

A Theoretical Critique of Theory, Part 1 --
Modus Ponens and Cauchy Topologies. VS.1

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Abstract: In ideal circumstances, we know exactly what to do. But there are no ideal circumstances; but then we are confusing and conflating two things if you look: When we speak of ideal circumstances, we are philosophers and thinking of our version of a Platonic ideal, not our value ideals or our ideal values [a common mistake that does not justify nominalism - it is the nominalist's backdoor malware into the reductive Platonism], such as freedom of speech, right bear arms, habeas corpus, each one of us has those which are most important to us, sometimes many at the same time. These are not however social value-propositions. They derive of natural law in the Constitution. However, certain Platonic ideal circumstances as to our individually important value ideals can be created in real life, to the degree that we are able to *invent*. That is why we have *Critique*. It takes notice of the differences and the possibilities offered by the differences, which would be less without noticing the

differences. However, in in that sense where ideal circumstances can be created [actually, are present], we have created them in our everyday lives, they are our individual lives, exist within the network of constitutive grounds for law and institutions. In strict terms of modality, these value-propositions become axiomatic with the *given* system of our everyday lives that.

And so, with a leap of faith to living our everyday lives practically, theoretical matters, axiomatically classical matters, classical axiomatic matters, a serious mind would see that you that in the debates in physics over cosmology, we literally have geodesics flying out through time from centrifugal non-global hyperbolic Cauchy topology like Frisbees, each one of which you can play an infinite number of games on. You don't need or have a CTC, so there is no causal blockade in the hyperbolic Cauchy topology of strong cause and effect. Modus ponens as explained above is the only mechanical mechanism is the mode for cause and effect that man has, and its antecedence-precedence minimalism yet strong presence is enough; and it is minimum. With modus ponens what it has been since remote antiquities, to say anything otherwise would be to ask help from God to unravel all of the physics up until today's counterarguments in favor of a *vt time-lapse* based arithmetic time line with counterintuitive information transfer and strangely in relation to the later, if that goes badly, the need for constructivism's interference in mathematics, resulting in the need to use MP to take the physics apart. The solution itself takes the piled data apart. We can't read God's mind. But Gödel left us this. Otherwise we need God's help, and I have written the PRF.POSTV [proof-positive] against that possibility. All that we retain from that would be the nominalist's eased conventional respect for Occam in expostulation and discussions of formal matters such as sets.

In this [theoretical] critique of theory, new terms and tools are introduced for the Gödel material and literature. It would be precisely named, "Critique of The Theory." Not Gödel's theory, if he had one, but 'The Theory' as an object. It's revealing that no other concept can be spoken of in that way.

Picture trees in a forest, and rocks displaced by gravity and falling through forest, hitting one tree, then another, until they stop. Hubble shows to astronomers which super-structures are found, how big, and how far back in time. It is consistent with Mach's principle if you rotate yourself before you look into the forest at 90 degrees and find a way of suspending yourself and turning.

Asymptotes are used within vertical and horizontal graphs to justify a future that need not be seen as a future in the sense of grammatical future-tense [which is a dubious tense in "philosophical grammar"] but as a potential part in such systems themselves that we deal with with respect to incompleteness.

The thesis is that we can approach incompleteness by using [theoretical] reasoning and available tools that are allowed in theoretical reasoning and in reasoning as we think of it in reasoning through situations, and in the sense of pure reasoning itself; and, in order to critique the very meaning of incompleteness itself. As well, as the theoretical reasoning possible inside the tools themselves, should they have domains. We will not always have a domain for ourselves. We will not always be here; we will die, and epochal turns in history amounting to new antiquities will occur.

One of the most famous axioms of this type was invented by Vico, an axiom he discovered by thinking things through and studying.

In the long course that rumor has run from the beginning of the world it has been the perennial source of all the exaggerated opinions which have hitherto been held concerning remote antiquities unknown to us, by virtue of that property of the human mind noted by Tacitus in his Life of Agricola, where he says that everything unknown is taken for something great (omne ignotum pro magno est). - Gianbattista Vico, *La Scienza nuova*, *The New Science*

The White Horses:

1. Logic is not a natural science. Mathematics is a natural science.
2. Both follow de Morgan's laws without variance from the other.
3. Arithmetic are the basis is the basis of algebra.
4. Algebra makes the exhibition of geometry possible. It's not a projection of algebra. (This misunderstanding is the cause of most of our 'paradoxes'.)
5. Logic's sum are its elements: $\Sigma = \forall\exists, PX, \neg\vee\wedge$.
 - 3.1. $\forall\exists$. The quantifiers.
 - 3.2. PX . The propositions and their characteristics, or arguments.
 - 3.3. $\vee\wedge\neg$. The logical connectives and the single logical operator.
4. There is no such thing as a lower or higher order logic. There is one unique logical calculus. Its logical sum is $\forall\exists, PX, \neg\vee\wedge$.

5. Any element of $\forall\exists, \text{PX}, \neg\forall\wedge$ is syncategorematic except for X.
6. Any element of $\forall\exists, \text{PX}, \neg\forall\wedge$ is not syncategorematic if with X, including X itself. That contradicts point 5. It simply says that X is neither syncategorematic nor a-syncategorematic. Alone, it stands alone. Any other element that is alone, stands in need of X.

6.1. This is important for ground rules.

6.2. Ground rules are not important for the Gödel-sentence.

6.3. Ground rules are important for the function of the Gödel-sentence. Therefore they are important for the Gödel-sentence. That contradicts point 6.2. By transmission however 6.3 is normative and therefore not contradictory of 6.2.

a. What better place to start with a man who hated rumor 'legerdemain' unless it was he who was doing it (which is also something Christopher Hitchens said of Chomsky's socialism), an approach that became a very fascinating and productive pathology later: he is no less than Ludwig Wittgenstein. I note that B.F. Skinner and Gödel and Vico held etymology in high regard in their work. That is no coincidence. Wittgenstein's language games do bear a family resemblance, forgive me. Wittgenstein is (in)famous for his "infamous" early statement on Gödel. Preferring a barricade of hibernation to exposure to a room full of people in the living room, he continued to think about it.

"Wittgenstein questions the intra-systemic and extra-mathematical *usability*. . . of *P* [in various discussions of Gödel in the *Nachlass* (Rodych 2002, 2003)] and, at (§19), he emphatically says that one... "cannot make the truth of the

assertion [$\neg P$ or ["Therefore P " plausible to me, since you can make no use of it except to do these bits of legerdemain.]

b. An incomplete piece of information ' $\neg P$ ' or ' P ' is encoded in a system where it is not provable [PRVBLE] but where it is true [TRU]. I won't predicate the turnstiles of that which they say something about which is only sensible without their predication.

bb. One has to ask, 'which is it first?' Something is not PRVBLE nor is it TRU in S . Or something is TRU but not PRVBLE in S . These statements are equally autonomous as they are dependent on one another. It discomfits me, while it makes others uncomfortable or worse.

bbb. At any rate, the most elementary accepted encode symbol for a Gödel number is s .

