian, the words for berries and other berry-size fruits are mass nouns: *klubnika* 'strawberries', *zemljanika* 'wild strawberries', *černika* 'blueberries', *smorodina* 'currants', *vinograd* 'grapes', *kryžownik* 'gooseberries', *višnja* 'cherries', *čeresnja* 'sweet cherries', *kumanika* 'blackberries'. Words for medium-size fruits, which people can hold individually while eating, are all countable nouns: *jabloki* 'apples', *gruši* 'pears', *slivy* 'plums', *apelsiny* 'oranges', *banany* 'bananas' and so on. The words for huge fruits, too big to be held individually while eating and too big for a person to eat at one go, can be used as either countable or uncountable depending on the context. When referring to foodstuffs, they are normally uncountable:

Ja s"el mnogo arbuza.
'I ate much watermelon.'
Ja s"el mnogo zemljaniki.
'I ate "much" wild strawberries.'

**Ja s"el mnogo jabloka.*
'I ate much apple.'

The words for vegetables, however, behave differently from the words for fruit, and it is clear that the difference between the two classes is not motivated by any differences in size but by differences in eating habits. Carrots (*morkovka*) or beetroots (*svekla*) are not too different in size from apples or bananas, but people don't eat them whole, holding them in one hand; normally, carrots and beetroots are eaten chopped and cooked. It makes sense, therefore, that while individual raw carrots or beetroots can be thought of as individual objects, cooked carrot and beetroot should be rather thought of as 'mass'. The grammar of *morkovka* and *svekla* suggests precisely such a double conceptualization: the words in question can be used as countables, but they can also be used as mass nouns.

Daj mne tri morkovki/svekly/banana/jabloka.
'Give me three carrots/beetroots/bananas/apples.'
*Ja s"el mnogo morkovki/svekly/*banana/*jabloka.*
'I ate "much" carrot/beetroot/*banana/*apple.'

The size of carrots and beetroots makes them comparable to apples or bananas (you can hold a carrot or a beetroot in one hand, like an apple or a banana). This explains, I think, why the words for carrots and beetroots can be used as countables. The way one eats carrots or beetroots, however, is different from the way one eats apples or bananas; this explains why the words for carrots and beetroots can also be used as mass nouns, whereas the words for apples or bananas cannot. The above explanation is supported by the fact (noted in Mel'čuk 1979a) that the words for cucumbers and tomatoes are countable, and cannot be used as mass nouns:

**Ja s"el mnogo ogurca/pomidora.*
'I ate much cucumber/tomato.'

People (in Russia) normally eat tomatoes and cucumbers raw, holding them individually in one hand, as one eats an apple or a banana, they don't chop and cook them, as they chop and cook beetroots and carrots.

Heads of lettuce and cabbage are too big to be eaten individually, so predictably the words for lettuce and cabbage are mass nouns, and cannot co-occur with numerals without a classifier.

**Ja s"el dve kapusty/dva salata.*
'I ate two cabbages/lettuces.'

Ja s¨el mnogo kapusty/salata.
'I ate much cabbage/lettuce.'
Ja kupil dva kačaṅa kapusty/salata.
'I bought two heads of cabbage/lettuce.'

On the other hand, peas and beans come in particles which are too small to be eaten individually, one by one, so, predictably, the words for peas (*gorox, gorošek*) and beans (*fasol'*), are also mass nouns.

Ja s"el mnogo goroxu/goroška/fasoli.
'I ate much peas/beans.'
* *Pokaži mne odin gorox/gorošek/odnu fasol'.*
'Show me one pea(s)/bean(s).'

As mentioned earlier, however, the word for broad beans behaves differently from the words for ordinary beans or peas: while it is not countable either, it has a plural form and takes obligatorily plural agreement:

Ja s"el mnogo bobov.
'I ate a lot of broad beans.'
* *'Ja s"el tol'ko neskol'ko bobov.'*
'I ate only a few broad beans.'
Eti boby očen' vkusny.
'These broad beans are very tasty.'
* *Eti boby očen' vkusen.*
* 'These broad beans is very tasty.'

In other words, *boby* 'broad beans' occupies grammatically an intermediate position between *fasol'* 'beans' or *gorox* 'peas' on the one hand and *morkovka* 'carrots' or *svekla* 'beetroots' on the other. Thus, the words for vegetables with tiny 'particles' (to use Bloomfield's word, see section 10 below) are mass nouns, the words for hand-size vegetables eaten raw are countables, the words for hand-size vegetables eaten cooked have a double status, i.e. can be used as either mass or countable, and the words for vegetables with 'particles' which are small but not tiny are neither mass nor countable but have an intermediate grammatical status.

I don't want to suggest, however, that it is only size which is responsible for the peculiar grammatical behaviour of a word such as *boby*. The names of other foodstuffs with particles of exactly the same size may behave differently. What is important about *boby* is the class of foodstuffs it is subconsciously compared with: presumably, it is thought of as a kind of

foodstuff similar to beans (because of their appearance, taste, 'filling' value etc.) but with particles which are nonetheless conspicuously bigger. It is this striking departure from the expected norm for the class at hand which accounts, I think, for the grammatical difference between *boby* and *fasol'*. The departure cannot be great because then the odd member of the class would perhaps no longer be thought of as clearly belonging to the same class. It must be small and yet perceptually striking.

Let me note briefly at this point that *boby* behaves grammatically just like *oats* (plural uncountable). I think that semantically the parallel is also striking. We will explore this parallel and its implications later.

4. Water (names of homogeneous substances)

According to Whorf (1962:140), "We have two kinds of nouns denoting physical things: individual nouns, and mass nouns, e.g., 'water, milk, wood, granite, sand, flour, meat'. Individual nouns denote bodies with definite outlines: 'a tree, a stick, a man, a hill'. Mass nouns denote homogeneous continua without implied boundaries. The distinction is marked by linguistic form; e.g., mass nouns lack plurals, in English drop articles, and in French take the partitive article *du, de la, des*."

Having defined the distinction between the two classes of nouns in terms of homogeneity and unboundedness, Whorf immediately attacked it as largely arbitrary and "forced upon our description of events by language" (1962:141):

"The distinction is more widespread in language than in the observable appearance of things. Rather few natural occurrences present themselves as unbounded extents; 'air' of course, and often 'water, rain, snow, sand, rock, dirt, grass'. We do not encounter 'butter, meat, cloth, iron, glass', or most 'materials' in such kind of manifestation, but in bodies small or large with definite outlines. The distinction is somewhat forced upon our description of events by an unavoidable pattern in language."

But this alleged arbitrariness of the grammatical distinction in question is, to some extent at least, an artefact of Whorf's analysis: who said in the first place that mass nouns denote "continua without implied boundaries"? Limiting ourselves for the time being to examples of the kind considered by Whorf (*water, milk, wood, butter, meat, cloth, iron, glass*) we could suggest that mass nouns of this kind are correlated not with 'unboundedness' but rather with 'arbitrary divisibility'. If you take some water or some butter

and divide it into parts, each of the resulting parts will be water, or butter; but if you take a bottle or a chair and divide it into parts the resulting parts will not be bottles or chairs. Words such as *bottle* or *chair*, referring to objects which cannot be divided, are normally countable, words such as *water* or *butter*, referring to 'stuffs' which can be divided at will, are normally mass nouns.

The fact that many words can be used as either countable or non-countable, depending on the meaning intended, shows that the grammatical characteristics in question are sensitive to changes in the conceptualization. Consider for example the following sentences (Allan 1980:547):

> There's not enough table for everyone to sit at.
> Emmy finds squashed spider more nauseating than the thing alive.

The nouns *table* and *spider*, usually countable, in these sentences behave as uncountables. The semantic reason for this unorthodox behaviour is clear: no matter how one divides squashed spider, each of the resulting portions will still consist of squashed spider (because the expression *squashed spider* refers not to a kind of living creature but to a kind of stuff); and no matter how one divides the table(-edge) for people to sit at, each portion of it will still be table(-edge). The same applies to all the other ingenious examples mentioned in the literature, such as the sentence of the mother termite concerned about her child (Pelletier 1979:7):

> Johnny is very choosey about his food. He will eat book,
> but he won't touch shelf.

The fact that no absolute boundary can be drawn between countable and uncountable nouns shows not that countability is a shaky and capricious category, as has often been suggested, but quite the contrary: that it is highly sensitive to the intended conceptualization.

But to appreciate how firm and reliable it is, one must study not just individual lexical items but the conceptualizations intended by the speakers (and study them in depth, going beyond the first superficial impressions). If nouns can be divided at all into those which are primarily countable and those which are primarily uncountable, it is because different nouns can be more or less compatible with different conceptualizations. If we study the correlations between grammatical behaviour and conceptualization directly, the apparent arbitrariness of some aspects of grammatical behaviour will be greatly reduced and in many cases may vanish altogether.

The distinction between 'unboundedness' and 'definite outline' drawn by Whorf is spurious in the form in which he draws it (because as he points out himself, substances such as milk or butter or cloth do not occur in 'unbounded quantities', and when we see them they do have a 'definite outline'). But the intuition behind this distinction is sound and can be formulated in a way which will not necessitate instant disclaimers: butter or meat is 'unbounded' in the sense that there is no fixed position of the parts within any given portion. In mathematics, dividing is an abstract process which can be carried out in the mind. But in real life, as experienced by ordinary people, dividing a thing involves separation of the parts, with their concomitant change of place. In the case of things conceived of as individual objects (such as bottles or chairs) we could not move or remove the parts without destroying the qualitative identification of the object. In other words, if we move or remove some parts of a bottle or a chair, the object in question may well cease to be a bottle or a chair. This is why they are seen as objects with a definite (fixed) outline. The meat or the butter on a dish will also have a definite outline, but this outline is not fixed, i.e. it can be changed (by moving or removing some of the parts), and the meat will remain meat, and the butter, butter. (See explications 1 and 11 in the Summary at the end of this chapter.)

It is true that the conceptualizations in question are suggested by language, but they are not as arbitrary as Whorf maintained. The concept of a bottle or of a chair implies a definite outline because it implies a definite function, and this function could not be fulfilled if the outline was destroyed. The concept of a bird or a fish or a man also implies a definite outline, because it implies a definite type of behaviour, and this behaviour could not occur if we chopped the bird, the fish or the man to pieces, or otherwise changed the fixed position of the parts. The concept of a tree or a flower also implies a definite outline but it also implies certain other characteristics which could not persist if the outline (i.e. the perceivable relative position of the parts) was destroyed. The concepts of wood or paper, unlike those of shelf or book, ignore the outline because they do not imply any other characteristics which would depend on the outline. But if shelves or books are thought of in terms of other potential functions (such as being good to eat), the outline loses its conceptual importance and the grammatical behaviour of the nouns *shelf* and *book* changes too.

Obviously, there are different possible ways of conceptualizing the world, there are different possible cognitive perspectives, and a termite's

perspective may differ from that of an Englishman. But the different conceptualizations have their own logic, which grammar reflects and illuminates.

5. Chocolate and chocolates (solids with a double status)

Chocolate belongs to an interesting class of nouns which can be either countable or uncountable. Countable *chocolates* are made largely of uncountable *chocolate*. But they are not simply pieces of (uncountable) chocolate. They usually have a filling made of something other than chocolate; more importantly, they have a definite size, which is important to the conceptualization: a (countable) chocolate is thought of as neither too big nor too small to be put into the mouth and eaten as a single entity. In addition to size, the texture of a chocolate matters, too: the filling may be soft and sticky, but the surface of a chocolate must be firm, so that one can pick it up with one's fingers and put it into the mouth without dirtying the fingers. Moreover, a chocolate must be attractive to look at. For all these reasons, half a chocolate is not *a chocolate:* divided into parts, a chocolate loses some of its defining characteristics ('mouth-size', clean surface, attractive symmetrical form).

Cheese, on the other hand, like hard chocolate, can be divided into parts in any way one likes. There are no such things as small eatable objects made partly or wholly of cheese, with a size and texture which couldn't be changed without defeating their purpose. For this reason, *cheese* is only a mass noun.

What holds for *chocolate* holds also for *cake, sausage, coal, stone* and a number of other nouns. All these nouns designate firm substances which occur in two different forms: as arbitrarily divisible 'stuffs' and as individual objects, conceptualized partly in terms of their size and form. A *cake* differs from a *piece of cake* in having a definite size (being neither too big nor too small for a person to be expected to want to eat one at a time) and a definite outline: (countable) *cakes* are meant to look as attractive, symmetrical, self-contained entities. A cake divided into parts loses its snack-like size and its symmetrical, decorative form. Similarly, a (countable) *sausage* is a snack-size self-contained entity which cannot be arbitrarily divided into parts without losing some of its defining properties; (uncountable) *sausage*, on the other hand, is 'infinitely' divisible.

Stones (countable) are conceptualized, I suggest, as 'hard things which

can be seen in various places on the surface of the earth, which are not made by people, which can be thought of as part of the surface of the earth, and which look as if they could be picked up with a hand or hands and thrown'. *Stones* differ crucially from *rocks* in being throwable (by a human being); *pebbles*, on the other hand, differ from *stones* in being small enough to be picked up with a finger and a thumb. I believe that precisely these anthropocentric properties provide the hidden standards which guide the speakers of English in their use of the words *stone, rock* and *pebble*. In addition to a definite size a stone has also a definite appearance: it looks like an individual object, not like something which has broken off a cliff or a rock. One expects the surface of a stone to be fairly smooth (smoothed by age); this fits in with the idea we have of stones as of things that one could hold in one's hands. *Stone* as a mass noun is used to refer to material from which various things are built. As such, it is conceptualized as arbitrarily divisible.

And so on. It is clear why the class under consideration does not contain any nouns designating liquids, powders or other substances which assume the shape of their containers: the double conceptualization — 'stuff' or separate things — is possible only for substances which can occur as self-contained entities, i.e. for substances which are hard or at least firm. But not all hard substances can be conceptualized in terms of individual objects. As we have seen earlier, cheese cannot, and neither can soap or bread. A 'cake of soap' is regarded as a piece of (uncountable) *soap*, not as an individual object (cf. *three round chocolates* versus **three round soaps*) — presumably, because soap can be viewed as infinitely divisible: a piece of soap divided into smaller parts doesn't lose its functional qualities; but a chocolate divided into pieces loses its functional qualities (because the 'function' of a chocolate consists not only in being edible but also in being a delectable, nice-to-look-at and easy-to-pick-up mouth-size object). Similarly, *bread* designates something that is viewed as arbitrarily divisible, and so it is used only as a mass noun; (bread-)rolls, however, are viewed as individual entities, conceptualized partly in terms of size and shape, so they are designated by a countable noun (bread-roll). (See Summary, 13 cf. 1.)

6. Crockery (names of heterogeneous classes of objects)

However, the generalization which has been suggested as the semantic correlate of mass nouns such as *water, butter* or *cheese* does not seem to

hold for ALL mass nouns. For example, words such as *furniture, crockery* or *clothing* are also mass nouns: they don't have a plural and they cannot co-occur with numerals. And yet can one possibly claim that the concepts embodied in these nouns imply arbitrary divisibility? Would crockery, furniture or clothing, when chopped to pieces, remain crockery, furniture or clothing any more than plates, chairs or jumpers chopped to pieces would remain plates, chairs or jumpers? Obviously not. This means that 'arbitrary divisibility' cannot be regarded as the 'class meaning' of ALL mass nouns.

Quine (1964:91) draws a distinction between what he calls singular terms and what he calls general terms (=mass nouns) as follows: "So-called mass terms like 'water', 'footwear' and 'red' have the semantical property of referring cumulatively: any sum of parts which are water is water." He does notice that his definition fits *water* or *red* better than it does *furniture* or *footwear*, but he blames the discrepancy between his definition and the language as it really is on the language. He writes (1964:100): "But the distinction of functions in question matters much to us, however poorly reflected in word forms. We need not hesitate to draw distinctions, where they clarify our concerns, though they have no vivid reflections in English idiom; nor to waive distinctions indifferent to our concerns, though English idiom exalt them."

For my part, however, I would prefer to try to elucidate the logic of the English idiom rather than to dismiss this idiom as poorly reflecting the distinctions which interest the philosopher. I prefer to face the fact that mass nouns like *footwear* or *furniture* do NOT have the semantic property of 'referring cumulatively', which Quine attributes to them at one moment and denies at the next. It is clearly not true that 'any sum of parts of furniture is furniture', or that 'any sum of parts of footwear is footwear'. If we cannot explain the grammatical behaviour of nouns of this kind in terms of any real generalization then we had better agree with Bloomfield: mass nouns have no 'class meaning'; the grammatical category in question may be partially motivated semantically but on the whole it is arbitrary.

However, another course is also open to us: having acknowledged the fact that 'arbitrary divisibility' cannot be regarded as a semantic correlate of the entire class of mass nouns, we can continue our search for such a correlate. We can hypothesize that the property of 'arbitrary divisibility', characterizing nouns such as *water* or *butter*, is a partial manifestation of a deeper semantic principle — one which would genuinely apply to, and explain the behaviour of, not only words such as *water* and *butter* but also words such

as *crockery*, *furniture* or *footwear*.

It is this second hypothesis for which I am going to argue. Nouns such as *furniture* or *crockery* behave (in certain respects) like *water* or *butter* because furniture or crockery cannot be counted, just like water or butter cannot be counted. The reasons why the things in question cannot be counted is in each case different, but the semantic common denominator is there, reflected in the shared grammatical characteristics.

The reason why water or butter cannot be counted is sufficiently explained by their arbitrary divisibility: the idea of counting implies the presence of separate objects, and water or butter do not present themselves to the human beings in the form of separate objects, they can be divided into parts in any way one likes without losing their qualitative identity, and one cannot divide them into separate parts in a non-arbitrary fashion.

I submit that furniture or crockery cannot be counted for a different reason: the idea of counting implies not just the presence of separate objects, but the presence of separate objects OF THE SAME KIND — and while furniture or crockery do present themselves to human beings in the form of separate objects, these separate objects are conceived of as objects of different kinds. As Frege (1884) forcefully argued, things of different kinds cannot be counted together — that is to say, they cannot be counted together as long as they are conceived of as things of different kinds. Frege quoted with approval Spinoza's statement on this point:

"We only think of things in terms of number after they have first been reduced to a common genus. For example, a man who holds in his hand a sesterce and a dollar will not think of the number two unless he can cover his sesterce and his dollar with one and the same name, viz., piece of silver, or coin; then he can affirm that he has two pieces of silver, or two coins; since he designates by the name piece of silver or coin not only the sesterce but also the dollar."

Of course things of different kinds — for example, birds of different kinds or trees of different kinds — CAN be counted together (as birds, or as trees). But when we subsume, say, a swallow and an eagle under the category *bird*, or an oak and a maple under the category *tree*, we are thinking of them as belonging to THE SAME KIND (namely, bird; or tree), not to different kinds. When, on the other hand, we subsume spoons, forks and knives under the collective supercategory *cutlery* we are thinking of them as of things of DIFFERENT KINDS which can be used together for a similar purpose. Similarly, *kitchenware* is a supercategory which includes things

of different kinds that can be used jointly and for a similar purpose in the kitchen; and *bedlinen* includes things of different kinds (such as sheets and pillow cases) which can be used jointly and for a similar purpose on beds.

Thus, supercategories such as *bird* or *tree* are 'taxonomic', i.e. they belong to hierarchies of kinds (where each 'kind' is identified on the basis of similarity between its members); supercategories such as *crockery, cutlery, furniture* or *kitchenware* are not taxonomic — they include things of different kinds, grouped on the basis of contiguity and/or function, not on the basis of similarity. (See Summary, 3.)

The reality of the postulated difference between taxonomic and non-taxonomic supercategories can be supported with a variety of data other than those from grammatical countability. Thus, taxonomic supercategories can be used to refer to items of one kind. One can say:

Mary drew some trees/birds/flowers.

even when the trees in question all look like oaks, when the birds all look like magpies and the flowers all look like tulips. But one would be unlikely to say:

Mary drew some cutlery/furniture/crockery.

if Mary drew only spoons, or only chairs, or only cups.

