# Re: Looking for Undecidable Propositions in Systems without a certainamountofarthimetic.

***Source:*** http://sci.tech−archive.net/Archive/sci.logic/2008−08/msg00543.html

- *From*: MoeBlee <jazzmobe@xxxxxxxxxxx>
- *Date*: Mon, 18 Aug 2008 15:00:27 −0700 (PDT)

On Aug 15, 9:02 pm, Nam Nguyen <namducngu...@xxxxxxx> wrote:

> Your conversation has becomes weird indeed! (To say it mildly!).

No, that you don't understand the simple common sense in my reply
doesn't make my reply weird.

You just keep missing the point that if what you want to do is
redefine 'true' so that it means 'provable', then that's just
switching meanings for words and is not substantive. It's not
substantive at least in the sense that if we accept your directive
that 'true' now mean 'provable', then we can defined 'taloo' in the
way we formally did and do all the model theory we used to do with the
word 'true' but now with the word 'taloo' instead.

And what you keep missing is that the definition of 'true' (more
specifically, the definition of a 3−place relation: S is true in M for
L) is a mathematical definition that can be given in a formal set
theory. If you object to the definition, then you might as well object
to bunches of other mathematical definitions.

We now have two separate definitions:

3−place predicate:
a sentence S is true in a model M for the language L iff [fill in
defiens here]

3−place predicate:
a formula S in a language L is provable from a set of formulas G in
the language L iff [fill in definiens here]

(And, as the language in either case may be taken as implicit, we may
informally make those both 2−place predicates.)

Now you don't want us to use 'true' in the first instance. So instead,
we'll just do this:

3−place predicate:
a sentence S is taloo in a model M for the language L iff [fill in defiens here]

Now we may continue to do all the mathematics we used to do about semantics and models,, except we'll use the word 'taloo' instead of the word 'true'.

So the question for you is, would you then object to that? If so, then why? If not, then all your directive about the word 'true' boils down to is switching out a definition and nothing mathematically substantive.

> > It's not interesting to ponder what happens to the statement, "All dogs are mammals" if we change the definition of 'dog' to 'electric can opener'.

> That's an erroneous analogy. Because "electric", "can", "opener" have no relevance here to "dogs", and "mammal"! Otoh, My definition and the canonical definition of truths, w.r.t. an underlying T, both have the syntactical consistency of T as a key relevant part!

The point of the analogy is simply the general point about switching definitions.

> A correct analogy would be something like my defining "dogs" as:
>
> "All dogs are mammals of a specific wolf−DNA−sequence that has existed since 150,000 years ago."

No, that would be more along the lines of a sharpening of a definition. But the definition of 'true in a model' is already mathematically precise. If you want to take 'true' to mean not 'true in a model' but rather 'provable from a set of formulas' (or whatever the precise switch you want to make), then that is not taking a somewhat imprecise definition and making it precise, but rather it is taking a term that is ALREADY precisely defined and switching it over to some other VERY DIFFERENT definition.

MoeBlee

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