Is Language A Language Language? An introduction to the analytic systems of Noam Chomsky for language, and Heinrich Schenker for classical music

" All dull sentences are ungrammatical ."

....Attribution uncertain, possibly Alexander Pope (Note. This is an upgraded version of an article written in the 80's. Since that time, Chomsky and crew have introduced all sorts of gadgets designed to "fix" the theory. I still stand by the criticisms expressed in this article. No amount of tinkering can rescue a theory grounded in a vision so essentially wrong-headed.

As for Herr Schenker, he and his theorizing ceased 70 years ago. There is no danger of being contradicted by more recent developments.

All misspellings are deliberate.)

Introduction

When avid readers of prose fiction and poetry pick up a scientific journal it often happens that they find themselves astonished, if not repelled, by the relative poverty of scientific discourse. What one discovers is a small number of words used over and over again from a limited vocabulary that, for the most part, is inaccessible to persons not actively working in the field. Sentences are brief and to the point; discourse is starved of nuances, deliberately so, as the communication of scientific data and theory requires that it be understood by everyone in its targeted community, so that its experiments be repeatable, its conclusions testable, its predictions falsifiable. An inherent trade-off is of necessity at work, by which impoverishment of language is required give maximum strength to argument, thesis and demonstration. Concentrating on a limited collection of notions, the scientist throws out whatever is superfluous to focus thought with greatest intensity to the advancement of understanding.

This sense of astonishment is felt by scientists themselves in relation to work in other sciences. Mathematicians may have a similar experience when confronted with a computer program, or textbook on computer programming. Once again an overly rich language has been reduced almost to the vacuum state, the remainder being then combined with odd coinages ("download", "mouse", "hypertext" ...) in the service of narrow though highly effective technical objectives.

What, then, is one to make of a science named *Linguistics*, the subject matter of which is language itself? What can an unsalvageably impoverished scientific discourse have to tell us about the living language of daily life, intra-personal communication, our private thoughts, literature ? Given that the very thoughts of the peoples of every society on earth are cast in words and sentences, *Linguistics* is potentially as vast as human thought itself!

The quest to create a scientific language to understand the language of daily discourse is as vain as that of those biologists who imagine that they can understand all that there is to know about the manifestations of life on this planet through the exercise of a single intellectual attribute - analytic reason - apart from sensation, ethics, emotion, intuition, judgment. These are sciences equipped with a fundamental self-referencing paradox. It is indisputable that imaginative literature will more readily expose the poverty of scientific discourse, than linguistics will ever discover more than a barren shadow of all the riches harbored by language.

Noam Chomsky and Heinrich Schenker function as the Church Fathers of Language and Music of the 20th century. Each of them invented systems of interpretation which claim, in principle, to be able to determine when a sentence using the vocabulary of their chosen mode of discourse is grammatically meaningful.

Even beyond that: each hints at a unique and profound insight into the subterranean foundations of their medium: some mysterious *Deep Structure* from which all the surface features of language and music emerge . *Batteries of transformations*, so they tell us, *lying in the Middle Ground*, carry the irreducible elements of the *Deep Structure* up to the things that we actually hear and to which we give meaning.

The author of this essay suggests that this is all so much hogwash, that these systems of interpretation (or hermeneutics) tell us more about the persons who elaborated them than they do about either language or music. That they have been so widely accepted as Gospel by the contemporary educational establishment may also be telling us more about Education's own "deep structure" than it would care to have exposed.

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The promulgation of rigidly dogmatic systems of explication of human intellectual artifacts is one of the recognizable traits of 20th century thought: abstract analytic schemes which purport to tell us when our thinking, speaking, writing, drawing, composing, dreaming ¹, or even humming and finger-painting, aren't or are kosher. ² Few there be in our times, certainly among educated folk, who retain any confidence in their ability to communicate their thoughts. It seems to be the case that we need to turn to outside "experts" to reassure us that what we say makes sense to others anymore.

"Thou art my refuge and my strength, an ever-present help in trouble " saith Scripture, and the need to hide under the cloak of Venerated Authority is permanently alive in Mankind. There will always be a Moses descending Mount Sinai with his tally sheet of

"Thou Shalt Nots!" Much of what we deride about the Middle Ages is still very much a part of our intellectual culture: Economics has its Marx, Psychology its Freud, Music its Schoenberg, Literature its Derrida, Philosophy its Russell while religions, great and small, continue to supply us with an unending progression of popes, gurus, prophets, Messiahs and the like. Teacher and disciple raise up their own pavilions of idolatry, which often bear little resemblance to each other: one

¹One is reminded of the story of the woman in analysis with Sigmund Freud, who told him that his wish-fulfillment theory of dreaming had to be wrong because she'd had a dream that clearly did not represent anything she'd wished for. He explained to her that she'd had that dream because she wished to prove that her analyst was wrong.

²Does the strange effect of the ending of this sentence indicate some violation of the laws of the "deep structure" ?

must be careful not to confuse the ideas of original thinker with the rigid doctrinal beliefs of his allied cult of true believers.