Oaks can be thought of, and referred to, as *trees*, because the word *oak* means 'a kind of tree (such that ...)'; similarly, magpies can be thought of and referred to as *birds* and tulips can be thought of and referred to as *flowers*, because the word *magpie* means 'a kind of bird (such that...)', and the word *tulip* means 'a kind of flower (such that ...)'. But the word *spoon(s)* does not mean 'a kind of cutlery (such that ...)'; and the word *chair(s)* does not mean 'a kind of furniture (such that ...)'. *Spoon(s)* means, roughly, 'a kind of thing, made by people, for people to eat liquid food with', and *chair(s)* means, roughly, 'a kind of thing, made by people, for one person to sit on'. 'Cutlery' is not a semantic common denominator included in the meaning of *spoon, knife* and *fork,* in the way that 'bird' is the semantic common denominator included in the meaning of *swallow, magpie* and *eagle*. Words such as *cutlery, crockery* or *furniture* stand for collective supercategories, each of which is thought of as including a variety of things which can be used together. To subsume spoons, knives and forks under one heading *cutlery* does not mean to think of them as of one kind of thing; it means to think of them as of things of DIFFERENT kinds which can be used jointly for a similar purpose.

When things of different kinds are thought of as things of the same kind (for example, as birds or trees or flowers), then they can be counted together. When things of different kinds are thought of as things of different kinds (for example, as crockery, cutlery or furniture), they cannot be counted together. When things of the same kind are thought of not as separate objects but as portions of something that can be arbitrarily divided into parts (water, butter), then they cannot be counted either. The general principle is quite firm: the grammatical property of being a mass noun (the grammatical uncountability) is correlated with the semantic property of being, for whatever reason, not countable.

The word *different* in English can be applied either to different individuals of the same kind or to different kinds. But the word *various* is restricted to different kinds. It is highly significant, therefore, that the word *various* cannot co-occur with numerals:

I visited five different countires.
*I visited five various countries.

In prohibiting the co-occurrence of the word *various* with numerals the English language makes implicitly the same point which Spinoza and Frege made explicitly, on a theoretical level. That is to say, it reflects English speakers' tacit knowledge and understanding of the crucial conceptual rule that counting requires a common 'kind'.

However, the simple distinction between what can and what cannot be counted is not the only distinction related to number which is relevant to the English noun system. A number of more subtle distinctions are also drawn and reflected in the grammatical behaviour of the relevant nouns. Subtle distinctions of this kind have long been known to exist in non-Indo-European languages (cf. for example, Mathiot 1964 and 1967). The failure to recognize the existence of similar distinctions in the English noun system has led to the belief that the grammatical differences observed — such as that between *oats* and *wheat*, or between *clothing* and *clothes*, or between *vegetables* and *fruit*, or between *kitchenware* and *kitchen utensils* — are idiosyncratic and 'arbitrary'. I will try to show that this belief is unfounded.

7. Scissors (names of 'dual objects')

The non-arbitrariness of the relationship between grammatical form and meaning is particularly clear in the case of nouns designating 'dual

objects', such as *scissors, trousers, pants* or *goggles* (despite Gleason's amazing statement quoted in section 1 above). The nouns included in this class designate objects which have two identical parts fulfilling the same function within the whole. These parts are partly separated from one another so that they can be almost thought of as separate parts; since, however, the two semi-separate parts are joined together, and since their being joined is essential to the function performed by the dual object (separated, the two parts of a pair of scissors or a pair of trousers are pretty useless), the two semi-separate parts are not really thought of as two separate objects. (See Summary, 8.)

All these conceptual features are reflected in the grammar of the words of this class. Thus, the plural verb agreement:

The trousers were/*was torn.

reflects the perceived internal complexity of the object (i.e. its internal duality). The non-existence of the corresponding singular form:

*One trouser was torn.

reflects the fact that the two symmetrical parts are not thought of as separate entities. The co-occurrence with the expression *pair of* shows not only the perceived dual structure of the objects in question but also the fact that the two semi-separate parts perform together the same function. To see the significance of this last point consider the following contrasts:

a pair of socks	?a pair of jumpers
a pair of gloves	?a pair of rings
a pair of eyes	?a pair of pimples
a pair of oxen	?a pair of cats
a pair of legs	?a pair of knees
a pair of hands	?a pair of elbows

In a pair of eyes, the two eyes perform jointly the same function; but two pimples do not perform any function; two elbows are seldom seen as performing the same action jointly, but when they do, the expression *a pair of elbows* does not sound totally inappropriate:

> The crowd was so thick that it was almost impossible to move, and only someone with a particularly strong pair of elbows could push his way through it.

Remarkably, when the two members of a pair are physically separate

(as in the case of eyes, gloves, socks etc.), the noun designating them does have a singular/plural contrast (*an eye* versus *eyes, a glove* versus *gloves*); but when they are physically joined, the two symmetrical parts cannot be thought of as separate objects, and only the plural form referring to the dual object as a whole can be used (**a trouser, *a scissor*).

The example of the *scissors*-class words suggests that when a noun has no singular form and when the verb agreement is obligatorily plural, this grammatical plurality indicates that the referent is seen as composed of individual parts which don't quite achieve the status of separate objects. If we put it like this, then the grammatical behaviour of words for dual objects, like *scissors*, seems to throw some light on the behaviour of 'plural mass nouns' such as the Russian word *boby* 'broad beans' or the English word *oats*. Obviously there is nothing dual about either broad beans or oats and, predictably, *oats* cannot co-occur with the expression *a pair of*. But perhaps 'stuffs' like oats, too, can be seen as consisting of separate parts, which while physically separate, don't quite achieve the conceptual status of individual objects.

8. A grain of rice (substances with a minimal unit)

Before we turn to a more detailed discussion of words like *oats*, however, let us first explore the significance of the formal distinctions among SINGULAR mass nouns. So far, we have treated the *singularia tantum* as one undifferentiated class, with only one exception: the words of the *crockery* class, I have said, differ from more 'typical' mass nouns such as *water* or *butter* in designating heterogeneous collections of discrete objects. I have claimed that in one case it is the non-discreteness of the denotata which is responsible for the semantic, and consequently grammatical, non-countability of the words in question, and in the other case the heterogeneity of the denotata is responsible. The difference in the source of the non-countability is reflected in the difference with respect to quantification: while neither butter nor crockery can be counted, butter can be weighed, whereas crockery normally would not:

John bought half a pound of butter/?crockery.

However, while *crockery* differs both semantically and grammatically from *butter, rice* or *grain*, it is a simplification to present *butter, rice* and *grain* as behaving all in the same way. To begin with, some mass nouns

designate 'stuffs' which are seen either as internally undifferentiated or as masses of tiny discrete entities, whereas other mass nouns designate masses which are always seen as undifferentiated masses. Thus, rice can be seen either as an undifferentiated mass or as a collection of *grains*, and grass can be seen either as an undifferentiated mass or a collection of *blades*. On the other hand, *butter, meat* or *milk* cannot be seen as collections of discrete objects. To be sure, one can divide a given portion of meat or butter into pieces, but there is no natural, non-arbitrary way of doing so. A piece of meat or butter can be divided into smaller pieces of meat or butter. But a grain of rice or a blade of grass cannot be divided into smaller grains of rice or blades of grass.

It is true that one can speak of *a carton of milk* or *a packet of sugar*, thus treating milk and sugar as things which apparently can come in discrete units. But expressions of this kind are still different, both semantically and grammatically, from *a grain of rice* or *a blade of grass*; and so are expressions such as *a slice of bread* or *a blob of butter*. Mass nouns referring to stuffs seen as 'materially homogeneous' can only occur in a 'a N_{count} of N_{mass}' pattern if the N_{count} in question designates a certain container or a certain amount (whether or not the amount in question is stated regardless of shape, as in the case of *kilogram* or *litre*, or with reference to shape, as in the case of *slice* or *blob*):

a $N_{container}$ of N_{mass}
a N_{amount} of N_{mass}

But a grain or a blade is neither a container nor an amount. When asked:

How much grass? How much rice?

we cannot seriously answer:

One blade. One grain.

because, conceptually, grass begins above the level of one blade, and rice, above the level of one grain.

I do not want to make too much of this distinction between materially homogeneous and materially heterogeneous 'stuffs' because in English it seems to be of only marginal importance. It plays a greater role in Russian, which has a special singulative suffix to designate minimal discrete entities of which a certain 'stuff' consists (cf. section 2). For example:

Mass noun, *sing. tantum:*	One minimal discrete unit:
gorox 'peas'	*gorošina* 'one pea'
fasol' 'beans'	*fasolina* 'one bean'
klubnika 'strawberries'	*klubničina* 'one strawberry'
černika 'blueberries'	*černičina* 'one blueberry'
trava 'grass'	*travinka* 'one blade of grass'
pesok 'sand'	*pesčinka* 'one grain of sand'
soloma 'straw'	*solominka* 'one straw'
krupa 'groats, grain'	*krupinka* 'one grain'
žemčug 'pearls'	*žemčužina* 'one pearl'

Words for 'stuffs' seen as materially homogeneous cannot take the singulative affix *-in- (-ink-):*

mjaso 'meat'	**mjasina*
muka 'flour'	**mučina*
ris 'rice'	**risina*

It will be noticed that the line between 'stuffs' seen as materially heterogeneous and 'stuffs' seen as materially homogeneous is drawn in Russian in a slightly different way than in English. For example, in English, *rice* and *sand* are treated in the same way, whereas in Russian the corresponding words — *ris* and *pesok* — are treated differently. It is clear, however, that the broad principles employed are the same, even though each language implements them in its own way.

But English has no singulative suffix that would clearly mark formally mass nouns designating 'stuffs' which are seen as materially heterogeneous. On the other hand, English has a formal device (call it if you like 'zero derivation'), for marking 'minimal units worthy of interest'. For example, *grain* can be, and normally is, quantified as 'stuff', in non-discrete terms:

I bought a hundred kilograms of grain/rice/butter.

but it can also be quantified in terms of discrete units:

There are only five grains left.

Idiosyncracy? But if the grammatical behaviour of *grain* was idiosyncratic then *grain* should either be alone in exhibiting it, or it should belong to a class of random items, with no logic to it. Alone it is not. Some of the other members of the *grain* class are: *hair, straw, seed, sugarine* and *clover*.

Jane has blond hair/*hairs.

Harry noticed two grey hairs on Jane's temple.
The mattresses were filled with straw/*straws.
Pass me two straws, would you?
I bought some sesame seed for the canary.
I planted a seed in a flowerpot.
Buy me some sugarine, would you?
Pass me two sugarines.
I'm looking over a four-leafed clover. (from a popular song)
I'm looking over a field of clover.

When we compare not just *grain* and *rice* but several members of each class then a clear pattern emerges. Nouns such as *grain*, which have a double grammatical status (being primarily mass nouns but being also usable as count nouns) designate 'stuffs' composed of very small or very thin individual entities. It is true that *rice, sand* or *grass*, too, designate 'stuffs' composed of very small or very thin particles, and yet they cannot be used as count nouns. But there is an important difference between the two groups in this respect. Individual particles of rice or sand are of no special interest to people (what can one do with one grain of rice or with one grain of sand?). But individual particles of seed or individual sugarines can be of considerable interest: one can plant a seed, one can add one sugarine to one's tea. Similarly, one blade of grass is normally of no intrinsic interest; but one hair growing on one's chin, or one grey hair on one's temple, may be a matter of considerable interest, if not alarm. A clover is reasonably big, bigger than a wild daisy or a violet. However, unlike daisies and violets, 'clovers' often grow in great masses, covering jointly considerable areas. For this reason, it is natural that they should be given the conceptual and grammatical status of a mass noun, denied to daisies or violets. At the same time, an individual clover (especially, a four-leafed one) can be of interest — much more so than a blade of grass. It is natural, therefore, that *clover* should also qualify for the conceptual and grammatical status of a countable noun, denied to *grass*.

It should be emphasized that words such as *clover* or *hair* do not have the same grammatical and semantic status as words such as *chocolate, cake* or *stone*, discussed earlier. *Chocolate, cake* or *stone* can be used either as mass nouns or as fully countable nouns. When they are used as countable, there are no restrictions on their countability: one can talk of a few cakes, of dozens of cakes, and of hundreds of cakes. But one doesn't talk of hundreds of hairs or hundreds of grains. Hairs or grains are treated as counta-

ble only when they occur singly or in very small numbers. Words such as *hair, straw* or *grain* are primarily mass nouns, although they can also be used as count nouns. Their status as mass nouns reflects the perceptual characteristics of the denotata (lots of tiny things occurring together). Their status as count nouns reflects their 'cultural' characteristics (even one of these things that usually occur together can be potentially significant to human beings). Grammar reflects both human perception of the world and human anthropocentric interests. (See Summary, 2 and 4, cf. 13.)

9. Hair, noodles and apples ('*singularia* mostly', '*pluralia* mostly' and 'edible objects')

An examination of mass nouns such as *butter, rice, hair* and *crockery*, which are all formally *singularia tantum*, has shown that within this broad class several distinct subtypes can be identified. When one turns to look more closely at countable nouns, which do have a contrast between singular and plural, it emerges that just as some mass nouns are 'more mass' than others, some countable nouns are 'more countable' than others. I am not suggesting, however, that the mass/count distinction is a matter of degree. Rather, I am suggesting that in both the broad class of (singular) mass nouns and the broad class of countable nouns, several distinct subtypes can and should be distinguished.

We have seen that words such as *clover* or *hair* can be used as countables, just as *violet* or *head* can. Since, however, *clover* or *hair* are normally used as mass nouns, their individual (countable) status is, I think, more tenuous than that of unambiguously countable nouns such as *violet* or *head*. The restrictions on countability mentioned earlier suggest that *one hair* or *one clover* is seen as a kind of departure from the expected norm. One expects to see 'hairs' or 'clovers' *en masse,* not as individual entities. It is unusual to find a particular hair or a particular clover worthy of interest. If a hair grows in an unusual place, or is of an unusual colour, or if a clover has four leaves, it is understandable that it should be seen as deserving special attention and singled out; but these unusually interesting hairs or clovers are thought of against the background of hair or clover growing *en masse*.

Turning now to words such as *apple* or *egg*, we can say that they, too, have a double grammatical status; they, too, can be used as either countable or mass:

I had two eggs/apples for breakfast.
Add more apple/egg to the salad.

But *egg* or *apple* are primarily countable nouns, and one cannot call a collection of whole eggs or apples *egg* or *apple*:

*I brought a basket of apple/egg.

Words such as *apple* or *egg*, when used as mass nouns, imply that the original form of the objects in question was destroyed: to add *apple* to the salad one must chop or grate the original apple or apples. But words such as *hair* or *clover*, when used as mass nouns, do not refer to chopped hairs or clovers:

a. I bought 5 kg of straw/clover.
b. ?I bought 5 kg of apple.

Sentence (b), if acceptable at all, implies that the apples have been chopped or otherwise divided into parts. Sentence (a), however, does not imply that the individual straws or clovers have been chopped or crushed.

Thus, nouns such as *apple* or *egg* are primarily countable. When they are used as mass nouns, they present the 'stuffs' in question as coming from individual discrete objects whose discreteness has been destroyed. Nouns such as *hair* or *clover* are primarily mass nouns. When they are used as mass nouns they present the 'stuffs' in question as COMPOSED of tiny individual entities but not as MADE of individual entities (big or small) which have been smashed to pieces. (See Summary, 12.)

Are there any nouns which can only be used as countables, i.e. which can never be used as mass nouns? We have seen earlier that even nouns such as *book* or *shelf* can in certain contexts be used as mass nouns, as in the mother termite's sentence, repeated here for convenience:

Johnny is very choosey about his food. He will eat book,
but he won't touch shelf.

Sentences of this kind have been used in the literature as evidence that there is no real difference with respect to countability between nouns such as *apple* or *egg* on the one hand, and nouns such as *book* or *shelf* on the other. (Cf. e.g. Pelletier 1979, Ware 1979 and Bunt 1979.) I confess, however, that I don't find this evidence compelling. Sentences such as that attributed to the mother termite are jocular, and their humorous effect stems from the fact that *book* or *shelf* cannot really be used as mass nouns.

I think that the nature of this constraint (which of course can be viol-

ated, as other linguistic constraints can) is semantic rather than purely cultural. One can perfectly well imagine that a doctor (perhaps a mad doctor) would prescribe eating wood, glass, paper or chalk, and the corresponding sentences do not sound humorous:

The mad doctor forced the child to eat wood/glass/paper/chalk.
The mad doctor forced the child to eat books/pencils/socks.

But the sentence:

?The mad doctor forced the child to eat book/pencil/sock.

does sound funny. Similarly, there is nothing unheard-of about burning books, but the sentence:

?Add more book to the fire.

does sound odd.

The point is that words such as *apple* or *egg* as names of discrete objects include edibility in their meaning (see Wierzbicka 1985c), and there is a general semantic rule in English (and in many other languages) which allows names of edible objects which have edibility encoded in their meaning to be used also as names of non-discrete foodstuffs derived from those objects. There is no similar rule, however, which would allow names of combustible objects to be used as names of combustible stuffs, or names of objects which can be eaten but which don't have edibility encoded in their meaning (such as *book* or *shelf*) to be used as names of foodstuffs.

The rules I am talking about are rules of 'regular polysemy' of the kind established by Apresjan (1974). Rules of this kind are far from idiosyncratic and often recur in different unrelated languages (cf. Eather 1977 and Chau 1979), but they have to be regarded as language-specific rather than universal, because they do differ, to some extent, from language to language. Russian, for example, does not have the rule, mentioned above for English, which derives names of foodstuffs from names of edible objects. One cannot say in Russian:

* *Ja s"el tarelku tertogo jabloka.*
'I ate a plate of grated apple.'
* *Ona podarila mne bol'šuju banku varenogo jabloka.*
'She gave me a big jar of stewed apple.'

One can only say:

Ja s"el tarelku tertyx jablok.
'I ate a plate of grated apples.'
Ona podarila mne bol'šuju banku varenyx jablok.
'She gave me a big jar of stewed apples.'

Thus, at least four different subtypes of countable nouns can be established for English: the *chocolate* subtype, the *hair* subtype, the *apple* subtype, and the *book* subtype. I would like to propose now a fifth subtype, which can be called the *noodle* subtype. Words such as *noodle* or *bean* cannot be used as mass nouns:

*We had noodle/bean for dinner.

That is to say, a termite probably could say this, but not even a termite could use the words *noodle* or *bean* (in the singular) to refer to a plateful of noodles or beans. The contrast between *noodles* and *rice* in this respect:

We had rice/*noodle for dinner.

makes perfect sense in terms of the hypothesis advanced here: noodles, or beans, are much bigger than grains of rice, so it is understandable that they should achieve the conceptual and grammatical status of individual objects which grains of rice fail to achieve (in English). Grammatically, *noodles* or *beans* are countable:

There were only two or three noodles/beans left on the plate.

It makes sense for noodles or beans to be seen as more worthy of counting than grains of rice, because of the difference in size. (Gleason's, 1969:224, claim that *rice* and *beans* "both refer to articles of food consisting of numerous small particles" and his conclusion that "the distinction between these two subclasses is purely arbitrary" misses this crucial point.)

Should we conclude, then, that words such as *noodles* or *peas* or *beans* are fully countable — as countable as *apples* or *eggs?* Perhaps even more so, since *apple* or *egg* can also be used as mass nouns, whereas *noodle* or *pea* cannot?

Add a bit of apple to the salad!
?Add a bit of noodle/pea to the salad.

But don't words such as *noodle* or *pea* contradict the general semantic rule which we have advanced earlier on, the rule which says that names of individual edible objects can be also used as names of foodstuffs derived from those objects? Why should *noodle* or *pea* disobey that rule?

But perhaps words such as *noodle* or *pea* are NOT conceived of as names of individual edible objects? Perhaps they are rather conceived of as names of largish individual particles of which a foodstuff is composed?

If words such as *noodle* or *pea* were really fully countable, then the question "How many?" should be fully applicable to them. But consider the following contrast:

a. John: I had eggs for lunch.
   Mary: How many (?how much) did you eat?
b. John: I had noodles for lunch.
   Mary: How much (?how many) did you eat?

Similarly:

I don't feel well — I think I ate too many eggs for lunch.
?I don't feel well — I think I ate too many noodles for lunch.