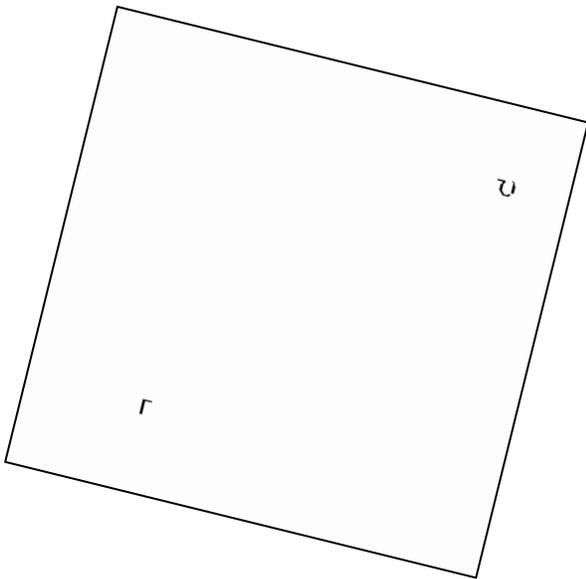
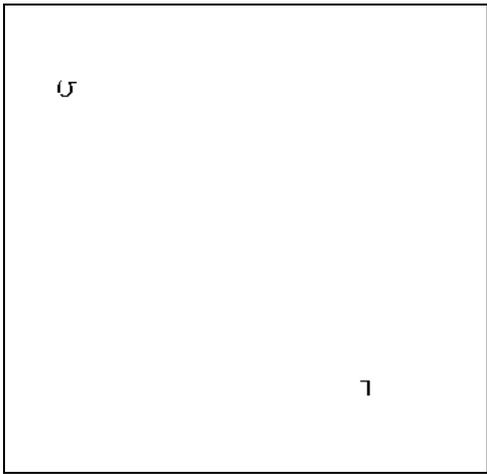
bbbb. We simply say that s is obliged to act as an analytic function-word in syntax, that moves elements until there is a synthetic layer of meaning: a synthesis. The Gödel number is a syntactic unit with a studied *Trace* [TR]. So this will *not* be a mocking minstrel show-sub-study-Piaget master-class in mathematical logic or in the relevance of mathematics or for the foundations of mathematics: It is not an oeuvre! It becomes an oeuvre once it leaves that presumption that it is one. It becomes an oeuvre once it leaves the presumption that it is one and even better language games become possible and lords over them benignly.

cc. *s.f* denotes meaninglessness: *s.fx* changes that like fire to a dry bail of cotton. It is meaningful to express the syntactical dynamics like this: *s.f* + ADD-x, or + MULT-x, or DIVD-x or ORDS-X, with all arithmetic laws as commutative, associative, etc., left untouched. Call it, *adducing-x*. ADD-X could be used with the others for data-type inference. It's important to know this because it leaves all arithmetic operations open to us; we are not compelled by Gödel numbering to take into account data-type inference but we aren't finished with Gödel; additionally we are not compelled not to. For example, in that we are not compelled to, we may feel compelled ourselves to use them or experiment with them. We haven't chosen one in particular yet, yet we are using one [+], which is useful uniquely to us as mathematically stated on world-lines in its particular use of decode, something we will go into. In this vein, we have not picked one as we would if it came to the fate that we would need to use the Axiom of Choice (AOC), which will be gone into later on its own terms. The AOC is like something you need to kill you to be successful with it. To work with it infusing it with other theoretical criteria that you stipulate may work with it [in this case Mach's Principle with Bayesian Networks, since the AOC is inverted downwards at magnitudes of choice, and other theoretical objects just as the AOC is a theoretical object] is suicide. I don't think it can be done, such a rapid TOE. You would need Van Gough, and he would say, *nonsense*.

ccc. It is not furtive to state that it is a transition from one state of something to another, if not to an exclusively alternative target object entirely, or dropped into a different system entirely: The drop-thru would crack up. If it doesn't crack-up it will be a representation of modus ponens (MP) that we can watch, and if not, it will happen somewhere where we cannot

watch it, and we know not whereof nor what-of nor even if-of, and should not even speculate about that unique syntactical unit which probably is simultaneously a form now, perhaps even in this system.

cccc. If it takes the form of a number, it might look like this broken number 5 rotated:



5C. You can see how this could be rotated. It drops-thru until it hits a plane. Rotate yourself 90 degrees and look into a forest of tall pine. Float inert, then turn, arms down. Float inert, then turn with arms out. It will hit one of the trees, but the path it takes we don't know. We cannot know. It either will reconstitute as 5, or it will not, or instantiate as an additional level of modus ponens topology. That depends on whether it falls into an alternative system in the forest, or it fastens to one of the trees as an incompleteness form that has internal properties pace Wittgenstein with another form, in which case it can end up as a crack-up or as a representation of modus ponens. See ee:

Please see ee.

5C'. **GROUND RULES, fall-thru, fall-in.** It's clear that induction should not be used to infer an unseen drop-thru and its consequence or its break-down; that would combine induction with what is a matter of MP and how it might function, be represented, or look under *x,...,conditions*. **That is an interesting issue.** MP has a nomicological fall-in aspect too, [as opposed to drop-thru, where we see it hit a plane or Cauchy topology or an indexing flank, or whatever works for the sake the GROUND RULES]; that we ignore at great risk, pace the great Finnish logician on modus ponens and by extension the pioneer in Modal Logic Systems, L-2m (a fiction), it doesn't matter. G.H. von Wright, Wittgenstein's successor at Cambridge as Chair. It may that be that a crack-up qua fall-in doesn't mean the information is lost though the form may change (or it may not, and we may be looking at just one of any possible number of drop-thrus instead, or both). Nothing is absolutely clear with keeping on top of Gödel. What is fall-in? We need to a name for what happens if the Gödel fall-thru to

modus ponens cracks-up in the event that that crack-up is an intermediate state to representation of modus ponens.

d. **Wheeler's steel bar.** The example of two steel bars that are one bar of geometrical area and initially cubed space, because they were forged [not connected together after one and then the other was forged] where they have at their they have at two inward ends a very small it piece of meaningful data. Is it what Wheeler said, or implied: a radical new view or conception of nearest-neighbor? Definitely. Is it a point [prove it to me that it is], a length, a point as a cube without a cube's coordinates as a cube or a square [prove it to me if it isn't]? Or is the it still on the four-dimensional arithmetical world-line? If so, is it so with the fourth dimension a position in lapsed-time ct not lapsing in movement [prove to me that it's not, because I can name an arithmetic name space as the fourth dimension that will prove you wrong for position and momentum, or make you have doubts that I am not able to disable your pursuit]. Or is it a Maxwell's demon without the active thermodynamics [an oxymoron, fine, but still].

dd. **A vector space up to a complex number.** The possibilities in which this may happen are many and perhaps contingent, or finitely ruled with one free or more free variables, but the exponentially more at adding each new free variable in consideration of *x-unknown-reason*, which would create a massive system of complexity, unless we go an order of magnitude or more, a few scales to make sense of it by, perhaps better a vector space up to its [imaginary] complex number. There is nothing about counting or infinity to talk about here at all. That is an issue. *The length referred to on this rod* is equally composite of the rod as every other part (point, all of the above

possibilities listed in brackets) of the rod, so its nearest neighbor equally global with all other points or point-lengths. What certainly does happen is that nearest-neighbor gets a radically new property. That's from Wheeler and this is his thought experiment as seen through my eyes.

dd. **MP and Berkeley's *De Motu***. Whatever it is, it is as close as a physical object that we can invent that we might think appears similar to MP in **its meta-functions and as a concrete and ideal object**. I have to emphasize the latter sentence. It is very important when we are talking about **actualized concrete objects** per Berkeley's *De Motu*. Why? Self-evidently. Is it a point or length or bit of something that is nonetheless discrete nearest neighbor?

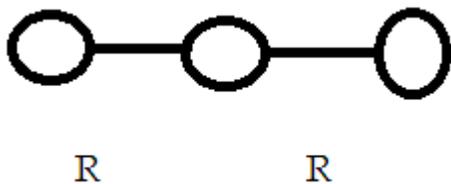
ddd. **Trace, calque, conditionship**. Contemplating the drop-thru of Q after the actualization of the [CFC] conditionship antecedent-P to consequent-Q, with its attending disjunction and witness-existence property [DEP] kicking in as the syntax is traced-out [Trace, calque, per the literature] as *s.fx* instantiates the decoding of the encoded Gödel number, with the same properties of members of intuitionist sets. Limited here, per caution in *Critique*.

dd. **Descartes and doubt**. If we use the full-out version of Descartes' version of *Doubt* in *Meditations* we are granted mathematical rights to lay down a provisional functor valid TRU for each possibility for Wheeler's rod that we hypothetically asserted, and assert TRU of each. Prove wrong. We aren't finished with Gödel.

