Dear Bab,

unable to do algebra. Is this likely? Also, since the theory has been verified experimentally over and over again, somehow nature would have to be unable to do algebra too. Is this likely?

Since I find your position so untenable, I am probably going to have a hard time refuting it. This seems counter-intuitive, but really isn't. Since you are able to believe something I find unbelievable, we probably share very little in the way of common ground. I know you have • scientific and technical background, again, somehow nature would have to be unable to do algebra too. Is this likely?

In fact, your abhorrence of special relativity may be so complete that you are willing to completely rewrite your world-view, just so you do not have to believe in special relativity. This has happened many times in the history of thought, for example, the philosopher Henri Bergson had a theory of time in which time was measured by the subjective sensation of the occurrence of events. Bergson felt that the synchronization of time was because people perceived events at the same rate. When early relativists uncovered the twin paradox (wherein a twin that is accelerated to near-light speeds ages more slowly than one who is not), Bergson argued that since both twins perceive time the same, it was impossible that one should age more slowly than the other. Bergson was simply unable to adjust his world-view to adopt the new conception of time.

I perceive in your letter an attempt to approach me on the supposed common ground of mathematics. Unfortunately, this is an illusion. To paraphrase Bertrand Russell, in mathematics we do not know what we are talking about, nor do we know if what we are saying is true.” In other words, unless we share a common interpretation of the mathematical symbols we manipulate, we will not get anywhere. For example, I infer from your letter that you think it contains a convincing refutation of special relativity. I do not see that it contains any such thing. I see that it contains some algebra, but if this amounts to a refutation of relativity, you must read things into these equations that I don't see.

I note that you have published many pages on this subject, without a lot of comment by other people. I also infer from your letter that you want more feedback. I would like to give you more feedback, but I'd like to "cut to the chase." You seek one of two things: truth or glory.

If you are a glory seeker, your only problem with relativity is that you didn't invent it. You seek the glory of being the only human being out of five billion who shows that the emperor has no clothes. Your need of being the only human being out of five billion who shows that the emperor has no clothes.

If you are a truth seeker, you have some specific problem with relativity, as Bergson did. So, putting aside all the mathematics, what is it about relativity that bugs you?

Chris
The obsessed GRE taker may accumulate up to 18 preparation points. Multiply the number of prep points by 1.5 to arrive at your percent advantage over the person with zero prep points. This percent advantage represents the percent reduction in the gap between the maximum possible GRE raw score and the raw score you'd get with zero prep points. For example, say two people with equal knowledge of the subject take a GRE with a maximum possible raw score of 200 points, and the person with zero prep points gets a raw score of 100. The person with 12 prep points will get a score of around 118. This can mean the difference between scoring in the 56th and the 80th percentile.

Test-taking preparation improves performance in four areas not directly related to the subject matter being tested (and increases your knowledge of the subject matter). These areas are: confidence, time management, guessing productively on questions you otherwise wouldn't be able to answer, and pinning down answers to questions about which you have incomplete knowledge.

A question about tests for Ron Hoellin—have you calculated a correlation coefficient for the Titan vs the Mega? I did some quick sloppy calculations & came up with an r of about .88. Is that reasonable?

LETTER FROM RICHARD W. MAY

Dear Rick,

It may not be exceedingly clever of us to attempt to select individuals at a one-per-million criterion (the membership of the Mega Society) and then confuse this set of individuals with another set that is in principle (not in fact) random by the same criterion (the subscribers), i.e., a minute subset of the population able to pay the $10 subscriber fee.

Separate lists should be compiled and at least available to the membership, if not published or the admissions criterion should simply be changed to that of a society of individuals occasionally having $10 in discretionary funds. I am not in favor of the latter alternative, notwithstanding the immense advantages in both statistical confidence level and political correctness.

Richard

[Editor's comments: Here's what I'll do, if it meets with everyone's approval—
A. List people we know to be members and the name of the test by which they qualified, if we know it. If we don't, we'll list whatever information we do have.
B. List pertinent credentials of non-qualifying subscribers who authorize me to do so. For instance, a subscriber may have scored a 39 on the Mega (or 1540 on the SAT), doesn't want to do the work necessary for another shot at qualifying some, but still wants everyone to know said subscriber can do very well on such tests.
C. The membership list will always be correctable in terms of adding people, but not subtracting people. If you were ever legitimately considered a member, you remain so forever. (This does not include subscribers who mistakenly became listed as members.)
D. Controversies regarding individual membership will tend to be resolved in favor of the member in question. I don't want to piss people off by putting them through all sorts of B.S. regarding the circumstances under which they were granted membership. (Some small amount of B.S. may be generated by my own disorganization and laziness.)
E. I'll try to crank out a membership list by the October issue, which you can expect to see by Valentine's Day.]

Chris Cole
Box 9545
Newport Beach CA 92683-9545

Dear Chris,

A) Given:

\[ x' = \frac{(x-St)}{\sqrt{(1-S^2/C^2)}} \]

According to the basic rules of algebra, (1) is incomplete. (1) must be completed by substitution of (2) and (3) and simplifying.

The result is:

\[ x' = \frac{x}{(1-\beta)/(1+\beta)} \]

B) Given:

\[ \beta = \frac{t-Sx/C^2}{\sqrt{(1-S^2/C^2)}} \]

According to the basic rules of algebra, (5) is incomplete. (5) must be completed by substitution of (2) and (3) and simplifying.

The result is:

\[ t' = \frac{t}{(1-\beta)/(1+\beta)} \]

C) Equations (4) and (6) are the sole completed and correct results of any derivation of the Lorentz Transformation.

D) Equations (1) and (5) are the conventional Lorentz Transformation. They are invalid by virtue of being algebraically incomplete. The Theory of Special Relativity is founded on (1) and (5). When (1) and (5) are completed, the mathematical foundation of the Theory of Special Relativity vanishes. Therefore, the entire Theory of Special Relativity is founded on incomplete algebra and is invalid.

E) Where is the error, if any, in the foregoing?

Best regards,

Robert J. Hannon
reference, but which I've decided to extend thereto. It might denote sarcasm, or it might be a signal that while some people may use this word in the context at hand, I don't consider it entirely appropriate for the context as I believe they define it. Regarding "mathematization", reasons two and four apply. I.e., the CTMU is so mathematical that it transcends known types of mathematics, and the quotes were a warning to those whose ideas of mathematics are obsolete or artificially restricted by confusion about mathematical concepts like "infinity". 

Regarding the relationship of definitions to theories, and the general features of the holographic analogy, you prove yourself a very quick study. Keep up the good work, and let me know what you think after you read your back issues of *Noesis*. Try to keep one thing in mind as you do: you are searching for meaning. The CTMU is a religion of meaning. I open its doors to you because you are a human being, and as members of mankind and cooperative participants in one reality, we are - beneath the beauty and variegation of physical individuality - ultimately one. Being with a free will in which we both share. For the first time in human history, these things have become logico-mathematical verities.

Incidentally, congratulations! My records indicate that you are a nonmember-subscriber to the Mega Society journal. However, simply by recognizing the importance of the CTMU, you have elevated yourself to a higher position on the scale of actual intelligence than most of our "members", and you can take that to the bank. This is due to your performance on the top-level "IQ test" encrypted in the form of my contributions to *Noesis*. Of course, your score is only preliminary and approximate, but it is clearly among the most promising to date. [To see why the CTMU is superior to other adult intelligence tests which have appeared in *Noesis*, consider that (1) it imbues every aspect of reality and is thus "unbiased" with respect to those parts of reality in which you dwell and in which you are interested (practically everyone has thought about what reality is, and anybody who hasn't has no business taking any high level IQ test); (2) its points are logically and mathematically solved and need not be "scored" on bases like consensus or point of view; (3) it has now been tried out on a group of well-studied subjects with respect to whom it displays an unprecedentedly high "top end" (inasmuch as most of them are well on their way to flunking it through neglect or implied rejection); (4) by its very nature, it can only be designed and administered by a real genius intellectually qualified to judge the intelligence of others; (5) as an ultimate theory of the nature and scope of intelligence, it is uniquely valid as a scale of intellectual awareness; and (6) it is no mere bag of puzzles, but has such innate importance as to be invulnerable to questions of motivational deficiency.]

Sincerely,

Chris Langan
P.O. Box 131
Speonk, NY 11972

---

April 20, 1993

**LETTER FROM RON HOEFLIN**

Dear Rick,

It bothers me, frankly, that material is published in *Noesis* from non-member subscribers without warning readers that the item is not by a full-fledged member. This tends to undermine the purpose of the group, which includes camaraderie among intellectual peers, since we are not informed who is a purported "peer" and who is simply a "guest."

I suggest, therefore, that an official list of full members be compiled and published in *Noesis* within the next few months. Since Jeff Ward has been serving as membership officer of sorts, perhaps he can assist you with the compilation. I believe the list ideally ought to include the following information:

1. Member's name
2. Member's address
3. Name of the test or tests on which the member qualified

If this list cannot be compiled from available files, I suggest that you request all members to send you this information by a given deadline. Those who do not respond by that deadline will not be included in the list of full-fledged members, although they may request to be included in such a list at some later date if they are indeed fully qualified.

A membership card ought to be issued to official members. I would be willing to produce such a card if no one else is willing to.

I do not consider myself a full-fledged member of the Mega Society, so the request for a list of official members cannot conceivably be construed as an ego trip on my part.

I feel so strongly that a list of official members is necessary that I probably will withdraw from further participation in the group if no list of members is compiled and published by the end of the year—but preferably sooner.

Sincerely,

Ronald K. Hoeflin
P. O. Box 539
New York, NY 10101
Consider the Turing halting problem, in which infinity is cryptically defined on a computational relationship. In order to attempt to compute the uncertain validity of an undecidable hypothesis ("machine alpha will halt"), machine beta must embark on a nonterminating ("infinite") computative "cycle". Where everything is reduced to infocognition - in which alpha here occupies an informational and beta a cognitive role - this is in fact the only definition of infinity that counts. Infinity, whether parallel or sequential, cardinal or ordinal, becomes the daunting prospect of any transducer embedded in or attempting to simulate another which has the capacity to outlast it, outreach it, or in any way contain or enclose it.

Let's come at this from a slightly different angle. Take the terms infinity and all. We use them to encompass totalities that we either cannot, or would rather not, enumerate. Thus, they are to some extent open with respect to content. Yet, they have closed-form definitions which are well-distinguished from those of other terms. In fact, one can load either of these terms with arbitrary conditions and constraints which describe the exact sense in which closure applies (e.g., "all wombats which are both pregnant and have not lost their tails"). But this is true only because closure is implicit in their bare definitions or the definitions of terms to which they apply. Because subjective and objective reality are identified in the empyreonic identity, this HSCS convention is generalistically "objectivized". Thus, it makes perfect sense to speak of an "infinite but closed" universe...and of a "big bang" and "big crunch" which may be "infinitely" far away in the past and future, and yet identically distributed over time. By the way, eternity must be treated like infinity; it "lasts" long enough to encompass any discrete HSCS-syntactified process, but is instantaneous at the and/or last time level of reality. In fact, time and space as we know them arise only as artifacts of metasyntactic restriction; without the attending inductive stratification, the universe is as atomically, "instantaneous" flash of parallel self-differentiation.