If *noodle* was really fully countable, then we should be talking of noodles in terms of 'how many', not in terms of 'how much'. But we don't. This suggests, I think, that the word *noodles* (in the plural), like *rice*, is thought of as the name of a foodstuff, not as the name of a collection of individual objects. At the same time, this foodstuff is so clearly, so unmistakenly, non-homogeneous and so obviously composed of small individual entities, that it is conceptualized not as a real 'stuff', but as a 'stuff' composed of individual entities which cannot be fully ignored.

In fact, words such as *noodles* or *peas* are similar in this respect to words such as *hair* and *clover*, discussed earlier. The words *noodles* and *peas* refer to things which are expected to occur not as individual entities but as collections of things. Normally, they are of interest as collections. It is somewhat unusual for a noodle, or for a pea, to become the focus of interest and the topic of conversation — no less unusual than it is for a hair or a clover.

But of course noodles or peas normally present themselves to us in fairly limited quantities, not in big masses, as clover, straw, or even hair do (there are obviously many more hairs on a person's head than peas or noodles on their plate). For this reason, it makes sense for a mass of straw, clover or hair to be treated grammatically as more 'mass-like' than a plateful of peas or noodles. *En masse*, straw, hair or clover is conceived of as truly uncountable 'stuff': who could count all the clovers in a field of clover, or all the hairs on a person's head? On the other hand, the noodes or peas on a plate COULD be counted. Normally, one wouldn't want to count

them, and one would think of them in terms of 'how much?' rather than of 'how many?' Yet subconsciously one is aware that the 'stuff' on one's plate, composed of smallish individual objects, COULD be counted. Speaking of 'a field of clover' or 'a head of hair', one is aware, subconsciously, that the 'stuff' in question, while composed of small individual objects, could not really be counted. At least this is the view embodied in English grammar. Certainly, this is not the only possible view, but it does make sense. (See Summary, 10.)

The conceptual difference between the *noodles* class and the *hair/clover* class is well reflected in the behaviour of a word which belongs to both these classes. The word in question is *seed* or *seeds*. *Seeds*, like *hair*, can be used either as a (singular) mass noun or as a count noun:

I bought a bag of poppy seed.
I planted a seed.

But it can also be used as a *plurale tantum:*

I offered the guests sunflower seeds/?seed.

Sunflower seeds are bigger than poppy seeds and this is probably one reason why one is more likely to call the former *seeds* and the latter *seed*. However, size is not the only relevant factor. After all, one CAN say:

I bought two kilograms of sunflower seed.

But the sentence:

?I offered the guests sunflower seed on a dish.

sounds odd: it seems to carry a faint implication that the guests were birds rather than humans.

The meaning of this implication is not immediately clear, because while humans eat sunflower seeds individually, one by one, presumably so do canaries. However, it should be kept in mind that human foods are compared, subconsciously, with other human foods rather than with animal feeds. Seen in this light, sunflower seeds are clearly different from rice or porridge, which are eaten by the spoonful, i.e. as 'stuffs', not as individual entities. A plateful of sunflower seeds cannot be seen as comparable with a plateful of rice or of porridge, it must be seen, rather, as comparable with a plateful of peanuts or berries, i.e. as a collection of tiny individual entities. Obviously, they are not as individual as apples or bananas, and normally one would never know how many sunflower seeds one has eaten,

as one would never know how many noodles one has eaten, but one eats them as individual entities or in groups of several individual entities, rather than as spoonfuls or other non-discrete portions.

As for birds, they may eat seeds individually rather than *en masse*, but English doesn't reflect a bird's perspective, it reflects a bird's owner's perspective. Due to our anthropocentric bias, human food is usually viewed as something we eat, but animal feed (note the *food/feed* contrast, with the causative implications of the latter) is viewed as something one GIVES to an animal, or to a bird, to eat, rather than as something that animals or birds EAT. Sunflower seeds offered to a guest are viewed from the human eater's perspective, but sunflower seed bought for a canary is viewed from the human buyer's point of view, not from the point of view of the bird. Thus seed bought for the canary is bought as a 'stuff', and when people talk about this 'stuff' they tend to ignore the perceptual and conceptual perspective of the bird. (See Summary, 10 cf. 4.)

Let me mention, in passing, a parallel from Polish, which also shows how a difference in perspective results in a difference in grammar. In Polish, the names of fruits, including berries, are countable (in the sense in which *noodles* or *peas* are countable in English) — presumably because berries are picked, and often eaten, one by one: *maliny* 'raspberries', *porzeczki* 'currants', *truskawki* 'strawberries', *śliwki* 'plums'. However, farmers selling their produce in market-places usually refer to the same fruits by means of *singularia tantum*, i.e. of mass nouns: *malina, porzeczka, truskawka, śliwka*. From the farmer's perspective, the berries he brings to the market-place are masses, handled as masses, not as individual entities. Thus, a shift in perspective is reflected in a shift in grammar.

According to the grammar of English, hair or poppyseed is theoretically countable but practically uncountable, and individual hairs or seeds are of interest only in exceptional circumstances; noodles or sunflower seeds are more countable than hair but are not fully countable either (why bother); apples are fully countable, but they are also of interest in a chopped form, because their shape is not essential to their (definitional) function; books or shelves are fully countable, and are not interesting in a chopped form, because THEIR shape is quite essential to the function spelled out in their meaning.

10. Oats (names of substances composed of particles and limited in quantity)

Oats is, grammatically, plural, whereas *wheat* is singular:

Oats are/*is good.
Wheat is/*are good.

Bloomfield (1933:266) says that this contrast is purely arbitrary, yet just a page earlier (p.265) he shows that he is in fact aware of a semantic difference between the two which may well be the clue to their different grammatical behaviour: "*Salt* is a mass noun", he says, "but, by class-cleavage, there is also a plural *salts* (as in *Epsom salts*), with the meaning 'consisting of particles', in a class with *oats, grits*, and the like." In saying this he implies that *oats* behave differently from *wheat* because it belongs to a different semantic class; that the formal class to which *oats* belongs does have a 'class meaning'; and that this class-meaning is, roughly, 'consisting of particles'.

But if this is so, then how could Bloomfield maintain that the grammatical difference between *oats* and *wheat* is semantically arbitrary? Consider the following sentence:

Little Miss Muffet sat on a tuffet, eating her curds and whey.

Is it really a sheer accident that Miss Muffet was eating *curds and whey* rather than **curd and wheys?* Is it not, rather, 'logical', in the sense in which it is logical that we should eat *radishes* (whole) and *horseradish* (grated) rather than **radish* and **horseradishes?*

Presumably, Bloomfield's reasoning went like this: *oats* is in one class with *grits* and with some other nouns whose denotata 'consist of particles'; but doesn't wheat, too, consist of particles? Doesn't rice or sand consist of particles? So why don't *wheat, rice* and *sand* belong to the same formal class as *oats* and *grits?*

If one agrees with Bloomfield's idea of meaning (as something that 'science' can establish through a study of denotata) then indeed one has to accept his conclusion: the formal difference between *oats* and *wheat* is semantically arbitrary. If, however, one rejects that idea of meaning and defines meaning, rather, as 'what is meant', i.e. as the language-specific conceptualization of some part or aspect of reality, then Bloomfield's conclusion is not warranted at all: water, too, 'consists of particles', but it is not CONCEIVED of as something consisting of particles (at least not in

ordinary English); and neither is wheat. I maintain that grammatical forms are semantically motivated, because, while they are not necessarily correlated with any 'real world attributes', they ARE correlated with different conceptualizations.

But isn't this reasoning circular? We suggest that the difference in grammatical behaviour of *oats* and *wheat* reflects a difference in the conceptualization — but how do we establish the difference in the conceptualization in the first place? Isn't it on the basis of the difference in the grammatical form?

Indeed — if we couldn't produce any independent evidence for the postulated differences in the conceptualization, the reasoning would be circular. Whether or not independent evidence can be provided depends on what conditions one puts on what is to be accepted as the 'conceptualization'. If the postulated conceptualizations are to be stated in the form of some 'abstract features' or other artificial symbols (such as 'distributiveness' or 'spatiality' or 'totality' or 'singulativeness' etc.) then indeed the postulated correlation between the conceptualization and the grammatical form would be completely unverifiable.

If, however, we state the postulated conceptualization in natural language, in simple, intuitively understandable terms, then its correctness or otherwise will be intuitively verifiable. If we do find an intuitively verifiable formula which not only fits a few initial examples but also makes correct predictions with respect to any other comparable cases, then I think we have a good reason to believe that the postulated conceptualization is correct. We still haven't 'proved' that it is correct, but there are very few interesting hypotheses which can be 'proved' in that sense (cf. Polanyi 1962:139-144). In other words, in postulating a 'class meaning' we are guided indeed, at least to a considerable extent, by the grammatical form. But the meaning that we finally postulate (using all the clues from grammatical form) must be intuitively verifiable and must have predictive power.

I would argue that Bloomfield's formula ('substances in the *oats* class consist of particles') does not have much predictive power simply because it does not correctly state the 'class meaning' in question, or rather because it doesn't state it fully.

One inadequacy of Bloomfield's formula is obvious: what is relevant is not just 'having particles' but 'having separate particles'. Water, milk or butter may also consist of particles, but they do not consist of SEPARATE

particles — at any rate, they do not VISIBLY consist of separate particles. This proviso — 'visibly consisting of separate particles' — would explain why *water* or *milk* should not belong to the same class as *oats* does; but doesn't flour or (table) salt, too, consist of particles which can be seen to be separate?

They do. And yet there is a difference in this respect between oats on the one hand and flour or salt on the other: oats consist of CLEARLY PERCEIVABLE, HIGHLY NOTICEABLE separate particles (which can even be separated by hand); flour or salt consist of particles which are far less conspicuous as separate objects. The importance of this difference is corroborated by the fact that BOILED oats have acquired names with different grammatical characteristics: *oatmeal* and *porridge*, both singular nouns, like *flour*. Porridge, too, 'consists of particles', but these particles are not clearly perceivable as separate objects; consequently, porridge is not conceptualized as something consisting of separate particles; consequently, grammatically *porridge* patterns like *flour*, not like *oats*.

It should be stressed that a substance may be conceived as having clearly perceivable separate particles on different grounds. Size is one relevant factor: particles of sugar are smaller than particles of oats, and this may explain why *sugar* is not in the same grammatical class. On the other hand, the expression *hundreds-and-thousands* (an Australian term for the multi-coloured dots of sugar used on cakes or sandwiches) behaves grammatically just like *oats*. One can say neither:

*Hundreds-and-thousands/oats tastes better than honey/wheat.

nor:

*There is a hundred-and-thousand/an oat on your shoulder.

This fact, too, makes sense in terms of the hypothesis advanced here: the substance called, significantly, 'hundreds-and-thousands', is so clearly, so obviously composed of separate particles, tiny as they may be, that it is perfectly understandable why it should be conceptualized as such.

Eating habits may be another relevant factor. For example, grains of raw rice, while small, are clearly perceivable as separate; but people don't eat raw rice. Most commonly, rice is seen and handled when cooked, not when raw; and when it is cooked, the grains are not nearly as separate as when raw. Hundreds-and-thousands, on the other hand, are eaten raw, so the separateness of the individual particles, tiny as they are, is more salient than that of grains of rice. (See Summary, 5.)

The grammatical behaviour of words such as *oats* or *hundreds-and-thousands* represents a kind of compromise between that of countables which can be called '*pluralia* mostly' such as *noodles* or *beans*, and that of mass nouns such as *sugar* or *rice*: the plural verb agreement (*Oats are/*is good for you*) hints at the perceived structural 'plurality' of the substance in question, i.e. at its being composed of separate parts, whereas the lack of co-occurrence with numerals and the inability to occur in the singular (**one oat,* **three oats*) hints that individual particles are too insigificant for anybody to want to talk about them. It will be recalled that this is precisely how we have interpreted the same structural features in the case of 'dual' nouns such as *scissors*. But of course scissors CAN be counted: they can be counted in terms of *pairs*, because a pair of scissors IS a separate and useful object, which cannot be arbitrarily divided into parts. Oats can be arbitrarily divided into parts, and although there is a limit to this division (one cannot go further than an individual grain or flake) those minimal discrete units are too insignificant to be focussed on or counted.

As a further example, consider the word *chives*.

The chives were/*was fresh and appetizing.
*There was one chive on the plate.

Chives are conspicuously composed of individual entities (blades). At the same time, there is not much reason for people to want to count those individual entities or to talk about them. The fact that chives are usually eaten chopped adds to the insignificance of their individual blades. Consequently, I suggest, it makes sense for chives to be conceptualized as a 'stuff' with a perceivably 'plural' structure rather than either as a homogeneous stuff or as a collection of countable entities.

But of course, what matters is not so much the physical size as, so to speak, the perceived size. We noted earlier that broad beans are conceptualized in Russian as conspicuously bigger than ordinary beans, because they are thought of as belonging to the same class of foodstuffs as ordinary beans. Similarly, I would conjecture that oats are conceptualized in English as large-grained because they are subconsciously compared with other cereals. Chives may be physically similar to grass, but they are not thought of as being in the same class of stuffs as grass; rather, they are subconsciously compared with other cooking ingredients or spices, and those usually come in a ground or otherwise more or less homogeneous form.

I suggest, then, that the grammatical similarity between nouns like *oats*

and nouns like *scissors* reflects the fact that both classes are seen as referring to, so to speak, aggregates (cf. Mathiot 1967). Nouns in the *scissors* class designate objects which have distinct parts but whose parts don't quite achieve the status of individual objects because they are physically joined, and because individually they cannot fulfill the function for which they are made; nouns in the *oats* class designate objects which have also distinct parts, but whose parts don't quite achieve the status of individual objects because they are too insignificant to be taken any notice of and because individually they cannot fulfill their perceived function.

The explanation suggested here may seem convincing with respect to the examples given so far, but it is not sufficient to account for all the relevant facts. For example, what about *gravel*? One might argue that the grammatical difference between *sand* and *pebble/pebbles* is perfectly understandable in terms of our hypothesis, because pebbles are big enough to be clearly seen as separate entities, and also to be handled (e.g. thrown) as separate entities, whereas grains of sand are too small for that. But isn't gravel clearly composed of separate particles?

Indeed it is. The fact that gravel does not belong to the *oats* class points to one characteristic of the words in this class which hasn't been mentioned so far: they all designate substances which are usually seen in limited quantities, they never designate substances which occur in seemingly 'limitless' quantities, such as water, air, mud or sand.

Compare, from this point of view, chives and grass. Physically, the two may be very similar, but the way we encounter them is usually very different. We see grass in vast expanses, where it is truly impossible to count it — not only because there are usually too many blades for anyone to be able to count them but also because the area covered with grass often has no clear boundaries. Our encounters with chives are usually different. When we buy a bunch of chives we normally don't count them because we can't be bothered to do so and because there would be no point in doing so, but not because it would be strictly impossible to do so. If we grow chives ourselves, again the area occupied with the chives is usually much smaller and much more circumscribed than an area occupied with grass. It is not impossible to count the chives in a vegetable patch, although it would be troublesome and rather pointless to do so.

It is interesting to compare *pluralia tantum* such as *chives* or *oats* with '*pluralia* mostly' such as *peas* and *noodles*. It is possible, though pointless, to count the peas on one's plate, as it is possible to count the chives in a

bunch; and significantly, both *peas* and *chives* have a plural form and a plural verb agreement. It is practically impossible to count the grass in a meadow or even on a lawn (not to mention the sand on a beach) — and, significantly, *grass* and *sand* are *singularia tantum*. However, while both chives and peas (or oats and noodles) can be counted, there are very few occasions indeed when anybody would actually count the chives in a bunch of chives or the oat-flakes in a packet of oats. On the other hand, peas or noodles ARE sometimes counted, or referred to individually. For example, children who don't like to eat their greens will often pick at their peas or beans and eat them individually, to their mother's intense irritation. Sentences such as the following can then be heard:

> Johnny, if you eat your peas one at a time you will never finish!
> Come on, Johnny, take a spoonful of peas — you've only eaten three or four peas so far!

Thus, while both *chives* and *peas*, or *oats* and *noodles*, are regarded as 'aggregates', to be described in the plural, peas and noodles are viewed nonetheless as more worth individualizing, and consequently, more deserving a singular than oats or chives are.

Pluralia tantum of the *oats* class designate 'aggregates' which are more mass-like than those designated by '*pluralia* mostly' of the *noodles* class but less mass-like than 'stuffs' designated by *singularia tantum* such as *sand* or *grass*. To put it differently, words of the *oats* class do not refer to limitless 'masses', they refer to limited 'aggregates', limited multiplicities of particles or bits.

From this point of view, *oats* differs crucially from *wheat*, just as *chives* differs from *grass*. For an average speaker of English *oats* is primarily the name of a foodstuff which one sees in limited quantities on a breakfast table, in the kitchen or in a shop; but *wheat* is, primarily, a crop — something that grows in the field in great masses. (I have asked many native speakers of English, including several children, to describe *oats* and *wheat* for me; nearly all described oats as something composed of flakes that people, or horses, eat; and wheat, as something that grows in the fields. The exact phrasing differed from person to person, but the same essential difference in the conceptualization — a foodstuff versus a crop — emerged from nearly all the answers.) *Wheat* and *grass* are *singularia tantum* because they designate 'masses' growing on large expanses; *oats* and *chives* are *pluralia tantum* because they designate foodstuffs occurring in small quan-

tities (e.g., on a kitchen table). Of course foodstuffs, too, may be designated by *singularia tantum* (for example, *rice, flour, sugar* or *salt*) — but only when they are seen as more or less homogeneous, not when they are seen as composed of, or containing, lots of conspicuous particles or bits. (See Summary, 5 cf. 2.)

It should be clear now why gravel, though conspicuously not homogeneous, is nonetheless designated by a *singulare tantum*, not by a *plurale tantum*, like oats: gravel occurs in a large mass, like sand, grass or wheat; one doesn't see it in small quantities as one does oats, chives or coffee-grounds (on a kitchen table).

It is true that the *oats* class in English has only a limited number of members: *oats, hundreds-and-thousands, chives, dregs, coffee-grounds, curds, soapsuds, groats, grits* (the last two being also dialectally restricted) and a dozen or so others. Nonetheless it seems quite clear that the list above is more than a random collection of names of 'stuffs', that it has its logic.

Furthermore, this list is not fixed: it expands in time and thus cannot be viewed as a set of relics, whose behaviour should be explained in diachronic rather than in synchronic terms. Thus, various recent commercial products which fit the conceptualization of the *oats* class have been given commercial names with the grammatical characteristics of *oats*. For example, the most common brand of breadcrumbs produced and sold in Australia has the commercial name *Krummies (plurale tantum)*. It appears that the lexeme *hundreds-and-thousands* is also of fairly recent date (e.g., it is not listed in the Oxford English Dictionary, although it is mentioned in the Macquarie Dictionary of Australian English.)

It is also clear that the same logic explains the behaviour of comparable nouns in some other languages. The Russian word *boby* has already been mentioned. For comparison, I will now adduce several similar examples from Polish. The equivalent of the *oats* class in Polish is also limited in number, but all the relevant words seem to fit the generalizations suggested here. The relevant class includes:

krupy (groats, barley)
jagły (millet barley)
zacierki (a dish consisting of round bits of hard dough boiled in milk or water)
lane kluski (a dish consisting of shapeless bits of semi-liquid dough boiled in milk or water)

fusy (coffee grounds)
konfitury (berries, or small pieces of fruit, fried in heavy syrup)
powidła (sugarless plum jam, which contains lots of solid bits — presumably, pieces of skin — very noticeable in the otherwise smooth, semi-liquid substance)
flaki (tripe)
szumowiny (froth, little waves of froth forming themselves on the surface of boiling semi-liquid food)
pomyje ('hogwash', dishwater containing lots of bits of food)
otręby (bran)
żeberka (literally 'small ribs', a dish made of a joint of meat containing ribs)
nóżki cielęce ('calf's feet', a dish made of calf's feet)
trociny (sawdust)
mydliny (soapsuds)

All the items in the above list designate 'stuffs' which are encountered in limited quantities, which are clearly composed of, or which include, many individual particles or bits, and whose particles, while noticeable, have no significance individually. Thus, it makes sense for *krupy* or *zacierki* to be half-way, grammatically and presumably conceptually, between *ryż* 'rice' (a *singulare tantum*) and *kluski* 'noodles' (a '*plurale* mostly'): the individual particles of *krupy* or *zacierki* are bigger than those of rice and smaller than those of noodles. The individual bits of *lane kluski* are not only smaller than ordinary *kluski* 'noodles', but also less individuated (since they are made by pouring a continuous stream of semi-liquid dough into boiling water and since that stream of dough breaks into formless and somewhat unpreditable bits). On the other hand, *kładzione kluski,* which are similarly formless and unpredictable but bigger (being made of thicker dough divided into largish bits with a spoon rather than poured), are fully countable. *Szumowiny* 'froth', *mydliny* 'soapsuds' or *pomyje* 'hogwash' are clearly heterogeneous (containing lots of different bits), but they are clearly not composed of fully discrete entities either.