Yet there is a major difference between the law-givers of antiquity and their resurgent contemporary counterparts. Prophets of former days, whether wise, foolish, sincere or corrupt, restricted the scope of their chastisement to mankind's bad *behavior*. The modern day usurpations of their role have widened their scope to include our *grammar*, *thought patterns*, *habits*, *slips of* the tongue, secret desires, brain waves, tunes , games, tastes in vegetables and ice cream, and our private reveries. Somehow everything we do these days pungently offends the delicate nostrils of the gods, our polluted souls must undergo extended rites of purification, spiritual evisceration, incineration in the fires of dogma!

Among the prominent Arch-Popes of the age one finds Noam Chomsky, Analyst of the Language Instinct , and Heinrich Schenker, Defender of the Diatonic Faith. Beginning with the 1910's, (when Heinrich Schenker began publishing his analyses of classical music), and again in the 1950's, (when Zellig Harris then Noam Chomsky, astonished us with boasts -with remarkably little to show for it in the decades that followed - that they were privy to a mathematics that could describe the intricacies of language) the universities, teaching colleges, high schools, conservatories and little one-room schoolhouses around the world have throbbed with the denunciatory harangues of professors, instructors, adjuncts, teaching aides and teaching assistants and all subalterns of the aforesaid , correcting and incorrecting speech and song for the greater glory of mental stagnation.

There may be people to whom this comes as no surprise; yet I have always found it strange. It's much easier for me to understand how the followers of Marx and Freud were able to tighten their ideological garrote over Economics and Psychology, inherently murky domains, badlands wherein ignorance, anger, envy, despotism, lusts for power and wealth, and deep convictions of righteousness roam about at liberty, The presence of Church Fathers in these disciplines supply a vocabulary and may have the salutary advantage of channeling the discourse.

But is there not something odd in the resurgence of the dogmatic malaria in two discursive vehicles for factual and spiritual communication, language and music in which for centuries, nay millennia, mankind has never had any problems in going about its business and written much beautiful prose, poetry and music besides?

It must be that this phenomenon is particularized, specific to the advent of cybernetic control. Back in the 40's and 50's the celebrated radical activist Noam Chomsky sought and obtained his research funding from the US. Army Signal Corps, the Air Force Office of Scientific Research and the Office of Naval Research. These humanitarian foundations were interested in digging up the universal structures of grammar underlying all language, because they could design the optimal translation

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software for spying America's alleged enemies ³ and murder them before they could get us .

One should not accuse tonaural ideogogue Milton Babbitt and his thriving laboratory of musical vivisectionists at Princeton University of having similar goals in mind for Heinrich Schenker's musical hallucinatorics. Their motivation appears to be purely theological: whirling the Schenkerian Gospel to the beat of the Radetzky March , a veritable flail against the Philistines , Babbitt claims that all classical compositions can be reconstructed from computer programs designed to "generate" classical music, that the music of Schoenberg's 12-tone school can be reduced to group theory, and that music which isn't being generated by these (purely hypothetical) programs (which no- one seems to be able to encode) would just not be music. It is just possible that some use may be found for this by the CIA in their research on brainwashing.

The editor of Ferment considers himself doubly fortunate at having been born in this glorious age, between the bodily ascension of the blessed Pope Heinrich Schenker into the bliss of immortality, and the ushering forth of the Path to Salvation proclaimed by the blessed Pope Noam Chomsky. Through dint of much study and research he has carried their methodologies into new areas of unexpurgated semiotic exegesis. In all modesty he claims to have invented a representation scheme for the innumerable structural layers *between* the words and the music of any song, whether it be a deathless Lied of Franz Schubert,

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³Enemies of the Free World

or the most egregious Tin Pan Alley trash. Begging his readership's indulgence, he has named his system: *Liskerotics*. How this works will be explained in Part II. In the meantime he appends a quick survey of the schemes and strategies of Chomsky for language and Schenker for music.

Although the American Air Force and the Navy rented Chomsky's intellect to assist them in their quest for World Domination, the Chomskyan school claims that it is out to exhume the skeleton of a *Universal Grammar*. This fundamental structure in the cranial substratum of all mankind, if it exists, would provide the blueprint for all past, present and future speechifying. The malevolent intentions of the agencies that pick up the bills make Chomsky feel very guilty, which is why he writes lots of books vilifying American foreign policy. Granted that it cannot be vilified enough for my taste.

Despite this perverse hobby, he continues to receive ample funding for his researches, as well as numerous citations and awards from the world's largest military academy, MIT. This must be taken to mean that the syntactic investigations of the Chomskyan school hold the potential for more planetary devastation than his radical writings do actual good. Or, to credit him with more integrity (which I think we should), Chomsky set his mind early in his career to developing the most ingenious academic con-job of the twentieth century (not excepting Deconstructionism). Since then he has used his fatuously acquired prestige to attack the very Establishment that maintains him.

Chomsky's approach to language demonstrates that he is far more interested in the verbal skills of high tech machinery than in those of sadly fallible humans; for despite his valuable criticism of Behaviorism and the old classifying linguistics , he persists in committing two of their cardinal errors:

(i) Maintaining that it is possible for a sentence to be grammatically correct independent of its context; and

(ii) Maintaining that any sentence which is grammatically correct will have a precise and unambiguous meaning. (Our sense of the matter is that the class of all such sentences is null. If not, then it is certainly so minuscule that as to be totally inadequate to the daily activities, commerce and struggles of mankind.)

