

Take it to Proof:
Lie Algebra Symmetry-Checks
and Factorization
for Goedel's Theorems

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Based on a work at

http://vixra.org/author/alex_patterson.

If an error is suspected is in a Theory, I claim the right to lay down a provisional functor, which gives me time to inquire of the Theory. I lay that functor down invariantly as what it is: a contextual mapping from [[functor] Fa to Fb, context]] where functors carry context as opposed to functions mapping Fa to Fb, where the outcome is known. Without such mathematical function-syntax in our corpus of thought, inquiry as Theorizing could not well be justified, because it could not well proceed. Intuitionist sets are not valid without the justification property which is inherent in them. They hold much promise. Absurdity would follow if denied. People take knowledge much too much for granted. But matters are open to inquiry at all times.

Man on the street who has abandoned his university studies, and has no time for his old questions: "If you want to prove something to me, then take it to proof . . . before you even remotely approach me. Don't behave like a chimpanzee with me. You want to tell me something is true, on the other hand, that X happened, or is the case, and that that's the truth, then damn if I care. Move on, and go talk to someone else. It pertains to me? Go join a Comintern before I throw you out a window. Caveat: Do you wear a watch? OK, then make it plain and I'll listen."

Let Theory own Critique. When you do, critique will probably not be able to own Theory; Theory will wipe it out: such is its inhuman power. When writing a critique of The Theory you are constantly meeting resistance from it; the push-back of such critique is comparable to animalism.

One wonders. Why it is that when we think of The Theory, when it [Theory] is the subject of critique and inquiry, we say, 'If it's a Theory, let us make a gratuitous entry of it into the books, because it is sure to tell us that is not gratuitous.'

An Overview View --

I have an overview concept of the Gödel System. I have laid down a functor, I can predicate of it of the System, without mentioning it (the functor):

The fact that this prediction occurs when looking down on and examining Gödel's incompleteness theorems 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 at all. Is it observation dependent. But this does take into account and admit the lack of a proof for an encoded P inside of the syntactical limit of the domain. Do we see or detect an algorithm **at all** when we look down on the theorem in this manner, as into a cylinder, and also just outside its walls, with 360 birds eye degree visibility at every tangent? What's the use of decidability really?

The Lie algebra has arithmetic type = multiplication because it corresponds to 'lattice data.' Lie algebra is constantly looking to create (a) new $M \times M_n$ complete

diagonal(s) of the lattices in the larger matrix L, by algebraic decomposition. The Lie algebra's symmetry-checks confined at each check to only one side of the equation, i.e. NOT-POSS SYM-CHECK(RHS & LHS), and vice versa; & by NOT-POSS FACTORIZE(LHS & - RHS), or NEC(LHS & RHS) factorization cancellation cross-channel the equation sign.

Those are derivation-inferingings as the type of axioms needed to take to PRF matters TRU in a syntactical domain that is type MULT. Wouldn't a Gödel number and its sentence fall away somewhere into the history of mathematics if we looked down at S and S was the Lie algebra with this kind of derivation-infering with a type proof? If there's a system that Goedel's theorems can't break, or a System which repairs itself of true but unprovable axioms (really, which says No to Goedel's theorems), that can't decouple truth and proof from another in itself and otherwise decouples with only PRF left and TRU dropped, and it is still inconsistent, then Gödel's theorem's are traced out of this S. But because it is still inconsistent, Goedel's theorems still hold, but are not binding, not in a court of law.

Who said PM need be universal? Who said is PM needn't be universal? Who said answers to these questions are clear, or asked, or who declared 'we take them granted, it's our assumption, so we must be right.'

Mathematics must have a vaster range of expression than Goedel's theorems say are encrypted in a System encoded with unreleased information, somehow implying greater range of expression *there*. Not sure. Then e.g. the modus ponens in intuitionist set theoretic disjunction and existence property shouldn't be allowed for in Goedel's S's. That's strange. Maybe we say modus ponens

is true and subsumed and greater than it was before, but then when, not where, when?

But are we being fooled? I think looking at the system from above to see if there is an algorithm *outside* is the way our minds are able to accept the particulars of the Lie algebra for example as subsuming Gödel's theorems with its unique factorizations and symmetry-checks, and the way they do it; that doesn't mean that they don't or do, but it means that Goedel's theorems don't apply right now, it seems to me. Or rather, from the apophatic view, it's why they do when they do, why they do when they can. It's a particular persuasion of the mind that the Lie algebra is one of the algebras that are symbolically 'algorithms' just for Goedel's theorems but actually are algebraically true and proven themselves in the Lie algebra and visible when looking from above, from an overview.

We got ourselves confused, and even then we're aren't paroled. Not just any algorithm will do. That's why there's all the talk on decidability. That's factored out, also, however. Disjunct, existential, and arithmetic type inference of all five types at one's disposal for the type of the algebra on top of countable world lines do the job. Once in the system where axioms had to go as TRU but not PRVBL, TRU but not PRVBLE statements by a type inference of multiplicative decomposition of (of lattices, and the greater matrix L syntax disproportionate to every possible matrix decomposition in it) into unique ones of themselves within the system work fine, it seems to me. The encoded axioms were ill-proportioned / disproportionate indexes, for lack of a better name (i.e., they were Recursive and Dependent), and are 'decoded' by decomposition into theorems of their own

syntax. I don't believe this is arguing however by larger systems containing smaller ones, because actual arithmetic type inference is what cause a real and sought decomposition, which is the purpose of the Lie algebra.

There must be such ingenuity built into mathematics itself. Gödel's theorems imply it, they indicate a problem, a task to be attended to in real time, they state not an eternal problem of Platonic proportions, that would (it couldn't succeed) give Platonic thinking an ordering that can be an existential threat to setting tasks and letting mathematics carry its full expressive power and extend, among other things.

But the main thing is that Goedel's theorems point to a fundamental issue to be solved, and it can be solved in such ways. The only algorithm is a symbolic one in your mind with your mind fixed on inference rules, recursion and stacks of all types by procedural pseudo-arbitrary (workable, of one but many) code; but is actually probably a well noted algebra in mathematics.

In any case it's accepted that no such algorithm can exist for PM's true but unprovable axioms, so it's purely imaginary but a necessary Platonic assumption for Goedel's theorems.

It seems that Gödel forgot about mathematics systematically in-built intrigues. What's not a system? Gödel forgot an a basic truism: for every true but unprovable axiom there is a Gödel number and sentence for it, there is a type inference algebra that preserves Goedel's theorems themselves, that they remain inconsistent because there was no algorithm to decode the axiom; the axiom was decoded by a natural

algebra corresponding to the type inference system that it came out of.

This is all so far removed from philosophical grammar where the real challenges about such problems are to be found and solved so that mathematics doesn't have to go through this. Philosophical grammar is really the only honest philosophy that we have still. Philosophical grammar is all about modality and modal logic, and we know that for example the Lie algebra leads to modals in group theory, because the Lie algebra ends up in Poincare's groups.

That's the bridge where a lot can be cracked, a very few in the upper skies truly wanted to crack modal logic itself, and not be reverse engineering von Wright's first system of modal logic, which was the first system of it. Rather, Boyd, by using some Wittgenstein PG and Austin PG to crack it, von Wright having been in the direct circle of the first as pupil and archivist of W's intellectual estate.