CHRISTER HENNIX

17 POINTS ON

INTENSIONAL LOGICS FOR INTRANSITIVE EXPERIENCES, 1969-1979. [1,2]

.0: By an intensional logic is meant the sets of mental inscriptions of symbolic forms by means of which one's dignity can be reawakened. Here, symbolic forms are just mental inscriptions of the languages of inner representations for which the external evidence consists in the notations of an intensional logic for intransitive situations.

.0.1: Note on intensionality. [DEFINITION] Intension = Rate or character of change by which a symbolic form acquires a non-intersecting quality with respect to the world of the mundane. (Compare the notion of "metamorphoses of one's sense of phenomena" in Henry Flynt, "HESE Logic Jan. 4, 1979." Note that, if "noema" is substituted for "phenomena," this notion is very close to the notion of intensionality just introduced.)

.0.2: Note on intransitivity. The original relationship between the self and the world is intransitive. The meaning of a perception is here no more than the apperception it offers. Roughly speaking, the transitivity of this relation is initiated when the symbolic forms of the languages of inner representations start to crumble.

.1: In the phenomenon of intensionality there appears to be a correlation between the quality of the intensions and the personality of the subject. One aspect of intensionality is, for example, that the inner visions that it can produce can be of unsurpassable beauty and possess the utmost poetic integrity. Another readily available aspect of intensionality is that it may provide an acute experience where colors of objects become much more intense, deep, rich, and glowing. Further, visions produced by induced states of sublime intensionality never resemble familiar (unintensional) objects. They may be extremely definite--yet they are always surrounded by an air of novelty; or, they can constantly approach yet always elude the semblance of commonly known things. Corresponding to these apperceptions

there are induced states of inner self-illumination which I have tentatively classified in my series of 4-COLOR MAPS, 1977- .

.2: There is no question about the importance of this concept of intensionality for, as one example, theories of space-time and logics for the experience of the everyday world (the life-world), at least to the extent that critical and penetrating theories are sought. (Compare Henry Flynt's "HESE Logic.") For instance, consider the concept of time in this context. Time is the medium through which the consciousness functions when it organizes two or more perceptions about itself, so that our personae are embodied in a concrete reality bounded by this feeling of time together with perceptions of a background space. That is, the real or true self is in a constant tension from attempts to abandon itself in order to become another (An Other); or, another place (Topos) has arrived on slowly and gracefully moving eddies of intensions with an exchange of brilliant colors.

What is to be stressed in this context is that the intensionality of (for example) a perception can dissolve its timely dimensions into a span of loosely connected time-lines some of which even curve back onto themselves. Hence one has the feeling of being suspended rather than transposed in time for the duration of the intension, and hence, also, the feeling that Euclidian geometry ceases to determine the perception of space. In passing, I would like to mention that these aspects may provide for a revolutionary reinterpretation of the Clifford-Wheeler geometrodynamic cosmology, in which concrete appearances of matter are conceived of as distortions of empty space by interpreting matter as the result of the curvature of space. (Empty space is defined as space with zero curvature.) (Aside: I am in a place from which a voice is heard clamoring "the material universe is a defect in the purity of non-being.")

These aspects may also provide for a revelatory reinterpretation of the experience of subjective reality by considering this experience not as a linear ordering but as a complex span of flows of desires coupled with their immediate satisfaction and subsequent evaporation and recomposition enforced by a new radiance and space with intensional weight. Such a flow cannot be

distorted by, or even care about, any particular ordering of the past; and any notion of a future world would collapse for it in view of the (weighted) strength of the intensionality sustaining this reality. Therefore, the inevitable timelessness of the flow corresponds to its intensity. And its content is ineffable without recourse to a rarefied atmosphere of attention, in which interpretations of my intensional logics are (reflexively) self-illuminated—or in which a process of self-awareness arrives spontaneously (like the suddenness of a cross-personal identification) and transforms the mind to a state of complete intransitivity (meaning that the mind is in a state where it touches itself by itself). (This is, essentially, the effect of the revelatory reinterpretation of Montague grammar which I have documented in Notes on Toposes & Adjoints, Stockholm 1976, and in .5 below.) In this context, it is essential to perceive all intransitive situations as tangential to the range of the consciousness of the mundane. Also, it is essential to perceive the tangential space of the subjectively real as being generated by the potential existence of Stimmungs which are carried by revelatory intensions--such as sudden cross-personal identifications—and as being the space in which the authenticity of the self can experience its own echoes.