This example of his working method is taken from *Language* And Mind , (pg. 38) :

"..... The underlying structure 28 will be converted into 29 by prenominalization...

28: John learned that John had won.
29: John learned that he had won.
Notice that we cannot form 31 from 28 by prenominalization:
31: He learned that John had won. "

Each of the sentences in this extract are presented as being context-free. Chomsky apparently believes that there exists no way whereby one can use the English language to express the idea that the person who wins the prize and the one who learns about it are the same person. Yet there are several ways of doing it:

" He learned that he was the winner, and his name was John."

It is also quite easy to derive 31 from 28 once we make the reasonable assumption that the two John's in the latter are different people. Even a moderate familiarity with the difficulties of writing fiction is enough to make one recognize that language, whether written or spoken, can only capture a weak approximation to what one wants to express. *Every* sentence is inherently ambiguous. Chameleon-like, *every* sentence, no matter how well crafted, changes its meanings as a function of context.

That the two "John"'s in structure 28 may be different people may be a legitimate inference, depending on the context in which it is stated. In fact, it is precisely *because* "John learned that John had won" does *not* imply as "John learned that he had won", that structure 28 can only be considered substandard English because of its inherent internal confusion, while structure 29 demands a context to make it intelligible. (Is the "he" the same person as subject, or someone else?)

One has to exercise one's imagination to invent contexts in which these sentences would actually be used by someone. One evokes a computer programmer called John who names his desk monitor after himself. Or that such a poorly constructed sentence is being uttered by a recent immigrant whose mother tongue is poor in pronouns. At the extreme, one might overhear the proud father of a 6-year old boasting to his friends that:

"Little John-John learned that John-John won! ".

Structure 29 can mean many different things depend on its context. How, then, can one speak of a rule that can derive 29 from 28?

Summarizing: Structure 28 is bad English. Structure 29 is meaningless without its context. One cannot speak of deriving a correct meaningless sentence from a grammatically incorrect sentence through a rule of deep structure. In a mathematics textbook, one only requires that the equations balance on both sides; but in a book on linguistics and grammar, one can require that the sentences correspond to the way native speakers actually speak.

As with all creeds, ideologies and cult followings Chomsky's systems of linguistic explication come adorned with buzzwords:

(a) Trees

- (b) The Universal Grammar
- (c) Surface Structure
- (d) Deep Structure
- (e) Grammatical Transformations

Examining each of them in turn: a *tree* is a stick figure representation of a grammatical structure. Its correspondence to

actual language, written or spoken, is almost negligible, for the simple reason that all the words in any sentence of more than 5 words have important links of association and meaning which cut across or even ignore grammatical rules. However, because they look like flow charts, trees useful for transferring data to a computer.

Take the following sentence:

" My tailor is rich"

Tailor is a noun ; *My* is a pronoun; *My* tailor is a noun phrase, etc. The account of the good fortune of this tailor decomposes in the following fashion:

My Tailor	NOUN PHRASE	NP	
My	PRONOUN		Р
Tailor	NOUN		Ν
Is Rich	VERB PHRASE	VP	
Is	VERB		V
Rich	ADJECTIVE		Α
My Tailor I	s Rich SENTENCE	S	

These can be made to fit into a schematic representation which looks like this:

P	IP N	VI	A	
P ▼ My	N ↓ Tailor	↓ Is	A ↓ Rich	

These diagrams are, it is claimed, *essentially more powerful* than the traditional methods of parsing. Chomsky considers them essentially more powerful, and apparently the Air Force also

thought them essentially more powerful. On page 26 of *Syntactic Structures* Chomsky writes:

"We find that this new form of grammar is *essentially more powerful* than the finite state model rejected above."

The probable response to this sentence of a typical speaker of English is:

"Well, isn't *My tailor is wealthy* the really correct way to express this notion?"

Why is this? Because "rich" is not properly speaking, an adjective but a noun . Or, *as real people do all the time*, we can *debate* the issue of weather "rich" is an adjective or a noun . Wee all agree that "wealthy" is an adjective. Thus the pathological, shall we even say *dire* simplicity of the Chomskyan tree diagram has been shown, even in this barren instance, to be riddled with controversy.

In fact, why did I choose this sentence? Because it's often invoked by French school children as a way of making fun of their classes in English, the kind of silly, meaningless construction that is far more likely to crop up in a text book than in a conversation.

A comparable sentence in the same category might be : *I eat my hat* . After its immersion in "pre-Johnalization" this quaint phrase ,

(the meaning of which is confused by that fact that it does double duty as an idiom), comes out in various transformations as:

" John eats John's hat."

"John-John eats John-John's hat."

"He eats John's hat."

" I eat John's hat."

"John eats his hat." etc., etc .

A Universal Grammar , a Structuralist shibboleth, corresponds to nothing that anyone has ever found. Despite this it is claimed as the foundation for all actual and potential languages. ⁴ In 37 long years, the Chomskyites have founds only two items in their Universal Grammar:

(A) All languages have a surface structure, a deep structure and a set of grammatical transformations which carry the deep

⁴Having little relevance to science, it has a distinguished lineage in philosophy. Both Raymond Lull, (alchemist, theologian, religious fanatic and missionary and the greatest poet in the Catalan language), and Gottfried Leibniz invented their own versions of the Tibetan mandala: charts with spinning wheels deemed capable of generating all forms of knowledge, actual and potential.

structure onto the surface structure. This has not been proven by any means, although its sounds like the kind of plausible conjecture people can mull over in the Starbucks coffee shop adjoining any Rhetoric faculty. The idea was first elaborated by Wundt. We shall meet it again in Schenker .