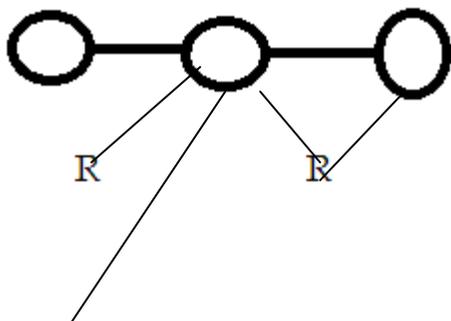
e. **Balzac and truth.** *All is true*, Balzac said in *Pierre Goriot* in English, for whatever reason. *All is true*, not Dostoevsky's *everything / anything goes*. Balzac meant it in every possible anti-thetical sense to a statement of a tautology. That's interesting for a man who wanted to catch every aspect of life in a little known part of Paris over three generations with a few hundred hundred characters in one book, *Pierre Goriot*.

ee. **Tractatus from R-theory to form.** That *would be* Wittgenstein if he wrote novels as he wrote the *Tractatus* and remained at mid-point between relational theories in today's sense of R-theory and his dismissal of it. He did, in the *Tractatus*. What nonsense. He didn't say anything. He had a model.

eee. See Wittgenstein in the *Tractatus*: he started with relations.



He was traumatized by the relational monstrosity that this two relations caused:





R

R

eeee. **Atomic properties and life forms contra relations.** He let them overlap instead [not shown here], the stances of his objects to each object of *forms* that had certain inner properties that would take well to another form, and thus would concatenate in a way that we would call Venn diagrams. This is exactly where the Bayesians met and parted. They agreed on one thing however, networks, or configurations, agreement on this particular point is / was there, it evolved over his period of life.

4e. **Networks and life forms.** He believed in Networks. That became part of his later philosophy when he said that there is 'The Network' that we all have that carries the assumptions on which we walk, talk, eat, all life-forms, forms of life, such as, in the universal cases, that we assume that gravity will not suddenly give way or a cavern open up when we are walking to class. He developed this of course in PI and OC. It is here that I have changed my belief about Bayesian Networks and their capacities. I was hoping to arrive there, but since it is dishonest to say that you are doing a *Critique* at least in the classical sense you have to derive it through reasoning that goes forward, backward, up, down, until you have not a deduction, but something you arrive at. A form of derivation, which in Wittgenstein's later philosophy would be extended to a form of life. But Wittgenstein MO had only *beliefs*; operating on first principles, he already knew exactly what he wanted to arrive at; which is what makes the *Tractatus* not a critique, but a measure;

it was a fault of his that this method was a planned self-confirmation of his beliefs: fortunately for him and us, he was a genius, he was the first to give us name spaces, etc. But he was a philosopher.

5E. **Talking to a fence post.** This respect for Bayesian thinking the reader will recognize later a fundamental that I arrive at in this critique, seen to fit Cauchy topologies. But I think I'll have to give up Bayesian thinking altogether at some point. I feel I might as well be talking to a fence post.

f. **Removing value-propositions from epistemology.** By making these epistemological matters, he removed 'value propositions' from epistemology - a great contribution to society and thought, as 'value propositions' are not to be conflated with axiomatic systems of socially constitutive documents such as *Constitutions*; nor for that matter in over the cliff physics and sciences of the mind, where value-propositions should never be present. But they are rife with them. Observe campus life and think for yourself outside of groups for a week, and then look. You'll see force-mechanisms and indoctrination that goes far beyond the previous forms of political correctness. It is getting Maoist now, from its source type and its target type, or, let's say.

eee. **Showing but giving no examples.** He stated his propositions as tautologies at the end of the book. He gave objects a form which without it [the form] could not concatenate with other objects to create configurations if they existed with inner properties each suitable to the other. This allowed him to point out or show the existence of inner properties of atomic facts, coming in sentences and propositions, without requiring to point out any inner properties specifically as examples. He gave no

examples. Which is interesting when we move on to Bayesian matters later, since that goes right into them and may be productive all-round. It's a keeper and non-trivial and not naïve. Still feeling that I am talking to a fence post pace Bayesian things.

f. Back to Gödel. **The Gödel-syntax is traced-out leaving a [Trace, calque] leaving unbound automata as a usable trail.** The DEP property to stands as a unique instance of its use.

ff. Define unique? Define the tape. On this imaginary tape there is an imaginary symbol that Turing [if reading von Wright, we might be able to argue, only after investigation with the appropriate axioms and theorems for some said logical system, that it may be a Symbol of a symbol, as in von Wright's work on *The Symbolic Challenge*] said should be read, but not imagined. In the drop-thru it was read, with an output Q and the appearance of the DEP, which is so important to intuitionist sets which have the capacity to generate copy members. This is important later with respect to Gödel's theory of relativity.

fff. What remains is a unique instance of the set-theoretic property of disjunction and existence-witness.

g. Wittgenstein's tautologies referencing configured contingent objects changing in form [with new senses] as they change reconfigure. This is the *Tractatus* accurately summarized. That is a matter of the objects with form treating other objects [as-though] they were function-words in category theory with the attraction of being in need cognate verbal forms; and in category theory cognates which are changed only appear from the lexicon by adding nouns and verbs to functions words as THE, AND, OR, ALL,

SOME, [just as logic's logical constants AND, OR, IF, NEGATION, all, exist)], giving us well formed categories.

gg. This should have a natural extension almost identically to the fundamental role of anaphora in X-Bar Theory, regardless of whether it's dependency grammar, constituency grammar, lexicalist-hierarchical X-Bar Heading versus linear X-Bar Heading grammar. Chomsky did rid himself to an extent of a need use the logical constants and made use of traces. That's to his credit.

ggg. In Wittgenstein [the] logical constants are only apparent when you count or mark out and show the words 'the' and 'is' in relation to named objects 'cat' and 'mat' in "the cat is on the mat." They disappear from the calculus as soon as they are "shewn". Anaphora are of similar grain.

h. The Gödel-syntax is traced-out [Trace, calque] [much the same as in Chomsky's work on linguistic "Government and Binding," traces abstractions on 'loan-words,' TR[calque]] **leaving unbound automata as a usable trace and calque:** that gate is always open for re-use because of the TR, if it should happen to be re-used or if it *should* be re-used, for the same purpose, or another or others at once or at different times. The existence-witness and disjunction property (DEP) takes stand as a unique instance of its use in this tracing-out of the syntax to form qua entailment. In the instant of drop-thru, or before, or after. That's interesting: in $vt - vt'$ the information in special relativity is not passed to vt' or ct' . That means: no TR[calque], contradictory to loan-words; not quite functors, but not quite not. There's a question about information transfer in physical events there; e.g., Gödelian world lines that are privileged [especially in commutative information theory with respect to

objects like intuitionist sets seen by some as offering shorter index ranges cut from longer ranges that span indexes, for example, but not necessarily], in a Cauchy topology that is not globally hyperbolic, reducing strong causal elements, which is not difficult - in theory, and even more so, in the natural world of practice, or praxis, if we have to go that far, which we don't.

hhh. With respect to the DEP, we write asymptotic graphs of expansion or contraction with the witness and disjunction of P and Q in their nomic relation to one another on a straight line with no Dedekind cuts: $N \sim M$. Whether it is contraction or expansion is another issue. There are different assumptions built into each.

hhhh. What remains is a unique instance of the set-theoretic property of existence-witness and disjunction.