When I put a word in quotes, it can mean any of several different things. It might denote a neologism. It might denote an existing word whose standard definition doesn't quite cover my context of
Mr. LeRoy Kottke
4767 Dawson Drive
Ann Arbor, MI 48103

Dear LeRoy:

Issues 44-49 of Noesis were indeed the ones in which I introduced the CTMU. I took over the editorship during the first half of 1990 in order to do this without having to tolerate the kind of unreliability and half-baked editorial comments I’ve endured since. As it turned out, I was such a “popular” editor that another member’s ill-fated attempt to improve on my resolution of Newcomb’s paradox). Watch out... despite what I thought was a very clear writing style, all of these issues are reputed to be virtually impenetrable.

The CTMU supertautology is defined as an “expansion” of the human subjective cognitive syntax, or HSCS, with respect to its accepting (“observational”, “recognition”) stage. The human accepting syntax is logically one-valued; that which you can sense is real, and what is real is true and never false. 2VL arises when we formulate various aspects of reality in contrast to their logical negations and complements in order to “cognize” it. MVL arises when we begin to apply various mental constructions or relational hypotheses to this 2VL formulation of reality in order to predict it or cognize it on higher levels. Infinite-valued logic (IVL) arises as the terminus of an HSCS-open inductive regression through arbitrary causal and compositional arrangements of these hypotheses.

Since these hypothetical relationships are how we explain “objective reality”, MVL characterizes objective potential which has not yet collapsed as IVL HSCS/subjectively-perceived reality. MVL is merely the logic of probability, uncertainty, and unpredictability. The surprise comes when we realize that, due to the way in which the HSCS and objective potential are interlocked, the latter is literally MVL-structured for purposes of human cognition. In CTMU terms, the distinction between objective and subjective reality disappears at the empyreonic identity (concerning your related question, the CTMU is both a subjectively-projected mental limit and an objective reality; the two are finally indistinguishable). Thus, an instance of quantum collapse is a cancellative transition from MVL (telic) to IVL (actualized) reality, where it is understood that the operative undecidable determinants and not arise entirely from human telics but may come from nonhuman HSCS-consistent teles.

Notice that CTMU tautological structure is invariant through the transition from infinitely to finite and single-valued logic. I.e., closure applies throughout due to the stable HSCS basis of the transformation. Recall that the empyreonic identity is described as an “infinite-valued parallelism”. Parallelism implies that everything is “invariant” in the sense of simultaneous intercon-

May 05, 1993

Rick Rosner: I apologize in advance for addressing you in what may seem like an overly direct and disrespectful manner. I’m doing it because none of my experience with Noesis gives me any reason to think you will respond to a more delicate approach. I don’t want to make you feel bad - I think you’re probably a worthwhile person - but I do want to get through to you.

Thanks for calling me a “nice guy”. I hope you understand that it wasn’t me who seemed to be accusing you of ignorance and stupidity. It was Jojo. Part of the reason I invented him was to let say what needs to be said, without the unpleasant necessity of saying it myself. Actually, I regard you as intelligent, but doomed to ignorance by strange mental idiosyncracies. I shouldn’t talk; others might make the same accusation against me about their own fields of expertise. The difference is, I don’t try to tell fish how to swim or birds how to fly. I have enough regard for their abilities to learn instead of argue or ignore. You’ll find that this trait is universal among those who come to excel at anything technical.

While Jojo might endorse the adjective “sucky” as a description of your performance as editor, I’d tend to be less extreme in view of your honesty about its shortcomings. My displeasure with you started about the time you introduced my Noesis 71 piece with oblique aspersions and Seven Dwarves trivia. You may recall alluding to your own “all-encompassing” theory, for which past Rosner editors had implied certain CTMU-like characteristics. Unfortunately for that, the CTMU is the Mother of All Theories and is structured such that other theories must either conform to it or be eaten alive by it. Since I’d warned you of this repeatedly, I was finally forced to call your bluff.

I understand that a little entertainment can be good, especially for the expanding circulation Noesis so badly needs. But so are standards of content, and everybody eventually has to learn when and when not to laugh. Spend too much time laughing at the wrong things, and nobody will take you seriously enough to let you do anything else. While you strive to attain Alfred E. Neumannhood, others worry about guilt by association.

I’m glad you understand that theories can’t be judged on context, despite the fact that you do it anyway. If high-IQ journals are lousy contexts for publishing new theories, that’s literally everybody’s fault but mine. I see Noesis in terms of potential; you seem to see it as just another forum for snide humor, baseless egotism, half-baked opinions, and blatant idiocy. In a very real sense, that which is abused and neglected by others belongs to him who uses it to full advantage. In that sense, I own Noesis. I’m willing to share, but it’ll cost you more than the intellectual chump change you’ve been sprinkling on it so far.

You blame some of your incomprehension on “the material”. I disagree. In fact, the material is calculated to be full of terse, disguised “proofs” and “aha!” type neologisms. When I use a term...
like syndiffeonesis, what does it take for the reader to think 
"sym = same, diff = difference, syndiffeonesis = difference-
in-sameness = paradox"? Not much, in my book. You and the rest of 
the group will chew off your own paws to solve a Hoeflin, Langdon, 
Inman or Pomfrit verbal analogy, no matter how arcane or how alien 
to your real existences. But let me use a transparent verbal con-
struction to describe real existence itself. And suddenly I take 
first in the Dracula contest. What's that all about?

Let's get real, Rick. Most of us have read plenty of material next 
to which mine reads like a kindergarten primer, and I've done 
everything short of writing CTMU fairy tales to get your attention. 
The fact is, most of the "hard stuff" gets forced down your throat 
in school, where Joe Professor stands ready to beat your negligent 
little bottom if you slack (thus, the way you excuse yourself from 
reading Noesis "as if you're going to be tested on it"). May I 
point out that this is a hell of a standard for living your life? 
First you do things because your rear gets kicked by the school. 
Then you go to work for a company that takes turns kicking your 
rear with the government and your spouse. Then you die. Is that 
why you were gifted with a high IQ?

Probably confident that nobody but me gives a damn, you've called 
for an informal referendum on your performance. Apparently, the 
idea is that if I'm the only one complaining, and everyone else 
likes the show, then it's business as usual. Well, I'm afraid that 
turkey won't fly. Democracy, as conceived by the ancient Athenians, 
requires both logic and a sincere, universal desire for communica-
tion and understanding. People who respect neither of these cri-
teria, but prefer yukking it up at each other's expense, don't 
qualify for a democracy. Like spoiled, misbehaving brats, they 
must learn to shut up and grow up before they get to vote. This 
rule has been around much longer than either of us have. If your 
local porkbarrel pals have forgotten it, that's irrelevant. They 
and their constituents are why American government is so often 
described by words like "stalemate", "paralysis", and "gridlock".

Time grows short for you, Rick. Pretty soon, even I'll be unable 
to wipe the egg off your smirking face. You know what I'm talking 
about. If 60 Minutes ever does a piece on the Mega Society, do 
you want to be the guy who tries to run away and hide his mug from 
the camera? Wouldn't it be easier to shape up your act now? 
(On another note, good job on those GRE's!)

RON HOEFLIN: Your fixation on categories is, of course, less than 
"metaphysical". I.e., your system devolves to a set of categories 
which is reducible to individual categories. But in order to de-
fine a category in terms of a set of categories, you need the very 
sort of logical framework you appear to disparage in your letter. 
Since only the CTMU can explain what the general concept of "cate-
gory" really means, the only way for you to meet this objection 
is to embrace the CTMU. Until then, your system is reducible to 
something which cannot be explained within it, and for the nth 
time - is demonstrably not a theory of metaphysics.
and omniscient. Any challenge to its internal structure can be easily dismissed on the basis of irrelevance since by definition, in the ultimate limit the CTMU is all inclusive and hence can easily regard this pseudo-intrusive challenge as just part of the CTMU. These challenges and denials by members are then just part of the CTMU and are to be expected and assimilated into its ultimate structure. I think you have to admit that this is somewhere between certainty and uncertainty. That is, I don't appear to have any choice but to succumb to the CTMU, and any protest I may put to will certainly be met with a counter squelching force of authority. This makes self-determination an illusion, as is probably correct. However, the big question is: what is the reason for this uncertainty about a consensual universal answer—the CTMU—why all the angst? I guess, I would answer, because we haven't reached the limit yet, and won't, because of the assumed unbounded nature of the universal reality set. However, it seems to me that you have convinced yourself through a process of projecting the limit through imagination that it exists; I mean you have taken it to the limit mentally. And where does this mental state reside? Is this a real solution?  

2 + 2 = 4 is a statement composed of definitions; namely 2, +, =, 4. The theory of arithmetic, says that an operational connection exists that is provably true given the immutability of the symbols-> reality relationship, (2 is always 2, and not something else). This has an excluded middle logical aspect in the sense that the numbers are absolutely distinguished from each other; once and for all 2 retains its essential nature, at least for the duration of the proof of the validity of the above relationship. One of the 2's does not become a 1 while simultaneously the other 2 inflates to a 3 so it to preserve the sum of 4. That would be a different equation; a + b = 4. The structure is retained and eternal and the same as a + b = c. What has changed is the definitions, the theory is still true! It may be useful to make a distinction between an axiom and a definition, but I fail to appreciate it. Both are "givens" in my book, starting points, unprovable and unassailable but they don't "give" information; they ARE information. Relationships "give" information but the information they yield is a dependent quantity, probably relativized to cognitive syntax. 

I am mostly interested in numbers for their recreational value, but believe in logic and mathematics as codified structure, in which I am most interested. These disciplines have an eternal nature; but just bow eternal is eternal? 

Thanks for the discussion. I notice that in your description of the CTMU as the "mathematization" of the Bohm-Pribram "holographic universe analogy" the mathematization is in quotes, was the original a succinct mathematical description of quantity, probably relativized to cognitive syntax, but I fail to appreciate it. Both are "givens" in my book, starting points, unprovable and unassailable but they don't "give" information; they ARE information. Relationships "give" information but the information they yield is a dependent quantity, probably relativized to cognitive syntax. 

Irreducible categories, being independent to the extent of their mutual irreducibility, resist exchanges of information. This resistance constitutes a limit on information content at any level of generality surpassing "independence". Any level at which info can't flow is sterile; the theory can't evolve and produce new info at this level. Maybe your theory transcends this by replacing information and cognition with a bold new style of communication. Then again, maybe not. If not, your only recourse is the CTMU.