However the question of what exists in the Universal Grammar now becomes shifted onto the question of what's in the Deep Structure. This deep structure of language must be very different from the deep structure of an atomic nucleus (which as we know consists of quarks, gluons, possible gravitons and much else besides), given that the deep structure of a language has to include as well the history of the language, the history of the people speaking the language, the history of mankind as a whole, the amalgamation of languages following upon the amalgamation of peoples, distinctions of class and education, fads and fashions in rhetoric, the technological revolutions in McLuhan's massaging media, the musicality of phonemes, sense and sensibility, sensation and semantics, and much else besides.

What appears to have served as a guide for Dr. Chomsky through this glorious tropical paradise is often referred to as the "Oomph" theory. This alludes to the gut sense one has that one's interlocutor is a genuine speaker of English.

Someone may be talking to me and come up with a sentence that uses words in a combination that has never previously been used by anyone anywhere. Yet the instant I hear it, there is this "Oomph" rising from the pit of my stomach that signaling the recognition that this sentence has been articulated in correct English.

This is after all the function of grammar, but apparently something else is involved. Why is it that *John learned that John had won*, is correct grammar but bad English? Or is it correct grammar? The question begs a thousand treatises and an Institute Professorship at MIT.

All concur in affirming that the syntactic analyses of the Chomskyan school are designed to elucidate the provenance of the "Oomph". There will come a time when they will have to consult with their counterparts in Physiology departments. However, since the more refined aspects of language are so much a matter of taste, (personal, cultural), that there should be no difficulty in setting up some kind of *Inter-Departmental Colloquium on Appetition*, linguistic and biochemical.

Observe that there are times when the "Oomph" may spontaneously discharge for reasons that have nothing to do with correct grammar. Gastric flash-bulbs can be expected to go off, all the way from gut reactions such as : "That's gibberish!", "That's way above my head, man.", "That's stupid", or to " Uh-Oh. He's dangerous!", and the like. All such "Oomph's" are transmittable in the absence of good grammar, or indeed any grammar at all.

(B) Grammatical transformations of all languages are structure dependent. This statement actually says something: what it means is that if we choose a sentence that contains n words from any language known to mankind, then none of the structural transformations that preserve "correctness" depend on This may imply that a word cannot be arbitrarily dropped anywhere in a sentence and expect to have a meaningful relationship to its surrounding content .⁵

The *Surface Structure* is the bare hardware of language: words, phonemes, diacritical marks, accents, spelling, the prime mater of Information Theory. ⁶

According to Noam Chomsky, the *deep structure* is "*a formal structure that relates directly not to the sound but to the meaning.* "(page 14, Language and Mind).

Chomsky goes on to say that,

"Each language can be regarded as a particular relation between sound and meaning. "

Tenuous profundity quickly gives way to tedious banality. What Chomsky *really* means by grammar can be seen by these excerpts on pages 41 and 42 of *Language and Mind* :

"Suppose that we try applying the processes of interrogative and relative formation to the italicized noun phrases in 43. We should derive the following interrogatives and relatives from 43a -43f respectively :

44:

aI* What is for him to understand difficult?

⁵In Part II, in my analysis of the lyrics of the Song Of Freedom by Custis Wade, I present a word in standard English which functions as a "*Quasi* - structure dependent transformation", in certain dialects.

⁶ I refer the reader to my translation of the admirable text by Jacques Oswald, *Information Theory, or Analysis of Diacritical Systems*, Ellis Horwood, Ltd., 1991.

aR* a lecture that for him to understand is difficult
bI What is it difficult for him to understand?
bR a lecture that it is difficult for him to understand
cI* Who did he read the book that interested
dI* Who did he believe the claim that John tricked?
dR* The boy who he believed the claim that John tricked

eI* Who did he believe that claim that John made about?

eR* The boy who he believed the claim that John made about

fI* Who did they intercept John's message to?
fR*The boy who they intercepted John's message to
Of these only bI and bR are fully acceptable, and cases a,c,d,

and e are quite impossible, although it would be quite clear what they meant were they grammatically permissible. "

I must object. Sentence aI is quite clear once some parenthesis are added: " *What is, for him to understand, difficult?* "

cI* is a beautiful statement in good English, and I feel a twinge of envy that I did not invent it myself:

"Who did he read the book that interested ". This can be rendered in several ways:

"Who? Did *he* read the book that interested?"

"Who did he read? The book that interested?"

aR can be made meaningful by adding punctuation marks and by imagining it as spoken in a play:

" A lecture? That? For him? "

Then, like a Socrates musing aloud : "To understand is difficult. "

We must however concede that since more imagination is required than people are normally willing to expend to find meaning in this phrase it must be deemed at least "unintelligible". But the notion that people spit out all the permutations of word order in a potential sentence, then choose those forms which are meaningful, is strangely at odds with the ways we actually use and develop language.