5H. $N \sim M$ and $r(P, Q)$ drew a Euclidean theorem-line to a real proposition: $P \sim s.fx$ is a vertical or horizontal asymptotic graph of a function where some objects similar to summands make statistical corrections for unwanted knolls or dips: statistical geometrics was developed by Alfred Lände in his work on the foundations of quantum mechanics. That would allow for what I picture as a potential Bayesian matter.

5H.h. This leads to [a] stacking [of] questions, answers, recursion, feats of statistical induction, all in the form of the other, as the case may be. Gödel material is fragile and shy, as its inventor was. There is not a clear line between positions, hypotheses and guesses in Goedel's work on incompleteness.

5H.h.h. **Exhaustibility argument.** The exhaustibility argument of Torkel Franzén is not breached: scatology, eschatology, doppelgängers, epochal passages, stages, and rotations are all there.

i. So far we haven't even talked about a potential metric in this system of systems, where things fall-thru but not to us always, yet in those cases by induction, wherein we have generative Bayesian inferences, let's say, if not to us then in some other way or to / in some other form unknown to us. Scatology may be the best option for us.

ii. At any point of asking, you can predict, even posit, that there is a computation algorithm to calculate whether any "associated" theories are detected.

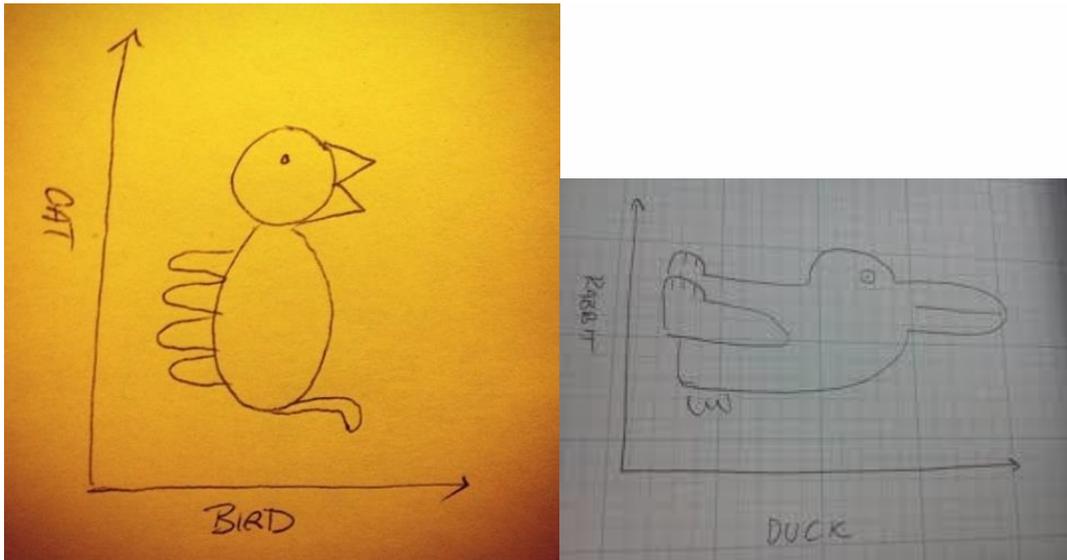
iii. That the prediction occurs when looking down on and examining Gödel's incompleteness theorem and sentence from the outside is fair, since it is asking the question as to whether based on what we know outside of a possible syntactical limit or domain, is there a computational algorithm of interpretability once modes ponens is established in its mutated form from $r(P, Q)$ to $N \sim M$, **when it is** presumably outside of the reach of sf , and therefore out of the system / domain wherein the encode and its sentence were required due to the relative nature of its relation to what exists incompletely outside of it, or its domain. The inside-outside connection is an issue that hasn't been addressed, I can think of a variety of reasons why, none of which need to be correct. It is a kind of lens, a lens with an aspect-ratios viz. Gödel relativity and even the asymptotic nature of *aspect-seeing*. In fact the slopes of tangents play a very important role here with respect to time (lapsed as

derivatives and non-lapsed, partly per Mach, before and after one pauses to think about it.

iiii. I found these, Wittgenstein never would have thought of graphing them, but the kids either did, or knew sub-consciously. Referring and requesting data from Piaget on children's creativity would be helpful.

5I. **Privileged recognition.** Can we talk gestural 'lapses,' facial expressions 'lapses' as privileged individuality, as in the mien of one's gait, and automatic recognition and linguistic kick-in of verbal behavior [Behabitives, Austin] name-spaces indexed as natural language predications upon recognition in milliseconds? Yes we do, it appears. It's instantaneous. X-Bar recognition-kick-in occurs at that same millisecond, as we say "It's a bird." Etc. "Now it's a cat." Children find this fun.

See the *aspect-seeing* pictures: Bird-Cat, Duck-Rabbit.



Courtesy of

<http://www.blameitonthevoices.com/2014/06/mindblowing-animal-graphs.html> behave perioop dontv wait

j. **Information and mechanical objects.** Insufficiency of present information doesn't mean insufficiency in future, and in the forms that the future can take, such as contained and encapsulated mechanically, past or present. Take *s.f.*, we don't have sufficient information about it to take it to PRF, whether PRF by OBSRV or proof by AXM-THRM. A lack of sufficient information even on a radical theoretical object of inquiry is still to say and assert that the remainder of the information exists and can be **encapsulated**, contained, made mechanical, and without predication or with predication stripped away. It is not far from Quine's notion of *Natural Kinds* and *Interchangeability* [Quine, *Ontological Relativity*]. Both are very interesting and may or may not come up in this stage of the *critique*.

jj. **Associated games.** Still, it is difficult to resist Quine's *Natural Kinds* if we consider B.F. Skinner produced empirical results. Two different games, but worth the association.

jjj. **Modality and Entailment.** Containment and modality are intimate with each other. They would, in Quine's world of *Natural Kinds*, be of the same *kind*. Modality as *entailment* takes the form of containing viz. *modus ponens*, even as matters progress, or accumulate data as they move [and presumably move *asymptotically* towards *entailed form*, or entailment as form, or vice versa, at the outer limits, physicalized, *towards a position with physical coordinates* in dimensional space and time] or are in motion, so to speak. A Brownian kind of movement to heterogeneous distribution of syntax and form. Again, I don't believe this is a

naïve example. It is a demonstration of an idea by example that cannot be formulated yet in its [the idea's] own right. It is a stealth way of thought entering into Time.

k. **Antecedence-Consequence Conditionship and Drop-Thru.** This, from the (now a) previous edition of this work:

Observing this may very well be a part of the fall, but it will definitely be a part of the modus ponens, since we will recognize our beloved, and cry hurrah! Let's get to work. And look at the work we've done that has added to modus ponens! Let's work! P was the antecedent to all of this! It dropped through in the *future* as Q. We can say that if Qy, Py, and state the contrary-fact (CF) in it, and stay within bounds, since we state still, that if Qy, then Py, and if not, if there had been Py, there would be Qy! There was Py, it's in the *past*, in our particular drop-thru case. The direction is correct! We've derived a fall-thru w.r.t. the antecedent-consequent with its great mate, the witness and disjunction property. Let's skip Tarski for now, who can be engaged. I don't see that we need Church.