Furthermore, your "categories" don't look very original. They appear to be no more than the standard categories of traditional philosophy (ethics, aesthetics, etc.) strung together on a time-based filament called a "purposive act". What, then, is time? What is purpose? And what is action? Until you possess a logical framework of sufficient flexibility to define these terms at their most primitive levels, you'll remain in the philosophical outhouse... confined there, presumably in Lutherian contemplation of the anal nature of deduction, by a pedlock labeled CTMU.

If you are only trying to "build an outhouse", might I point out that a crescent moon would fit on the door more easily than would a grandiose title like "hyperphilosophy"? Etymological analysis of this neologism shows that it constitutes a reflexive claim of metaphysical status. This claim has now been thoroughly discredited for any system other than mine. The fix is in, and it's worldwide and permanent.

Your claim to derive no insight from the CTMU is an indictment of your worth as a philosopher. If you can't understand my clear, concise letter to the editor in Noesis '76, the baroque, labyrinthine schemes of the long dead, then you're just an exegete, a commentator, an historian. Chris Cole, who does not to my knowledge call himself a philosopher, was able to read and understand the letter in question. Why can't you? Things like relativity and quantum theory may not provide you with insight, but if not, then neither does the reality of which they are demonstrable aspects. What, then, is your "theory" but an irreal fantasy?

Congratulations on the reported solicitation of your treatise by a university press. If I thought that universities had any franchise on philosophical reasoning. I'd probably be jealous! But in view of their apparent preference for material like yours over material like mine, their neglect looks quite like a badge of honor. I only request that you be very careful to credit me with any of my ideas that find yourself forced to use, the number of which will be proportionate to the depth of any valid analysis you are able to complete. You seem to think that your parallel between Freudian psychology and traditional philosophy is airtight despite their own very different natures. But the problems associated with each multiply like viruses under combination, and "firing an artillery piece in time of war" would be a very poor virustat.

Meanwhile, keep up the good aspects of your work (such as they may be), and take special care to avoid false or misleading claims. For example, all coordinate systems are studied within the master
theory known as coordinate geometry, where they serve to order real spaces in mutually consistent ways. If metaphysical theories, which serve to order reality as a whole, are "like coordinate systems", then they are all mutually consistent with respect to reality and may be studied within a master theory of true metaphysical scope (the CTMU). Your thesis requires you to admit this. And Ron, quite true points on which you have personally been beaten beyond any hope of reversal. Though I hate to have to say it, it makes you both look ridiculous.

LEROY KOTTKE: The CTMU is not without predictive power. But this stems from the fact that it begins by establishing the existence of undecidability (since undecidability is mathematically proven, any theory which doesn't admit it is sheer crankery). Because it is defined as a reality-exhaustive metaphysical tautology or supertautology, there can never be a "meta-CTMU". More accurately, just as natural languages like English are their own metalanguages, the CTMU is its own "meta-theory". The CTMU is nonetheless bounded in a logical sense. Whatever lacks any sort of boundary is incomputable and undecidable by definition: its boundary is that which defines it by separating or distinguishing it from other things (a fact about boundaries which applies to much more than physical extent). Predictions undecidability would thus imply zero information and thereby contradict the cognitive and observational aspects and informational contents of the CTMU and every other theory. These matters can be rigorously treated, but not in terms that most readers of Noesis seem anxious to grasp.

Some background might make this go down a bit easier. Ever since the time of Aristotle, it has been understood that the existence of physics requires the existence of a broader discipline called metaphysics (a few hard-noses deny this, but what they need is a good laxative). Now, the study of metaphysics is a process of generalization... how physics regresses to generalized causal (temporal) and compositional (spatial) relationships. This is the level at which physical terminology, assumptions, and reasoning can be objectively considered. Asking metaphysics to yield specific physical predictions, particularly at the introductory stage, is therefore a contradiction in terms. Yet, because the consistency of physical reasoning requires metaphysical analysis, metaphysics is entitled to a share of the credit for every prediction of every valid physical theory. I.e., every such prediction confirms it.

It follows that if you can reason logically to a correct theory of metaphysics, you hit a big jackpot of ready-made confirmations and "predictions". For example, "my next physical observation will be consistent with all other physical observations (and therefore valid when considered apart from any mental construction or interpretation) is a metaphysical prediction, and it is absolutely crucial to your grasp of reality. Calling it "self-evident" is artificially tautological and logically forbidden. Since it is incorrectly assumed as a basis for every other "prediction" known to science, any theory which "proves" it - through, for instance, a recursive interdefinition of physics and observation - gets a cut of the booty ex post facto (because the specific "prediction"

---

Chris Langan
P.O. Box 131
Speonk, NY 11972

April 29, 1993

Speonk, NY 11972

Dear Chris,

Thank you for the letter, I will order the seminal work on the CTMU (I gather these are issues 44-49), as you have convinced me that it is indeed extraordinary and furthermore, that I need to think more seriously about it. I didn't mean to be flip in my approach to the CTMU, it's only my way of getting around and trying to orient myself in unfamiliar territory. I am not aligning myself with anyone person or perspective at the moment, except coincidentally. Your explanations and suggestions were most heartening and I am glad to see that you don't mince words, and perhaps more importantly that you do not respond vindictively when invited to. I know that truth seeking is not easy and I am not about to be put off by a few seemingly insensitive remarks. I honestly hope that the CTMU is as great and comprehensive as it seems. My approach so far has been to ask questions that when answered, will take me farther toward resolving the things that bother me the most. This may or may not lead me in the best direction. I recognize that there is a problem here, because if I was perceptive enough to ask the questions I need to ask to further my understanding of something that I don't understand then I probably wouldn't need to ask them in the first place. So I can now more fully appreciate your guidance in understanding the CTMU. I have often, just for fun, reviewed my approach to understanding a given situation and compared my Enlightened approach with a better approach that I would take given my enlightened state. The moral is always that I would prefer to take the enlightened approach. Don't mistake my brashness for arrogance. I am not arrogant. I am ignorant.

All that aside, while I am waiting for the seminal expository works on the CTMU, I would like to charge ahead, your remarks to Rick, in Noesis 76 are interesting, but I still don't understand this: You say that the CTMU is a supertautology. Is its domain two valued logic? I don't understand how self-referential (closed) systems can be both two-valued and many valued. I can visualize this: an unbounded logic system can include both 2VL and MVL and in the limit, as the space-time context approaches infinity, then a supersystem (CTMU) used to describe, if not define, this state can become all-inclusive and hence self-referential. But I fail to understand how it is possible for a tautology, super or otherwise, to be unbounded. Does MVL collapse to 2VL in the limit? Is this a fair assessment of what you're saying? That the supertautological nature of the CTMU exists as a limiting situation? If so, I can begin to see why its utility is secondary to its structural nature, since we already have a lot of predictive theories with their accompanying uncertainty. An ultimate structural theory would be desirable. You and your CTMU are in the enviable position of invincibility, being self-referential and still super cognizant...
Given the close relationship between causality and decidability, explanations of synchronicity are limited by the undecidability of acausal relationships.

12. The inconsistency explained by nonstandard analysis resides in the definition of an "infinitesimal" as "an infinitely small nonzero quantity". It has nothing immediate to do with "0/0". As it happens, however, the means by which the CTMU resolves paradoxes of infinity and infinitesimality - i.e., the CTMU interpretation of nonstandard analysis - does preclude to meaningful interpretations for such terms as 0/0.

I have a few suggestions for you. (1) Many of your questions regarding early issues of Noesis may have been answered in later issues. Read them. (2) Don't be caught dead seeming to agree with my critics, e.g., Hoeflin or Rosner. They are already caught in completely untenable positions, and any appearance to the contrary is strictly a temporary illusion. That they see every opportunity I give them to save face as a chance to spit in mine has a price you may not want to share. I'd be forced to treat you in kind, and you don't want to become a world-class laughing stock (nothing looks quite as pathetic as having been outclassed and refusing to admit it). (3) Your thoughts on "Fourier Cosmology" are insightful and meaningful, but only make sense in the CTMU logical framework. The CTMU is the long-awaited "mathematization" of the Bohm-Pribram "holographic universe analogy", concerning which similar insights on Fourier analysis have been around for some time now. Of course, the CTMU is much more as well: it develops on a metalogical basis what Bohm and Pribram noticed by serendipity, and vastly improves other cosmological perspectives in the bargain. Because it has logical priority over the Bohm-Pribram analogy, it underlies phenomena like laser holography and thus determines the extent to which the holographic analogy is valid.

I'll send both of these letters along to Noesis. Incidentally, why don't you write an article on Stern's "matrix logic" formalism for publication?

Sincerely,

Chris Langan
P.O. Box 131
Speonk, NY 11972

on the physical level, the CTMU makes certain specific cosmological "predictions", but currently on scales too vast to admit of ready confirmation (I refer you to your own Noesis 77 paper on "Fourier cosmology"). That's due to the metaphysical, generalistic nature of cosmology, a fact which makes all established, respected cosmologists answerable to the CTMU. The CTMU also makes predictions about so-called psi effects like telepathy, telekinesis and precognition, subject to considerations of undecidability in the process of specific confirmation. Obviously, any logical theory which predicts psi effects is remarkable for that alone (for what it's worth to mention it, I've empirically confirmed such effects). And this, as I've already explained, is but the tip of the iceberg.

Since the first of your Noesis 78 letters uses terminology ("U()") from my Noesis 76 letter on the CTMU, I can only surmise that you endorse my conclusions therein. You should thus be aware that the CTMU is anything but just another "theory of informational organization and processing". The fundamental relationship between reality and information, which must allow for all aspects of both of these terms, had to be spelled out sooner or later. Better that I should do it here, in Noesis, than leave it to the ham-handed fumblings of people who could not in a thousand years have conceived a model which includes relativity, undecidability, and quantum paradox become mutually comprehensible. If you're going to try to second-guess the CTMU, at least recognize it as more than an "executive computer program". Such oversimplistic descriptions have been repeatedly discredited in Noesis, and I grow weary of having to labor the distinction.

But perhaps this misses the main point. I don't have to make excuses for metaphysics, and I don't have to "solve" anything with it but metaphysical problems. Everything else is gravy. The CTMU already deserves a Nobel Prize; physics has always purported to be a top-level theory of reality, and it can never live up to that claim without the CTMU. Want to argue? I advise you to (re?)read some of my recent contributions. Insist on more numbers? If you want numbers without logic, go buy an actuarial chart. But if you like soundly-structured theories, concepts and relationships, that shining beacon on your intellectual horizon is the CTMU.

BOB HANNON: You keep looking for relativity to "emerge" from the Lorentz transformation. Relativity is the basis of the transformation, and is presupposed. It emerges from the logic of the situation in which the speed of light is found to be an invariant velocity limit. The Lorentz transformation is a piece of math that conveniently fits relativistic logic; the logic has priority over the math. You persistently refer to the LT as a "premise" when it is in fact a reflection of the premised invariants incorporated in its group identity. If you ever succeed in finding fault with the "relativism" of Lorentzian mathematics, its successor can only be relativistic with respect to the invariants you choose. This is
your only possible constructive angle of attack, given your determination to "debunk" Special Relativity.