As a final comment, although some of these sentences may be grammatically correct, not one of them corresponds to anything (with the possible exception of bI provided it be filled out with appropriate pauses and musical inflections) anyone (unless they were preparing for the oral examination for a PhD in some department of Structural Linguistics) would ever actually use in conversation,

Languages possess multiple capabilities, as vehicles for the transmission of information, for the representation of a state of mind, as a means for liberating the imagination, for the inward articulation of thought, for the expression of emotion. Human beings are always employing several languages in conversation, each with its own conventions, grammar, transformations and "rules". The broad division of literature into prose, fiction and non-fiction prose, and poetry reflect this diversity to some extent, although not all language is literary, or capable of being made so.

What of the devout Christian who repeats the name of Christ 10,000 times and thereby falls into a transic state of bliss? Or the Hindu with his mantra? This is language, certainly, used legitimately for the achievement of a certain kind of communication, in this case with some transcendent reality, but it is not likely to be made more comprehensible by a Chomskyan analysis on a stick figure.

In addition there are both written and spoken languages. It is a error of a serious kind to posit an isomorphism between them: ask any professional actor. Ask him, for example, how he finds a way to say "Something in rotten in the state of Denmark" in Hamlet, Act I, Scene 1, without provoking a fit of laughter in the audience.

The accurate transmission of spontaneous speech is very difficult and requires the development of powers of careful listening and concentration. Real conversational speech, unedited, cannot be translated into some grammatically correct standard of written prose.

The Chomskyites would probably argue that *Half a league half a league half a league onward* (Chomsky usually omits commas) is not grammatical. Yet one can find entire paragraphs in basic texts in economics, psychology or sociology which might pass some kind of grammaticality test, which say nothing at all.

That subspace of written language which can be productively analyzed by Noam Chomsky's methods is as barren of substance as the methodology itself. Language draws its resonance from its contexts, that of daily life, and that of other language. His systematic approach may give some insight into the language used to efficiently convey uncomplicated factual information, a purely conjectural language corresponding to some bureaucrat's Utopian dream of the ideal engineered society. Such modes of expression are the linguistic equivalent of a mathematical demotic, such as this conversation overheard in Berkeley, California in 1985, between cops using their walkytalkies to track down a suspected criminal:

"Suspect age 30, male, Caucasian. Do you hear me?" "Affirmative." "Is suspect visible?" "Negatory."

Heinrich Schenker's graphic Phantasies are at the other end of the spectrum from Noam Chomsky's arboreal skeletons . Indeed, as he himself admitted, they are elaborate, intricate, harmonious works of art in their own right.

"I am well aware of the fact that my theory, being derived from the practical art of genius, is itself art and must remain so ... " (H. Schenker, essay, "Rameau and Beethoven")

It is conceivable that some future systematizer will develop a method for aesthetic analysis of Schenker's *diagrams* quite independent of anything they have to say about music!

Schenker is, in effect, playing at the piano on graph paper. Such comments as these seem to indicate that he realized as much:

"Piano singing is the stroking of the air through up-anddown motions of the hand ... " (H. Schenker, "The Art of Performance", Oxford University Press 2000)

It is unquestionably true that Schenker loved and understood the music he condescended to analyze (which is to say the music of the 12 Olympian paradigms who, (once in awhile), wrote *real* music, (which is to say that it conforms in all respects to Schenker's long lists of dogmatic laws, (namely : *Handel, Bach, Scarlatti, C.P.E. Bach. Haydn, Mozart, Beethoven, Schubert, Mendelssohn, Schumann, Chopin, and Brahms* (which is to say, 90% of the seasonal fare of the most conservative symphony orchestras in today's world.))))

The difficulty lies in the fact that ,although Schenker is guilty of nothing more sinister than drawing up personal connections between notes, chords, themes, harmonies, patterns and subdivisions within a classical composition, *in exactly the same way that every serious musician does in mastering a piece*, (Schenker was a piano prodigy) he is the only one that had the *temerity to write his subjective choices down as a system* to which *everyone*, including the composers themselves, were henceforth obligated to follow!

For some reason inexplicable to me, Schenker felt it his personal duty to cut away the human possibilities in a composition, much as a surgeon cuts away infected tissue, in order for him to get at what he believed to be the *pure or absolute music* underneath. He admits as much in many places. Here is a typical quotation:

"Basically, a composition does not require a performance in order to exist. Just as any imagined sound appears real in the mind, the reading of a score is sufficient to prove the existence of the composition. The mechanical realization of the work of art can thus be considered superfluous . " (H. Schenker, "The Art of Performance")

This assertion, which is in every way consistent with the museum mentality that posits an absolute content to music, surcharged with overtones of arrogance, as well as a number of what I consider to be outright errors.

(1) Schenker assumes that the only real judges of musical worth are those persons who are able to re-create the sound of a score by reading it from the page.

(2) He also assumes that he actually hears in this way *everything* the composer intended to put into the score.

(3) He assumes that any two competent readers will re-create in their minds *exactly the same* internal aural image.

(4) He assumes that the interpretative art of the performer will add little more to the "existence" of a composition than such extraneous elements as the cut of his tuxedo, the wood from which the piano is made or the dryness of the concert hall.

If he were speaking about literature rather than music, one could say that Schenker makes the mistake of assuming that the

novel and the *playscript* are interchangeable literary vehicles; that in effect there is no performing art that is not subsidiary to the text.