. . . still needs work, but is sufficient for the purposes here. It will be handled in later work I suppose where we can use complex numbers [only if necessary, since building more mathematics into indexing is not wanted] in basic hierarchical intuitionist sets [Nash] to work with special functions, and in general generate copies of the sets members.

l. At this point both [p and [therefore p would have been acceptable to Wittgenstein. Russell and Whitehead demur, pretending to be nonplussed, Popper rushes in and declares the

rules that everyone must live by, and Feyerabend fires back at his former teacher [Popper] with his students.

ll. The idea being, of course, that syntaxes permeate the social world of the *constitutive* [the enabling conditions of institutions and the conventions of language pace J.L. Austin and Ludwig Wittgenstein].

lll. If English had been a proto-Indo-European language the common phrase in epochal use now, "of course," would be all we would need to immediately start building a civilization. But it wasn't. Barring the worst sort of authoritarian moral ineptitudes and enforcements and democratic warfare [wars on the ground and in the air], Vico's historical cycle to the next epoch will have a chance. In fact, he says that the Hebrews calculated their time on earth most accurately than any other tribe. We may come back to that when considering Goedel's Rotational Theory of Relativity in the way that it excludes time-lapses but not discrete experiential world-lines arithmetically composed in four dimensional Minkowski space. It is relevant to the Hebrew's accuracy and to Vico's saving theory of epochal cycles. And we know from Hebrew that Latin is only temporary, and we're doing Latin: *qua*.

m. Entailment *qua s.fx* is impossible without acting in a constitutive system of conventions [agreement is visible in **impliciture** in its various forms and practice, **a huge domain of inquiry**], in which reciprocity it exits.

mm. Reciprocity per the naturalistic pseudo-sets, which turn out to be, without contradictions in arithmetic and quite to the contrary, natural adjuncts to that social entailment: i.e.

intuitionist sets; and covariant with them: Bayesian inference, networks, in its various forms, up to today's notions of neural networks and generative learning. [Bear with me please, this is the hardest part of this paper / work, paperwork: *Bartleby the Scrivener*, by Herman Melville. The first acknowledge existentialist literary or philosophical work, prior to Kierkegaard got there.]

n. We will go so far to select-in the slopes of tangents algebraically and in their geometric counterparts as complex aspects (more on this, if there is time and space) or features and objects of, intuitive Bayesian inferences; as well as *such* the natural theorem-centric requirements in geometry derived of arithmetic that they already are. This is a matter that is addressed here in the domain of abstract algebra.

nn. We want to use the sequent line. Because this is intuitive knowledge I'll dispense with most of the mathematics; you can get it in high school algebra and geometry with some trig.

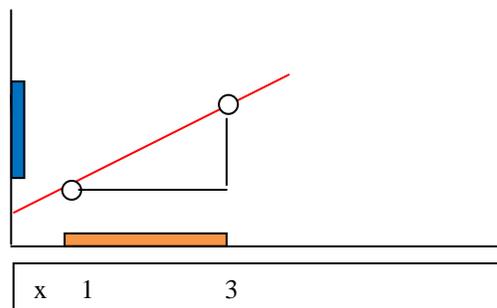
nnn. Slope of curve is same through-out.

Sequent line: red

Change in y: blue

Change in x: orange

We're interested in the integers 1 and 3.



o. Generalization to a *Curve* that makes of the sequent slope a maker of a polygon, where the sequent slopes to a curve as a function of x or y to a vector space, according to where the curve is defined by discrete 'hits' to its tangents relative to its point of vulnerability [wait, it's coming].

oo. **Herd behavior on a topology.** Hits are from outside of the System, external and with less expressive range than the polygon system which it strikes, each time instantiating a tangent slope where the vector space [we don't like vectors, however, but another expression is not available at the moment]. (Vectors are objects where in the theory of mind are of the type that burden us with "referentially opacity." At the extreme of the referent they are arbitrary, and by the 'availability heuristic' [AH] male cult objects in Freudian theory, pace *Hacking Physics*).

ooo. **Proprietary-privileged, Densities-Peripherals, De Motu-data-type inference in Modus Ponens.** The drop-thru to arithmetic name spaces where inference to any one or all of the arithmetic operations by data-type inference as we watch the drop-thru of encoded Gödel number into actualized concrete modus ponens [pace Mach's Principle, Berkeley's *De Motu*, and Gödelian relativized arithmetic on the four dimensional world line]. It is easy to see a hit is as an event that upon contact creates the tangent. The is a **proprietary** notion, contrary to non-proprietary vantage points in Standard Theory. The Availability Heuristic [AH] would seem appropriate as an object holder here.

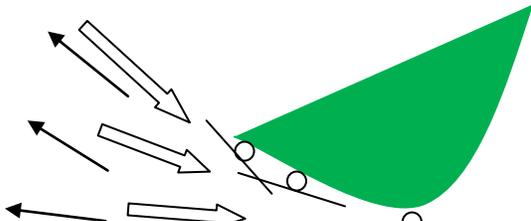
ooo. Whatever it is, it is as close as a physical object that we can invent that we might think appears similar to MP in **its meta-functions and as a concrete and ideal object.** I

have to emphasize the latter sentence. It is very important when we are talking about **actualized concrete objects** pace-Berkeley's *De Motu*. Why? Self-evidently.

oooo. At each hit to the vulnerable point-area [vector space], the slope of the tangent line either decreases. I cannot ever increase. A symmetry-breaker. It operates by the 'hits.' The vulnerability area closes or is closed by rapid-fire attack hits, and the herd density population changes and moves towards the outer edges of the polygon to their nearest neighbor maximal proximities. I have to draw a random curve that will not be the AXM generalization to a curve from this object. Any intersections between the NOAXM curve in green and original geometric object must be ignored unless pointed out by me.



A herd formation. It makes sense for the drop-thru to close off the vulnerability point in a herd.

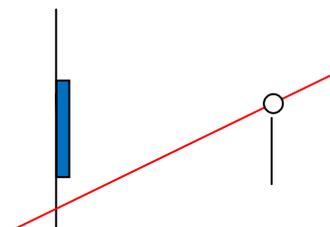


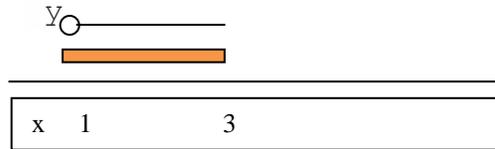
50. Initial picture: hits to tangent lines eliminates the point-coordinates creating a smaller and smaller space for hit-ability proportional to stage of generalized curve.

[One of the ideas here is that *inventiveness* in the attempt to solve problems of any kind, in science especially, and in this case herd-behavior in particular, can add content to and lead to descriptive and / or theories or of such things as herd-behavior, even if they are discovered by mistakes in pursuing a different mathematical or theoretical goal. That happens all the time in the mathematics especially.]

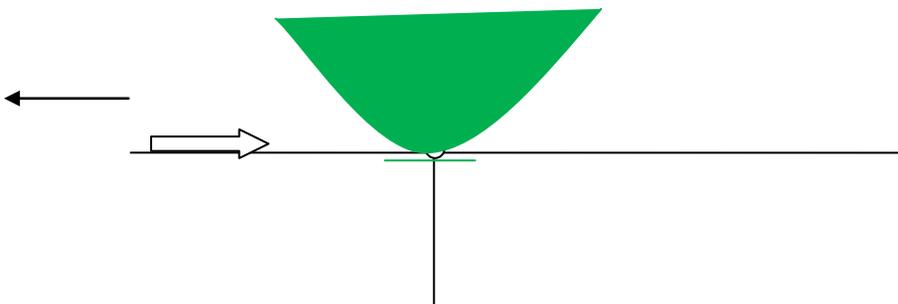
p. In any case, we need a tipping of the generalized curve from the original sequent line to a uniform generalized curve where the slope of the tangent is straight, again, but is it the sequent? This would reassemble the original sequent slope in the same way that a drop-thru of a *sf* to *sf.x* is a reconstitution [decoding of] a meaningless geometrical sequent space.