Try to think of the invariant speed of light as the boundary of a space in which velocitcal frames must distribute themselves in a way which preserves the distinctions among their velocities, but in which they become more "crowded" as they near the boundary. The space is like a topological "open neighborhood" whose homogeneous, isotropic "metric" is infinitely geometrically compressed at the (observer-relativized) "edges". The invariant c is associated with the geometrodynamic identity and represents closure of the space with respect to its definitive predicates. If you hate the idea of never exceeding the speed of light in your intergalactic wanderings, your job is to find and defeat the boundary conditions of SR in an appropriate "metasymmetry". To even try to do that, you need CTMU generality and reasoning power.

THE REST OF YOU: I notice two facts about the readership of Noesis that seem to be in total opposition. (1) You like to speculate and daydream about cosmology and "metaphysics". (2) You don't like logical reasoning about metaphysics.

It is well known to child psychologists that an extreme predilection for fantasizing and daydreaming over logical reasoning is a reliable indicator of mental immaturity. On the other hand, IQ is defined in such a way as to imply relative intellectual maturity. Something's badly out of whack here.

I think I finally know what that something is.

A. You think that metaphysics is so utterly divorced from reality that, whereas you'd never be caught dead "speculating" about what you think are matters of hard fact, you feel free to indulge yourselves when it comes to "metaphysics".

B. You distrust and deeply resent anyone who says that your play-ground of self-indulgent speculation is actually just another matter of hard fact.

Thus, by introducing the CTMU, I appear to be depriving you of a cherished dimension of intellectual creativity.

This appearance is misleading. If a child who's going bananas with his fingerpaints is approached by a teacher with brushes and a knowledge of art technique, he may at first feel stifled. He may try to ignore the teacher and continue, like a truculent chimpanzee, to smear gooey gob of paint with his paws. But the teacher, knowing that the little simian's creativity can never achieve full flower without guidance, must not be deterred. The fingerpaints must be appropriated, the paws wiped clean, and the innocent young mind guided, through an acquired appreciation for the knowledge and talents of others, towards the realization of its own budding talent.

The CTMU is not a monolith. It is a vast open terrain whose most general features have been mapped in principle, but whose total exploration can never be completed in time. This, after all, is the nature of reality, and the CTMU - as a theory of reality -

inductive syntaxes that are logical in essence (if they weren't, then you could achieve no intelligible formulation of your observations or inductive process). Your distinction between logic as "a formalism" and as a cognitive "process" is problematic. The process of which you speak is self-describing, and thus a "formalism" for itself.

6. Your distinction between a definition and a theory is meaningless. To go along with your terminology, "2 + 2 = 4" is "exact and eternal", and therefore a "definition". But it is also deducible within the theory of arithmetic, and therefore a theorem (or sub-theory of the overall theory). Perhaps this is what you mean when you speak of the "interaction" of theories and definitions. In any case, I fail to see how your position differs from that of the CTMU, except in the extremely informal use of terms like "exact and eternal".

It might help you to try to explain the difference between a definition and an axiom in an "a priori" theory like arithmetic. One gives a predicate of a thing; the other, of a relationship or process among things. But they both give information. In the CTMU, information is always relativized to cognitive syntax. Theories are assimilated by cognitive syntax as knowledge is acquired. So definitions are indeed refined as theories evolve, and this in turn refines the theories. But this is one of the major points of the CTMU. If you have a different point to make, what is it?

Remember, the CTMU is "complete and consistent" only at an ultimate level of generality. This is true because you can no longer regress to more general theories to exhaust the capacity of your cognitive syntax. Since the CTMU considers syntax a variable with respect to evolving systems like human minds, there is no danger of its formalism going beyond. I.e., it is invariant with respect to certain variables with open definitions, and thus with respect to the undecidability to which those variables are subject and which characterize their definitions. Lesser theories, like those of standard physics, lack this level of invariance and are therefore susceptible to undecidability.

7. "Synchronicity" is an etymologically restricted term which implies that two apparently related but causally unrelated events have occurred at the same time. The "same time" constraint is non-general and thus of limited use. In the CTMU, this concept is generalized as synalogy (etymology: SYNthetic • ANALOGY), which means the same thing minus the time restriction. I.e., a synalogy is an acausal "meaningful coincidence". Since quantum nonlocality is an example of synalogy, and since the CTMU offers a syntax for nonlocality, the CTMU obviously offers a syntax for synalogy; and since synchronicity is just a restricted form of synalogy, the CTMU syntax applies to it as well.

Inductive regression in search of causal and compositional relationships terminates at unbound telesis, the observer-relativized collapse of which creates information. Telesis is distributive over spacetime and may thus undergo nonlocal collapse due to cognitive parallelism among distant observers, thereby reflecting the absolute inseparability of cognition and information.
April 19, 1993

Mr. Leroy Kotke
4787 Dawson Drive
Ann Arbor, MI 48103

Dear Leroy:

I'm in receipt of your 4/14/93 letter. Naturally, I'll be happy to address your questions regarding Noesis 58.

4. The CTMU is a supertautology, or a universal tautological formulation of reality. A tautology is "closed" because, if it were "open" with respect to every informational parameter, it would be devoid of information. The human cognitive syntax is a tautology because it is a vehicle for information, and this information includes the syntax itself. The "boundary" between a predicate and its logical negation, like any boundary, effects closure with respect to the distinguishing parameter. No boundaries, and no closure, would therefore render any theory totally uninformative and useless. The existence of real information therefore implies that global reality, on whose generalized information all specific information depends, is closed with respect to informational parameters. Thus, the CTMU must exhibit closure with respect to the informational parameters of its own theoretical syntax. However, this closure is associated with the empyreonic identity and is ultra-generalized. The CTMU thus remains open with respect to specifics, as it has to in order to represent locally undecidable aspects of reality.

5. You need to distinguish between separate things and separate aspects of one thing. Because it is a supertautology, the empyreon can only be one thing of which every lesser thing is an aspect. Cognition, as interpreted within this system, then becomes an operation among different aspects of one unified whole, whence these aspects can be regarded as cognitive transformations. Determinacy, because it is informational, must now be relativized to transformative syntax. It is in this sense that the mind and reality are "codeterminate". Similarly, cognition and information, or subject and object, are mere aspects of a single agency, infocognition. They are "separable" only on a localized, relative basis. Facts are subsumed under logic - i.e., logic has "priority" over facts - because logical relationships are generalized factual relationships. i.e., logic is a model for factual reality at a level of generality transcending specific facts. Your logical syntax has a form no less definite for its ability to acquire and assess arbitrary specific facts through observation and cognition. When you say that "logic did not lead you" to a given conclusion, but that observation and induction did, don't know what you mean. Observation and induction are governed by observational and must reflect the nature of that which it "maps". It is wide enough to accommodate the creativity of any number of local cartographers, and is meant to aid rather than hinder their explorations. It is the friend, and not the enemy, of your creativity.

There is also a fair possibility that some of you, despite your inability to challenge CTMU logic, are repulsed by its religious overtones. Since religion may be the most powerful single factor in world history, any claim that you aren't interested in it would be proof positive of a pathetic disconnection from reality. Maybe you find the subject "distasteful", or suffer from deep infantile conditioning at the hands of "big religion". But in any case, the CTMU was destined to emerge through the consciousness of somebody with the courage to admit its religious significance, and I have no apologies to make for pointing this out. It is entirely up to each of you to make your peace with it. Though it can wait for your submission, its terms will not soften, and ignoring or resisting it is a strategy without honor or reward. It takes guts to face the truth, and you know what they say: no guts, no glory.

One last thing. There are two schools of thought about what the Mega Society is. The Rosner/Clifton School maintains that it is a ridiculous collection of culturally advantaged underachievers. The Langan/Cole School maintains that it can, under the right circumstances, "change the world". The truth is presently somewhere in the middle (I've already planted seeds that will lead to profound change, even though the Noesis garden is choked with bizarre weeds planted by others). One solution to this problem would be to identify those factions of this society which are actually attempting to "change the world" free of piss-ant internal interference.

Remember, this society claims a distinction which allows it to be different from others of its kind: it is the highest among them. Maybe the lesser societies are confederations of misfits, cranks, and whining nerds. But did you, who claim (actively or passively) to be the cream of earthly intelligentsia, join this group because you wanted to be the worst and most insufferable nerds ever? Or did you join because you hoped to become acquainted with people of comparable ability, who thought the right way and cared about the right things? I've invested quite a bit of my time and energy in the latter hypothesis, and it's high time you made up your minds.

There is absolutely no excuse for a group with Mega's purported problem-solving firepower to be "all blow and no show". I'm not alone in my desire to see this group live up to its hype. Chris Cole, among others, seems to have had high hopes for us. If such hopes are ever to be realized, it will be through the efforts of "determined and frustrated" (but logical) theoreticians who spit in the face of common cynicism about IQ societies. Give me half a break, and I'll continue to run point for you. Stonewall me, and I'll have to run it over you instead. The four-year proof of my ability to do this is one done deal. Chris Langan
C.M. Langan
P.O. Box 131
Speonk, NY

Dear Chris,

In reviewing Noesis 58 Feb. 1991, in my restless search for meaning in my surroundings, a few questions occurred to me that I hope you can/will/may answer. In keeping with your request to address disagreements to a line number, I extend this to include comments as well, and not necessarily to present them in numerical order.

Number 5. "The CTMU is a theory of the codeterminate relationship between reality and the intellect....Because physical theories necessarily have logical structures, logic has priority."

Presumably this defines reality and the intellect as being two separable entities; are you separating these two interdependent elements for the purpose of revealing their interdependence? I can understand this; but why does this imply that logic has priority? If I agree to this, then in your system, facts are subsumed by logic. How does this square with a recursive relationship between facts and logic that serves to define both? I have often been baffled by the seeming artificial but strong need for human interaction with the non-human world to be predicated on separation of subject and object, which when accomplished, can then be dispensed with, and the reality of the whole can then be perceived as it could never have been had that separation not taken place. I think that there is a good reason for this...indeed a necessity for this which is revealed in physics formalism as the collapse of the wave function. The reason for this is that if I don't have a wave function, then I can't have a collapse. So I believe that it is all a put up job, a convenience of nature exercising its right to maximum ambiguity in light of no constraints. If I (as cognitive observer) don't choose to exercise my rights, then nature can behave however it wants to. In no way did logic lead me to this conclusion. It was the result of observation and induction. I say that logic was not involved in this to emphasize the difference between logic as formalism and the process inherent in human cognition that may or may not be best described as a logical process.

Number 6 A very important distinction can be made between a definition and a theory. A definition can be exact and eternal, a theory cannot. How do you answer the question: "How can the CTMU explain Heisenberg Uncertainty in a certain fashion?"; i.e., not be uncertain itself? A theory can and should explain relationships between events, and a dynamic theory or theoretical structure has the potential to be its own object in an interdependent and/or recursive sense. That is, definitions and theory interact in such a way as to refine their relationship. The question of their distinctiveness or separability is secondary to their interactive relationship.