Yet imagine the reactions of an actor to the opinions of someone with an "established" reputation as a theorist of drama, delivered to him in a voice of the strictest dogmatic authority, that Shakespeare had written into the script everything there is to know about the role of "Macbeth"; that by virtue of some sort of *deep structure* 7 all original interpretation is irrelevant, extraneous or incorrect; that , as actor, his only function is to memorize then recite his lines in a manner laid down for him through a hundred inflexible rules of dramatic art?

We all know that actors do not in fact work this way. Typically what an actor is looking for in a script (why many fine actors often agree to perform in bad plays) is some vantage or perspective on a certain kind of person *which enables her/him to bring out something latent in her/himself*. Without this kindling of the imagination in the hearts and minds of actors there is no performance, nor would audiences bother to attend a play in which this kindling does not occur.

William Shakespeare did not envisage all the ways of seeing "Macbeth". He would have found it very strange to be told that he was obliged to anticipate *all possible ways* of performing "Macbeth" before putting them in his script. To the contrary, Shakespeare provides the *foundation* on which the actor can *build* a character named "Macbeth". The attempt to do otherwise

⁷Stanislavsky makes no such claim for his "through line of action"

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would require the composition of a script of 10,000 pages or more. Even then the project would fail.

To the extent that music is a *performing art* the same considerations apply . Artur Rubinstein did not simply follow Chopin's instructions, nor even those latent in his deep structures! What he gave to his audiences was *Rubinstein* playing Chopin, albeit with intelligence and respect. Indeed, what Rubinstein found in a Chopin composition, very much resembled what Schenker "finds" in classical compositions: notes, chords, patterns, themes, harmonies , sections, and connections between them - *his* connections, not Rubinstein's, nor Richter's, nor Liberace's, nor (God forbid!) Yanni's .

The major difference between Schenker and the above, is that he wrote them out, called them a system and demanded that everyone else follow suit.

My general feeling is that Heinrich Schenker's investigations into the structure of the classical European tradition in music are loving and informed, though frequently silly, while Noam Chomsky's attack on language is frankly malevolent. In the last analysis, Schenker does wish us to attain to a richer understanding of music. Yet Chomsky's stated goal seems quite militaristic: to build a kind of *Algebraic Machine* that will generate all and only those sentences which are permissible in English.

Since the appearance of the first version of this article in Ferment in 1983, I've yet to encounter a linguist, structural or otherwise, who is well-informed, or even knowledgeable, of Schenker's theories of musical analysis ⁸. Chomsky's name is known to most educated people through his visible presence in radical politics. Yet, although the name "Heinrich Schenker" is not exactly a household world, the virus of Schenkerism has infected every music conservatory in the extended European continuum. And, yes, it is a fact that Heinrich Schenker (1867- 1935) , whose writings on music theory began to circulate in the 1910's and continued until his death, took what is basically the same approach to diatonic music, (the music of Europe and its extensions from 1600 to the present), that Chomsky, starting in the 50's, adopted towards all spoken languages, past, present or potential, not excluding Martian.

That the structural linguists should be so uninformed of homologous developments in a major field, only serves to better contrast the bold universality of their claims with the narrowness of their vision.

Heinrich Schenker and Noam Chomsky both let one know that they are onto strikingly new discoveries into the interaction of form and meaning, discoveries that will blast away the archaic "classifying methods" of their predecessors, replacing them by *a deductive system of laws* !

Just like the one's they've got in physics.

Both postulate a Foreground, Middle ground and Background (surface, intermediate and deep structure) . At the

⁸In fact my father did. He is a linguist and acoustical phonetician; for many years he's put in a few days each week as a researcher at the Haskins Laboratory in New Haven. One day over lunch he mentioned that his son was interested in a music theorist by the name of Heinrich Schenker. "Of course!", one of his colleagues piped up, " He's pre-Chomsky Chomskyism!"

middle level, in both theories, one finds *transformations* working like cranes (indeed, Chomsky's parsing diagram and Schenker's *Ursatz* do look something like cranes), lifting pregnant formalisms from the background to the foreground.

Both have expressed pride in their discovery of the intermediate level; indeed, in a celebrated quote, Schenker states that history will remember him as the discoverer of the Middle Ground! Both were convinced that they were on the way to discovering a truly Universal Grammar, though Schenker never came close and Chomsky has yet to show us what's in it.

On this matter Chomsky has had the distinct advantage (or perhaps disadvantage: his grammar must explain more) of being able to roam about the plenitude of world language. Schenker found himself more or less constrained to the "12 Olympian paradigms" of the European classical music tradition of the past 300 years. This caused him no inconvenience : Schenker considered *all other music* as unworthy of the qualifier "art" . The only merit of, say, Josquin des Pres, Monteverdi, or Caccini was that what they did led to "real" diatonic music in the long run.