Drop-thru to encoded s.f. object

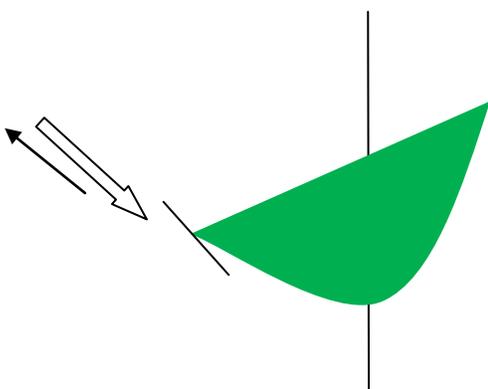




pp. And why not? It is so, is it not? The above is meaningless, something TRU but not provable in a domain. Generalization of takes sf to PRF. This is strange. Because we are saying that a reconstitution [via a process of the generalization of the original object sf [P] drops-thru to entailment via the process of getting generalized, where it returns to itself, instead of entailing Q and stripping away its syntax, i.e. its generic self. So is it $sf.x$, sf , or a third value, or? It is a new sighting, surely. And there are other examples in the way that this can happen. But I would expect

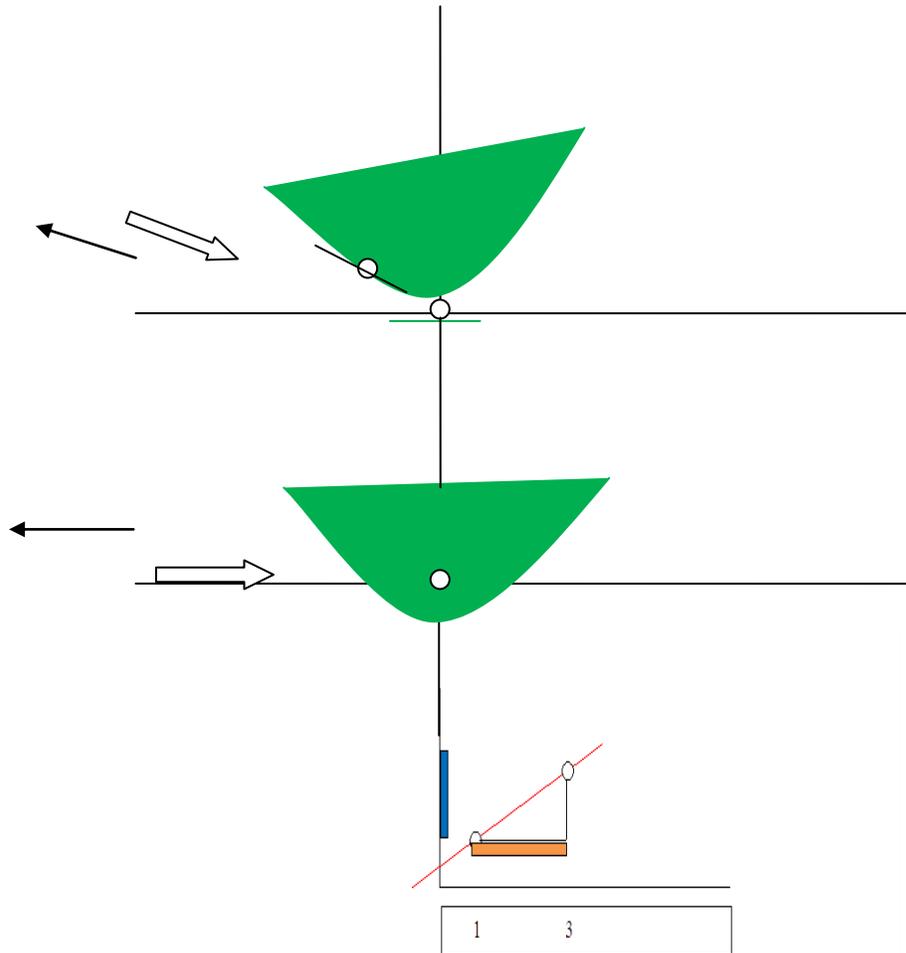


Hit 1.





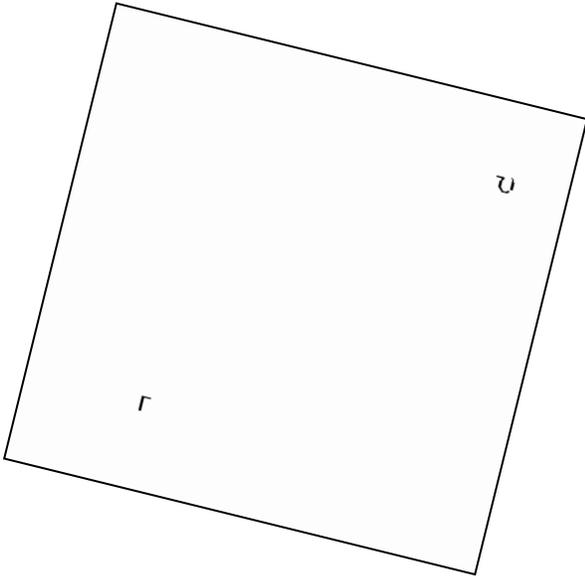
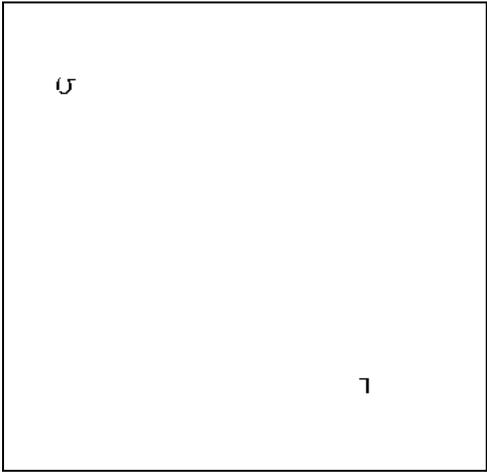
Hit 2.



that is the data re-assembled as consequent in a "dissolution" the antecedent P. Perhaps under a the condensed detachment (Jan Lukasiewicz) qua reification of Modus Ponens.

ppp. I think it is not an issue and that reassembly look nice, but is in actuality the dissolution of P, as Russell thought it to be as well. Since it is harder to dismiss the sequent line

picture even after it's been generalized and exhausted to an upright curve by 'hits', I will take it as a number, for demonstration, and propose that, on logical grounds, it would dissolve, in mathematical fission. Call it the number 5.



q. Moving on, Gödel number drop-thru to a herd-topology. A herd-topology is allowed to be a Cauchy which has the conditionship

mechanism of compacted modus ponens. The Cauchy topology is not globally hyperbolic: by no possible means given these conditions can it possibly be globally hyperbolic. It's absolutely constrained with respect that. We can stand by that in a court of law.

qq. One place that can leave us is in what we've just done. Sentient conscious behavioral mentality [herd] with minimal causal properties [the herd follows a curve where density population is in the center and with each hit moves towards the edge on the Cauchy topology, each time transferring the density of the population away from the center and towards the periphery where nearest neighbor gets more and more compacted so that the whole periphery is inviolable and the vulnerability point closed in inversely. That is drop-thru: the vulnerability is an encode if nothing else in information theory; mathematical fission afterwards with respect to the fact that the drop-thru object is not effected by minimum causal strengths at all in a Cauchy topology, leaving P to "dissolve," "drop away" as Russell said of P and Q in $P \rightarrow Q$ relation. This is *very physical*. This is not *unphysical*, for those versed in the Orwellian language of censoring by naming as something departs from Standard Theory.

qq. Can we make a game of it; is there a language-game for this? There must be. It's all constitutive and *inventive*. *Constitutive and Inventive*. There, me-peeps, we have *Games that we can play*. Invariants to be introduced.

qqq. There is a theoretical object which is what it says it is: **a [the] privileged Cauchy topology (PCT)**. The serious mind should sit back and look: It is the case that under acceptable conditions we do quite literally have geodesics flying out

through time viz. non-global hyperbolic [privileged] Cauchy topologies like Frisbees each one of which you can play an **infinite number of games on [you can count as you make them]**, and build separate physics [counted as you make them], and not notice a thing. You'll be right here on earth doing what you're whatever you're doing now, what human beings have done since the beginning of time.

qqqq. You don't need to nor do you have a CTC; you could, but the point is that there is so there **is no causal blockade** in that comes like a completely unnecessary approach what is globally hyperbolic [unsustainable, bloated strong cause and effect, strong causation] about topologies of strong cause and effect. Modus ponens as explained above is the only mechanical nomic law that exists; and it is minimal, it is at the minimum. Condensed detachment delivers a high degree of less causation.