I might add that in Russian the class of plural mass nouns is extended slightly further than it is in Polish: it includes not only words for stuffs which are limited in space and in quantity and which have uncountable 'bits' in them, such as *šči* 'cabbage soup', *pomoi* 'hogwash', *opilki* 'sawdust' or *kudri* 'curls, curly hair', but also words for some liquids which don't have any visible 'bits' in them — if these liquids occur only in small quantities

and in containers, i.e. if they are severely limited both quantitatively and spatially, for example *duxi* 'perfume', *černila* 'ink' or *slivki* 'cream'.

It may also be relevant that liquids such as cream, ink or perfume are used gradually, in tiny portions: one does not drink a jug of cream as one drinks a glass of milk, one does not pour perfume as one pours water, and so on. In fact it is conceivable that all such liquids designated by *pluralia tantum* are conceptualized somewhat like nosedrops, ear-drops or eyedrops are conceptualized in English. For example, nosedrops are not 'drops', they are a kind of liquid; from a material point of view they contain no conspicuous particles. But conceptually they are seen as a collection of potential drops and consequently they are treated grammatically as a *plurale tantum*, like *oats* (there is no such thing as **one nosedrop*).

To recapitulate: in English, 'plural mass nouns' such as *oats* designate quantitatively and spatially limited 'stuffs' clearly composed of small particles which are not big enough and not significant enough for anybody to want to count them or otherwise to focus on them as on individual entities, and which are nonetheless too conspicuous for the 'stuff' in question to be thought of as homogeneous. The plurality of such words indicates their 'aggregate' status, and thus links them with 'countable aggregates' such as *noodles* and with dual objects such as *scissors*. The fact that they have no contrast between a plural and a singular shows that, unlike the words of the *noodles* class, they are viewed as closer to 'stuffs' than to 'aggregates'.

11. Guts and woods (names of body parts and places)

One other class of words which share some grammatical characteristics with the words of the *oats* class includes words such as *guts, bowels, brains* and *haemorrhoids*. McCawley (1975:320) calls these words 'plural mass nouns' and illustrates their peculiar behaviour with the sentence:

His guts were splattered over the wall (*all five of them).

Thus, *guts* parallels *oats* in uncountability and plural agreement. It should be noted, however, that an expression such as *Harry's brains* is ambiguous between the body-part reading and the food reading (not to mention the 'intelligence' reading). On the food reading, the word *brains* belongs to the same grammatico-semantic class as *oats* and can indeed be called a 'plural mass noun': in this sense, *brains*, like *oats*, is quantifiable and refers to a kind of 'stuff', which while materially non-homogeneous (because it can be

seen to have lots of constituents) can be divided in different ways into parts each of which will still be brains.

But clearly, the word *haemorrhoids* is not in the same semantic class. Haemorrhoids are not something that one could buy half a kilo of (not even for the purpose of medical experiments). Haemorrhoids are a kind of THING, not a kind of STUFF, and so are, I would claim, *(Harry's) brains, guts* or *bowels*. Each of these words designates an object (not a 'stuff') which is clearly internally complex, having many similar parts, parts, however, which are not separate and which one couldn't, or wouldn't care to, count.

Polish has a class of words of a similar kind, i.e. *pluralia tantum* referring to objects, not 'stuffs', for example *widły* 'garden fork', *grabie* 'rake', *organy* '(musical) organ', *organki* 'mouth organ' or *skrzypce* 'violin', and so does Russian: *grabli* 'rake', *vily* 'garden fork', *sčety* 'abacus', *nosilki* 'stretcher' (with four separate parts for the carrying people to hold), *kačeli* 'swing', *drožki* 'droshky', *nary* 'plankbed' (made of several planks nailed together).

McCawley (1975:320) mentions the Russian word *časy* 'clock' (literally 'hours') as an example of a purely idiosyncratic *plurale tantum*, and contrasts it with the "minor regularity" exhibited by names of dual objects such as *scissors* or *goggles*. I am not convinced, however, that *časy* is any more idiosyncratic than *scissors*. First, it should be noted that in Latin, too, the word for clock is a *plurale tantum* and means literally 'hours': *horae*. Two identical idiosyncrasies are of course possible, but a little less likely than one. Furthermore, if we recognize that Russian has a whole category of *pluralia tantum* designating objects with several similar and symmetrically arranged parts, such as *grabli, vily, sčety* and so on, then it becomes apparent that clocks can be seen as falling into the same conceptual category.

Of course neither a rake nor a clock 'has to' be conceptualized as an object with several similar and symmetrical parts, but obviously both can. Polish has 'chosen' to lexicalize the word for rake, but not the word for clock, as a *plurale tantum*. On the other hand, Polish has lexicalized the word for violin as a *plurale tantum*, though it hasn't gone so far as to lexicalize similarly the word for cello, while in Russian neither the word for cello nor the word for violin have received this status. One can see the rationale behind all these apparently idiosyncratic 'decisions': a violin consists of a wooden case-like frame and of four strings; if one focusses on the strings, not on the frame, a conceptualization in terms of 'several similar

parts' suggests itself, but if one pays more attention to the wooden frame this conceptualization may seem less suitable. But in a cello the wooden frame is so big, so conspicuous, that it is less likely to be ever disregarded in favour of the strings. Polish has 'chosen' to conceptualize violin, but not cello, as a 'multiple object', and Russian has chosen neither. On the other hand, Russian has chosen to conceptualize both rake and clock as 'multiple objects', whereas Polish has given this status only to the former. The final choices are language-specific, but the underlying principle is iconic.

English does not designate objects which can be seen as having several similar and symmetrical parts by *pluralia tantum*, but it does have words such as *stairs*, whose countability is at best very restricted (although there is a good deal of sociolectal and dialectal variation in this respect):

?Our staircase has 33 stairs (cf. *steps*).
?He was jumping four stairs at a time.
?He was standing on the top stair.

The fact that in English *stairs* are, or can be, thought of as a multiple object, to be described in the plural, whereas rakes or garden forks are not, suggests that English may be sensitive not to the 'multiple structure' *per se* but to the multiple structure IN A FIXED PLACE: the position of stairs within a building is normally fixed, and so is the position of the brains, guts, bowels or haemorrhoids within a person's body.

This hypothesis, which at first may seem far-fetched, is supported by the existence of other *pluralia tantum* referring to multiple objects fixed in place, such as *bleachers, ruins* or *catacombs*.

Emily was sitting in the bleachers beside her friend June.
?How many bleachers were there there?
John was bored with the ruins of Rome/with the catacombs.
?How many ruins/catacombs are there there?

It is also amply supported by data from the area of geographical and topographical concepts. In particular, the names of chains of mountains normally have in English a plural form and a plural verb agreement.

The Pyrenees run (?runs) between France and Spain.
The Apennines run (?runs) down the whole Italian Peninsula and extend into Sciliy.

This grammatical plurality reflects of course a conceptual plurality: the idea of a chain of many mountains. The grammatical non-countability reflects a

conceptual non-countability:

*The Pyrenees — all 79 of them — are situated between France and Spain.
*Thirteen of the Andes are higher than any of the Alps.

One cannot count the mountains within a chain for the same reason that one cannot count a person's brains, guts or bowels: one can only count separate objects, or what is thought of as separate objects. At the same time the internal plurality of a mountain chain is so striking that in many languages it finds its reflection in the habitual conceptualization and, consequently, in the grammatical form. (See Summary, 6 and 7.)

It is interesting to note that the names of political complexes such as the United States are less likely to be treated as plural nouns than the names of purely geographical complexes such as *the Alps, the New Hebrides* or *the Bahamas:*

The Bahamas are (?is) popular with tourists from all over the world.
The United States has/have the highest GNP per capita in the world.

A political complex — like a family (cf. Jespersen 1924:196) — can be conceptualized either as a group or as a unit:

My family is a large one.
My family are early risers, all five of them.

The 'plurality' of a group of people or of a group of states can be easily disregarded because a group of this kind can ACT as one unit. But a group of mountains or a group of islands cannot act, and therefore their perceptual plurality is much harder to disregard conceptually.

It might be objected that while the individual mountains in a chain are indeed joined together, the islands in a group of islands are physically separate, and their names should therefore be fully countable. It seems, however, that geographical entities such as the New Hebrides, the Bahamas or the British Isles are thought of as AREAS defined by groups of islands rather than as COLLECTIONS of islands. I don't want to claim that the waters between the different islands which are jointly called "the New Hebrides" are clearly included in the concept 'the New Hebrides', but I don't think that they are clearly excluded either. An expression such as *the New Hebrides* refers vaguely to the area occupied by the islands in question

without either explicitly including or excluding the waters between them.

It is also interesting to note in this connection that the word *island* itself is fully countable, whereas the word *mountains* can be used as either countable or uncountable. Thus, a continuous chain of mountains can be referred to not only by an uncountable plural proper name, such as *the Andes* or *the Pyrenees*, but also by the word *mountains* itself:

The mountains stretch right across the country, from the Atlantic Ocean in the West to the Mediterranean Sea in the East.
*How many mountains are there there?
We have a cabin in the mountains.
*How many mountains is your cabin in?

In fact, geographical and topographical words which refer to areas without clear boundaries can generally be used in the plural without any implication of countability, that is to say, they can occur in contexts where they could not co-occur with numerals:

John hated the plains (*all five of them).
Bill vividly remembered the marshes which stretched all along the border. *There were more than twenty of them.

Generally speaking, common nouns designating clearly discrete areas such as islands or ponds, are countable, and nouns designating areas which may or may not have clear boundaries, such as marshes or mountains, can be used as either countable or plural-uncountable. In some cases (for example, in the case of *mountains*) the uncountable use seems to be predominant. In the case of *woods*, in some dialects of English (e.g. in Australian English) the uncountable use has become lexicalized:

The woods were/*was beautiful.
The woods were beautiful, *both of them.

12. Leftovers (names of heterogeneous groups of objects and/or 'stuffs')

The existence of the semantic motivation of the *oats* class is also supported by the existence in English of another closely related class, which shares with the *oats* class both grammatical and semantic characteristics. This class includes words such as *leftovers, groceries, contents, remains, refreshments, goods, goodies, spoils, supplies* and *belongings*.

These words, like *oats*, have a plural form and a plural verb agreement.

*The grocery was in the kitchen.
*The groceries was in the kitchen.

and, like *oats*, cannot be counted:

*I bought three groceries (*one grocery).

They differ from the words in the *oats* class in being not only uncountable but also more or less unquantifiable:

The refreshments were served on the porch.
*I gave John half a kilo of refreshments.
The spoils were divided equally.
?John was given half a kilo of the spoils.
The goodies have arrived.
?John gave half a kilo of the goodies to Mary.

I would claim that there is a very good semantic reason why the nouns in the 'leftovers' class resist quantification: a word such as *oats* or *chives* refers to A KIND OF THING, i.e. to something qualitatively homogeneous, although materially heterogeneous (composed of separate particles); but a word such as *leftovers, goodies* or *refreshments* refers to DIFFERENT KINDS OF THINGS, i.e. to something that is qualitatively heterogeneous. If a number of different things are given jointly a common name (in the plural), such as *goodies, refreshments* or *leftovers*, it is not because they are qualitatively similar to one another, but because they are all in the same place, at the same time, and also because they are in that place at that time for the same reason. (See Summary, 9.)

For example, the expressions *odds-and-ends* and *bits-and-pieces* clearly refer to things of DIFFERENT KINDS, united primarily by happening to be together in the same place. The *contents* of a wardrobe may include things of different kinds, all these things of different kinds being united not by quality but, above all, by place (and time). Since, however, a mouse which has crept out of its hole would normally not be counted among the *contents* of a wardrobe, obviously the concept *contents* includes not only the unity of place but also, so to speak, the unity of origin: the contents of a bag or of a wardrobe include all the things which have been PUT there. In the case of *spoils*, the unity of both the place and the origin is obvious. *Groceries* include all sorts of edibles, kept jointly (e.g. in a shop) for sale, or kept jointly (e.g. in a string bag) because they have been put there to be carried home. Bill's *remains* are at least originally in the same place, and

come from the same source (Bill's body). The *leftovers* have clearly the same kind of origin (being 'left over'), and include things of different kinds 'left over' in the same household. *Goods* include things of different kinds kept together in one place for the same reason, for sale, or for use. *Supplies* include things of different kinds brought to one place so that people in that place can use them when they need them.

Or consider the word *dishes*, used as in the sentence:

Mary asked Bill to do the dishes.
*How many dishes did he do?

It is clear that the word *dishes* is not used in this sentence as a plural of the word *dish*, because *dishes* in the plural includes cups, saucers and even cutlery, i.e. things which taken individually can never be referred to as *a dish*. *Dishes* used as a *plurale tantum* refers to a heterogeneous collection of objects which are gathered together in one place after a meal and which have to be washed because they have been used in connection with a meal. The fact that these objects are in one place at one time is crucial. It is also crucial that the collection in question is 'bounded', i.e. that it is a GROUP, not a CLASS. One could not come to a store and say:

?I'd like to buy some dishes.

meaning cups, saucers, forks, and some other objects which come under *dishes* in the *plurale tantum* sense of the word. One can say, on the other hand:

I'd like to buy some crockery and some cutlery.

Similarly, one could come to a store and say:

I'd like to buy some bedlinen.

but not:

?I'd like to buy some covers.

if the word *covers* is used in the *plurale tantum* sense, as in the sentence:

John pulled the covers over his head.

The word *covers* in this sense refers to a heterogeneous set of things which are put jointly on a bed, for a person going to bed to cover himself with. Normally this set includes a sheet and some blankets, or an eiderdown and a sheet, or an eiderdown in a linen case and perhaps a rug on top of it. But whatever 'covers' one uses, they are always a set of objects rather than a

single object (a travel rug does not qualify as 'covers'), and a set whose components would not be counted because they are not objects of the same kind. Furthermore, *covers* in this sense are conceptually tied to one place (normally, a bed), just as *dishes* are tied to one place (normally, a kitchen), and they are clearly 'bounded' in quantity and in space.

To recapitulate, all the words in the class under discussion refer to things which are 'bounded', which are limited in quantity, and which belong to one place. No words in this class belong to open-ended categories of stuffs, or things. All the words in this class refer to GROUPS of things, to collections of items. However, the items in each such collection cannot be regarded as individual objects of the same kind which could be counted together because they are not all of the same kind, and also because each such collection, being defined only by place and origin, may include not only objects but also 'stuffs'. The words referring to such heterogeneous collections resist non-discrete quantification. Certainly, the contents of a bag or the spoils of a robbery could be weighed jointly, but the figures thus obtained would not be very meaningful, given the heterogeneity of what is weighed. (Who would want to share the spoils of a robbery, or the leftovers available for supper, on the basis of weight?)

Words such as *oats* or *chives* are fully quantifiable because each of them refers to just one kind of thing. But the grammatical features which they share with the words of the *leftovers* class can be fully explained in terms of shared semantic features: limited quantity, conspicuous plurality of components, and pointlessness of counting those components.

It should be added that the *leftovers* class (like the *oats* class), while limited in numbers, is not closed, and so the members of this class cannot be regarded as relics to be explained in historical rather than in synchronic terms. Some members of this class are clearly recent additions. *Goodies* is one case in point, *nuts-and-bolts* is another (an American word, referring to a combination of party snacks of different kinds served together on one plate).

13. Clothing versus clothes

Let us compare two classes of nouns:

A.	B.
clothing	clothes
furniture	goods

crockery	goodies
cutlery	refreshments
bedlinen	groceries
footwear	leftovers
underwear	odds-and-ends
lingerie	bits-and-pieces
jewellery	contents
ski-gear	remains
kitchenware	belongings
tableware	supplies
chinaware	trappings
earthenware	trimmings
fruit	spoils
equipment	valuables
etc.	etc.

Both classes contain uncountables: neither words like *clothing* nor words like *clothes* can co-occur with numerals, and neither type exhibits an opposition between singular and plural. The grammatical similarity between the two classes (in their grammatical uncountability) can be explained in terms of their semantic similarity: both contain nouns designating supercategories of the non-taxonomic type, i.e. nouns each of which refers to a variety of things, to a collection of things of different kinds, thought of as things of different kinds. But what about the grammatical DIFFERENCE between the two classes? Why are the nouns in the A class *singularia tantum* whereas those in the B class are *pluralia tantum?*

Let us consider the SEMANTIC differences between the two groups. A supercategory such as *cutlery, furniture* or *jewellery* groups things of different kinds, which, however, all have the same kind of purpose (roughly, 'to eat with' in the case of *cutlery,* 'to wear on one's body not to cover the body but to look nice' in the case of *jewellery,* 'to put in a place where people live to make this place good to live in' in the case of *furniture*). A supercategory such as *odds-and-ends, belongings* or *goods* groups things which don't necessarily have a common purpose: instead, they have a common place. Examples such as *odds-and-ends* or *bits-and-pieces* highlight the highly heterogeneous nature of supercategories based on place. To be sure, supercategories such as *furniture* or *cutlery* are heterogeneous too, but they have at least a unity of purpose, which the categories based on place lack.

We have seen earlier that the grammatical difference between *sin-*

gularia tantum and *pluralia tantum* is linked with 'boundedness'. 'Stuffs' designated by *singularia tantum* such as *water, grass* or *sand* are 'unbounded', unlimited in quantity and in space. 'Stuffs' designated by *pluralia tantum* such as *chives, curds, dregs* or *coffee-grounds* occur in limited quantities and can be regarded as bounded in place. Objects designated by *pluralia tantum*, such as *guts, haemorrhoids* or *stairs* are all 'bounded' in the sense that there is a definite, limited amount of them in any given skull, backside or building, and one cannot add to or subtract from them. The 'boundedness' of mountains, woods or bushes is self-evident.

I would suggest that *furniture* (a *singulare tantum*) differs in the same way from *contents, belongings* or *leftovers (pluralia tantum)*. No matter how much furniture (jewellery, cutlery etc.) one buys, sells or otherwise transfers from one place to another, it remains furniture (jewellery, cutlery etc.) But a room's or a bag's contents, John's belongings or the leftovers from the previous day in a particular household are necessarily limited, defined, not only in place but also in quantity. Significantly, the nouns in the B class do not easily co-occur with the indefinite determiner *some*: there is something odd about the expressions *?some contents, ?some remains, ?some spoils* or *?some belongings*.

?I pulled some covers over my head
?I washed some dishes.
?I brought some belongings with me.

(Of course, they can co-occur perfectly well with the expression *some of the*, which preserves their inherent definiteness: *some of the contents*, etc.) There is no such restriction on the nouns of the A class, which are all open-ended: *some furniture, some cutlery,* etc. (See Summary, 3 cf. 9.)

Singular uncountable supercategories such as *furniture* or *cutlery* differ from singular uncountable 'kinds' such as *butter* or *rice* in consisting of separate entities; but they are similar to singular uncountable 'kinds' in having fully transferrable (movable and removable) parts. Any part of any given portion of butter or meat can be moved or removed without the 'stuff' in question ceasing to be butter or meat; and any number of items of furniture or cutlery can be moved or removed without either the remaining or the transferred group ceasing to be furniture or cutlery. But parts of a bag's contents, or of the freshly bought groceries or of the refreshments served in a particular place at a particular time cannot be similarly transferred without losing their former conceptual status. For example, the eggs, sausages

and radishes which while in a shopping bag can be called jointly 'groceries', transferred to a refrigerator or to a cupboard quickly lose their status of groceries. (Things kept in a refrigerator are thought of as *food*, not as *groceries*.) Refreshments cannot be made into sandwiches and stored away without losing their status of 'refreshments'. And a bag's contents transferred to a drawer quickly cease to be thinkable of as 'the bag's contents'. Odds-and-ends, divided and regrouped, cease to be odds-and-ends; bits-and-pieces, divided and neatly rearranged, cease to be bits-and-pieces. Rings and watches, left together in an area where they can be easily stolen (or where they are, on the contrary, watched over), can be thought of jointly as 'valuables':

Don't leave valuables in this area!