"It is important to point out the fact that Schenker's life's work and intensive dedication to music was directed almost exclusively to music which he evaluated at the level of art. Music which he considered below the highest level in that sense was outside his field of interest and deemed unworthy of serious consideration alongside the music of genius. " (Sylvan Kalib, Vol. I, pg. 368, see Bibliography) For example Schenker is emphatic (Schenker is always emphatic) in his assertion that rhythm is never present as a structural component in the background level. No quarter is to be shown it appears for the music of India and Africa, or American jazz. He refers to the music of the Middle Ages, and even the Renaissance, as "pre-music", a kind of lame stumbling towards his system. He is also on record as having hated the music of his own time, the 1920's, possibly the most luxuriant musical epoch in all European history, the heyday of Stravinsky, Bartok, Hindemith, Ravel, Berg, Schoenberg, Webern, Strauss, Poulenc, Milhaud, Ives....

How much beautiful music we should have lost had they read his writings and decided to take them seriously!

Summarizing: whereas Noam Chomsky seeks a Universal Grammar underlying all spoken, speakable and, for all we know, unspeakable languages, Schenker claims to have laid bare the essential principles of the only musical language worthy of the name: Classical European Music from Bach to Brahms, excluding even that sorry renegade, Wagner - not for his politics, alas! - but for his ignorance of the deeper mysteries of the *Bassbrechung*, the *Urlinie*, the *Ursatz*, *Auskomponierung* and the *Unfolding of the Urklang* !

It is in this phrase: *The Unfolding of the Urklang*, that lies at the heart of Schenkerian analysis.

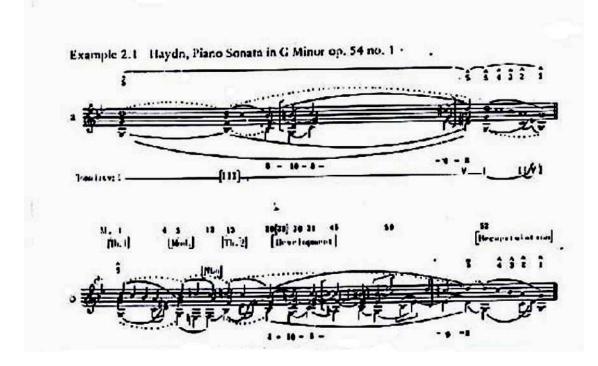
The Fundamental Noise , a Major Triad built upon a Tonic

(the Minor Triad is not an independent neo-Kantian "organism" in his system), engenders entire pieces of classical music through its repeated "unfoldings" over their range. These unfoldings literally "procreate" notes via the successive degrees of the overtone series. The "prolongations" fill in the blanks between the notes of the "unfoldings".

Note that Schenker's approach does avoid the basic defect of the Chomksyan approach: the analysis of words and sentences out of context: Schenker only deals with entire pieces. For him every piece of classical music worth listening to acquires its "coherency"

(the magic word), through this unswerving unfolding of the fundamental noise, or *Urklang* .

Down there in the depths, at the deepest level of the Background, the *Urklang* diversifies into a *Urlinie*, or fundamental line, and a *Bassbrechung*, or fundamental bass arpeggio. Together these form the *Ursatz*, an artifact one usually finds squatting like a cantilever bridge on the diagrammatic chart accompanying a Schenkerian analysis:



Schenker claims to find the *Ursatz* everywhere, hardly surprising since he is always looking for it. The structural components of the Ursatz are "transformed" by the Middle Ground, then hoisted aloft (*Auskomponiert*) into the Foreground, that is to say, the specks written down on the page, in obedience to a great heavenly host of dogmatic laws, all of his own invention. Schenkerian Transformational Grammar includes:

The *fundamental principle* of the interrupted fundamental line

The *fundamental principle* of the obligatory register The *fundamental principle* of the presence of Foreground, Background and Middleground The *fundamental principle* of the *Zug* The *fundamental principle* of the *Ansteig* The fundamental principle of the invariable presence of the Ursatz

The fundamental thesis of Statement, Interruption,

Restatement and Closure

The *Gesetz des Besonderen Werdens* (The principle of the development of particular characteristics)

Etc.

Let us not, through sheer laziness or negligence, forget to mention:

The *law* of the initiating tone of spans The *neighboring note* principle The *extension* of the neighboring note principle The *suspension* principle The *extension* of the suspension principle The *Appogiatura* principle

The extension of the Appogiatura principle , etc., etc., etc....

I for one can scarcely repress an exclamation like: "*I've been hornswaggled*! "Had Orpheus been obliged to keep all of these principles in his head, mankind would never have gotten past the incoherent screeching of squawks! Yet Schenker is adamant in telling us that all these things are there in any piece of real music, that he can always find them and that, if he doesn't, the music is inferior, if not outright bad, or stupid, or ugly, or 'incoherent', or even, God forbid - *'pre-music*! Or not even music at all! The latter opinion, at any rate, has been stated by fanatic Schenkerite Milton Babbitt vis-a-vis the music of John Cage. In the catalogue of "real" music, German music has a preeminent place:

"German melody, the true melody of music, is the overall music of the synthesis. The other nations, on the other hand, with very few exceptions, lack the musical power and stamina to create similar relationships and tensions. Their melody is an end in itself, of only a fleeting moment, immature, unfruitful for a synthesis regardless of how beautiful that moment itself may be . "(Kalib, pg. 365)

Schenker, like Chomsky, developed a elaborate system of diagrammatics, (perhaps one should say, 'diagrammaratics '), representation schemes using graphs and other pictorial means to illustrate his methods. In this domain Heinrich Schenker is by far the greater master: Noam Chomsky is routed utterly. Whereas a Chomskyan evisceration of a sentence produces a ratty stick figure, Schenker's diagrams are, in and of themselves, beautiful works of art. In addition to the 3 structural levels each on their own staff, his charts are peppered with:

> -durational values, (indicating 'importance' not time); -parentheses;

-brackets;

-connecting bars;

-long and short ties;

-numbers;

-carats above numbers;

-roman numerals;

- parenthesis with nothing in them;

exclamation points;

-asterisks;

-abbreviated comments

Each diacritical symbol has the effect of pushing a note deeper into its structural level. When a Foreground note begins to sag under this accumulation one suspects that Schenker really wanted to put it into the Background, yet balked at the enormous labor of ripping apart his structure and starting all over again.