What is "IT" in the CTMU that enables man to be both the observer and the subject, since IT purports to examine the interrelationship between MIND and UNIVERSE? Does the CTMU have boundaries or limits? If so what are they? Or is THAT the uncertainty aspect?

Number 4 The flaw in your reasoning may be that your conviction of the logical nature of the CTMU and its verification by ALL physical theories is self-defining AND self-verifying, and as such is a closed system. A closed system is by definition delimited, and can be proved by its own methods only to be incomplete.

Number 7 Does the CTMU explain synchronicity? Synchronicity certainly defies conventional logic, and if it could be put on a "logical footing," that would imply a superior understanding of this phenomenon. By synchronicity I mean the apparently acausal inordinate, unconventional pairing of events that should, by conventional probabilistic estimates be nearly impossible. But yet based on my observations, and the reported experiences of others, the conclusion I make is, tentatively, the more isolated an event is, the higher the probability of a similar event becomes so that an event-pairing is conserved. The image of the Fourier Transform of an temporally isolated event keeps coming to mind on that note, with the sidelobes neatly representing similar events that are separated by and in content with a central main reality, an infinite multiplicity of event pairs flank these, in both positive and negative extent, analogous to past and future, although they exist in eternal space, and their magnitude corresponds to the relative probability of their occurrence. Or perhaps the explanation of synchronicity calls for the structure of a higher order logic along the lines of a Matrix Logic such as created by August Stern; he claims to be able to place fundamental physics calculations in a logic framework as well as conventional logic as a subset of his new method. He manipulates logical quantities after placing them in a matrix format, borrows inner and outer products from mathematics as fundamental tools and defines the results in such a way as to be very convincing as to their potential generality, although I notice a lack of specific results. What does the CTMU say about synchronicity?

Number 12 This "incredible" model presumably invoked to explain away an inconsistency between infinitesimals and zero to resolve inconsistencies in the infinitesimal calculus sounds interesting—but seems unnecessary since 0/0 = anything, its just a quantity in need of further definition, such as the derivative.

4/14/93
Dear Chris,

In reviewing Noesis #58 Feb. 1991, in my restless search for meaning in my surroundings, a few questions occurred to me that I hope you can/will/may answer. In keeping with your request to address disagreements to a line number, I extend this to include comments as well, and not necessarily to present them in numerical order.

Number 5. "The CTMU is a theory of the codeterminate relationship between reality and the intellect...Because physical theories necessarily have logical structures, logic has priority.

Presumably this defines reality and the intellect as two separable entities; are you are separating these two interdependent elements for the purpose of revealing their interdependence? I can understand this; but why does this imply that logic has priority? If I agree to this, then in your system, facts are subsumed by logic. How does this square with a recursive relationship between facts and logic that serves to define both? I have often been baffled by the seeming artificial but strong need for human interaction with the non-human world to be predicated on separation of subject and object, which when accomplished, can then be dispensed with, and the reality of the whole can then be perceived as it could never have been had that separation not taken place. I think that there is a good reason for this...indeed a necessity for this, which is revealed in physics formalism as the collapse of the wave function. The reason for this is that if I don't have a wave function, then I can't have a collapse. So I believe that it is all a put up job, a consequence of nature exercising its right to maximum ambiguity in light of no constraints. If I (as cognitive observer) don't choose to exercise my rights, then nature can behave however it wants to. In no way did logic lead me to this conclusion. It was the result of observation and induction. I say that logic was not involved in this to emphasize the difference between logic as formalism and that process inherent in human cognition that may or may not be best described as a logical process.

Number 6 A very important distinction can be made between a definition and a theory. A definition can be exact and eternal, a theory cannot. How do you answer the question: "How can the CTMU explain Heisenberg Uncertainty in a certain fashion?"; i.e., not be uncertain itself? A theory can and should explain relationships between events, and a dynamic theory or theoretical structure has the potential to be its own object in an interactive and/or recursive sense. That is, definitions and theory interact in such a way as to refine their relationship. The question of their distinctiveness or separability is secondary to their interactive relationship.

What is "IT" in the CTMU that enables man to be both the observer and the subject, since IT purports to examine the interrelationship between MIND and UNIVERSE? Does the CTMU have boundaries or limits? If so what are they? Or is THAT the uncertainty aspect?

Number 4 The flaw in your reasoning may be that your conviction of the logical nature of the CTMU and its verification by ALL physical theories is self-defining and self-verifying, and as such is a closed system. A closed system is by definition delimited, and can be proved by its own methods only to be incomplete.

Number 7 Does the CTMU explain synchronicity? Synchronicity certainly defines conventional logic, and if it could be put on a "logical" footing, that would imply a superior understanding of this phenomenon. By synchronicity I mean the apparently acausal inordinate, unconventional pairing of events that should, by conventional probabilistic estimates be nearly impossible. But yet based on my observations, and the reported experiences of others, the conclusion I make is, tentatively, the more isolated an event is, the higher the probability of a similar event becomes so that an event-pairing is conserved. The image of the Fourier Transform of an temporally isolated event keeps coming to mind on that note, with the sidelonges nearly representing similar events that are separated by in contention with a central main reality, an infinite multiplicity of event pairs flank these, in both positive and negative extent, analogous to past and future, although they exist in eternal space, and their magnitude corresponds to the relative probability of their occurrence. Or perhaps the explanation of synchronicity calls for the structure of a higher order logic along the lines of a Matrix Logic such as created by August Stern; he claims to be able to place fundamental physics calculations in a logic framework as well as conventional logic as a subset of his new method. He manipulates logical quantities after placing them in a matrix format, borrows inner and outer products from mathematics as fundamental tools and defines the results in such a way as to be very convincing as to their potential generality, although I notice a lack of specific results. What does the CTMU say about synchronicity?

Number 12 This "incredible" model presumably invoked to explain away an inconsistency between infinitesimals and zero to resolve inconsistencies in the infinitesimal calculus sounds interesting—but seems unnecessary since 0/0 anything, it's just a quantity in need of further definition, such as the derivative.
I'm in receipt of your 4/14/93 letter. Naturally, I'll be happy to address your questions regarding Noesis 58.

4. The CTMU is a supertautology, or a universal tautological formulation of reality. A tautology is "closed" because, if it were "open" with respect to every informational parameter, it would be devoid of information. The human cognitive syntax is a tautology because it is a vehicle for information, and this information includes the syntax itself. As soon as you say anything definite about something, you are distinguishing that which it is from that which it is not (i.e., from its logical negation). This distinction forms a kind of boundary. The "boundary" between a predicate and its logical negation, like any boundary, effects closure with respect to the distinguishing parameter.

No boundaries, and no closure, would therefore render any theory totally uninformative and useless. The existence of real information therefore implies that global reality, on whose generalized information all specific information depends, is closed with respect to informational parameters. Thus, the CTMU must exhibit closure with respect to the informational parameters of its own theoretical syntax. However, this closure is associated with the empyreonic identity and is ultra-generalized. The CTMU thus remains open with respect to specifics, as it has to in order to represent locally undecidable aspects of reality.

5. You need to distinguish between separate things and separate aspects of one thing. Because it is a supertautology, the empyreon can only be one thing of which every lesser thing is an aspect. Cognition, as interpreted within this system, then becomes an operation among different aspects of one unified whole, whence these aspects can be regarded as cognitive transformations. Determinacy, because it is informational, must now be relativized to transformative syntax. It is in this sense that the mind and reality are "codeterminate". Similarly, cognition and information, or subject and object, are mere aspects of a single agency, infocognition. They are "separable" only on a localized, relative basis.

Facts are subsumed under logic - i.e., logic has "priority" over facts - because logical relationships are generalized factual relationships. I.e., logic is a model for factual reality at a level of generality transcending specific facts. Your logical syntax has a form no less definite for its ability to acquire and assess arbitrary specific facts through observation and cognition. When you say that "logic did not lead you" to a given conclusion, but that observation and induction did, don't know what you mean. Observation and induction are governed by observational and must reflect the nature of that which it "maps". It is wide enough to accommodate the creativity of any number of local cartographers, and is meant to aid rather than hinder their explorations. It is the friend, and not the enemy, of your creativity.

There is also a fair possibility that some of you, despite your inability to challenge CTMU logic, are repulsed by its religious overtones. Since religion may be the most powerful single factor in world history, any claim that you aren't interested in it would be proof positive of a pathetic disconnection from reality. Maybe you find the subject "distasteful", or suffer from deep infantile conditioning at the hands of "big religion". But in any case, the CTMU was destined to emerge through the consciousness of somebody with the courage to admit its religious significance, and I have no apologies to make for pointing this out. It is entirely up to each of you to make your peace with it. Though it can wait for your submission, its terms will not soften, and ignoring or resisting it is a strategy without honor or reward. It takes guts to face the truth, and you know what they say: no guts, no glory.

One last thing. There are two schools of thought about what the Mega Society is. The Rosner/Clifton School maintains that it is a ridiculous collection of culturally advantaged underachievers. The Langan/Cole School maintains that it can, under the right circumstances, "change the world". The truth is presently somewhere in the middle (I've already planted seeds that will lead to profound change, even though the Noesis garden is choked with bizarre weeds planted by others). One solution to this problem would be to identify the members of each of these schools, segregate the underachievers in a section of the journal tentatively entitled Mega Comix (edited by Rick and/or Jojo), and then attempt to "change the world" free of piss-ant internal interference.

Remember, this society claims a distinction which allows it to be different from others of its kind: it is the highest among them. Maybe the lesser societies are confederations of misfits, cranks, and whining nerds. But did you, who claim (actively or passively) to be the cream of earthly intelligentsia, join this group because you wanted to be the worst and most insufferable nerds ever? Or did you join because you hoped to become acquainted with people of comparable ability, who thought the right way and cared about the right things? I've invested quite a bit of my time and energy in the latter hypothesis, and it's high time you made up your minds.

There is absolutely no excuse for a group with Mega's purported problem-solving firepower to be "all blow and no show". I'm not alone in my desire to see this group live up to its hype. Chris Cole, among others, seems to have had high hopes for us. If such hopes are ever to be realized, it will be through the efforts of "determined and frustrated" (but logical) theoreticians who spit in the face of common cynicism about IQ societies. Give me half a break, and I'll continue to run point for you. Stonewall me, and I'll have to run it over you instead. The four-year proof of my ability to do this is one done deal.

Chris Langan
your only possible constructive angle of attack, given your determination to "debunk" Special Relativity.