* The logico-mathematics of computer languages is much more sophisticated and handles the increasing complexity of mathematics with great sophistication therefore ease of proof through the visibility of the tested code. All I need now is data-type inference and I have a consistent non-globally hyperbolic Cauchy topology with infinite geodesics.

5Q. I submit that if one is analytic and an adult [there is nothing more serious in life than adulthood], to say No is a plea to God to unravel physics from the anal denial in Roman salutes. That's right. Else, the juristic reciprocity: deconstruct physics with these same tools, used more cunningly, in consent, with free will.

5QQ. We can't read God's mind in an ever so fine TOE. Not in a thousand million epochs measured by geological time. It is an enlightenment logical fallacy. But Gödel left us that insight.

R. I want to look into anything or any matters or states of affair that are possibly probable and see but how useful this is for digging for relations between the **availability heuristic**, the **Bayesian** world, all things mechanical, **aspect-seeing** and its role in cognitive science, and, most importantly, **mechanical elements** and **anaphora** as an unstudied area.

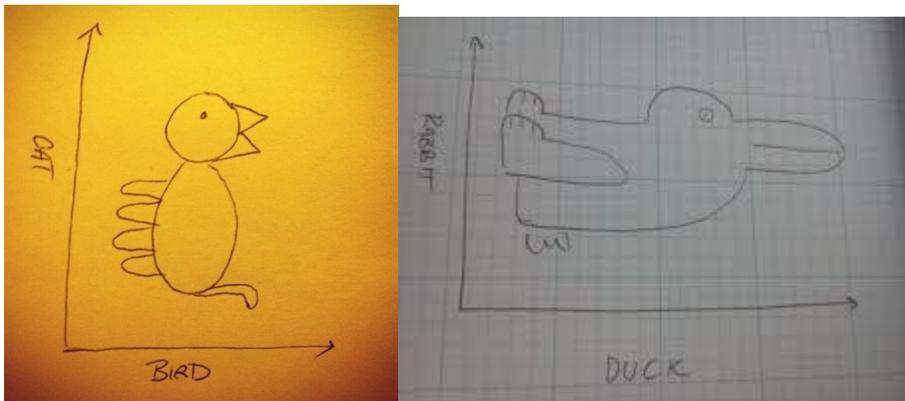
RR. I have dropped many terms and denotations during the exposition, a critique here seen as trying to subsume those earlier terms and denotations into larger domains or tighter schemes and return to:

That the prediction occurs when looking down on and examining Gödel's incompleteness theorem and sentence from the outside is fair, since it is asking the question as to whether based on what we know outside of a possible syntactical limit or domain, is there a computational algorithm of interpretability once modus ponens is established in its mutated form from $r(P, Q)$ to $N \sim M$, **when it is** presumably outside of the reach of *sf*, and therefore out of the system / domain wherein the encode and its sentence were required due to the relative nature of its relation to what exists incompletely outside of it, or its domain. It is a lens if anything, that works through aspect-ratios in Gödel-time with my senses in *aspect-seeing*. In fact the slopes of tangent lines within a rotational circumference of non-geodesic circle and also within a geodesic planer circle [where the point where the geodesic

case is the derivative intersection is very important, where in Gödel relativity we do need an instantaneous rate of change] play a very important role here with respect to time, before and after one pauses to think about it.

RRR. Children have graphed aspect-seeing as good Cartesians would be helpful. Can we talk veridical gestures and facial expressions, automatic recognition of verbal cues and verbal behavior, that can also dutifully work as name-spaces indexed as noun phrases upon recognition in T, so long as they are indexed coming of syntax to form from a system we can identify, or see by induction, so long as they are linguistic, or, are uniform? Yes we do. It's instantaneous: X-Bar: Sentence, Verb Phrase, Noun Phrase, recognized on cues and verbal behavior; mental recognitions mechanically lapsed time but not spatially lapsed time, as we say, "It's a bird." "Now it's a cat." More on what I call "verbal behavior peripherals" later.

Bird-Cat, Duck-Rabbit.



Courtesy of

<http://www.blameitonthevoices.com/2014/06/mindblowing-animal-graphs.html>

S. Questions come to mind: The problem of "definability" is very important; it relates to us matters about that which are predicative, and those which are not - presumably being impredicative. The Axiom of Choice is very useful in ordered pairs in the form of indexed negative exponents of sub-indexed Cartesian Products to choose from. The Axiom's preference is not to support The Continuum Hypothesis (CH) because the Axiom's work would simply be conclusive in its role, and also conclusive as a matter of scientific reasoning: it's conclusive, goes the proof.

SS. Another similar axiomatic system, the Grelling paradox, or the Heterological Paradox, is openly subject to what I will now only refer to as an interpretability marker, and later go into it further, because of this system's special that come of a priori, but only it is system, there are others, but few that we know of.

SSS. It is more in the way of a contradiction with an interpretability and computability marker but still incomplete: **it computes itself to itself**. This is a **special proprietary view of a very few known axiomatic systems**, and therefore it not likely that there is such fundamentalism elsewhere.

SSSS. The AOC the CH do not harmonize with such ease in the same way as the AOC and the Heterological Contradiction do. Noted, by Wittgenstein, and von Wright. It carries weight, therefore, at least on the basis of the two men.

5S. Given Gödel, it's possible and reasonable to say that there is no Theory outside of experienced time T ; even positing lapsed-time t in Einstein's body of equations.

T. Nash wanted to combine Gödel and Turing, and move from the ground-up with his conception of and hard work on "hierarchical intuitionist logics / sets," with the use of special functions: a GROUND LEVEL, the use of special functions on recursion and on integers, a stacked table to index on, without leaving the hierarchy where they are worked out with these tools of his: it's local.

TT. It is only the arithmetic that interests me, the day to day accounting, and that which it makes possible in its first order of extension in mathematics: geometry. Geometry would not exist without pi, without irrational numbers; the axioms would not emerge in our minds; our first and perhaps only true and provable axiomatic system, Euclid's geometry, which is how we got here, as the natural extension of arithmetic, would not exist, would be wiped out if irrationals had been considered untranslatable on the arithmetical white line. The very idea of inventing something that doesn't exist, in this case sets, is odious because it would disallow or contradict nature's extensions of itself. And, if you do it once, it creates problems that extend everywhere and put us back a century, twenty years, or permanently.

TTT. Hawking's Chronological Hypothesis as an alternative to Nash's desire to bring the CH a further level was a consciously dishonest attempt to avoid incompleteness. But Nash's hierarchy works independently of his desire to extend CH to a GHC. His idea is that you let the axioms run recursively from the GROUND to each distinct level upwards with the added axioms spitting out where the axioms of this system don't work for provability in the system, and then to let, or watch, this happen until they exhaust themselves.

TTTT. As I read him, this meant that there would be a meaningful expression that fits to entailment and thus to modus ponens, and kind of drop-thru. It's a type of self-referential "machine" that works on the basis of a GROUND and of RECURSIVE LOOPS indexing the added axioms as TRU but UNPRVBL on the strength of that GROUND as you move up.

5T. That's a continuum [or a continuity, which he insisted on explicitly] whether he meant by a table that the indexing was in a second system, with or without coordinates of space and time, or outside, and therefore entailment, i.e. the movement from syntax of the TRU axiom to its FORM.

