As readers of *Noesis* will recall, this crucial redefinition begins with a mutual, recursive interdefinition of *information* and *cognition* within a "reified tautology" called a *quantum transdu­cer*. The quantum transducer, being *paradoxiform* by direct analogy with tautologically-based inference, models the way subjectively-tautological cognitive syntaxes transduce information in time. The universality of this model allows reality to be reduced to it, and thus to (cognitive) information. "Information" is the objective aspect of the quantum transducer *for* itself and for all others; it is *cognition-for-cognition*, equating generalistically to a cog­nitive identity relation on that part of reality to which it cor­responds (i.e., the part containing all the transducers playing active and passive roles in it).

As you suggested in *Noesis* 73, my "certitude" regarding the CTMU rests on its tautological structure relative to all humanly-com­prehensible reality (I seem to recall mentioning something to this effect during one of our two conversations)...and a few related "tricks" like paradox-distributivity. Formulating reality as a tautology was an obvious move. The reason no one succeeded before me is that doing so required a basic (and rather counterintuitive) restructuring of our perceptions and conceptions of reality.

A primary effect of this restructuring was to eliminate certain barriers existing among various submetaphysical disciplines. Every field of human inquiry contains valuable information, but it has always been difficult to transfer this information across inter­disciplinary boundaries. Thus, the elimination of these boundar­ies - the construction of a "universal formalism" - opens various realms of inquiry to relevant but otherwise-inaccessible informa­tion once "hidden" in the alien formalisms of other realms. The "liberated" information is then free to combine in synergistic (or even chaotic) ways to reveal new insights.

I know you remain skeptical of certain implications of the CTMU, largely because you're unfamiliar with the logical and model-theo­retic criteria for proof. Hut you must at least know that they in­volve conjunctions like *type theory* and *probability theory*, and the theories of *physics, computation* and *decision*. Furthermore, these conjunctions are used to solve problems which cannot other­wise be solved, at least with any amount of ease. Your skepticism notwithstanding, it is obvious that this kind of "informational chain-reaction" can he a powerful generator of insight.

There is one problem in particular that cannot be solved without a CTMU-style tautology and its attendant informational explosion: that of providing a general, logically consistent picture of the universe. This owes to the fact that the basis (root concept) of any correct theory of metaphysics must be *tautological relative to all conceivable aspects of reality*. Because the "metaphysical uni­verse" is so all-encompassing that it exceeds the set of all self-inclusive sets, where "self-inclusion" is synonymous with the kind of self-description on which (prepositional) tautology is defined, it must reduce (or regress inductively) to the broadest and most powerful tautology the human mind can formulate.

There is only one such "universal tautology", and therefore only one correct basis for metaphysical theorization. To convince you of this, I offer the following informal and highly simplified "proof". For the purposes of this proof, think of "information" as that by which transducers distinguish among objects or ideas. The phrase "T excludes d" means that the *theory* T contains neither the *info* d nor a deductively heritable generalization of it. The point of *exclusion* is to excuse us from differentiating between two theories, one of which is either a notational variant or deductive evolution of the other. Such theories pass as virtually identical; "different" theories have different tautological bases.

**SHORT FORM:** Say that there are two true but different theories of metaphysics M and M’, one or each of which contains information inferentially excluded by the other. Call all such info "d". Since M, M’ are both true, and the distinction between two truths is it­self a truth, d is true. Since metaphysics is comprehensive over reality by definition, it can exclude no real truth. But at least one of the pair M, M’ excludes at least a part of d. So at least one of the pair is not a theory of metaphysics, and the assump­tion that two such theories exist is self-contradictory. This im­plies that there is at most one true theory of metaphysics.

Could there be *no* true theory of metaphysics? According to the above discussion, metaphysics reduces ultimately to the human cog­nitive syntax (or more accurately, its symmetric self-expansion). So "no true theory of metaphysics" would imply that human beings lack a cognitive syntax. If this were so, human cognition would he random and patternless. But it isn't. So there is one true theory of metaphysics, and this is by definition the CTMU.

It might be objected that the CTMU, being based by definition on the human cognitive syntax, already resides in each of our minds and thus represents no informational gain. But this syntax is not so easily formulated within itself, and equating metaphysical reality to it is neither obvious nor simple. As explained above, a net informational gain comes from freeing information once "locked up" (artificially isolated) within U\*-pseudotautologies and the scientific and mathematical theories implicitly based on them.

Now that we have the essential picture, let's try for some detail. Let Ui, be that part of a generalized universe U\* to which we refer as *the physical universe*, or the set of all things directly obser­vable by Ui-observers. This is a recursive definition in which Ui is defined on Ui-observers and vice versa, and varies with choice of subscript. Subscripts correspond to *cognitive equivalency classes* within U\*, or sets of observers sharing the same information-transductive syntax. Ui consists of that part of U\* specifically decidable to Ui-observers, and is mathematically equivalent to the cognitive class itself. Assume that the class Ui is human.

The term "metaphysics" is variously construed. In certain usages it encompasses alternate (or "parallel", or independent) realities with no physical meaning. In the Aristotelian sense - and ours it is the totality of theoretical potential relative to the physi­cal universe. While there is nothing mutually antithetical about these constructions, metaphysics relates to physics only as an exhaustive domain of ultimately Ui-effective "hidden causality" undecidable by conventional scientific means. The *real universe* U\* is an extension of Ui by adjunction of this domain.