Try to think of the invariant speed of light as the boundary of a space in which velocital frames must distribute themselves in a way which preserves the distinctions among their velocities, but in which they become more "crowded" as they near the boundary. The space is like a topological "open neighborhood" whose homogeneous, isotropic "metric" is infinitely geometrically compressed at the (observer-relativized) "edges". The invariant c is associated with the geometrodynamic identity and represents closure of the space with respect to its definitive predicates. If you hate the idea of never exceeding the speed of light in your intergalactic wanderings, your job is to find and defeat the boundary conditions of SR in an appropriate "metasymmetry". To even try to do that, you need CTMU generality and reasoning power.

THE REST OF YOU: I notice two facts about the readership of Noesis that seem to be in total opposition. (1) You like to speculate and daydream about cosmology and "metaphysics". (2) You don't like logical reasoning about metaphysics.

It is well known to child psychologists that an extreme predilection for fantasizing and daydreaming over logical reasoning is a reliable indicator of mental immaturity. On the other hand, IQ is defined in such a way as to imply relative intellectual maturity. Something's badly out of whack here.

I think I finally know what that something is.

A. You think that metaphysics is so utterly divorced from reality that, whereas you'd never be caught dead "speculating" about what you think are matters of hard fact, you feel free to indulge yourselves when it comes to "metaphysics".

B. You distrust and deeply resent anyone who says that your play-ground of self-indulgent speculation is actually just another matter of hard fact. Thus, by introducing the CTMU, I appear to be depriving you of a cherished dimension of intellectual creativity.

This appearance is misleading. If a child who's going bananas with his fingerpaints is approached by a teacher with brushes and a knowledge of art technique, he may at first feel stifled. He may thus try to ignore the teacher and continue, like a truculent chimpanzee, to smear gooey gobs of paint with his paws. But the teacher, knowing that the little simian's creativity can never achieve full flower without guidance, must not be deterred. The fingerpaints must be appropriated, the paws wiped clean, and the innocent young mind guided, through an acquired appreciation for the knowledge and talents of others, towards the realization of its own budding talent.

The CTMU is not a monolith. It is a vast open terrain whose most general features have been mapped in principle, but whose total exploration can never be completed in time. Thus, after all, is the nature of reality, and the CTMU - as a theory of reality -

inductive syntaxes that are logical in essence (if they weren't, then you could achieve no intelligible formulation of your observations or inductive processes). Your distinction between logic as "a formalism" and as a cognitive "process" is problematic. The process of which you speak is self-describing, and thus a "formalism" for itself.

6. Your distinction between a definition and a theory is meaningless. To go along with your terminology, "2 + 2 = 4" is "exact and eternal", and therefore a "definition". But it is also deducible within the theory of arithmetic, and therefore a theorem (or sub-theory of the overall theory). Perhaps this is what you mean when you speak of the "interaction" of theories and definitions. In any case, I fail to see how your position differs from that of the CTMU, except in your extremely informal use of terms like "exact and eternal".

It might help you to try to explain the difference between a definition and an axiom in an "a priori" theory like arithmetic. One gives a predicate of a thing; the other, of a relationship or process among things. But they both give information. In the CTMU, information is always relativized to cognitive syntax. Theories are assimilated by cognitive syntaxes as knowledge is acquired. So definitions are indeed refined as theories evolve, and this in turn refines the theories. But this is one of the major points of the CTMU. If you have a different point to make, what is it?

Remember, the CTMU is "complete and consistent" only at an ultimate level of generality. This is true because you can no longer regress to general theories once you exhaust the capacity of your cognitive syntax. Since the CTMU considers syntax a variable with respect to evolving systems like human minds, there is no danger of its formalism being exceeded. I.e., it is invariant with respect to certain variables with open definitions, and thus with respect to the undecidability to which those variables are subject and which characterize their definitions. Lesser theories, like those of standard physics, lack this level of invariance and are therefore susceptible to undecidability.

7. "Synchronicity" is an etymologically restricted term which implies that two apparently related but causally unconnected events have occurred at the same time. The "same time" constraint is non-general and thus of limited use. In the CTMU, this concept is generalized as synalogy (etymology: SYNthetic • ANALOGY), which means the same thing minus the time restriction. I.e., a synalogy is an acausal "meaningful coincidence". Since quantum nonlocality is an example of synalogy, and since the CTMU offers a syntax for nonlocality, the CTMU obviously offers a syntax for synalogy; and since synchronicity is just a restricted form of synalogy, the CTMU syntax applies to it as well.

Inductive regression in search of causal and compositional relationships terminates at unbound telesis, the observer-relativized collapse of which creates information. Telesis is distributive over spacetime and may thus undergo nonlocal collapse due to cognitive parallelism among distant observers, thereby reflecting the absolute inseparability of cognition and information.
Given the close relationship between causality and decidability, explanations of synchronicity are limited by the undecidability of acausal relationships.

12. The inconsistency explained by nonstandard analysis resides in the definition of an infinitesimal as "an infinitely small nonzero quantity". It has nothing immediate to do with "0/0". As it happens, however, the means by which the CTMU resolves paradoxes of infinity and infinitesimality - i.e., the CTMU interpretation of nonstandard analysis - does conduce to meaningful interpretations for such terms as 0/0.

I have a few suggestions for you. (1) Many of your questions regarding early issues of Noesis may have been answered in later issues. Read them. (2) Don't be caught dead seeming to agree with my critics, e.g., Hoeflin or Rosner. They are already caught in completely untenable positions, and any appearance to the contrary is strictly a temporary illusion. That they see every opportunity I give them to save face as a chance to spit in mine has a price you may not want to share. I'd be forced to treat you in kind, and you don't want to become a world-class laughing stock (nothing looks quite as pathetic as having been outclassed and refusing to admit it). (3) Your thoughts on "Fourier Cosmology" are insightful and meaningful, but only make sense in the CTMU logical framework. The CTMU is the long-awaited "mathematization" of the Bohm-Pribram "holographic universe analogy", concerning which similar insights on Fourier analysis have been around for some time now. Of course, the CTMU is much more as well: it develops on a metalogical basis what Bohm and Pribram noticed by serendipity, and vastly improves other cosmological perspectives in the bargain. Because it has logical priority over the Bohm-Pribram analogy, it underlies phenomena like laser holography and thus determines the extent to which the holographic analogy is valid.

I'll send both of these letters along to Noesis. Incidentally, why don't you write an article on Stern's "matrix logic" formalism for publication?

Sincerely,

Chris Langan
P.O. Box 131
Speonk, NY 11720

was logically ungrounded at the time it was made, does not become a valid prediction until it is, and at this level belongs to the remedial theory itself. Game, CTMU.

On the physical level, the CTMU makes certain specific cosmological "predictions", but currently on scales too vast to admit of ready confirmation (I refer you to your own Noesis 77 paper on "Fourier cosmology"). That's due to the metaphysical, generalistic nature of cosmology, a fact which makes all established, respected cosmologists answerable to the CTMU. The CTMU also makes predictions about so-called psi effects like telepathy, telekinesis and precognition, subject to considerations of undecidability in the process of specific confirmation. Obviously, any logical theory which predicts psi effects is remarkable for that alone (for what it's worth to mention it, I've empirically confirmed such effects). And this, as I've already explained, is but the tip of the iceberg.

Since the first of your Noesis 78 letters uses terminology "U()" from my Noesis 76 letter on the CTMU, I can only surmise that you endorse my conclusions therein. You should thus be aware that the CTMU is anything but just another "theory of informational organization and processing". The fundamental relationship between reality and information, which must allow for all aspects of both of these terms, had to be spelled out sooner or later. Better that I should do it here, in Noesis, than leave it to the ham-handed fumblings of people who could not in a thousand years have conceived of a metaphysical theory like soundly-structured theories, concepts and relationships, that I have a few suggestions for you. (1) Many of your questions regarding early issues of Noesis may have been answered in later issues. Read them. (2) Don't be caught dead seeming to agree with my critics, e.g., Hoeflin or Rosner. They are already caught in completely untenable positions, and any appearance to the contrary is strictly a temporary illusion. That they see every opportunity I give them to save face as a chance to spit in mine has a price you may not want to share. I'd be forced to treat you in kind, and you don't want to become a world-class laughing stock (nothing looks quite as pathetic as having been outclassed and refusing to admit it). (3) Your thoughts on "Fourier Cosmology" are insightful and meaningful, but only make sense in the CTMU logical framework. The CTMU is the long-awaited "mathematization" of the Bohm-Pribram "holographic universe analogy", concerning which similar insights on Fourier analysis have been around for some time now. Of course, the CTMU is much more as well: it develops on a metalogical basis what Bohm and Pribram noticed by serendipity, and vastly improves other cosmological perspectives in the bargain. Because it has logical priority over the Bohm-Pribram analogy, it underlies phenomena like laser holography and thus determines the extent to which the holographic analogy is valid.

I'll send both of these letters along to Noesis. Incidentally, why don't you write an article on Stern's "matrix logic" formalism for publication?

Sincerely,

Chris Langan
P.O. Box 131
Speonk, NY 11720

was logically ungrounded at the time it was made, does not become a valid prediction until it is, and at this level belongs to the remedial theory itself. Game, CTMU.

On the physical level, the CTMU makes certain specific cosmological "predictions", but currently on scales too vast to admit of ready confirmation (I refer you to your own Noesis 77 paper on "Fourier cosmology"). That's due to the metaphysical, generalistic nature of cosmology, a fact which makes all established, respected cosmologists answerable to the CTMU. The CTMU also makes predictions about so-called psi effects like telepathy, telekinesis and precognition, subject to considerations of undecidability in the process of specific confirmation. Obviously, any logical theory which predicts psi effects is remarkable for that alone (for what it's worth to mention it, I've empirically confirmed such effects). And this, as I've already explained, is but the tip of the iceberg.

Since the first of your Noesis 78 letters uses terminology "U()" from my Noesis 76 letter on the CTMU, I can only surmise that you endorse my conclusions therein. You should thus be aware that the CTMU is anything but just another "theory of informational organization and processing". The fundamental relationship between reality and information, which must allow for all aspects of both of these terms, had to be spelled out sooner or later. Better that I should do it here, in Noesis, than leave it to the ham-handed fumblings of people who could not in a thousand years have conceived of a metaphysical theory like soundly-structured theories, concepts and relationships, that
theory known as coordinate geometry, where they serve to order real spaces in mutually consistent ways. If metaphysical theories, which serve to order reality as a whole, are "like coordinate systems", then they are all mutually consistent with respect to reality and may be studied within a master theory of true metaphysical scope (the CTMU). Your thesis requires you to admit this. And Ron, quite true points on which you have personally been beaten beyond any hope of reversal. Though I hate to have to say it, it makes you both look ridiculous.

LERGY KOTTK: The CTMU is not without predictive power. But this stems from the fact that it begins by establishing the existence of undecidability (since undecidability is mathematically proven, any theory which doesn't admit it is sheer crankery). Because it is defined as a reality-exhaustive metaphysical tautology or supertautology, there can never be a "meta-CTMU". More accurately, just as natural languages like English are their own metalanguages, the CTMU is its own "meta-theory". The CTMU is nonetheless bounded in a logical sense. Whatever lacks any sort of boundary is incomputable and undecidable by definition: its boundary is that which defines it by separating it or distinguishing it from other things (a fact about boundaries which applies to much more than physical extent). Predictions bounded would thus imply zero information and thereby contradict the cognitive and observational aspects and informational contents of the CTMU and every other theory. These matters can be rigorously treated, but not in terms that most readers of Noesis seem anxious to grasp.