.3: Although these aspects of intensionality severely contradict the mundane experience of the world, they are nevertheless far less controversial than the aspect of intensionality which I have introduced in my Composite Sound Wave Environment E-H-1 which was installed at Moderna Museet in Stockholm a couple of years ago. The novel aspect of intensionality in this work consists in introducing--besides the aspects already discussed above--synesthetic experiences in the consciousness of the perceiving subject. This experience of synesthesia goes far beyond the mere association of visual imagery and proceeds to forms of perceptions and experiences which are intermediate between various sense experiences. For example, it is common that the perceiving subject finds himself quite unable to say whether his experience is visual, auditory, or tactile, or even whether he is experiencing a soft touch or smells a rare fragrance. In these states of emotions, intensionality embodies an overflowing sense of well-being or state of ecstasy which the

subject may describe as the "ending of all desire" despite the overflowing and irresistable desire to go on eternally engaging in novel experiences in which the most complex changes take place within the self. In this way the boundaries normally separating the self from the mundane environment are eroded, and a quasi-psychotic state of consciousness is induced. (Frege: A hitherto unrecognized kind of insanity.) It is to be stressed, however, that these experiences differ only in their superior esthetic qualities and because they correspond to no object in the mundane world: a large part of their charm lies in the halo of beauty which they cast around the simplest and most common objects once their unintensionality is removed. It is here (Topos) that the authenticity of the self can experience its own echoes with such intensity that the world and the self coalesce in a state of mutual complete intransitivity.

.4: In .4 and .5 below we shall give a brief introduction to a universal class of intensional logics for intransitive experiences of the kind already described. Although our introduction is sketchy, the reader can fill in the gaps if he consistently adheres to the principle ad nullam de necessario (meaning roughly that necessary conclusions must be assumptionless) and looks up the categorical constructions in Notes on Toposes & Adjoints. (Note well: the concept of "category" in .5 is of course independent of the Eilenberg-MacLane-Lawvere concept of categories as mathematical objects (although there is a similarity explored in the chapter on formal semiotics in Notes on Toposes & Adjoints); see Richard Montague, Formal Philosophy, Yale 1973.)

.4.1: The surface of the tangent plane facing the subjectively real world is designated □ . The surface of the tangent plane facing the mundane world is designated ■ .

.4.11: Dialectics is defined by the unordered pair

⟨ Accumulated Errors ■ , Sustained Feelings of Awareness □ ⟩*

together with the following Tactical Configuration

*The two terms are duals of one another.

$1 \longrightarrow 0$ *(INITIAL MAP)*

$0 \longrightarrow \Lambda$ *(FIRST DISCRIMINATION)*

$\Lambda \longrightarrow \blacksquare$ *(CATASTROPHE MAP)*

$\blacksquare \longrightarrow \square$ *(RECONCILIATION)*

$\square \longrightarrow 1$ *(RETURN TO THE EVERYDAY MALICE)*

.4.2: By a "colorless" or "grey" WORLD ALGEBRA $\mathbf{V}$ *we mean the notion*

$$\mathbf{V} \approx \Lambda \square \blacksquare$$

of dialectics, where

$$\square \simeq \{\Lambda\} ,$$

$$\blacksquare \simeq \{\Lambda \{\Lambda\}\} ,$$

$$\Lambda \simeq \overline{\mathbf{V}} \quad \textit{and}$$

$$\overline{\Lambda} \simeq \mathbf{V}$$

.4.21: EXAMPLE. $\mathbf{V} \approx \Lambda \{\Lambda \{\Lambda\}\}$ *together with its equational closure and tactical configuration is a WORLD ALGEBRA* $\mathbf{V}$ *.*

.4.3: By a WORD ALGEBRA $\mathbf{V}$ *we mean a WORLD ALGEBRA* $\mathbf{V}$ *containing*

some of the following equations

$$\zeta : \mathbf{V} = \mathbf{\Lambda}$$

$$\eta : \mathbf{V} = \square$$

$$\theta : \mathbf{V} = \blacksquare$$

Ad ζ. *Equation* ζ *yields* $\forall \mathfrak{y} A(\mathfrak{y})$ *always* <u>*fulfillable*</u> *while* $\exists \mathfrak{y} A(\mathfrak{y})$ *is always* <u>*unfulfillable*</u>.

Ad η. *Equation* η *yields* $\forall \mathfrak{y} A(\mathfrak{y})$ *always* <u>*fulfillable*</u> *if, and only if,* $\exists \mathfrak{y} A(\mathfrak{y})$ *is always* <u>*fulfillable*</u> *and conversly with unfulfillable in place of fulfillable.*

Ad θ. *Equation* θ *yields* $\forall \mathfrak{y} A(\mathfrak{y})$ <u>*fulfillable*</u> *if, and only if,* $\exists \mathfrak{y} \exists \mathfrak{x} [A(\mathfrak{y}) \mathscr{g} A(\mathfrak{x}) \mathscr{g} \neg \mathfrak{y} \cong \mathfrak{x}]$ *and* $\exists \mathfrak{y} A(\mathfrak{y})$ *is always* <u>*unfulfillable*</u> *if, and only if,* $\forall \mathfrak{y} [\neg A(\mathfrak{y}) \mathscr{g} \mathfrak{y} \cong \mathfrak{y}]$.

