

Re: The incompleteness theorems, Sigma-1-completeness, induction, all that

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- *From:* "Rupert" <rupertmccallum@xxxxxxxxx>
 - *Date:* 31 Aug 2006 18:05:52 -0700
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george wrote:

Rupert wrote:

The standard doesn't become relevant until the SECOND incompleteness theorem, when we discover that Con(T) is also undecided. Since Con(T) **must** be true (not because the standard says so, but because that is a necessary condition for any of these models to exist at all),

This only makes sense if you avail yourself of a notion of truth simpliciter,

what UTTER bullshit.

Obviously we already have truth in NATURAL language. The ISSUE is what one might ever mean by truth IN A FORMAL language. In THIS paradigm, THAT truth IS MODEL-theoretic. I AM NOT anywhere appealing to calling any FORMAL statement true withOUT reference to a model: THAT'S YOUR fallacy.

You said Con(T) must be true in order for models of T to exist at all. Now it's true that Con(T) must be true in the standard model in order for models of T to exist at all. But you wanted to conclude that Con(T) is true simpliciter. The only justification possible or necessary for doing that is to define "true" to mean "true in the standard model".

which you just objected to doing.

You have to quote that objection, dumbass.

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Why?

There is not, as you imply, any good reason to privilege the standard model in the context of Con(T) but not in the context of G_T (by the way, G_T and Con(T) are equivalent in Sigma-1-Induction Arithmetic).

So FUCKING what?? We are TALKING about *T* and THEY ARE NOT equivalent in all models of T!!

They might not be, if T fails to extend Sigma-1-Induction Arithmetic. But you're not necessarily talking about models of T. Con(T) might not be true in any models of T, but you said you were interested in whether it's true in the standard model.

We can talk about any model we like.

No, really, thanks to the completeness theorem, WE need NEVER talk about models AT ALL. ANYthing that we can PROVE, that we can have any confidence in, is going to be true IN ALL models, so models just aren't relevant.

So you're basically saying the whole discipline of model theory is a waste of time? Ridiculous.

Once we use them to prove that something is unprovable, we can immediately thereafter just PICK A SIDE and add the previously undecidable thing as an axiom.

There is no objection to us defining "true" to mean "true in the standard model",

OF COURSE there is,
SINCE
I
[reverb machine]

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THE GREAT AND POWERFUL *I'Z*
jes'-now objected
MAH OWNself.

Even though you yourself did it when you said Con(T) must be true.

Obviously I meant there is no *cogent* objection.

And indeed, if you ever BOTHERED to say "true in the standard model" then nobody would've ever cared.

It is perfectly standard to define "true" to mean "true in the standard model" as a way of saving your breath. And there's nothing wrong with that. What could possibly be wrong with a definition?

What you actually
say is "true"[simpliciter] as though anybody who thought that
it could possibly be false was a blithering idiot. Since your whole
result is that it CAN be false (that's the only way it can be
undecidable)
in some models OF THE VERY THEORY YOU ARE DISCUSSING,
THAT is worse than merely objectionable: IT IS FUCKING IDIOTIC.

No, you are fucking idiotic.

When I say it's true, I don't mean to imply it's true in all models.
Simple as that. So I'm not contradicting your point.

this is justified because

Jeezus; what part of SHUT UP don't you understand?
That is a completely illegitimate use of "cause".
Whatever justification you present is "caused" by nothing
more than your personal preferences.

You're an idiot.

we are quite interested in the notion of truth in the standard model

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I repeat, SHUT UP.

This is LOGIC.

WE are NOT interested in truth.

WE are interested in NECESSARY truth.

WE are interested in MODAL truth, NOT MODEL[-theoretic] truth.

WE are interested in PROVABLE truth, NOT PROBABLE truth.

Sometimes it is useful to work with the notion of truth in the standard model, so it is useful to have a convenient way of referring to it.

It's ridiculous for you to tell mathematicians not to investigate the notion of truth in the standard model. They can investigate anything they like and come up with any word they like to refer to it. Your ranting is ludicrous. Stop making a complete ass of yourself.

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