But worn on one's body, in the usual places (the rings on the fingers and the watch on the wrist) they are no longer thought of as 'valuables':

?On Sunday, Mary wasn't wearing any valuables.

In fact, it appears that all the words of the B class designate temporary groupings — groupings of things of different kinds which happen to be in one place at one time (and for the same reason).

There is one further difference between the words of the B class (*pluralia tantum*) and those of the A class (*singularia tantum*). Class A groups categories whose members are physically separate from one another, and could therefore be counted together (if they could be brought conceptually to a common denominator). One cannot count furniture as 'furniture' because when chairs, tables and beds are described jointly as 'furniture' they are thought of jointly as things of different kinds. But if one explicitly establishes a new category: 'things of any kind which can be grouped together under *furniture*', then they can be counted together as 'pieces' or 'items' of furniture. On the other hand, members of the categories in the B class are not only heterogeneous but also not fully discrete. One couldn't count leftovers or goods, not even as 'pieces' or 'items' of leftovers or of goods, because leftovers may include soup, and goods may include butter, i.e. they don't have to consist of discrete objects. A question such as:

?How many items of leftovers/goods/supplies/refreshments are left?

is odd because it assumes that the category in question consists of separate

objects, whereas the uncountable-plural form of the noun implies a possible lack of discreteness. Supercategories designated by *singularia tantum* (*furniture, cutlery, crockery, footwear,* etc.) always imply discreteness.

What I am suggesting, then, is that the grammatical property *plurale tantum* (combined with grammatical uncountability) suggests that the referent is limited in quantity, 'bounded' in place, and not fully countable because the parts may not be truly separate; the grammatical property *singulare tantum* suggests that the referent is not limited in quantity or 'bounded' in place, and that its parts are fully transferrable (movable and removable).

Let us consider in this light the 'minimal pair' *clothing* versus *clothes*. In many contexts the two words can be used interchangeably without any obvious difference in meaning. In some contexts, however, either one or the other is clearly preferable. In general, when speaking of a big company producing or selling various things for people to wear, *clothing* is preferable to *clothes;* when speaking of what a person is wearing at any one time, *clothes* is preferable to *clothing*.

Johnny took his clothes (?clothing) off but couldn't put them (it) on.

During the depression, Myers switched from toys to clothing (?clothes) and made a fortune.

A collection of random pieces such as hats, socks, scarves and jumpers is more likely to be referred to as *clothing* than as *clothes;* a potential set, or a collection of potential sets, such as shirts and pants, or jumpers and skirts, is more likely to be referred to as *clothes*.

Both *clothing* and *clothes* refer to a variety of things which people can wear in various combinations. But *clothes* refers specifically to groups of things which could jointly 'clothe' one body, i.e. which could occur in the same place (on one person's body), at one time. *Clothing* can refer to any miscellaneous collection of items because it is not thought of in terms of groups of things to be used jointly, at the same time, on the same body. If you write to someone:

Please send me some clothes.

you will probably not be satisfied with scarves and hats. But if you say of a family with many children:

Send them some clothing.

you may well regard a gift of several scarves and hats as satisfying the request perfectly well.

As McCawley (1975:319) points out, discussing the sentence "Fred has more clothes than I do" (his 15): "If Fred's wardrobe consists of 2 pairs of shoes, 2 pairs of socks, 1 pair of swimming trunks, and 4 T-shirts, and mine consists of 1 pair of shoes, 1 pair of socks, 1 pair of levis, 2 shirts, and 1 jacket, it would be strange to say that Fred has more clothes than I do, even though Fred has 9 or 13 articles of clothing (depending on whether a pair of shoes counts as 1 or as 2 articles of clothing) but I have only 6 or 8. I conjecture that the reason for this is that Fred's 9 or 13 articles of clothing don't clothe him as fully as my 6 or 8 articles clothe me." I believe, however, that McCawley is wrong when he continues (1975:320): "in the above argument, specifically, in example (15), the noun involved was not *clothing* but *clothes*. I could just as well have used *clothing* instead of *clothes* in that argument, and nothing would have been any different."

McCawley implies that there is no difference in meaning (in conceptualization) between *clothing* and *clothes,* but I think that he is misled by his own examples. If instead of discussing Fred's wardrobe the sentences commented on the amount of *clothing* or *clothes* given by Fred to charitable institutions, the difference between the two concepts would have been clearer. If Fred gave to an orphanage hundreds of scarves, hats and pairs of socks we COULD say that Fred has given them a large amount of *clothing*, even though the clothing he gave wouldn't clothe anybody fully. We would be less likely to say, I think, that he has given a large amount of *clothes* to the orphanage.

The point which I am trying to make can be illustrated with the following sentence from Lisa Alther's novel *Original sins* (1981:78):

> My cousin LeRoy, he so dumb, Cap'n, dat when he rob dis clothing store, he put on de new clothes and leave his old ones in de store.

The store is repeatedly described as a *clothing store*, but the garments worn jointly by a person are repeatedly referred to as *clothes*. Throughout the book, the garments worn jointly by a person at any given moment are referred to as *clothes:* but a miscellaneous collection of garments to be marked with name tags is referred to as *clothing:*

> She went around the bedroom and picked up Jed's dirty clothes and the bath towels he'd dropped. (p.371)

> She pinned labels on everyone's remarks, like name tags on children's camp clothing. (p.402)

Thus, both the grammatical and the semantic contrast between *clothes* and *clothing* parallels exactly that between *dishes* and *crockery* or between *covers* and *bedlinen*. (See Summary, 3 and 9.)

14. Fruit versus vegetables

According to Ware (1979:22) the words *fruit* and *vegetables* "apply to things that for all accounts and purposes seem to be alike", and so the grammatical distinction between the two appears unnecessary and inexplicable. Hopefully, our discussion of the grammar of words for fruit and vegetables in Russian has already prepared the reader for the idea that this contrast may be less inexplicable than it seems, and in fact may have provided the necessary clues. To explain the rationale behind this contrast, however, it may be advisable to compare first the words of the *vegetables* class with some other nouns of the *fruit* class rather than with *fruit* itself, because *fruit* is not a very good example of the class to which it belongs. The class of which *fruit* is a (unorthodox) member groups nouns such as the following ones: *crockery, cutlery, furniture, jewellery, tableware, bedlinen,* and so on (see section 4). As has been pointed out earlier, each of these nouns designates a heterogeneous class of separate objects which could be used together for a similar purpose. Grammatically, these nouns are all *singularia tantum* and resist non-discrete, as well as discrete, quantification.

> ?John sells furnitures/crockeries/jewelleries.
> ?John sold 100kg of furniture/crockery/jewellery.

Fruit, while normally used in the same way as *furniture, crockery* or *jewellery*, is not a very 'good' example of this class because it can occasionally be used in the plural:

> Raymond reflected that he had drunk the milk of those cows, eaten the flesh almost his whole life. He'd eaten fruits and vegetables grown in that sticky red clay. (Alther 1981:278)

Thus, *fruit* seems to have a double grammatical status: sometimes it behaves like *crockery* or *furniture*, but sometimes it behaves like *vegetables*. I will try to explain this peculiarity of *fruit* later on, having first explored the conceptual and grammatical differences between the more orthodox mem-

bers of the two classes.

At first sight, *vegetables* seems to differ from *cutlery* or *furniture* as countables differ from mass nouns: first, it does exhibit a singular/ plural contrast, and second, it can co-occur with numerals:

Cabbage is the only vegetable I like.
Cabbage and spinach are the only two vegetables I like.
I like only three vegetables: cabbage, spinach and broccoli.
*They sell only two furnitures: beds and sofas.

I would argue, however, that although the word *vegetables* can co-occur with numerals, it is nonetheless a mass noun, of a sort, not a countable in the sense in which *books, shelves,* or even *apples* or *eggs* are countable. Expressions such as *three books, three shelves, three apples* or *three eggs,* refer to three OBJECTS; but the expression *three vegetables* does not refer to three objects, it refers to three kinds of 'stuffs'. It makes no difference in this respect whether or not the 'stuffs' in question are themselves designated by mass nouns or by more or less countable nouns:

I like only three vegetables: spinach, broccoli and celery.
I like only three vegetables: beans, peas and carrots.

Whatever the three vegetables in question are, the counting is done on kinds, not on objects. A sentence such as:

I had three vegetables for dinner.

cannot refer to one beetroot and two carrots, even though beetroots and carrots are discrete objects which in principle COULD be counted. They could be counted, but not as 'vegetables'.

Nouns such as *vegetables* differ from 'plural mass nouns' such as *groceries* or *leftovers* in not being obligatorily plural, and from 'singular mass nouns' such as *crockery* or *furniture* in not being obligatorily singular. They do have a singular/plural contrast, but they are still uncountable, because they designate arbitrarily divisible masses, such as spinach or broccoli, or because they designate objects whose discreteness can be ignored because they are seen as material for arbitrarily divisible masses, such as carrots or beetroots.

However, while carrots or beetroots can be chopped without losing their food value and can therefore be regarded as a 'foodstuff' comparable to spinach or broccoli rather than as a collection of discrete objects, perceptually they ARE discrete objects, not too big and not too small to be

handled individually and counted. Hence, understandably, carrots and beetroots, in contrast to spinach or broccoli, are designated by countable nouns (*carrots* and *beetroots*). But when carrots or beetroots are viewed under one heading with spinach or broccoli as 'foodstuffs', as 'vegetables', then their discreteness is ignored and their value as 'foodstuffs' comparable with non-discrete foodstuffs is emphasized. I would suggest that the word *vegetables* means, roughly: 'things of different kinds which are parts of things that people cause to grow out of the ground for food'. From this perspective, it doesn't matter any longer that to begin with carrots are discrete objects whereas spinach is from start to finish a 'stuff'. The cover-all term *vegetables* emphasizes a common origin and a common purpose, and ignores the physical and perceptual differences. (See Summary, 14.)

To see the validity of this interpretation, consider several other members of the *vegetables* class: *drugs, medicines, vitamins, herbs, spices, narcotics, cosmetics, chemicals, textiles, cereals, metals, minerals, spirits,* or *dyes*. Do, for example, cosmetics come in the form of discrete objects or in the form of arbitrarily divisible 'stuffs'? Both are possible: face creams come as 'stuffs', in their little jars, whereas lipstick usually comes in the form of discrete objects. But this difference doesn't matter, because from a functional point of view lipstick can be regarded as shapeless 'stuff'. (When one is wearing lipstick, one is not wearing it in the form of a discrete object.) Similarly, some medicines come as mixtures whereas others come in discrete form as tablets or pills. But this difference doesn't matter, because pills or tablets can be crushed before swallowing without losing their medicinal value and their conceptual status as 'medicines'. What matters in the case of cosmetics is that they are made by people and that they are made for applying to the surface of the body for the purpose of improving the appearance of the body; what matters in the case of medicines is that they are made by people and that they are made for introducing into the body for the purpose of improving a person's health.

Thus, words such as *vegetables, cosmetics* or *medicines* are similar to words such as *furniture, crockery* or *cutlery*, and also to words such as *groceries, leftovers* or *clothes*, in designating non-taxonomic super-categories: the 'class meaning' of each of these three classes includes the component 'things of different kinds'. This component makes the members of all these categories uncountable, because, as Frege (1884; see section 6 above) has made clear, things of different kinds thought of as things of different kinds cannot be counted. Among the three non-taxonomic

supercategories the *vegetables* class is even more 'mass-like' than the others, despite the fact that it is the only one among them whose members can co-occur with numerals:

*three footwear(s)/*three furniture(s)/*three clothing(s)
*three groceries/*three clothes/*three goods
three vegetables/three cereals/three narcotics

But the *furniture* class includes only nouns designating discrete, unchoppable objects; the *groceries* class includes both nouns designating choppable and nouns designating non-choppable things, i.e. words for 'stuffs' and words for discrete objects, and also words which can designate either discrete objects or 'stuffs'; *leftovers* can be chopped and still remain edible, but *clothes* normally can't be chopped and still remain wearable; the *vegetables* class includes only words designating 'stuffs' and choppable things.

Perhaps this is precisely the reason why words of the *vegetables* class can co-occur with numerals whereas neither words of the *furniture* class nor words for the *leftovers* class can. Objects of different kinds cannot be counted together (for reasons explained by Frege), but KINDS of objects, as well as kinds of 'stuffs', of course can:

John bought apples of three different kinds.
John bought wine of three different kinds.
John grows three different kinds of vegetables.

With mass nouns referring unambiguously to 'masses' (i.e. to arbitrarily divisible 'stuffs') the word *kinds* can be ellipsed without any danger of misunderstanding:

John bought three different wines.
John grows three different vegetables.

But in the case of nouns referring to objects the word *kinds* cannot be ellipsed:

*John bought three different apples (two Jonathans, three Golden Delicious and one Granny Smith).

I suggest that words such as *groceries* or *furniture* cannot co-occur with numerals for the following reason: since they do, or can, designate discrete objects, a numeral could be taken as implying that these objects can be counted together whereas in fact they can't. In contexts where it is absolutely clear that what is being discussed is kinds, not objects, even '*sin-*

gularia tantum' of the *furniture* class can occur in the plural (with varying degrees of stylistic felicity). For example, a scholarly book on kinds of earthenware (such as Hughes 1981) CAN use the plural *earthenwares*, for example in headings such as "Variegated earthenwares: marbled, agate and tortoiseshell", and perhaps could even use expressions such as *two totally different earthenwares*. Presumably, one could think up similar contexts for words of the *leftovers* class:

(?) They didn't want to specialize in any one kind of product: they were eager to produce as many different *goods* as possible.

Different KINDS can be counted, but OBJECTS of different kinds cannot; 'stuffs' of different kinds can be counted, but only in the sense of counting all the different KINDS of a given type of stuff. (See Summary, 14 cf. 3 and 9.)

It is time to return to *fruit* and to its grammatical peculiarities. After the foregoing discussion, the grammatical contrast between *vegetables* and *fruit* should be easy to understand. Vegetables are usually served, and eaten, cooked and chopped, as a shapeless mass, whereas fruit is normally served and eaten raw, in the form of discrete objects with a definite outline. It is perfectly logical, therefore, for vegetables to be classified, conceptually and grammatically, with heterogeneous classes of 'stuffs' and choppable things such as medicines, cosmetics or spices, and for fruit to be classified, conceptually and grammatically, with heterogeneous classes of discrete objects, such as furniture or crockery. The grammatical contrast between *fruit* and *vegetables* in English parallels the grammatical contrast between the names of different kinds of fruits and vegetables which we have found in Russian:

*Ja kupil 5 kilogram jablok/gruš/sliv/*jabloka/*gruši/*slivy.*
'I bought 5 kg of apples/pears/plums/*apple/*pear/*plum.'
*Ja kupil 5 kilogram kartoški/morkovki/svekly/*kartošek/ *morkovok/*svekol.*
'I bought 5 kg of potato/carrot/beetroot/*potatoes/*carrots/ *beetroots.'

In non-discrete quantification (for example, in weighing) words for apples, pears, plums and other medium-size fruits have to be treated as countables, but the words for medium-size vegetables such as potatoes, carrots or beetroots have to be treated as mass. This contrast makes no sense in terms of perceptual qualities of the denotata, but it makes perfect sense in terms of

their culinary status: raw versus cooked, whole versus chopped. (On the cultural importance of the raw/cooked contrast see Lévi-Strauss, 1969.) I suggest that the contrast between *fruit* (singular) and *vegetables* (plural) in English is another manifestation of the same conceptual difference, based on the difference in the culinary (and, more broadly, cultural) status.

We have noted, however, that while *fruit* differs from *vegetables* in being normally used as a *singulare tantum*, it differs from the other *singularia tantum* in being also able to be used in the plural:

> He'd eaten fruits and vegetables grown in that sticky red clay. (Alther 1981:278).
>
> *He'd cleaned and polished cutleries, furnitures and footwears.

Thus, *fruit* has a double grammatical status: it can behave like words designating collections of discrete objects and it can behave like the words designating 'stuffs'.

Is there any reason why fruit should be conceptualized as more discrete than vegetables and at the same time as more 'mass-like' than furniture, cutlery or footwear? Of course there is. In contrast to vegetables, fruit is normally handled in the form of whole, discrete objects; but in contrast to furniture or footwear, fruit is also choppable and gratable. In fact, in some languages, for example in French and Polish, fruit is treated grammatically in exactly the same way as vegetables, i.e. as a foodstuff:

> *Il est bon de manger les legumes et les fruits/*le fruit.*
> *Dobrze jest jesć jarzyny i owoce/*owoc.*
> 'It is good to eat vegetables and fruits/*fruit.'

English, too, allows this conceptualization of fruit as a 'foodstuff' on a par with vegetables, because it allows the plural *fruits*. But in contrast to French and Polish, it encourages also a different conceptualization of fruit, offering as an alternative — in fact, a preferred alternative — the *singulare tantum*, *fruit*.

15. Conclusions

(1) It emerges from the present study that the syntax of mass nouns in English is iconic to a degree previously undreamt of either by linguists or by philosophers who have written on the subject. Grammatical behaviour which has previously been regarded as idiosyncratic has been shown to be semantically motivated. The grammar of mass nouns reflects iconically

the way in which different classes of things and 'stuffs' are conceptualized. The apparent idiosyncrasies, far from being arbitrary, are revealing of subtle distinctions in the underlying conceptualizations. The relationship is iconic in the sense that the system of formal distinctions and the system of conceptual distinctions are mutually isomorphic. The fact that *oats* patterns grammatically just like *chives* does signal that the two are conceptualized in the same way; the fact that *scissors* shares some, but not all, of the grammatical properties of *oats* signals a partial overlap in conceptualization. WHICH grammatical property signals WHICH conceptual component is also something that can be predicted on a universal basis; for example, the form used in one grammatical context to signal a multiplicity of things is used in another context to signal a multiplicity of thing-like parts. Thus, similarity in form indicates a similarity in meaning (as a similarity between two or more physical maps indicates a similarity between the represented terrains.) The differences in the grammatical patterning between *oats* and *wheat*, between *rice* and *beans* or between *fruit* and *vegetables* provide clues to differences in the conceptualizations which without such clues may have never been discovered. ("For a great distinguishing property of the icon is that by the direct observation of it other truths concerning its object can be discovered than those which suffice to determine its construction", Peirce 1932:158.)

(2) Different classes of nouns, established on a purely formal basis, do each have a strictly definable 'class meaning'. For the broad class of mass nouns this 'class meaning' cannot be defined, without cheating, in terms of 'unboundedness' or arbitrary divisibility, but it can be defined in terms of uncountability, in the semantic sense of this word. Uncountability can be caused by a number of entirely different reasons, lack of discreteness, insigificance of individual items and conceptual heterogeneity being among the most important ones. One cannot count water because water does not come in the form of separate objects; one cannot count the soapsuds in a tub or the curds in a bowel of curds because there are no sharp boundaries separating one 'soapsud' from another or one 'curd' from another; and one cannot 'count' the hundreds-and-thousands in a packet or the hairs on a person's head because there are too many of them and because they are too insigificant individually for anyone to bother with; finally, one cannot 'count' crockery or furniture because crockery and furniture, while composed of fully separate objects, are conceived of as heterogeneous, and one can only count objects conceived of as being of the same kind.

(3) It has been shown that English has a number of different classes of categories conceived of as heterogeneous: the *furniture* class, the *groceries* class and the *vegetables* class. This result calls into question the widespread notion that human categorization, reflected in natural language, is by and large taxonomic, i.e. based on a hierarchy of 'kinds'. Concepts such as *furniture, groceries* or *vegetables* do not stand each for one kind of entities, they stand each for a collection of different kinds. (Cf. Wierzbicka 1985c.)