.4.4: <u>*Definition*</u>. *The WORLD PROBLEM for* $\mathbf{V}$ *is the class of equations each member of which has* $\square$ *as a solution.*

<u>*Definition*</u>. *The WORD PROBLEM for* $\mathbf{V}$ *is the class of (mental) activities* $\mathscr{AE}$ *which (in* $\square$ *) proceed over a span of indications of* $\mathbf{\Lambda}$. *Note that in* $\square$ $\mathbf{\Lambda\Lambda} \sim \mathbf{\Lambda}$, *id est iteration (continuation) is* <u>*idempotent*</u>. *Of course, in terms of the mundane experience of the world, WORLD and WORD PROBLEMS for* $\mathbf{V}$ *are examples of what appropiatly can be called IMAGINARY PROBLEMS* [3].

.4.41: <u>*Remark*</u>. *Although one can acknowlege an idea such as the "Imaginary", there is no reason to suppose that it has anything of interest*

to offer unless one has available interesting equality relations which allow for interesting distinctions which otherwise (normally?) are imperceptible. Note in this context that we have already above observed five formal distinctions between the equality relations occurring in .4.2-.4.4. Furthermore, two distinct notions of definitional equality are observed in the present work, namely DEFINITION _____ = _____ and definition _____ $=_{def}$ _____, and each equation $\Gamma = \Delta$ in the equational calculus above gives rise to an equality relation introduced by contextual definitions and observed as contextual equality. In .4.2-.4.4, for example, equation ζ induces a notion of ζ-equality, equation η induces a notion of η-equality, and equation θ induces a notion of θ-equality as contextual equality relations on the respective fields of events. Besides these and other formal equality relations, we are constantly observing, consciously or not, informal equality distinctions too numerous to be dealt with in the present exposition. What I want to draw attention to here, though, is the pre-eminent fact that no logic, whatever it may be, has anything interesting to offer unless it can produce a deep and penetrating analysis of equality. Further, and this point seems to escape most people, our informal equality distinctions form the ultimate source of our apperceptions of the external and inner worlds. Because the truth is, of course, that the external and inner worlds are not "caused" by material forces out there or biological forces in here, but by superfinite chains of identifications and distinctions insisted on by the mind. (By "superfinite" we mean that the subject's chains of identifications and distinctions appear unending to him because he conceives them without intensionality.) Here we can ask, why does the mind so insist? Can we change by an act of will an already imprinted (superfinite) chain of collations? The vertigo surrounding these and related questions shows that the relations of equality occupy almost the center of theoretical logic; and that our entire self-understanding is rooted in informal equality distinctions which we initially adopt naively and with unease, but which persist into superfinite time. It is a unique feature of my intensional logic, on the other hand,

to proceed without any assumptions about superfiniteness. (Incidentally, Henry Flynt's attempt to formulate a HESE logic related to his "logic of contradictions"—by which such experiences as those produced by my E-H-1 can be understood—is inadequate for two reasons. First, it makes naive and unwitting assumptions about superfiniteness. Secondly, it lacks any explicit, appropriate analysis of equality.[4])

.5: (The following text is taken verbatim (with minor corrections) from an earlier work of mine, "Brouwer's Lattice", Stockholm 1976.)

A domain $\mathcal{N}$ of basic objects is given.
On the intended interpretation, the basic objects correspond to basic intensions connected with the expanded eleutheric activities defined by Relevance Theory.

There are two main construction principles for obtaining composite complexes of intensions from basic intensions, viz:

1. *The first principle, connected with the singular bracketing operation, yielding expressions of the form [.....] , where the dots stand for any terms with values already in $\mathcal{N}$.*

2. *The second principle, connected with the operation of collecting together iterated applications of previouly obtained operations, yielding expressions of the form $\sqcup($ ..., ..., ..., ...), where the dotted places mark the argument places for terms only with value in $\mathcal{N}$.*

.5.1: A formula or design is any expression Φ, Ψ &c in a language $\mathfrak{L}(\mathcal{N})$ appropiate for $\mathcal{N}$, such that for any free variables in Φ, Ψ &c,

$\Phi(X_1,\ldots,X_n)$ is a design the value of which at the coordinates $X_1,\ldots,X_n$ is defined, if, and only if, the value of each term substituted at the places for the free variables in Φ takes at least one value in $\mathcal{N}$. If the values remain undefined or are appropriate only for other domains than $\mathcal{N}$, Φ is said to be a mere sign (ie a formula without design).