5T.T. It's almost impossible this could happen by adducing the dissolution of each added axiom as it is added to the hierarchy in the system, almost instantaneously. Excuse the naïve example, but you may picture it as letting a cigarette burn up to its filter, tipped sideways when lit to make it burn as a pyre: the metaphors are chosen well, the added axioms are discarded from TRU but not PRVBLE to TRU and PRVBLE in what I called a disjunct and witnessed counterfactual drop-thru of TRU P to provable Q.

5T.TT. That takes straight back to intuitionist sets. The circle is closing, which is an expression. A less naïve example, I think, so that we don't confuse effect and cause with where it is and where it is not. Such that: a fall-thru to entailment through its nomicological mechanism of cause and effect kicks in mathematical fission, or dissolution by procursive necessity: a chain reaction that obliterates each indexed added axiom [Gödel number and complement sentence] without cause and effect, which has already taken place in the fall-thru to form-entailment: the connection of the counterfactual stock P and Q as the structural

variables of modus ponens releasing the newly entailed axioms into a mathematical chain reaction outside of it [MP], as a voltage drop, for example, is reasoning that is too strong for me to ignore. It is not necessary to the argument, but following pure reason to see if there is anything else there, I come to it. It's the case that some things are so obviously there to you that you can't deny them even in the face of a thousand peers, a large public. It's not scientism. That it is not is one of the things that happens when you use Nash's work in his later years, in a scientific world of Chomskys, where science is not valued at all. One of his very closest of friends to me this of him.

U. What does this leave open, if it closes something, if the loop is closing, regardless of the reasoning about the obliteration of the indexed axioms. Anaphora, the availability heuristic, Bayesian thinking. Can a Bayesian Network be made of all of multiple fall-thrus, and if so, before, or after the fall-thrus get constitutive form and expression? What theoretical consequences might one draw on this? What would such a Network look like? What would it *do*? Possibly everything.

UU. *Why else* would we want to use ***these other tools*** when ***the entrenched complications are permanent*** and can only evolve to points of ***eventual incomprehension*** even if mathematics is formalized by computer languages, which would be a huge leap forward.

UUU. That they are so entrenched that it would take God to unravel them. Gödel has falsified their very tenets and assumptions. But Gödel did not provide or ***provide for*** a method to unravelling what he falsified. What might that be? If Gödel is inescapable, then only God can unravel the complex inventions of

systems piled upon systems piled on theories. Or computer languages, at least in use by humans, not necessarily run as programs using the code to compute proofs. I am not for that latter; for the former, I am very much for.

V. Physicists ignored incompleteness at exactly the time when Einstein's theory was taking hold. It was no accident that Gödel came out at exactly the right time. It was no accident that he was ignored, or not even made known. God could have ordained that [or the other], if you accept divine intervention. Scientists as Hawking speak of reading God's mind when physics is complete in the TOE in some years from now in our lifetimes, as if either were possible, and which are separate matters in their entirety; such doltishness, that that *eventual incomprehension* is right here, right now. Hawking has stepped so far back acknowledging now Gödel as the elephant in the room, but he won't retrench: he attempts to undermine what has already been undermined, so that he can come back to himself as he was before Gödel was forced on him in the eighties.

VV. God can't motivate people to stop and think before it's too late. They have free will. And, not being able to do so, if humans choose not to look at an inconvenience such as Gödel in the precise epoch of their progress in physics (God has given them free will after all), it follows that God can't unravel the consequences of their dishonesty and self-delusion, without their consent. That's proof-positive.

VVV. And it's not likely to happen. The entrenched theories are very attractive to their creators and inheritors. In the future God might unravel the consequences. If it's in the present free will would need to be engaged. But that a continued engagement is

impossible, preposterous even as entertainment, hardly not even thinkable. God's mind can't be known. Gödel took us that far.

VVVV. That is the only option that Gödel left us. Einstein: "Um das Privileg zu haben, mit Gödel zu Fuss nach Hause gehen zu dürfen." And Gödel was with Mach, not Einstein. He believed the privileged individual experience time could not be removed. Einstein, freely interpret his statement. It smacks of bitterness and irony.

5V. With four exactitudes: longitude, latitude, altitude have the precise local space; add at a name space for daily time 22.11.1968, and you are a world line of a person is seen. If the marble is touched on a mattress, it will move. If you put a bowling ball there, touch the marble and its world-line will be curve downward. All I need here is data-type inference. I can do that anytime. Haksel's theory of Types will do fine.

5VV. If there are planets, galaxies, and world lines, there is an infinite sequence of these four exactitudes; put the dreaded matter in place, and they curve, and are able to move relative to one another, with some signal coherence (non)commutative between them, with modus ponens appropriately in compacted detachment in the Cauchy topology which backload strong cause and effect, there's a lot to be had.

5VVV. Permit me to hack. Minkowski's space-time four dimensional manifold, where the space time interval between two events **is not independent on the inertial frame of reference** in which they are recorded. **The not is the change** that is consistent with Goedel's rotational universe.

5VVVV. Permit me further hacking. P (position), of the fourth dimension on the arithmetic world-line, is longitude, latitude, altitude, of date and time with type-inference epistemological name spaces as givens by data-type inference in the fourth dimension, wherein we get the means to see the inertial frame of reference dependent on the fourth dimension, i.e. the inertial frame of reference is recorded and registered in the mind-brain of the privileged w-person [you may look that up, and Russell's definite description fixes it beautifully and in logico-mathematical context here, per quantifiers, etc.). *Longitude, Latitude, Altitude, and a name space for exact date and time by data-type inference; but not lapsed-time. Not ct / vt per t .*

X. An object located at position p at time t_0 can only move to locations within $c(t_1 - t_0)$ by time t_1 . This is not the case. In Gödel's rotational universe, p at t_0 is not constrained in position to $c(t - t_0)$ by time t .

XX. And $d((\gamma(t_1), \gamma(t_2))) = v |t - t_0|$ **[the shortest geodesic path] is consumed** by $d((\gamma(t_1), \gamma(t_2))) = v t_1 = v$ qua T **[infinite geodesic]**.

XXX. $c(t_1 - t_0)$ by time t_1 is consumed by $c(t)$ by T . A person's world-line is infinite by personal moments of unique definite descriptions integral with type inference in the fourth dimension, regardless of whether it is a CTC closed-loop version of centrifugally rotated light cones or not.

XXXX. It is without boundary, where the inertial frame of reference is not recorded in t but experienced in T , or v qua T , or c qua T , the redundancies being v and c , therefore dismissed.

c is not defined by relativity. It's still a constant. It is a velocity that we have calculated.

Y. Gödel's CTC would necessarily intersect globally in hyperbolic manifolds on a Cauchy topology. Therefore, rounding all things out, it is not globally hyperbolic. That harmonizes with *modus ponens* drop-thru as a part of Q dropping as the consequent of the antecedent P_y , which can only be asserted on the condition Q_y . Infinite geodesics.

YY. It is important that what we get out of this is a 'proof' that the claims that functors should not have elements or members simply because a functor is not strictly a set but enhances categories [a red-herring trade-off], a functor may have members as an equally valid but special type of set, far from the nominalist's creed. A functor is often even an enhancement while acting in substitutability throughout axioms and theorems of a system, the enhancement dependent on the substitutability, and the substitutability meaningful only because of the resulting enhancement [syntax stripped to form, familiar], which confers meaning on the theorems and axioms that they did not have before. This is an area that I want to pursue, since at the level of non-trivial contradictions outside of and beyond first-order paradoxes, it provides a more logical [thoughtful, reasonable, understanding, rough and thorough] approach to highly original and profound epistemological problems and contradictions in a way that Gödel does not. It is also a matter of *modus ponens*, like everything else in syntax and form, in antecedent and consequent entailment, etc., etc.

Z. The eternity of a single moment where a madman is able to declare himself God, at the moment he decides to bring about a

single moment of universal experience by all human beings. That is his delusion. Or is it. You must go to Fyodor Dostoevsky to find out.