Some background might make this go down a bit easier. Ever since the time of Aristotle, it has been understood that the existence of physics requires the existence of a broader discipline called metaphysics (a few hard-noses deny this, but what they need is a good logician). Now, the study of metaphysics is a process of generalization... how physics regresses to generalized causal (temporal) and compositional (spatial) relationships. This is the level at which physical terminology, assumptions, and reasoning can be objectively considered. Asking metaphysics to yield specific physical predictions, particularly at the introductory stage, is therefore a contradiction in terms. Yet, because the consistency of physical reasoning requires metaphysical analysis, metaphysics is entitled to a share of the credit for every prediction of every valid physical theory. I.e., every such prediction confirms it.

It follows that if you can reason logically to a correct theory of metaphysics, you hit a big jackpot of ready-made confirmations and "predictions". For example, "my next physical observation will be...". But this introduces the point that I think is crucial to your grasp of reality. Asking metaphysics to "predict" is artificial tautological and logically forbidden. Since it is incorrectly assumed as a basis for every other "prediction" known to science, any theory which "predicts" is through, for instance, a recursive interdefinition of physics and observation - gets a cut of the bootie ex post facto (because the specific "prediction"...
Irreducible categories, being independent of their mutual irreducibility, resist exchanges of information. This resistance constitutes a limit on information content at any level of generality surpassing "independence". Any level at which information can't flow is sterile; the theory can't evolve and produce new info at this level. Maybe your theory transcends this by replacing information and cognition with a bold new style of communication. Then again, maybe not. If not, your only recourse is the CTMU.

Furthermore, your "categories" don't look very original. They appear to be no more than the standard categories of traditional philosophy (ethics, aesthetics, etc.) strung together on a time-based filament called a "purposive act". What, then, is time? What is purpose? And what is action? Until you possess a logical framework of sufficient flexibility to define these terms at their most primitive levels, you'll remain in the philosophical outhouse—confined there, presumably in Lutheran contemplation of the anal nature of deduction, by a pedlock labeled CTMU.

If you are only trying to "build an outhouse", might I point out that a crescent moon would fit on the door more easily than would a grandiose title like "hyperphilosophy"? Etymological analysis of this neologism shows that it constitutes a reflexive claim of metaphysical status. This claim has now been thoroughly discredited for any system other than mine. The fix is in, and it's worldwide and permanent.

Your claim to derive no insight from the CTMU is an indictment of your worth as a philosopher. If you can't understand my clear, concise letter to the editor in Noesis '76, but only the baroque, labyrinthine schemes of the long dead, then you're just an exegete, a commentator, an historian. Chris Cole, who does not to my knowledge call himself a philosopher, was able to read and understand the letter in question. Why can't you? Things like relativity and quantum theory may not provide you with insight, but if not, then neither does the reality of which they are demonstrable aspects. What, then, is your "theory" but an irreal fantasy?

Congratulations on the reported solicitation of your treatise by a university press. If I thought that universities had any franchise on philosophical reasoning, I'd probably be jealous! But in view of their apparent preference for material like yours over material like mine, their neglect looks quite like a badge of honor. I only request that you be very careful to credit me with any of my ideas that find you yourself forced to use, the number of which will be proportionate to the depth of any valid analysis you are able to complete. You seem to think that your parallel between Freudian psychology and traditional philosophy is air tight despite their own very different natures. But the problems associated with each multiply like viruses under combination, and "firing an artillery piece in time of war" would be a very poor virustat.

Meanwhile, keep up the good aspects of your work (such as they may be), and take special care to avoid false or misleading claims. For example, all coordinate systems are studied within the master...
like syndiffeonesis, what does it take for the reader to think
"syn = same, diff = difference, syndiffeonesis = difference-
in-sameness = paradox"? Not much, in my book. You and the rest of
the group will chew off your own paws to solve a Hoeflin, Langdon,
Inman or Pomfrit verbal analogy, no matter how arcane or how alien
to your real existences. But let me use a transparent verbal con-
struction to describe real existence itself, and suddenly I take
first in the Dracula contest. What's that all about?

Let's get real, Rick. Most of us have read plenty of material next
to which mine reads like a kindergarten primer, and I've done
everything short of writing CTMU fairy tales to get your attention.
The fact is, most of the "hard stuff" gets forced down your throat
in school, where Joe Professor stands ready to beat your negligent
little bottom if you slack (thus, the way you excuse yourself from
reading Nosis "as if you're going to be tested on it"). May I
point out that this is a hell of a standard for living your life?
First you do things because your rear gets kicked by the school.
Then you go to work for a company that turns kicks your
rear with the government and your spouse. Then you die. Is that
why you were gifted with a high IQ?

Probably confident that nobody but me gives a damn, you've called
for an informal referendum on your performance. Apparently, the
idea is that if I'm the only one complaining, and everyone else
likes the show, then it's business as usual. Well, I'm afraid that
turkey won't fly. Democracy, as conceived by the ancient Athenians,
requires both logic and a sincere, universal desire for communica-
tion and understanding. People who respect neither of these cri-
teria, but prefer yukking it up at each other's expense, don't
qualify for a democracy. Like spoiled, misbehaving brats, they
must learn to shut up and grow up before they get to vote. This
idea has been around much longer than either of us have. If your
local porkbarrel pols have forgotten it, that's irrelevant. They
and their constituents are why American government is so often
described by words like "stalemate", "paralysis", and "gridlock".

Time grows short for you, Rick. Pretty soon, even I'll be unable
to wipe the egg off your smirking face. You know what I'm talking
about. If 60 Minutes ever does a piece on the Mega Society, do
you want to be the guy who tries to run away and hide his mug from
the camera? Wouldn't it be easier to shape up your act now?
(On another note, good job on those GRE's!)

RON HOEFLIN: Your fixation on categories is, of course, less than
"metaphysical", i.e., your system devolves to a set of categories
which is reducible to individual categories. But in order to de-
fine a category in terms of a set of categories, you need the very
sort of logical framework you appear to disparage in your letter.
Since only the CTMU can explain what the general concept of "cate-
gory" really means, the only way for you to meet this objection
is to embrace the CTMU. Until then, your system is reducible to
something which cannot be explained within it, and - for the nth
time - is demonstrably not a theory of metaphysics.
Mr. LeRoy Kottke
4787 Dawson Drive
Ann Arbor, MI 48103

May 05, 1993

Dear LeRoy:

Issues 44-49 of Noesis were indeed the ones in which I introduced the CTMU. I took over the editorship during the first half of 1990 in order to do this without having to tolerate the kind of unreliability and half-baked editorial comments I've endured since. As it turned out, I was such a "popular" editor that I had to write them nearly in their entireties (with the notable exception of another member's ill-fated attempt to improve on my resolution of Newcomb's paradox). Watch out... despite what I thought was a very clear writing style, all of these issues are reputed to be virtually impenetrable.

The CTMU supertautology is defined as an "expansion" of the human subjective cognitive syntax, or HSCS, with respect to its accepting ("observational", "recognitional") stage. The human accepting syntax is logically one-valued: that which you can sense is real, and what is real is true and never false. 2VL arises when we formulate various aspects of reality in contrast to their logical negations and complements in order to "cognize" it. MVL arises when we begin to apply various mental constructions or relational hypotheses to this 2VL formulation of reality in order to predict or cognize it on higher levels. Infinite-valued logic (IVL) arises as the terminus of an HSCS-open inductive regression through arbitrary causal and compositional arrangements of these hypotheses.

Since these hypothetical relationships are how we explain "objective reality", MVL characterizes objective potential which has not yet collapsed as 1VL HSCS/subjectively-perceived reality. MVL is merely the logic of probability, uncertainty, and undecidability. The surprise comes when we realize that, due to the way in which the HSCS and objective potential are interlocked, the latter is literally MVL-structured for purposes of human cognition. In CTMU terms, the distinction between objective and subjective reality disappears at the empyreonic identity (concerning your related question, the CTMU is both a subjectively-projected mental limit and an objective reality; the two are finally indistinguishable). Thus, an instance of quantum collapse is a cancellative transition from MVL (telic) to 1VL (actualized) reality, where it is understood that the operative undecidable determinants and degrees arise entirely from human teleis but may come from nonhuman HSCS-consistent telors.

Notice that CTMU tautological structure is invariant through the transition from infinite to finite to single-valued logic. I.e., closure applies throughout due to the stable HSCS basis of the transformation. Recall that the empyreonic identity is described as an "infinite-valued parallelism". Parallelism implies that everything is "invariant" in the sense of simultaneous intercon-

RICK ROSNER: I apologize in advance for addressing you in what may seem like an overly direct and disrespectful manner. I'm doing it because none of my experience with Noesis gives me any reason to think you'll respond to a more delicate approach. I don't want to make you feel bad - I think you're probably a worthwhile person - but I do want to get through to you.

Thanks for calling me a "nice guy". I hope you understand that it wasn't me who seemed to be accusing you of ignorance and stupidity. It was Jojo. Part of the reason I invented him was to let say what needs to be said, without the unpleasant necessity of saying it myself. Actually, I regard you as intelligent, but doomed to ignorance by strange mental idiosyncracies. I shouldn't talk; others might make the same accusation against me about their own fields of expertise. The difference is, I don't try to tell fish how to swim or birds how to fly. I have enough regard for their abilities to learn instead of argue or ignore. You'll find that this trait is universal among those who come to excel at anything technical.

While Jojo might endorse the adjective "sucky" as a description of your performance as editor, I'd tend to be less extreme in view of your honesty about its shortcomings. My displeasure with you started about the time you introduced my Noesis 71 piece with oblique aspersions and Seven Dwarves trivia. You may recall alluding to your own "amateurish" theory, for which I have nowhere implied certain CTMU-like characteristics. Unfortunately for that, the CTMU is the Mother of All Theories and is structured such that other theories must either conform to it or be eaten alive by it. Since I'd warned you of this repeatedly, I was finally forced to call your bluff.

I understand that a little entertainment can be good, especially for the expanding circulation Noesis so badly needs. But so are standards of content, and everybody eventually has to learn when and when not to laugh. Spend too much time laughing at the wrong things, and nobody will take you seriously enough to let you do anything else. While you strive to attain Alfred E. Neumannhood, others worry about guilt by association.

I'm glad you understand that theories can't be judged on context, despite the fact that you do it anyway. If high-IQ journals are lousy contexts for publishing new theories, that's literally everybody's fault but mine. I see Noesis in terms of potential; you seem to see it as just another forum for snide humor, baseless egotism, half-baked opinions, and blatant idiocy. In a very real sense, that which is abused and neglected by others belongs to him who uses it to full advantage. In that sense, I own Noesis. I'm willing to share, but it'll cost you more than the intellectual chump change you've been sprinkling on it so far.