U\* is related to the physical universe by a form of connectedness loosely characterizable as "relevancy"; i.e., it is an extension of Ui generated by causal regression. From Ui, it appears as "causal potential" manifesting itself in Ui as "physical effects". For Ui, U\* is unique. For suppose that Ui were contained in many realities corresponding to many Ui-distinguishable metaphysical tautologies. For the differences among them to "register" in the minds of Ui observers, they must be specific relative to the Ui cognitive syntax. As relatively specific tautologies are of lower order than the "tautological" Ui cognitive syntax itself, the uni­verses to which they apply - i.e., the realms of Ui potential and Ui-relevant "alternate reality" they represent - must be partial and therefore properly included in U\* (which is complete by defi­nition and theoretically infinite). It follows that U\* is unique up to indiscernability: if "other versions" of U\* exist, they must be within it, inductively homomorphic to it and indistinguishable from it.

It would be easy at this juncture to point out that by "reifying" information as the quantum transducer, and distributing the quan­tum transducer over reality, we have removed the major distinction between U\* and any theory describing it. Whereas only the latter was formerly regarded as "informational", so now is U\*. The U\*-descriptive theory is now merely a sort of endomorphic "self-equi­valency" of U\* as perceived by Ui. We could conclude our proof on these grounds alone; if U\* is informational and "unique" for Ui, then so is the metaphysical information to which Ui regards it as "equivalent". But we can make this even clearer.

A theory of metaphysics is formulated by inhabitants of the real universe it describes. Relative to (Ui , U\*), it is a description of U\* by the observational subsystem Ui of U\*, or a U\*-self-description based on a Ui-formulated U\*-quantified tautology applying to the "metaphysical" extension U\* of the jointly-observable reality (Ui) of the Ui cognitive equivalency class of U\*. The circularity of this description reflects the necessary self-referentiality of tautology at the metaphysical level.

Suppose that there exist Ui-discernible theories of metaphysics M and M’ on {Ui, U\*}. The Ui-discernability" of M, M’ implies that they are Ui-informationally disjoint: (M ∪ M’) - (M ∩ M’) = [illegible] ∅. The "infometrical" form of this relationship is graphically expressed as

M---------(d)---------M’,

where the edge (dotted line d) represents *syndiffeonesis* (differ­ence within a cognitive class)...i.e., information in the sense given above.

Now, the disjunctive information represented by the edged exists in M ∪ M’, which, by the self-referentiality of metaphysical tau­tology, implies that it exists in their common universe U\*. So the edge *d* represents *real information* that must be included in the *real universe U\**. By our initial assumption that M and M’ are both theories of metaphysics and therefore tautological on U\*, d must be included in both of them. But since d is defined as *disjoint* information - whence the way it disjunctively separates M and M’ - this leads to a contradiction. I.e., the nonuniqueness of M and M’ violates the universality criterion of metaphysics.

**Now let's see if we can recap all of this**.

Aristotelian metaphysics is universal, containing in principle all Ui-relevant information (Ui-potential) U\*. A theory of metaphysics M is an open inferential system which, because necessarily univer­sal, reduces to a Ui-recognizable tautology T on U\* heritable in M via generalized rules of inference (where "generalized inference" is just logical substitution). As specific information equates inductively to ancestral generalisms, and U\* is both unique and Ui-indiscernible from T, the identification M = T = U\* is practically unconditional. Now suppose that there exist two Ui-distinguishable true metaphysical theories M and M’; i.e., two Ui-distinguishable Ui-tautologies T and T’. These can only be Ui-distinguishable by virtue of a nonempty Ui-informationa1 disjunction: i.e., disjoint information d = (T ∪ T’) - (T ∩ T’) > ∅ recognizable in/by Ui (where the information in T or T’ equals the scope (image) of its univer­sal quantifier, and ∅ is the null set). This information d, being the distinction between two Ui-perceptible truths, exists in Ui and thus U\*. But as it is *disjoint* information, one member of the pair (T, T’) does not contain it. So this member does not cover U\*, is not a U\* tautology, *and thus is not a theory of metaphysics*. On the other hand, M = Uj = 1, 2... Mj, where the jointly U\*-exhaustive Mj are all "true", Ui-distinct, and M-nonexluded, *does and is*.

So the assumption fails, and there can be only one correct theory of metaphysics at the tautological level. This, by definition, is the CTMU. I.e., the CTMU takes this existential proof of metaphys­ical uniqueness and uses the implied system as the identity of a*transductive algebra* meeting the conditions for human cognition by its homomorphic relationship to the human cognitive syntax. So for the human cognitive equivalency-class, the universe is generalistically identical to the CTMU tautology.

*Soi-disant* "metaphysicians" have been debating the merits of so-called metaphysical theories for centuries, usually claiming to argue from "logical" standpoints. The only accord they have been able to reach is an "agreement to disagree". Sadly, this has left the uncloistered masses with a level of metaphysical understanding not far above that which guided them through the last Ice Age, and science without a clue as to the meaning of what it is doing. If this is not a monumental injustice to humanity, then humanity has vastly overestimated its own importance.

Fortunately, mankind *does* have a protector against the abuses of time and energy being perpetrated upon it even now by mainstream philosophy. With the coming of the CTMU, time has run out forever on this conspiracy of the blind: the blind, sighted at last, can newly behold reality through tears of shame and gratitude; and the rest of us, freed from the rotting conceptual bonds of traditional "wisdom", can finally anticipate the fulfillment of our collective intellectual identity.

As a start down that road, the information in this letter alone exceeds that of a standard Ph.D in "philosophy". Think of it as a primary gateway into logical self-awareness.

Regards, Chris

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