For any activity $\mathcal{A}$, if $\mathcal{N}$ is the field of $\mathcal{A}$, then all acts subsumed under $\mathcal{A}$ may be described by an appropriate $\mathfrak{L}(\mathcal{N})$. Subsets of $\mathfrak{L}(\mathcal{N})$ are called Texts for $\mathcal{A}$. The rules for interpreting a Text determine the meaning of the formulas of the Text.

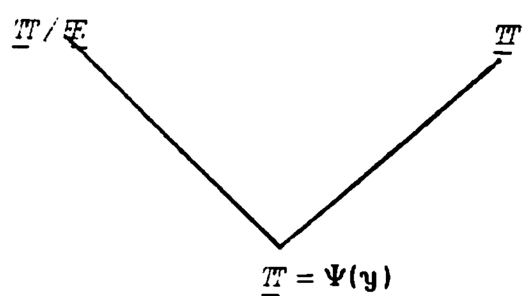
- - - - - - - - - - -

Syntactically, meaning is constructed out of intensions that componentwise determine the range of the semantics involved (ie subsets of the semantic domain).

We start with two objects, $\underline{\mathbb{E}}$ *and* $\underline{\mathbb{T}}$ *, that contain, respectivly,* *__possible objects__* *and* *__atomic intensions__*. *The meaning of any formula* Ψ *is then decided by the functional evaluation of the composite of elements in* $\underline{\mathbb{T}}$ *over the elements in* $\underline{\mathbb{E}}$*(the arguments for the elements of* $\underline{\mathbb{T}}$*).*

According to Montague,$\underline{\mathbb{E}}$ *and* $\underline{\mathbb{T}}$ *are conceived of as* *__basic categories__*, *while their combinatorial range is considered the domain of* *__derived categories__*. *For example, any modifier that is syntactically distinguishable in a formula belongs to a derived category.*

Given the basic categories $\underline{\mathbb{E}}$ *and* $\underline{\mathbb{T}}$*, we can inquire about their combinatorial modes. Consider, for instance the complex formula* $\Psi(y)$ *, which can be seen as a syntactial object of category* $\underline{\mathbb{T}}/\underline{\mathbb{E}}$ *:*



Other derived categories are, for example:

$(\underline{\mathbb{T}}/\underline{\mathbb{E}})\ /\ (\underline{\mathbb{T}}/\underline{\mathbb{E}}),\ (\underline{\mathbb{T}}/\underline{\mathbb{E}})\ /\ (\underline{\mathbb{T}}/\underline{\mathbb{E}})/\underline{\mathbb{E}})$ *&c*

.5.2: By these formal conventions, our logical constants receive the following syntactical definitions:

$\neg \equiv_{def} /\underline{\mathbb{T}}$

$\& \equiv_{def} /\underline{\mathbb{T}}\ \underline{\mathbb{T}}\ \underline{\mathbb{T}}$

$\vee \equiv_{def} /\underline{\mathbb{T}}\ \underline{\mathbb{T}}\ \underline{\mathbb{T}}$

$$\Rightarrow \overset{=}{=}_{def} \quad /\underline{T}\ \underline{T}\ /\ \underline{T}\ \underline{T}\ \underline{T}$$

$$\forall \overset{=}{=}_{def} \quad /\underline{T}\ \underline{T}\ \underline{T}\ ,\ \ldots\ldots\ldots\ldots\ ,/\underline{T}\ \underline{T}\ \underline{T}$$

$$\exists \overset{=}{=}_{def} \quad /\underline{T}\ \underline{T}\ \underline{T}\ ,\ \ldots\ldots\ldots\ldots\ ,/\underline{T}\ \underline{T}\ \underline{T}$$

It is an easy but elaborate exercise to construct further definitions wherever they are required.

****

NOTES

1. This essay is an (overdue) response to a request by Henry Flynt. I would like to express my thanks to Henry for his unfailing support of my work and for his criticism of earlier drafts of this essay.
2. In this essay I am apparently using a language to say something which it itself does not say. However, here I consider "the way out" to be "the way in" but in the opposite direction. In other words, I am not making any concessions concerning ordinary language in which entire mythologies are set down for the (not always explicit) purpose of betraying us. Rather, I hereby project the understanding that only by means of a radical reinterpretation can I use this language in order to be able to say something which it itself does not say. With this understanding it is only coherent to extend this radical reinterpretation to notations for symbolic forms and ultimately to pure languageless states of being (the post-imaginary state of being.)
3. DEFINITION The Imaginary = The grammar of the inconceivable.
4. Henry's central philosophical document, variously called "Primary Study" or "The Flaws Underlying Beliefs"—and also his paper "An Argument That the Metatheory of Mathematics Is Inconsistent"—fail for similar reasons. That is, they fail because they do not provide a profound, appropriate theory of equality.

New York, Jan. 1979