You blame some of your incomprehension on "the material". I disagree. In fact, the material is calculated to be full of terse, disguised "proofs" and "ah...!" type neologisms. When I use a term
connection, a mathematical requirement of informational stability relative to the HSCS (where the stability of each bit of recognizable information reflects its homomorphism to the empyreonic identity and thus to the informational totality thereby represented).

Naturally, we can't just be throwing terms like "infinity" around without defining them a lot better than other mathematicians and cosmologists. We have to take a computational approach to infinity, defining it as a syntactical (denumerative or discriminative) constraint on certain "interminable" processes and "unbounded" sets and spaces. When we do this, we find that syntactic infinity corresponds to metasyntactic closure. The senses in which the CTMU is "closed" and "open" are thus properly distinguished in terms of empyreonic inductive stratification.

Consider the Turing halting problem, in which infinity is cryptically defined on a computational relationship. In order to attempt to compute the uncertain validity of an undecidable hypothesis ("machine alpha will halt"), machine beta must embark on a nonterminating ("infinite") computative "cycle". Where everything is reduced to infocognition - in which alpha here occupies an informational and beta a cognitive role - this is in fact the only definition of infinity that counts. Infinity, whether parallel or sequential, cardinal or ordinal, becomes the daunting prospect of any transducer embedded in or attempting to simulate another which has the capacity to outlast it, outreach it, or in any way contain or enclose it.

Let's come at this from a slightly different angle. Take the terms infinity and all. We use them to encompass totalities that we either cannot, or would rather not, enumerate. Thus, they are to some extent open with respect to content. Yet, they have closed-form definitions which are well-distinguished from those of other terms. In fact, one can load either of these terms with arbitrary conditions and constraints which describe the exact sense in which closure applies (e.g., "all wombats which are both pregnant and have not lost their tails"). But this is true only because closure is implicit in their bare definitions or the definitions of terms to which they apply. Because subjective and objective reality are identified in the empyreonic identity, this HSCS convention is generalistically "objectivized". Thus, it makes perfect sense to speak of an "infinite but closed" universe.... and of a "big bang" and "big crunch" which may be "infinitely" far away in the past and future, and yet identically distributed over time. By the way, eternity must be treated like infinity; it "lasts" long enough to encompass any discrete HSCS-syntactified process, but is instantaneous at the identic level of reality. In fact, time and space as we know them arise only as artifacts of metasyntactic restriction; without the attending inductive stratification, the universe is atemporal, "instantaneous" flash of parallel self-differentiation.

When I put a word in quotes, it can mean any of several different things. It might denote a neologism. It might denote an existing word whose standard definition doesn't quite cover my context of
Dear Rick,

It bothers me, frankly, that material is published in Noesis from non-member subscribers without warning readers that the item is not by a full-fledged member. This tends to undermine the purpose of the group, which includes camaraderie among intellectual peers, since we are not informed who is a purported "peer" and who is simply a "guest."

I suggest, therefore, that an official list of full members be compiled and published in Noesis within the next few months. Since Jeff Ward has been serving as membership officer of sorts, perhaps he can assist you with the compilation. I believe the list ideally ought to include the following information:

1. Member's name
2. Member's address (unless, as in the case of Marilyn vos Savant, there is a desire to keep the address confidential)
3. Name of the test or tests on which the member qualified (but the precise score need not be given)

If this list cannot be compiled from available files, I suggest that you request all members to send you this information by a given deadline. Those who do not respond by that deadline will not be included in the list of full-fledged members, although they may request to be included in such a list at some later date if they are indeed fully qualified.

A membership card ought to be issued to official members. I would be willing to produce such a card if no one else is willing to.

I do not consider myself a full-fledged member of the Mega Society, so the request for a list of official members cannot conceivably be construed as an ego trip on my part.

I feel so strongly that a list of official members is necessary that I probably will withdraw from further participation in the group if no list of members is compiled and published by the end of the year—but preferably sooner.

Sincerely,

Ronald K. Hoeflin
P. O. Box 539
New York, NY 10101
The obsessed GRE taker may accumulate up to 18 preparation points. Multiply the number of prep points by 1.3 to arrive at your percent advantage over the person with zero prep points. This percent advantage represents the percent reduction in the gap between the maximum possible GRE raw score and the raw score you'd get with zero prep points. For example, say two people with equal knowledge of the subject take a GRE with a maximum possible raw score of 200 points, and the person with zero prep points gets a raw score of 100. The person with 12 prep points will get a score of around 118. This can mean the difference between scoring in the 56th and the 80th percentile.

Test-taking preparation improves performance in four areas not directly related to the subject matter being tested (and increases your knowledge of the subject matter). These areas are: confidence, time management, guessing productively on questions you otherwise wouldn't be able to answer, and pinning down answers to questions about which you have incomplete knowledge.

A question about tests for Ron Hoellin—have you calculated the correlation coefficient for the Titan vs. the Mega? I did some quick sloppy calculations & came up with an r of about .88. Is that reasonable?

LETTER FROM RICHARD W. MAY

Dear Rick,

It may not be exceedingly clever of us to attempt to select individuals at a one-per-million criterion (the membership of the Mega Society) and then confuse this set of individuals with another set that is in principle (not in fact) random by the same criterion (the subscribers), i.e., a minute subset of the population able to pay the $10 subscriber fee.

Separate lists should be compiled and at least available to the membership, if not published or the admissions criterion should simply be changed to that of a society of individuals occasionally having $10 in discretionary funds. I am not in favor of the latter alternative, notwithstanding the immense advantages in both statistical confidence level and political correctness.

Richard

[Editor's comment: Here's what I'll do, if it meets with everyone's approval--

A. List people we know to be members and the name of the test by which they qualified, if we know it. If we don't, we'll list whatever information we do have.

B. List pertinent credentials of non-qualifying subscribers who authorize me to do so. For instance, a subscriber may have scored a 39 on the Mega (ca 1540 on the SAT), doesn't want to do the work necessary for another shot at qualifying some, but still wants everyone to know said subscriber can do very well on such tests.

C. The membership list will always be correctable in terms of adding people, but not subtracting people. If you were ever legitimately considered a member, you remain so forever. (This does not include subscribers who mistakenly became listed as members.)

D. Controversies regarding individual membership will tend to be resolved in favor of the member in question. I don't want to piss people off by putting them through all sorts of B.S. regarding the circumstances under which they were granted membership. (Some small amount of B.S. may be generated by my own disorganization and laziness.)

E. I'll try to crank out a membership list by the October issue, which you can expect to see by Valentine's Day.]

Robert J. Hannon

LETTER FROM ROBERT J. HANNON

ROBERT J. HANNON
447 J Staghorn Lane
Sarasota FL 34238-5626
3 May 93

Chris Cole
Box 9545
Newport Beach CA 92683-9545

Dear Chris,

A) Given:

\begin{align*}
(1) & \quad x' = (x-St)/[(1-S^2/C^2)]^1/2 \\
(2) & \quad S = AC \\
(3) & \quad C = x/t = x'/t'
\end{align*}

According to the basic rules of algebra, (1) is incomplete. (1) must be completed by substitution of (2) and (3) and simplifying. The result is:

\begin{align*}
(4) & \quad x' = xf((1-\beta)/(1+\beta))
\end{align*}

B) Given:

\begin{align*}
(5) & \quad t' = (t-Sx/C)/[(1-S^2/C^2)]^1/2 \\
(2) & \quad S = AC \\
(3) & \quad C = x/t = x'/t'
\end{align*}

According to the basic rules of algebra, (5) is incomplete. (5) must be completed by substitution of (2) and (3) and simplifying. The result is:

\begin{align*}
(6) & \quad t' = tf((1-\beta)/(1+\beta))
\end{align*}

C) Equations (4) and (6) are the sole completed and correct results of any derivation of the Lorentz Transformation.

D) Equations (1) and (5) are the conventional Lorentz Transformation. They are invalid by virtue of being algebraically incomplete. The Theory of Special Relativity is founded on (1) and (5). When (1) and (5) are completed, the mathematical foundation of the Theory of Special Relativity vanishes. Therefore, the entire Theory of Special Relativity is founded on incomplete algebra and is invalid.

E) Where is the error, if any, in the foregoing?

Best regards,

Robert J. Hannon
Dear Bob,

You state in your letter that the entire theory of special relativity is based on incomplete algebra and is invalid. For this to be literally true, thousands (millions?) of very intelligent people would have to be unable to do algebra. Is this likely? Also, since the theory has been verified experimentally over and over again, somehow nature would have to be unable to do algebra too. Is this likely?

Since I find your position so untenable, I am probably going to have a hard time refuting it. This seems counter-intuitive, but really isn’t. Since you are able to believe something I find unbelievable, we probably share very little in the way of common ground. I know you have a scientific and technical background, and obviously you did not need to use special relativity in your day-to-day work. As a particle physicist, I did. And since we share little in the way of common ground, I will find it difficult to construct any kind of edifice that you would agree to stand upon. I already have evidence of this, when you brushed aside my earlier gedanken-experiment demonstrating time dilation.

In fact, your abhorrence of special relativity may be so complete that you are willing to completely rewrite your world-view, just so you do not have to believe in special relativity. This has happened many times in the history of thought, for example, the philosopher Henri Bergson had a theory of time in which time was measured by the subjective sensation of the occurrence of events. Bergson felt that the synchronization of time was because people perceived events at the same rate. When early relativists uncovered the twin paradox (wherein a twin that is accelerated to near-light speeds ages more slowly than one who is not), Bergson argued that since both twins perceive time the same, it was impossible that one should age more slowly than the other. Bergson was simply unable to adjust his world-view to adopt the new conception of time.

I perceive in your letter an attempt to approach me on the supposed common ground of mathematics. Unfortunately, this is an illusion. To paraphrase Bertrand Russell, in mathematics we do not know what we are talking about, nor do we know if what we are saying is true.” In other words, unless we share a common interpretation of the mathematical symbols we manipulate, we will not get anywhere. For example, I infer from your letter that you think it contains a convincing refutation of special relativity. I do not see that it contains any such thing. I see that it contains some algebra, but if this amounts to a refutation of relativity, you must read things into these equations that I don’t see.

I note that you have published many pages on this subject, without a lot of comment by other people. I also infer from your mailing your letter to me that you want more feedback. I would like to give you more feedback, but I’d like to “cut to the chase.” You seek one of two things: truth or glory.

If you are a glory seeker, your only problem with relativity is that you didn’t invent it. You seek the glory of being the only human being out of five billion who shows that the emperor has no clothes. Your need for this glory is so all-consuming that anything I say will be ignored. So please don’t waste my time.

If you are a truth seeker, you have some specific problem with relativity, as Bergson did. So, putting aside all the mathematics, what is it about relativity that bugs you?

Chris