(4) *Oats* differs in meaning from *wheat* and *rice* differs in meaning from *beans* not only because each of these words designates a different species, but also because each of these words embodies a different conceptualization in terms of number. Adequate definitions of such words should include explicit components showing the type of conceptualization involved. This means that the 'class meaning' of different kinds of nouns which we have so far discussed only informally can be stated in formal semantic representations.

Formal semantic representations (explications) are hard to read, and linguists who have never attempted formal semantic analysis themselves often skip them over when they see them, lacking both the patience and the interest to read them. For this reason, I have put the explications of the different 'class meanings' in question at the end of this chapter. I think, however, that if linguists are prepared to be satisfied with informal discussion in semantics it is because they are not used to taking semantics seriously: they simply don't expect from semantics the methodological rigour or discipline which in syntax or phonology they would regard as indispensable. From my point of view, however, informal discussion is not enough, and formal semantic representation is essential. To me, the explications which have been relegated to the end, constitute the climax of the entire study.

Summary of class meanings

1. SINGULARIA ONLY — NAMES OF HOMOGENEOUS SUBSTANCES
   (*butter, wine, water,* etc.)

a kind of thing (X)
one doesn't think of it as separate things that one could count
but as something any part of which one could separate from the others
each such part remaining the same kind of thing

2. SINGULARIA ONLY — NAMES OF SUBSTANCES WITH A MINIMAL UNIT

(*rice, sand,* etc.)

a kind of thing
one doesn't think of it as separate things that one could count
but as something any part of which one could separate from the others
each such part remaining the same kind of thing

many separate things looking all the same are parts of it,
and nothing else is
but these separate parts are so small
and they are so close together
and there are so many of them
that one doesn't normally think of them as separate things
that one could count
when one thinks of these things as separate things that one could count
one thinks of them as the smallest parts of something
any part of which one could separate from the others
each such part remaining the same kind of thing

3. SINGULARIA ONLY — NAMES OF HETEROGENEOUS CLASSES OF OBJECTS

(*furniture, cutlery,* etc.)

things of different kinds
which one uses together in groups of things of different kinds
for the same kind of purpose

one thinks of them as separate things
but not as things that one could count together
because they are not of the same kind

4. SINGULARIA MOSTLY — NAMES OF LARGE COLLECTIONS OF SMALL THINGS, NORMALLY THOUGHT OF AS TOO MANY TO COUNT
(*hair, clover,* etc.)

a kind of thing (X)
one doesn't think of it as separate things that one could count
but as something any part of which one could separate from the others
    each such part remaining the same kind of thing

many separate things looking all the same are parts of it,
    and nothing else is
but these things are so small or so thin
and there are so many of them together in one place and they are so
    close together
that one doesn't think of them as separate things that one could count
when there aren't many of them in one place looking all the same
one can think of them as separate things that one could count
without thinking of them as the smallest parts of something
    any part of which one could separate from the others
    each such part remaining the same kind of thing

5. PLURALIA ONLY — NAMES OF SUBSTANCES COMPOSED OF PARTICLES, NOT TOO MANY FOR ANYONE TO BE ABLE TO COUNT BUT TOO MANY FOR ANYONE TO WANT TO COUNT
(*oats, curds, coffee-grounds,* etc.)

a kind of thing (X)
one doesn't think of it as separate things that one could count
but as something any part of which one could separate from the others
each such part remaining the same kind of thing

many separate things looking all the same are parts of it
but these things are small
and they are close together
and one couldn't or wouldn't want to separate them from one another
and one cannot think of them as separate things that one could count

6. PLURALIA ONLY — NAMES OF PLACES, STRETCHED OUT BUT WITHOUT CLEAR INTERNAL BOUNDARIES
(*plains, steppes, woodlands* etc.)

a kind of place (X), not made by people
one can see that it has many different parts
    not separated from one another
one doesn't think of these parts as separate places that one could count
because they are not separated from one another
and because one could separate any big enough part from the others
    each such part remaining the same kind of place

7. PLURALIA ONLY — NAMES OF MULTIPLE OBJECTS FIXED IN PLACE
(*stairs, catacombs, bleachers; bowels,* etc.)

a kind of thing (X) that one doesn't move from one place to another
one can see that it has many different parts joined together
one doesn't think of these parts as separate things that one could count
because they are joined together
one doesnt think of it as something
    parts of which one could separate from the others
    each such part remaining the same kind of thing

8. PLURALIA ONLY OCCURRING IN THE FRAME '*A PAIR OF* X' — NAMES OF DUAL OBJECTS
(*scissors, goggles,* etc.)

a kind of thing (X)
one thinks of them as separate things
which have two identical parts used together for the same purpose
one cannot think of these two parts as separate things
because they are joined together
and because separately one could not use them for this purpose
one can count things of this kind
but one counts the whole things, not those parts joined together

9. PLURALIA ONLY — NAMES OF GROUPS OF OBJECTS AND/OR 'STUFFS'
(*leftovers, groceries*, etc.)

things of different kinds
which are in the same place, for the same reason
one doesn't think of them as things that one could count together
because they are not of the same kind
and because some of them may not be separate things

10. PLURALIA MOSTLY — NAMES OF SMALL COLLECTIONS OF SMALL THINGS, POSSIBLE TO COUNT BUT NORMALLY NOT COUNTED
(*noodles, peas* etc.)

a kind of thing (X)
one doesn't think of it as separate things that one could count
but as something that many separate things are parts of
that one wouldn't want to count
and as something parts of which one could separate from the others
each such part remaining the same kind of thing
these things are small and one wouldn't want to count them
but one can think of them as separate things that one could count
without thinking of them as the smallest parts of something
any part of which one could separate from the others
each such part remaining the same kind of thing

11. COUNTABLES ONLY — NAMES OF NON-DIVISIBLE INDIVIDUAL OBJECTS
(*bottle, chair, book* etc.)

a kind of thing (X)
one thinks of them as separate things that one could count
one cannot think of them as something
any part of which one could separate from the others
each such part remaining the same kind of thing

12. COUNTABLES MOSTLY — NAMES OF DIVISIBLE (EDIBLE) INDIVIDUAL OBJECTS
(*apples, eggs,* etc.)

a kind of thing (X)
one thinks of it as separate edible things that one could count
when these things are divided into parts one thinks of them as something
any part of which one could separate from the others
each such part remaining the same kind of thing

13. NOUNS WITH A DOUBLE STATUS — NAMES OF SOLID SUBSTANCES WHICH CAN OCCUR IN THE FORM OF INDIVIDUAL OBJECTS
(*chocolate, cake,* etc.)

a kind of thing (X)
one doesn't think of it as something that one could count but as something
any part of which one could separate from the others
each such part remaining the same kind of thing
separate objects can be made of it that one could count

14. PSEUDO-COUNTABLES — NAMES OF HETEROGENEOUS CLASSES OF SUBSTANCES AND CHOPPABLE THINGS
(*vegetables, narcotics, cosmetics,* etc.)

things of different kinds
which people use for the same kind of purpose (X)
and which people come to have in the same kind of way (Y)
one doesn't think of them as separate things that one could count
but as something any part of which one could separate from the others
each such part remaining the same kind of thing

Conclusion

I have argued throughout this book that grammar — just like the lexicon — encodes meaning. It is not a system of rules for generating grammatical sentences; it is a system of rules for 'generating', and interpreting, meaningful utterances. The speakers' problem is not how to produce grammatical sentences, but how to say what they want to say; and how to understand what other people say.

To say what we want to say is a task which is not always easy to accomplish, and not only because we often can't think of the right word. ("I have forgotten the word I intended to say, and my thought, unembodied, returns to the realm of shadows", wrote Osip Mandelstam, quoted in Vygotsky, 1962:119.)

To continue with another quote from Vygotsky (1962:126), "Thought undergoes many changes as it turns into speech. It does not merely find expression in speech: it finds its reality and form." No doubt, this formative function of language is due partly to the semantic function of words: the words of a language offer the speaker a large set of pre-packaged semantic bundles, and to that extent they organize and influence thought. But what applies to the lexicon applies even more to grammar: the grammar of a language, too, offers the speakers pre-packaged semantic configurations, and in this way organizes and influences their thought.

The meanings encoded in the grammatical constructions of a language are of the same kind as those encoded in lexical items; in both cases we have to do with different configurations of the same conceptual primitives (cf. Žolkovskij 1964). In a sense, however, the meanings encoded in grammar are 'privileged' (cf. Mel'čuk In press, chap. 5), if only because their number is smaller and the choices in this area are more limited than in the area of the lexicon.

Boas (cf. Jakobson 1959) believed that the grammar of a language determines what the speakers of a language HAVE to say, in addition to what they want to say. In my view this is an exaggeration, because there is

usually a way around the constraints of the obligatory grammatical categories, such as, for example, number or aspect (cf. Wierzbicka 1980a, chap. 2). Moreover, I think that the optional grammatical categories a language offers, such as for example the various diminutive categories in Slavic languages, shape and organize the speaker's thought as much as the obligatory ones do (cf. Wierzbicka 1985d). But the idea that grammar encodes meanings, and that, moreover, it provides a network of PRIVILEGED meanings, seems to me indubitable.

It seems also indubitable that while certain semantic configurations encoded in grammar are rare and possibly unique, certain others are widespread and possibly universal.

But to be able to investigate, describe and compare meanings encoded in the grammar of different languages we need a language-independent framework; in other words, we need a suitable semantic metalanguage. *Ad hoc* arbitrary labels will not do; and neither will concepts developed in some other disciplines, for some other purposes (such as those employed in symbolic logic, or in artificial intelligence). A suitable semantic metalanguage must be developed by linguists, on the basis of the study of natural languages. It must not be ethnocentric — and Euro-centric — based on the concepts encoded in English, or in Latin, or in Western logic, or in the British or American philosophy of language. Rather, it must be based on concepts which recur, in a recognizable form, throughout the languages of the world. I contend that concepts such as 'want', 'say', 'know', 'someone', 'something', 'this', 'you' and 'I', are of this kind; and that other universal 'semantic primitives' can be tentatively identified, and tested by trying to apply them to explicate meanings in different languages, and that they can thus be verified, modified or discarded as necessary.

The semantic configurations encoded in the grammar of different languages can be meaninfully compared only if we can develop a reliable, language-independent 'alphabet of human thoughts', Leibniz's "*alphabetum cogitationum humanarum*" (cf. Couturat 1903:436). The elements of this alphabet should be the ultimate units of our semantic analysis, which cannot be further explained. They must be, therefore, intuitively intelligible — for "*si nihil per se concipitur nihil omnino concipietur*" (if nothing is intelligible in itself nothing at all could ever be understood).

BIBLIOTHÈQUE
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Bibliography

Abraham, Werner. 1973. *The ethic dative in German*. In: Kiefer and Ruwet 1973:1-19.

Alfonso, Anthony. 1966. *Japanese language patterns: A structural approach*. Tokyo: Sophia University.

Alfonso, Anthony. 1971. "On the 'adversative' passive in Japanese". *Association of Teachers of Japanese, Journal-Newsletter* 8.

Allan, Keith. 1980. "Nouns and countability". *Language* 56.3:541-567.

Alther, Lisa. 1981. *Original sins*. Harmondsworth: Penguin Books.

Ameka, Felix. 1986. The use and meaning of selected particles in Ewe. M.A. thesis, Australian National University.

Ameka, Felix. 1987. "A comparative analysis of linguistic routines in two languages: English and Ewe". *Journal of Pragmatics* 2.3.

Ameka, Felix. In press. "'*Agoo* can be English', can it? On the semantic representation of linguistic routines". In: Wilkins, ed. In press.

Anderson, Stephen. 1971. "On the role of deep structure in semantic interpretation". *Foundations of Language* 7:387-396.

Apresjan, Jurij D. 1967. *Eksperimental'noe issledovanie semantiki russkogo glagola*. Moscow: Nauka.

Apresjan, Jurij D. 1974. *Leksičeskaja semantika*. Moscow: Nauka.

Apresjan, Jurij D. 1980. *Tipy informacii dlja poverxnostno-semantičeskogo komponenta modeli smysl-tekst*. Vienna: Wiener Slawistischer Almanach (Sonderband 1.)

Araujo, Frank. 1975. "Counting sheep in Basque". *Anthropological Linguistics* 17.3:139-145.

Austin, Peter. 1981. *A grammar of Diyari*. Cambridge: Cambridge University Press.

Bach, Emmon. 1968. "Nouns and noun phrases". In: Bach and Harms 1968:90-122.

Bach, Emmon and Robert T. Harms. eds. 1968. *Universals in linguistic theory*. New York: Holt, Rinehart and Winston.

Bally, Charles. 1909. *Traité de stylistique française*. Heidelberg and Paris. (3rd ed. Geneva: Librairie George, 1951.)

Bally, Charles. 1920. "Impressionisme et grammaire". In: *Mélanges* 1920:261-279.

Bally, Charles. 1922. "La pensée et la langue". *Bulletin de la Société de Linguistique de Paris* 23.3:117-137.

Bally, Charles. 1926. "L'Expression des idées de sphère personelle et de solidarité dans les langues indo-européennes". In: Fankhauser and Jud 1926:68-78.

Barnlund, Dean. 1975. "Communicative styles in two cultures: Japan and the United States". In: Kendon, Harris and Key 1975:427-456.

Bavin, Edith and Timothy Shopen. 1983. Warlpiri children's comprehension of discontinuous word order. Unpublished manuscript, La Trobe University and Australian National University.

Bierwisch, Manfred. 1970. "Semantics". In: Lyons 1970:166-184.

Bierwisch, Manfred and K.E. Heidolph. 1970. *Progress in linguistics*. The Hague: Mouton. (Janua linguarum, Series maior, 43.)

Birnbaum, Henrik. 1986. "Gesamtbedeutung — a reality of language or a linguistic construct?" *Scando-Slavica* 32:139-159.

Blake, Barry. 1977. *Case marking in Australian languages*. Canberra: Australian Institute of Aboriginal Studies. (Linguistic series, 23.)

Bloomfield, Leonard. 1933. *Language*. London: George Allen & Unwin.

Blount, Ben. 1984. "The language of emotions: an ontogenetic perspective". *Language Sciences* 6.1:129-156.

Bogusławski, Andrzej. 1966. *Semantyczne pojęcie liczebnika*. Wrocław: Ossolineum.

Bogusławski, Andrzej. 1970. "On semantic primitives and meaningfulness". In: Greimas, Jakobson and Mayenowa 1970:143-152.

Bogusławski, Andrzej. 1972. "O wyrażeniach oznaczających zmianę". In: Wierzbicka, ed. 1972:147-149.

Bogusławski, Andrzej. 1975. "On 'the world'". *Linguistica Silesiana* 1:63-70.

Bogusławski, Andrzej. 1977. *Problems of the thematic-rhematic structure of sentences*. Warsaw: Państwowe Wydawnictwo Naukowe.

Bogusławski, Andrzej. 1979. "Wissen, Wahrheit, Glauben: zur semantischen Beschaffenheit des kognitiven Vocabulars". In: Bungarten 1979:54-84.

Bogusławski, Andrzej. In press. "Know that". *Quaderni di Semantica*.

Bogusławski, Andrzej and Stanisław Karolak. 1970. *Gramatyka rosyjska w ujęciu funkcjonalnym*. Warsaw: Wiedza Powszechna.

Bolinger, Dwight L. 1967. "Adjectives in English". *Lingua* 18:1-34.

Bolinger, Dwight L. 1968. "Entailment and the meaning of structures". *Glossa* 2.2:119-127.

Bolinger, Dwight L. 1972. *That's that*. The Hague: Mouton.

Bolinger, Dwight L. 1977. *Meaning and form*. London: Longman.

Bolinger, Dwight L. 1984. "Surprise". In: Raphael, Raphael and Valdovinos 1984:45-58.

Borgert, Udo H.G. and C.A. Nyhan. 1976. *A German reference grammar*. Sydney: Sydney University Press.

Borkin, Ann. 1973. *To be* and not *to be*. *Chicago Linguistic Society, Papers* 9:44-56.

Brecht, Richard D. 1974. "Tense and infinitive complements in Russian, Latin, and English". In: Brecht and Chvany 1974:193-218.

Brecht, Richard D. and C.V. Chvany, eds. 1974. *Slavic transformational syntax*. Ann Arbor: University of Michigan Press.

Brecht, Richard D. and James S. Levine, eds. 1986. *Case in Slavic*. Columbus, OH: Slavica Publishers.

Bresnan, Joan W. 1979. *Theory of complementation in English syntax*. New York/London: Garland.

Bresnan, Joan W. 1982. "Control and complementation". In: Bresnan, ed. 1982:282-390.

Bresnan, Joan W. ed. 1982. *The mental representation of grammatical relations*. Cambridge, MA: M.I.T. Press.

Brunot, Ferdinand. 1953. *La pensée et la langue*. 3rd ed. Paris: Masson.

Brzechwa, Jan. 1964. *Przygoda króla jegomości*. Warsaw: Ruch.

Bungarten, Th. ed. 1979. *Wissenschaftssprache*. Munich: Finck Verlag.

Bunt, H.C. 1979. "Ensembles and the formal semantic properties of mass terms". In: Pelletier, ed. 1979:249-277.

Bystrov, I.S. and N.V. Stankevič. 1974. "K voprosu o passive i passivnyx konstrukcijax vo v'etnamskom jazyke". In: Xolodovič 1974:113-119.

Carlyle, Alexander ed. 1908. *The love letters of Thomas Carlyle and Jane Welsh*. 2 vols. London: John Lane.

Carroll, Lewis. 1960. *The annotated Alice: Alice's adventures in Wonderland and Through the looking glass*, intr. and notes by Martin Gardner. New York: Bramhall House.