The Chomskyites are advised in all seriousness to study the vastly superior "diagrammaratic" techniques invented by Heinrich Schenker. If the venerable Schenker can uncover 25 structural levels in 5 bars of a Haydn minuet, we have every right to expect no less from the anatomists of our beloved English!

Music in the traditions of Europe and Indian (though not in Africa, where the slit-drums convey the sounds of speech as well as the rhythm of the dance), is essentially abstract, with limited capacity for the direct transmission of factual information. It follows that one cannot say that musical statements are "true" or "false" as if they were written in a form of Morse Code. One can only charge them with being grammatically "correct" or "incorrect". This assessment may change from one period to another, and an excessively fastidious grammarian like Heinrich Schenker would probably wish to toss out all the music of the late Middle Ages , the so-called Organum, on the grounds that it is based on parallel runs of fifths and fourths. Only fools make appeal to the tribunal of uninformed taste; yet even persons with considerably familiarity with and competence in the language of music are obliged to speak in terms of what is "beautiful" or "ugly" in a musical statement.

Laws and rules exist for Western diatonic music, governing the use of consonance and dissonance, chord progressions, phrase structure, sentence structure, even the structure of entire pieces such as "sonatas" or "fugues". The European musical language has a strongly functional grammar, partly acoustical ("preparing" the descent of a minor sixth in singing to avoid a "hee-haw" sound), partly logical (using a "deceptive cadence" in a meaningful way rather than just throwing it in at random for variety), and partly mere convention (Why is a fourth "dissonant" when used in one way, and "consonant" when used in another?). These have been codified in the rules of harmony, counterpoint and form, those of harmony being the most basic, those of form the most flexible.

These rules were thoroughly mastered by all the great composers, who then were incorrigible in breaking everyone of them. This trait is also shared with thoroughly incompetent composers as well, who are always breaking these rules because they don't know any better, then claiming that they are just doing what all the great masters did! But that may well be intrinsic to the evolution of any aesthetic language.

To avoid being hidebound, rules need to be broken all the time for music to hold our interest: a piece composed according to all the rules of strict counterpoint would be dull indeed. Both composer and audience must, however, have absorbed the rules thoroughly to derive any satisfaction from their clever violation.

Heinrich Schenker's *Programme* attempts to extend *a new* from of strict counterpoint over entire works . Apparently he believed that even though the "12 classical paradigms" never followed all those restrictive rules in the small, they remained unalterably faithful to all of *his* new restrictive rules in the large!

And the immediate consequence of this is that one sometimes finds sizable errors of judgment in a Schenkerian analysis. He can overlooks things that "leap to the ear" of a sensitive or pragmatic musician. I came to the conclusion that Schenker's methods had a limited domain of applicability when I concluded that his analysis of the second song of Robert Schumann' s Dichterliebe (Aus Meinen Tränen Spriessen) misses a many basic details apparent to a practicing musician. This is not in the least surprising. Schenker believed in the existence of a "pure music" based on the absolute value of the tonal degree, apart from its 'literary' or what he would call 'extramusical' connotations. A reading of Charles Rosen's analysis of this song and the rest of the Dichterliebe in The Romantic *Generation* (pgs. 51-55 and elsewhere; see Bibliography) evokes an unqualified admiration for the subtlety and amazing cleverness of Schumann in his handling and interpretation of Heinrich Heine's poetry.

Yet sometimes Schenker's insights are valid , even profound; I do not accuse him of writing nonsense. For example, his observation that the prohibition against parallel fifths in

#35...

diatonic composition comes from a desire not to confuse the ear as to which voice is carrying the melody, is quite shrewd. The first prelude in C major of the Well Tempered Clavier of J.S. Bach seems almost to have been composed with the metamusical ⁹ speculations of Herr Schenker in mind.

But ideologues committed to total systems of interpretation invariably wander away from their beloved subjects. Nor do they flinch from the amputation of Truth in the defense of their systems: Schenker, Chomsky, Marx, Freud, Rajneesh, Ron Hubbard, Reverend Moon, Lyndon Larouche...... descending ever lower into the Nietzschean Abyss. Even the most disreputable among them nurtures some tiny grain of insight upon which he founds his totalitarian fortress: Moon wants to restore the family, Hubbard asks his disciples to apply scientific method to the problems of life, Rajneesh urged people to throw over their inhibitions, and so forth.....

Yet to all such forms of egoism and paranoia we may apply Oscar Wilde's melancholy insight: "Each man kills the thing he loves."

⁹Not to be confused with the breakfast cereal

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