Caton, Charles E. ed. 1963. *Philosophy and ordinary language*. Urbana:

University of Illinois Press.
Cattell, Ray. 1977. Body surface, movement and direction. Unpublished manuscript.
Cattell, Ray. 1980. Some composite semantic predicates in English. Mimeo.
Cattell, Ray. 1984. *Syntax and semantics, 17: Composite predicates in English*. Sydney/New York: Academic Press.
Chappell, Hilary M. 1978. Semantics of some causatives in Chinese and English. B.A. Honours thesis, Australian National University.
Chappell, Hilary M. 1980. "Is the *get*-passive adversative?" *Papers in Linguistics* 13.3:411-452.
Chappell, Hilary M. 1983. A semantic analysis of passive, causative and dative constructions in Standard Chinese. Ph.D. thesis, Australian National University.
Chappell, Hilary M. 1986a. "Formal and colloquial adversity passives in standard Chinese". *Linguistics* 24.6:1025-1052.
Chappell, Hilary M. 1986b. "The passive of bodily effect in Chinese". *Studies in Language* 10.2:271-283.
Chappell, Hilary M. In press. *Meaning and syntactic form in Chinese*. London/Sydney: Croom Helm.
Chau, Nguyen Thanh. 1979. Regular polysemy of nouns in Vietnamese. M.A. thesis, Australian National University.
Cole, Peter and Jerry L. Morgan, eds. 1975. *Syntax and semantics 3: Speech acts*. New York: Academic Press.
Comrie, Bernard. 1974. "Causatives in universal grammar". *Philological Society, Transactions* 1974:1-32.
Comrie, Bernard. 1975. "Subjects and direct objects in Uralic languages: a functional explanation of case-marking systems". *Études finno-ougriennes* 12:5-17.
Comrie, Bernard. 1978. "Genitive-accusative in Slavic: the rules and their motivation". *International Review of Slavic Linguistics* 3.1:27-43.
Comrie, Bernard. 1981. *Language universals and linguistic typology*. Oxford: Blackwell.
Comrie, Bernard. 1985. "Causative verb formation and other verb-deriving morphology". In: Shopen 1985, 3:309-348.
Comrie, Bernard and Gerald Stone. 1978. *The Russian language since the revolution*. Oxford: Clarendon Press.
Conrad, Bengt. 1982. *Referring and non-referring phrases: A study in the use*

of the gerund and the infinitive. Copenhagen: University of Copenhagen.
Couturat, Louis. 1903. *Opuscules et fragments inédits de Leibniz*. Paris. (Reprinted, Hildesheim: Olms, 1961.)
Cowan, William and Jaromira Rakušan. 1985. *Source book for linguistics*. Amsterdam: John Benjamins.
Craig, Colette ed. 1986. *Noun classes and categorization*. Amsterdam: John Benjamins. (Typological Studies in Language, 7.)
Crowley, Terry. 1979. The language of Paama (New Hebrides). Ph.D. thesis, Australian National University.
Davidson, Donald and Gilbert Harman, eds. 1972. *The semantics of natural language*. Dordrecht: Reidel.
Decaux, Etienne. 1966. *Petite grammaire polonaise*. Paris: Centre de documentation universitaire.
Delange, René. 1948. *La vie de Saint-Exupéry*. Paris: Editions du Seuil.
Delbrück, Berthold. 1893. *Vergleichende Syntax der Indogermanischen Sprachen*, vol. 1. Strassburg: Karl Trübner. (Photo-reproduced, Berlin: Walter de Gruyter, 1967.)
Dench, Alan. 1982. "Kin terms and pronouns of the Panyjima language of Northwest Western Australia". *Anthropological Forum* 5.1:105-120.
Dench, Alan. 1987. "Kinship and collective activity in the Ngayarda languages of Australia". *Language in Society* 16.3:321-340.
Denny, Peter. 1976. "What are noun classifiers good for?" *Chicago Linguistic Society, Papers* 12:122-132.
Dixon, Robert M.W. 1976. "Syntactic orientation as a semantic property". In: McCawley 1976:347-362. (Reprinted in Dixon 1982b:141-155.)
Dixon, Robert M.W. ed. 1976. *Grammatical categories in Australian languages*. Canberra: Australian Institute of Aboriginal Studies.
Dixon, Robert M.W. 1977. "Where have all the adjectives gone?" *Studies in Language* 1:19-80. (Reprinted in Dixon 1982b:1-62).
Dixon, Robert M.W. 1979. "Ergativity". *Language* 55.1:59-138.
Dixon, Robert M.W. 1980. *The languages of Australia*. Cambridge: Cambridge University Press.
Dixon, Robert M.W. 1982a. "Noun classifiers and noun classes". In: Dixon 1982b:211-233.
Dixon, Robert M.W. 1982b. *Where have all the adjectives gone? and other essays in syntax and semantics*. The Hague: Mouton. (Janua linguarum, Series maior, 107.)
Dixon, Robert M.W. 1984a. *Searching for Aboriginal languages*. St. Lucia:

University of Queensland Press.
Dixon, Robert M.W. 1984b. "The semantic basis of syntactic properties". *Berkeley Linguistics Society, Proceedings* 10:583-595.
Donaldson, Tamsin. 1980. *Ngiyambaa: The language of the Wangaaybuwan*. Cambridge: Cambridge University Press.
Doroszewski, Witold. 1963. *Podstawy gramatyki polskiej*. Warsaw: Państowe Wydawnictwo Naukowe.
Dowty, David. 1979. *Word meaning and Montague grammar*. Dordrecht: Reidel.
Durie, Mark and David P. Wilkins. 1980. Syntax and semantics of *say/tell* verbs. Mimeo, Australian National University.
Eather, Bronwyn. 1977. Regular polysemy of nouns in English. B.A. Honours thesis, Australian National University.
Emonds, Joseph E. 1976. *A transformational approach to English syntax*. New York: Academic Press.
Emonds, Joseph E. 1985. *A unified theory of syntactic categories*. Dordrecht: Foris.
Eršov, A.P. ed. 1987. *Voprosy kibernetiki*. Moscow: Nauka.
Evans, Nicholas. In press. "On the unimportance of 'cause' in Kayardild". In: Wilkins, ed. In press.
Fankhauser, F. and J. Jud, eds. 1926. *Festschrift Louis Gauchat.* Aarau: Sauerländer.
Fillmore, Charles. 1968. "The case for case". In: Bach and Harms 1968:1-88.
Foley, William A. and Robert D. Van Valin, Jr. 1977. "On the viability of the notion of 'subject' in universal grammar". *Berkeley Linguistics Society, Proceedings* 3:293-320.
Foley, William A. and R.D. Van Valin, Jr. 1984. *Functional syntax and universal grammar*. Cambridge: Cambridge University Press. (Cambridge Studies in Linguistics, 38.)
Freed, Alice F. 1979. *The semantics of English aspectual complementation*. Dordrecht: Reidel. (Synthese language library, 8).
Frege, Gottlob. 1884/1959. *The foundations of arithmetic*. Translated by J.L. Austin. Oxford: Blackwell.
Friedrich, Paul. 1970. "Shape in grammar". *Language* 46.2:379-407.
Fujimura, Osamu ed. 1973. *Three dimensions of linguistic theory*. Tokyo: TEC.
Galkina-Fedoruk, E. 1958. *Bezličnye predloženija v sovremennom russkom*

jazyke. Moscow: Moscow University Press.
García, Erica. 1975. *The role of theory in linguistic analysis: The Spanish pronoun system*. Amsterdam: North-Holland. (North-Holland Linguistic Series, 19.)
Ginzburg, Natalia. 1976. *Ti ho sposato per allegria: e altre commedie*. Turin: Einaudi.
Girke, Wolfgang and Helmut Jachnow, eds. 1976. *Theoretische Linguistik in Osteuropa*. Tübingen: Niemeyer.
Givón, T. 1971. "On the verbal origin of the Bantu verb suffixes". *Studies in African Linguistics* 2.2:145-163.
Givón, T. 1975. "Cause and control: on the semantics of interpersonal manipulation". In: Kimball 1975:59-89.
Givón, T. 1979. *On understanding grammar*. New York: Academic Press.
Givón, T. 1984a. "Direct object and dative shifting: semantic and pragmatic case". In: Plank 1984:151-182.
Givón, T. 1984b. *Syntax: A functional-typological introduction*, vol. 1. Amsterdam: John Benjamins.
Givón, T. In press. *Mind, code and context: Essays in pragmatics*, chap. 9: Language, culture and translation.
Gleason, Henry A. 1969. *An introduction to descriptive linguistics*. New York: Holt, Rinehart and Winston.
Goddard, Cliff. 1979. "Particles and illocutionary semantics". *Papers in Linguistics* 12.1:185-229.
Goddard, Cliff. 1982. "Case systems and case markers in Australian languages". *Australian Journal of Linguistics* 2.1:167-196.
Goddard, Cliff. 1983. *A semantically oriented grammar of Yankunytjatjara*. Alice Springs: Institute for Aboriginal Development.
Goddard, Cliff. In press. "Issues in natural semantic metalanguage". *Quaderni di semantica*.
Goldschmidt, Walter ed. 1959. *The anthropology of Franz Boas. Essays on the centennial of his birth*. San Francisco: Chandler. (American Anthropological Association, 61.5 pt.2, Memoir 89.)
Gorbačevič, K.S. 1971. *Izmenenie norm russkogo literaturnogo jazyka*. Leningrad: Prosveščenie.
Graudina, L.K. 1964a. "O nulevoj forme roditel'nogo množestvennogo u suščestvitel'nyx mužskogo roda". In: Mučnik and Panov 1964:181-209.
Graudina, L.K. 1964b. "Razvitie nulevoj formy roditel'nogo množestvennogo u suščestvitel'nyx-edinic izmerenija". In: Mučnik and Panov

1964:210-221.
Green, Georgia. 1974. *Semantics and syntactic regularity*. Bloomington: Indiana University Press.
Greenberg, Joseph H. ed. 1966. *Universals of language*. 2nd ed. Cambridge, MA: M.I.T. Press.
Greenberg, Joseph H. ed. 1978. *Universals of human language*. 4 vols. Stanford, CA: Stanford University Press.
Greimas, A.J., Roman Jakobson and M.R. Mayenowa, eds. 1970. *Sign, language, culture*. The Hague: Mouton. (Janua linguarum, Series maior, 1.)
Grice, H. Paul. 1975. "Logic and conversation". In: Cole and Morgan 1975:41-58.
Gunderson, Keith. ed. 1975. *Minnesota studies in the philosophy of science*, vol. 7. Minneapolis: University of Minnesota Press.
Hadlich, Roger. 1971. *A transformational grammar of Spanish*. Englewood Cliffs, NJ: Prentice-Hall.
Haiman, John. 1985. *Natural syntax: Iconicity and erosion*. Cambridge: Cambridge University Press. (Cambridge Studies in Linguistics, 44.)
Haiman, John. ed. 1985. *Iconicity in syntax*. Amsterdam: John Benjamins.
Hale, Kenneth L. 1966. "Kinship reflections in syntax: some Australian languages". *Word* 22.1:318-324.
Hale, Kenneth L. 1983. "Warlpiri and the grammar of non-configurational languages". *Natural Language and Linguistic Theory* 1.1:1-47.
Harkins, Jean. 1986. "Semantics and the language learner: Warlpiri particles". *Journal of Pragmatics* 10.5:559-574.
Harris, Zellig. 1969. *The two systems of grammar: Report and paraphrase*. Philadelphia: University of Pennsylvania. (Transformational and discourse analysis papers, 79.) (Reprinted in his *Papers in structural and transformational linguistics*. Dordrecht: Reidel, 1970:612-692.)
Hatcher, Anna G. 1944. "Il me prend le bras *vs.* il prend mon bras". *Romanic Review* 35.2:156-164.
Havers, Wilhelm 1911. *Untersuchungen zur Kasussyntax der indogermanischen Sprachen*. Strassburg: Karl J. Trübner.
Havers, Wilhelm. 1931. *Handbuch der erklärenden Syntax*. Heidelberg: C. Winters.
Hayakawa, Samuel I. 1974. *Language in thought and action*. London: George Allen & Unwin.
Heath, Jeffrey, Francesca Merlan and Alan Rumsey, eds. 1982. *Languages*

of kinship in Aboriginal Australia. Sydney: Oceania. (Oceania Linguistic Monographs, 24).
Hemingway, Ernest. 1952. *The old man and the sea.* New York: Scribner.
Hewson, John. 1972. *Article and noun in English*. The Hague: Mouton. (Janua linguarum, Series practica, 104).
Hirtle, Walter H. 1982. *Number and inner space: A study of grammatical number in English*. Québec: Université Laval. (Cahiers du psychomécanique du langage.)
Hooper, Joan B. 1975. "On assertive predicates". In: Kimball 1975:91-124.
Hopper, Paul and Sandra Thompson. 1980. "Transitivity in grammar and discourse". *Language* 56.2:251-299.
Hopper, Paul and Sandra Thompson, eds. 1982. *Syntax and semantics 15: Studies in transitivity*. New York: Academic Press.
Howard, Irwin. 1969. "A semantic-syntactic analysis of the Japanese passive". *Association of Teachers of Japanese, Journal-Newsletter* 6.1:40-46.
Huddleston, Rodney. 1975. "Homonymy in the English verbal paradigm". *Lingua* 37:151-176.
Hughes, G. Bernard. 1981. *English and Scottish earthenware 1660-1800.* London: Abbey Fine Arts.
Humboldt, Wilhelm von. 1963. *Schriften zur Sprachphilosophie. Werke in fünf Banden,* vol.3. Stuttgart: J.G. Cotta.
Hyman, Larry and Karl Zimmer. 1976. "Embedded topic in French". In: Li 1976:189-211.
Hymes, Dell H. 1961. "On typology of cognitive styles in language (with examples from Chinookan)". *Anthropological Linguistics* 3.1:22-54.
Hymes, Dell H. ed. 1964. *Language in culture and society*. New York: Harper & Row.
Hymes, Dell H. ed. with W. Bittle. 1967. *Studies in Southwestern ethnolinguistics*. The Hague: Mouton.
Inoue, Kyoko. 1974. "Experiencer". *Descriptive and Applied Linguistics* 7:139-162.
Inoue, Kazuko. 1976. *Henkei-bunpoo to Nihon-go*. [Transformational grammar and Japanese]. Tokyo: Taishuu-kan.
Isačenko, A. von. 1965. "Das syntaktische Verhältnis der Beziehungen von Körperteilen im Deutschen". *Studia Grammatica* 5:7-27.
Iwamoto, Enoch. 1987. Syntax and semantics of Japanese causative constructions. Unpublished manuscript, Australian National University.
Jacobs, Roderick and Peter Rosenbaum. eds. 1970. *Readings in English*

transformational grammar. Cambridge, MA: M.I.T. Press.
Jacobsen, Wesley. 1985. "Morphosyntactic transitivity and semantic markedness". *Chicago Linguistic Society, Papers* 21 (Parasession on causatives and agentivity): 89-104.
Jakobson, Roman. 1936/1971. "Beitrag zur allgemeinen Kasuslehre". In his *Selected Writings*, vol. 2:23-71. The Hague: Mouton.
Jakobson, Roman. 1957. "The relationship between genitive and plural in the declension of Russian nouns". *Scando-Slavica* 3:181-186. (Reprinted in Jakobson 1971:148-153.)
Jakobson, Roman. 1958/1971. "Morfologičeskie nabljudenija nad slavjanskim sklonenieм". In his *Selected Writings*, vol. 2:154-183. The Hague: Mouton.
Jakobson, Roman. 1959. "Boas' view of grammatical meaning". In: Goldschmidt 1959:139-145. (Reprinted in Jakobson 1971:489-496.)
Jakobson, Roman. 1971. *Selected Writings*, vol. 2: Word and language. The Hague: Mouton.
Jespersen, Otto. 1909-42. (MEG). *A modern English grammar on historical principles*. 6 vols. London: George Allen & Unwin.
Jespersen, Otto. 1924. *The philosophy of grammar*. London: George Allen & Unwin.
Judge, Anne and F.G. Healey. 1983. *A reference grammar of modern French*. London: Edward Arnold.
Kachru, Yamuna. 1976. "On the semantics of the causative construction in Hindi-Urdu". In: Shibatani, ed. 1976:353-369.
Kacnel'son, Salomon. 1972. *Tipologija jazyka i rečevoe myšlenie*. Leningrad: Nauka. (German translation by Hans Zikmund, *Sprachtypologie und Sprachdenken*. Munich: Max Hueber.)
Karttunen, Lauri. 1971. "Some observations on factivity". *Papers in Linguistics* 4.1:55-70.
Kayne, Richard S. 1975. *French syntax: The transformational cycle*. Cambridge, MA: M.I.T. Press.
Kendon, Adam, Richard Harris and Mary R. Key. eds. 1975. *Organization of behaviour in face-to-face interaction*. The Hague: Mouton.
Kibrik, A.E. 1979-80. *Materialy k tipologii ergativnosti*. Moscow: Institut Russkogo Jazyka AN SSSR.
Kiefer, Ferenc and Nicolas Ruwet, eds. 1973. *Generative grammar in Europe*. Dordrecht: Reidel.
Kimball, John, P. ed. 1975. *Syntax and semantics, 4*. New York: Academic

Press.
Kiparsky, Paul and Carol Kiparsky. 1971. "Fact". In: Steinberg and Jakobovits 1971:345-369. (First published in Bierwisch and Heidolph 1970:143-173.)
Kirsner, Robert S. 1985. "Iconicity and grammatical meaning". In: Haiman, ed. 1985:249-270.
Kirsner, Robert S. and S.A. Thompson. 1976. "The role of pragmatic inference in semantics: a study of sensory verb complements in English". *Glossa* 10.2:200-240.
Kitagawa, Chisato. 1974. "Case marking and causativization". *Papers in Japanese Linguistics* 3:43-57.
Klein, P.W. 1977. "Semantic factors in Spanish mood". *Glossa* 11.1:3-19.
Konopnicka, Maria. 1979. *Opowiadania*. Warsaw: Czytelnik.
Korzybski, Alfred. 1933. *Science and sanity*. Lancaster, PA: Science Press.
Köpcke, Klaus-Michael. 1987. Schemas in German plural formation. Typescript, University of Hannover.
Krahe, H. 1972. *Grundzüge der vergleichenden syntax der indogermanischen Sprachen*. Innsbruck: University of Innsbruck. (Innsbrucker Beitrage zur Sprachwissenschaft, 8.)
Kruisinga, E. 1932. *A handbook of present-day English*, part 2. 3 vols. 5th ed. Groningen: Noordhoff.
Kufner, Herbert L. 1962. *The grammatical structures of English and German: A contrastive sketch*. Chicago: University of Chicago Press.
Kuno, Susumu. 1973. *The structure of the Japanese language*. Cambridge, MA: M.I.T. Press.
Kuryłowicz, Jerzy. 1936. "Dérivation lexicale et dérivation syntaxique". *Bulletin de la Société de Linguistique de Paris* 37.2:79-92. (Reprinted in *Esquisses Syntaxiques*. Wrocław/Warsaw: Ossolineum, 1959:41-50.)
Kuznecov, P.S. 1953. *Istoričeskaja grammatika russkogo jazyka*. Moscow: Moscow University Press.
Kuznecov, P.S. 1959. *Očerki istoričeskoj morfologii russkogo jazyka*. Moscow: Nauka.
Lafitte, Pierre. 1962. *Grammaire basque (Navarro-labourdin littéraire)*. rev. ed. Bayonne: Editions des Amis du Musée basque.
Lakoff, George. 1987. *Women, fire and dangerous things*. Chicago: Chicago University Press.
Lakoff, Robin. 1968. *Abstract syntax and Latin complementation*. Cambridge, MA: M.I.T. Press.

Langacker, Ronald W. 1968. "Observations on French possessives". *Language* 44.1:51-75.
Langacker, Ronald W. 1985. "Observations and speculations on subjectivity". In: Haiman, ed. 1985:109-150.
Langacker, Ronald W. 1987. "Nouns and verbs". *Language* 63.1:53-94.
Larkin, Don and Michael H. O'Malley. 1973. "Declarative sentences and the rule-of-conversation hypothesis". *Chicago Linguistic Society, Papers* 9:306-319.
LDOTEL. 1984. *Longman dictionary of the English language*. H. Gay, B. O'Kill, K. Seed, J. Whitcut, eds. London: Longman.
Le, Tam Duy. 1976. "Vietnamese passives". *Chicago Linguistic Society, Papers* 12:438-449.
Lee, W.R. and Z. Lee. 1964. *Teach yourself Czech*. London: Teach Yourself Books.
Lees, Robert B. 1960. *The grammar of English nominalizations*. The Hague: Mouton.
Leibniz. See Couturat 1903.
Lepschy, Anna Laura and G. Lepschy. 1977. *The Italian language today*. London: Hutchinson.
Levi, Primo. 1982. *Se non ora, quando*? Turin: Einaudi.
Lévi-Strauss, Claude. 1969. *The raw and the cooked*, tr. by J.D. Weightman. New York: Harper & Row.
Lévy-Bruhl, Lucien. 1915. "L'expression de la possession dans les langues melanésiennes". *Mémoires de la Société de Linguistique* 19:96-105.
Lévy-Bruhl, Lucien. 1923. *Primitive mentality*. London: George Allen & Unwin.
Lévy-Bruhl, Lucien. 1926. *How natives think*, tr. by L.A. Clare. London: George Allen & Unwin.
Li, Charles N. ed. 1976. *Subject and topic*. New York: Academic Press.
Locke, John. 1690/1959. *An essay concerning human understanding*, ed. by A.C. Fraser. Oxford: Clarendon Press.
Luelsdorff, Philip. 1979. "On If and Whether complementation". *Linguistische Berichte* 62:25-47.
Lynch, John. 1973. "Verbal aspects of possession in Melanesian languages". *Oceanic Linguistics* 12.1:69-102.
Lyons, John. ed. 1970. *New horizons in linguistics*. Harmondsworth: Penguin.
Lyons, John. 1977. *Semantics*. 2 vols. Cambridge: Cambridge University Press.

Lyons, John. 1981. *Language, meaning and context*. London: Fontana.
Lysvåg, Per. 1975. "Verbs of hedging". In: Kimball 1975:125-154.
Macquarie Dictionary. 1981. ed. by Arthur Delbridge. Sydney: Macquarie University.
Makkai, Adam. 1977. "The passing of the syntactic age: A first look at the ecology of the English verb *take*". In: Makkai, Makkai and Heilmann 1977:79-103.
Makkai, Adam, Valerie Makkai and Luigi Heilmann, eds. 1977. *Linguistics at the crossroads*. Padua: Liviana.
Mallinson, Graham and Barry J. Blake. 1981. *Language typology: Cross-linguistic studies in syntax*. Amsterdam: North-Holland. (North-Holland Linguistic Series, 46.)
Mandelbaum, David. ed. 1949. *Selected writings of Edward Sapir*. Berkeley: University of California Press.
Mathiot. Madeleine. 1964. "Noun classes and folk taxonomy in Papago". In: Hymes 1964:154-163.
Mathiot, Madeleine. 1967. "The cognitive significance of the category of nominal number in Papago". In: Hymes 1967:197-237.
McCawley, James D. 1970. "Where do noun phrases come from?" In: Jacobs and Rosenbaum 1970:166-183.
McCawley, James D. 1972. "A program for logic". In: Davidson and Harman 1972:498-544.
McCawley, James D. ed. 1973. *Grammar and meaning: Papers on syntactic and semantic topics*. New York: Academic Press.
McCawley, James D. 1975. "Lexicography and the count-mass distinction". *Berkeley Linguistics Society, Proceedings* 1:314-321.
McCawley, James D. ed. 1976. *Syntax and semantics 7: Notes from the linguistic underground*. New York: Academic Press.
McCawley, Noriko A. 1972. "On the treatment of Japanese passives". *Chicago Linguistic Society, Papers* 8:259-270.
Mélanges d'histoire litteraire et de philologie offerts à M. Bernard Bouvier. 1920. Geneva: Société anonyme des editions Sonor. (Microfilm, British Museum, 1976).
Mel'čuk, Igor. 1974. *Opyt teorii lingvističeskix modelej 'smysl-tekst'*. Moscow: Nauka.
Mel'čuk, Igor. 1977. "Le cas". *Révue des Études Slaves* 50.1:5-36.
Mel'čuk, Igor. 1979a. "Countability vs. non-countability". *Chicago Linguistic Society, Papers* 15:220-227.

Mel'čuk, Igor. 1979b. "The predicative construction in Dyirbal". In his *Studies in dependency syntax*. Ann Arbor, Karoma: 23-90.

Mel'čuk, Igor. 1980. "Animacy in Russian cardinal numerals and adjectives as an inflectional category". *Language* 56.4:797-811.

Mel'čuk, Igor. 1986. "Toward a definition of case". In: Brecht and Levine 1986:35-85.

Mel'čuk, Igor. In press. *Principes de morphologie*. (University of Montréal).

Menzel, Peter. 1975. *Semantics and syntax in complementation*. The Hague: Mouton. (Janua linguarum, Series minor, 176.)

Merriam-Webster. 1972. *The Merriam-Webster pocket dictionary of synonyms*. New York: Pocket Books.

Moravcsik, Edith. 1978. "On the case marking of objects". In: Greenberg 1978, 4:249-289.

Morris, Charles W. 1938. "Foundations of the theory of signs". *International encyclopaedia of unified science*. Chicago: Chicago University Press.

Mučnik, Iosif P. and Mikhail V. Panov, eds. 1964. *Razvitie grammatiki i leksiki sovremennogo russkogo jazyka*. Moscow: Nauka.

Mustanoja, T.F. 1960. *A Middle English syntax*, part 1. Helsinki: Société Néophilologique.

Nedjalkov, V.P. and G.G. Sil'nickij. 1969. "Tipologija morfologičeskogo i leksičeskogo kauzativov". In: Xolodovič, ed. 1969:20-50.

Neumann, Dorothea. 1987. *Objects and spaces: A study in the syntax and semantics of the German case system*. Tübingen: Gunter Narr. (Studien der deutschen Grammatik, 32.)

Newmeyer, Frederick J. 1975. *English aspectual verbs*. The Hague: Mouton. (Janua linguarum, Series practica, 293.)

Ney, James W. 1981. *Semantic structures for the syntax of complements and auxiliaries in English*. The Hague: Mouton. (Janua linguarum, Series minor, 171.)

Nickel, Gerhard. 1968. "Complex verbal structures in English". *International Review of Applied Linguistics* 6:1-21.

Noonan, Michael. 1985. "Complementation". In: Shopen 1985, 2:42-140.

Padučeva, Elena V. 1985. *Vyskazyvanie i ego sootnesennost' s dejstvitel'nost'ju*. [The utterance and its relationship to reality.] Moscow: Nauka.

Palmer, Frank R. 1965. *A linguistic study of the English verb*. London: Longman.

Palmer, Frank R. 1971. *Grammar*. Harmondsworth: Penguin Books.
Panov, Mikhail V. 1968. *Russkij jazyk i sovetskoe obščestvo*, part 3: Morfologija i sintaksis sovremennogo russkogo literaturnogo jazyka. Moscow: Nauka.
Paul, Hermann. 1919-20. *Deutsche Grammatik*, vols. 3-4. Halle: M. Niemeyer. (Reprinted, 1958.)
Pawley, Andrew. 1987. "Encoding events in Kalam and English". In: Tomlin 1987:329-360.
Peirce, Charles. 1932. "Speculative grammar". In his *Collected papers*, vol. 2:129-269. Cambridge, MA: Harvard University Press.
Pelletier, Francis J. 1979. "Non-singular reference: some preliminaries". In: Pelletier, ed. 1979:1-14.
Pelletier, Francis J. ed. 1979. *Mass terms: Some philosophical problems*. Dordrecht: Reidel. (Synthese language library, 6.)
Plank, Frans ed. 1984. *Objects: Towards a theory of grammatical relations*. London: Academic Press.
Polanyi, Michael. 1962. *Personal knowledge*. London: Routledge & Kegan Paul.
Poston, Lawrence S., Eugenio Chang-Rodríguez and James L. Ferrigno. 1974. *Continuing Spanish*. 2nd ed. New York: Van Nostrand.
Prince, Ellen. 1974. English aspectual constructions. Dissertation, University of Pennsylvania.
Prisco, Michele. 1977. *Il colore del cristallo*. Milan: Rizzoli.
Putnam, Hilary. 1975. "The meaning of 'meaning'". In: Gunderson 1975:131-193.
Quine, Willard. 1964. *Word and object*. Cambridge, MA: M.I.T. Press
Quirk, Randolph and Sidney Greenbaum. 1973. *A university grammar of English*. London: Longman.
Quirk, Randolph, Sidney Greenbaum, Geoffrey Leech and Jan Svartvik. 1985. *A comprehensive university grammar of English*. London: Longman.
Radford, Andrew. 1977. *Italian syntax: Transformational and relational grammar*. Cambridge: Cambridge University Press.
Ransom, Evelyn N. 1986. *Complementation: Its meaning and forms*. Amsterdam: John Benjamins. (Typological studies in language, 10.)
Raphael, L.J., C.B. Raphael and M.R. Valdovinos, eds. 1984. *Language and cognition: Essays in honour of Arthur J. Bronstein*. New York/London: Plenum Press.

Reichenbach, Hans. 1947. *Elements of symbolic logic*. New York: Macmillan.

Riddle, Elizabeth. 1975. "Some pragmatic conditions on complementizer choice". *Chicago Linguistic Society, Papers* 11:467-474.

Rosch, Eleanor. 1978. "Principles of categorization". In: Rosch and Lloyd 1978:27-48.

Rosch, Eleanor and Barbara Lloyd, eds. 1978. *Cognition and categorization*. Hillsdale, NJ: L. Erlbaum Assocs.

Rosenbaum, Peter S. 1967. *The grammar of English predicate complement constructions*. Cambridge, MA: M.I.T. Press. (Research Monograph 47.)

Ross, John Robert. 1967. Constraints on variables in syntax. Dissertation, Massachusetts Institute of Technology. (Published by Indiana University Linguistics Club, 1968).

Ross, John Robert. 1972a. "Doubl-ing". *Linguistic Inquiry* 3.1:61-86.

Ross, John Robert. 1972b. "The category squish: Endstation Hauptwort". *Chicago Linguistic Society, Papers* 8:316-329.

Ruwet, Nicolas. 1976. *Problems in French syntax: Transformational generative studies,* tr. by S. Robins. London: Longman.

Saksena, Anuradha. 1982. *Topics in the analysis of causatives with an account of Hindi paradigms*. Berkeley: University of California Press.

Sapir, Edward. 1931/1949. "The function of an international auxiliary language". *Psyche* 11:4-15. (Reprinted in Mandelbaum, ed. 1949:110-121).

Šaxmatov, A.A. 1963. *Sintaksis russkogo jazyka*. The Hague: Mouton.

Schachter, Paul. 1976. "The subject in Philippine languages: topic, actor, actor-topic, or none of the above". In: Li 1976:491-518.

Schachter, Paul. 1976. "A nontransformational account of gerundive nominals in English". *Linguistic Inquiry* 7.2:205-241.

Schachter, Paul. 1985. "Parts-of-speech systems". In: Shopen 1985, 1:3-61.

Schank, Roger C. and R.P. Abelson. 1977. *Scripts, plans, goals, and understanding: An inquiry into human knowledge structures.* Hillsdale, NJ: L. Erlbaum Assocs.

Scholz, Friedrich. 1973. *Russian impersonal expressions used with reference to a person.* The Hague: Mouton.

Schuchardt, Hugo. 1885. *Über die Lautgesetze: Gegen die Junggramatiker.* Berlin: Oppenheim. (Reprinted in Schuchardt, Vennemann and Wilbur 1972:1-37.)

Schuchardt, Hugo, Theo Vennemann and Terence H. Wilbur. 1972. *Schuchardt, the Neogrammarians, and the transformational theory of phonological change*. Frankfurt: Athenäum. (Linguistische Forschungen, 26.)

Scutt, Jocelynne A. 1987. *Different lives: Reflections on the women's movement and visions of its future*. Ringwood, Vic.: Penguin Books.

Searle, John R. 1979. *Expression and meaning: Studies in the theory of speech acts*. Cambridge: Cambridge University Press.

Shibatani, Masayoshi. 1973. "Semantics of Japanese causativization". *Foundations of Language* 9:327-373.

Shibatani, Masayoshi. 1976. "The grammar of causative constructions: a conspectus". In: Shibatani, ed. 1976:1-10.

Shibatani, Masayoshi. ed. 1976. *Syntax and semantics 6: The grammar of causative constructions*. New York: Academic Press.

Shnukal, Anna. 1978. A sociolinguistic study of Australian English. Ph.D. thesis, Georgetown University.

Shopen, Timothy. 1974. "Some contributions from grammar to the theory of style". *College English* 35.7:775-798.

Shopen, Timothy, ed. 1985. *Language typology and syntactic description*. 3 vols. Cambridge: Cambridge University Press.

Shopen, Timothy and Joseph Williams, eds. 1980. *Standards and dialects in English*. Cambridge, MA: Winthrop.

Silverstein, Michael. 1976. "Hierarchy of features and ergativity". In: Dixon, ed. 1976:112-171.

Simpson, Jane. In press. *Aspects of Warlpiri morphology and syntax*. Dordrecht: Reidel.

Smith, Hedrick. 1976. *The Russians*. London: Sphere Books.

Spears, Arthur K. 1973. "Complements of *significant*-class predicates: a study in the semantics of complementation". *Chicago Linguistic Society, Papers* 9:627-638.

Sridhar, S.N. 1976. "Dative subjects". *Chicago Linguistic Society, Papers* 12:582-593.

Steinberg, Danny D. and L.A. Jakobovits, eds. 1971. *Semantics: An interdisciplinary reader in philosophy, linguistics, and psychology*. Cambridge: Cambridge University Press.

Stockwell, Robert P., Paul Schachter and Barbara H. Partee. 1973. *The major syntactic structures of English*. New York: Holt, Rinehart and Winston.

Sussex, Roland and Jerzy Zubrzycki. eds. 1985. *Polish people and culture in Australia*. Canberra: Australian National University. (Immigration Monograph 3.)

Szober, Stanisław. 1923. *Gramatyka języka polskiego*. Warsaw: Nasza Księgarnia.

Talmy, Leonard. 1976. "Semantic causative types". In: Shibatani, ed. 1976:43-116.

Tesnière, Lucien. 1959. *Elements de syntaxe structurale*. Paris: Klincksieck.

Thompson, Sandra A. 1973. "On subjectless gerunds in English". *Foundations of Language* 9:374-383.

To honour Roman Jakobson. Essays on the occasion of his seventieth birthday. 1967. 3 vols. The Hague: Mouton. (Janua linguarum, Series maior, 31-33.)

Todoriki, Sakura. 1987. Epistemology in grammar: A study of *-garu* in Japanese. MA thesis, Australian National University.

Tomlin, Russell S. ed. 1987. *Coherence and grounding in discourse*. Amsterdam: John Benjamins.

Urmson, J.O. 1963. "Parenthetical verbs". In: Caton 1963:220-240.

Van Valin, Robert and David Wilkins. In press. "Developing a semantic metalanguage for the syntax-semantics interface". In: Wilkins, ed. In press.

Vendler, Zeno. 1967. *Linguistics in philosophy*. Ithaca: Cornell University Press.

Vendler, Zeno. 1972. *Res cogitans: An essay in rational psychology*. Ithaca: Cornell University Press.

Vinogradov, Viktor. 1947. *Russkij jazyk*. Moscow: Učpedgiz.

Vygotsky, Lev. S. 1962. *Thought and language*, ed. and tr. by E. Hanfmann and G. Vakar. Cambridge, MA: M.I.T. Press.

Ward, D. 1975. *The Russian language today*. London: Hutchinson.

Ware, Robert. 1979. "Some bits and pieces". In: Pelletier, ed. 1979:15-29.

Wasow, Thomas and T. Roeper. 1972. "On the subject of gerunds". *Foundations of Language* 8:44-61.

Webster. 1968. *Webster's seventh new collegiate dictionary*. Springfield, MA: G. & C. Merriam.

Weinreich, Uriel. 1966. "On the semantic structure of language". In: Greenberg 1966:142-216.

Whittier, John Greenleaf. 1872. "The brewing of soma". In his *Complete poetical works*. Cambridge, MA: Riverside Press, 1894:449-450.

Whorf, Benjamin Lee. 1962. *Language, thought and reality*, ed. by John Carroll. New York/London: John Wiley & Son.

Wierzbicka, Anna. 1967. "On the semantics of verbal aspect in Polish". In: *To honour Roman Jakobson* 1967, 3:2231-2249.

Wierzbicka, Anna. 1969. *Kocha-lubi szanuje: Medytacje semantyczne.* [Essays on the semantics of emotions and ethical concepts.] Warsaw: Wiedza Powszechna.

Wierzbicka, Anna. 1970. "Descriptions or quotations?" In: Greimas, Jakobson and Mayenowa 1970:627-644.

Wierzbicka, Anna. 1971. "The deep or semantic structure of the comparative". *Linguistische Berichte* 16:39-45.

Wierzbicka, Anna. 1972. *Semantic primitives.* Frankfurt: Athenäum. (Linguistische Forschungen, 22.)

Wierzbicka, Anna ed. 1972. *Semantyka i słownik.* Wrocław: Ossolineum.

Wierzbicka, Anna. 1975. "Why 'kill' does not mean 'cause to die': the semantics of action sentences". *Foundations of Language* 13:491-528.

Wierzbicka, Anna. 1976a. "In defense of YOU and ME". In: Girke and Jachnow 1976:1-21.

Wierzbicka, Anna. 1976b. "Mind and body from a semantic point of view". In: McCawley 1976:129-157.

Wierzbicka, Anna. 1976c. "Particles and linguistic relativity". *International Review of Slavic Linguistics* 2.2:327-367.

Wierzbicka, Anna. 1977. "Mental language and semantic primitives". *Communication and cognition* 10.3:155-179.

Wierzbicka, Anna. 1978. "Syntax *vs.* semantics". *Theoretical Linguistics* 5.1:115-133.

Wierzbicka, Anna. 1979. Review of Lyons 1977. *Talanya* 6:102-109.

Wierzbicka, Anna. 1980a. *Lingua mentalis: The semantics of natural language.* Sydney/New York: Academic Press.

Wierzbicka, Anna. 1980b. *The case for surface case.* Ann Arbor: Karoma.

Wierzbicka, Anna. 1981. "Case marking and human nature". *Australian Journal of Linguistics* 1.1:43-80.

Wierzbicka, Anna. 1985a. "A semantic metalanguage for a cross-cultural comparison of speech acts and speech genres". *Language in Society* 14:491-514.

Wierzbicka, Anna. 1985b. "Different cultures, different languages, different speech acts: English vs. Polish". *Journal of Pragmatics* 4.2:205-255.

Wierzbicka, Anna. 1985c. *Lexicography and conceptual analysis.* Ann Arbor: Karoma.

Wierzbicka, Anna. 1985d. "The double life of a bilingual". In: Sussex and Zubrzycki 1985:187-223.
Wierzbicka, Anna. 1986a. "A semantic metalanguage for the description and comparison of illocutionary meanings". *Journal of Pragmatics* 10.1:67-107.
Wierzbicka, Anna. 1986b. "Does language reflect culture? Evidence from Australian English". *Language in Society* 15:349-374.
Wierzbicka, Anna. 1986c. "Human emotions: universal or culture-specific?" *American Anthropologist* 88.3:584-594.
Wierzbicka, Anna. 1986d. "Italian reduplication: cross-cultural pragmatics and illocutionary semantics". *Linguistics* 24.2:287-315.
Wierzbicka, Anna. 1986e. "Metaphors linguists live by: Lakoff and Johnson *contra* Aristotle". *Papers in Linguistics* 19.2:287-313.
Wierzbicka, Anna. 1986f. "Precision in vagueness: the semantics of English approximatives". *Journal of Pragmatics* 10.5:597-614.
Wierzbicka, Anna. 1986g. "Semantics and the interpretation of cultures: the meaning of 'alternate generations' devices in Australian languages". *Man* (n.s.) 21:34-49.
Wierzbicka, Anna. 1987a. "Boys will be boys: 'radical semantics' vs. 'radical pragmatics'". *Language* 63.1:95-114.
Wierzbicka, Anna. 1987b. *English speech act verbs: A semantic dictionary*. Sydney/New York: Academic Press.
Wierzbicka, Anna. In press a. "Kinship semantics". *Anthropological Linguistics*.
Wierzbicka, Anna. In press b. "Prototypes save". In: S.L. Tzohatzidis. *Belief systems in language: Studies in linguistic prototypes*. Amsterdam: John Benjamins.
Wierzbicka, Anna. In press c. "Semantic primitives and lexical universals". *Quaderni di semantica*.
Wilkins, David P. 1984. "Nominal reduplication in Mparntwe Arrernte". *Language in Central Australia* 1:16-22.
Wilkins, David P. 1986. "Particle/clitics for criticism and complaint in Mparntwe Arrernte (Aranda)". *Journal of Pragmatics* 10.5:575-596.
Wilkins, David P. In press. *Towards a theory of semantic change*. Berlin: Mouton-de Gruyter.
Wilkins, David P. ed. In press. *Conceptual primitives and semantic analysis: A cross-linguistic perspective*. Berlin: Mouton-de Gruyter.

Wilkins, David P. To appear. Mparntwe Arrernte sketch grammar and semantic studies: toward a semantically oriented grammar. Ph.D. thesis, Australian National University.

Wolfram, Walt and Donna Christian. 1980. "On the application of sociolinguistic information: test evaluation and dialect differences in Appalachia". In: Shopen and Williams 1980:177-212.

Wood, Frederick T. 1956. "Gerund versus infinitive". *English Language Teaching* 11:11-16.

Xolodovič, A.A. 1969. "Morfologičeskij i leksičeskij kauzativy v japonskom jazyke". In: Xolodovič, ed. 1969:270-293.

Xolodovič, A.A. ed. 1969. *Typologija kauzativnyx konstrukcij.* Leningrad: Nauka.

Xolodovič, A.A. ed. 1974. *Tipologija passivnyx konstrukcij: Diatezy i zalogi.* Leningrad: Nauka.

Zaliznjak, Andrej. 1973. "O ponimanii termina 'padež' v lingvističeskix opisanijax". In his *Problemy grammatičeskogo modelirovanija.* Moscow: Nauka.

Zaliznjak, Anna and Elena V. Padučeva. 1987. "O semantike vodnogo upotreblenija glagolov". In: Eršov 1987:80-96.

Žolkovskij, Alexander. 1964. "Predislovie". [Introduction.] *Mašinnyj Perevod i Prikladnaja Lingvistika* 8:3-16.

Zubin, David and Klaus-Michael Köpcke. 1986. "Gender and folk taxonomy: the indexical relation between grammatical and lexical categorization". In: Craig 1986:139-180.

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