

Re: Cantor's circular "proof" that evens = integers

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On May 24, 12:48 pm, Aatu Koskensisilta
<aatu.koskensi...@xxxxxxxxxxx> wrote:

It is also important to note that that a consistent theory might prove false statements is a mathematical observation no more problematic than, say, the existence of non-Archimedean fields or non-Abelian groups.

I retorted:

That is completely incoherent.

AK continued:

I'm sure it is to you.

Which was indefensibly abusive, as well as being utter bullshit. I was NOT expressing an opinion, ASSHOLE. It is incoherent TO EVERYbody, INCLUDING the people who profess to believe it, INCLUDING YOU. The fact that non-Abelian groups exist simply has nothing to do with anything being "a false theorem". THERE IS NO SUCH THING as a false theorem.

Curiously, most people studying logic are perfectly capable of appreciating the mathematical theorem

Meta-mathematical theorem.

that consistent theories can prove false statements,

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CALLING that a "theorem" is almost as idiotic as calling the statements in question "false". WE ARE IN A *CONTEXT* here. THIS context is DIFFERENT from the one in which the observation you just cited gets to call ITSELF a "theorem". WE are in a context where the word "theorem" implies A THEORY, which is CLOSED under LOGICAL CONSEQUENCE. Structures and interpretations generally are NOT terribly relevant to that because the THEORY, the statements IN the set closed under consequence, is ALL TRUE in ALL MODELS of ITSELF! More to the point, it is true under all models of THE AXIOMS FROM WHICH it was closed, if it was recursively axiomatizable. Inside the theory (where any statement that gets inside is inside because IT IS a THEOREM), no such thing AS A FALSE *statement*, let alone "false theorem", occurs. False statements occur UNDER INTERPRETATIONS, IN STRUCTURES, or (just barely) IN MODELS, and in the latter case, they are ALL NOT proved and therefore NOT THEOREMS! But even when you have an unproved statement that you are calling false in one model of the axioms, that very statement, unless it, in addition to being unproved, IS ALSO DISproved, will be TRUE in some OTHER model of the SAME axioms! So even CALLING it "a false statement" withOUT THE QUALIFICATION of the model under which it came up false IS NOT DEFENSIBLE. In the case of things like PA, the qualification is implicit because everybody always knows which model you mean. IN THE CASE OF MOST OTHER THINGS, THIS IS NOT the case. In the case where the statement is disproved, it is false, but again, it is not both false AND A PROVEN THEOREM, and more to the point, it is not MERELY false: it is false not ONLY in whatever model you might've been using to justify resort to terms as weak as "true" and "false", it is false IN EVERY, ANY, AND ALL models of the axioms AS WELL! To call such a statement MERELY "false" is lying by omission&understatement.

The fact that I am attacking a common linguistic practice does NOT imply that I don't understand something, except maybe why anybody as well-educated as AK will call you stupid (after having talked with you about the subject for over a decade) for doing it.

in the sense that while they might initially find it puzzling, after explanations and examples they understand the mathematical content of the assertion, and can follow the proof.

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To understand the mathematical content of the assertion and to follow the proof means to understand that the conclusion is true in all models of the axioms, if the thing is in fact proved, as it in fact must be, IN ORDER to be A THEOREM. A theorem is the conclusion OF A PROOF. It is therefore true IN ALL models of the axioms from which the conclusion was proved. Therefore, it is not merely oxymoronic, but moronic, to say "false theorem".

But you already knew I thought all that, so none of that is the point. The point is that you think (or at least *claim*; I'm going to give you credit for NOT being stupid enough to actually THINK this; I'm going to counter-claim that this is comes out of some sort of tragic EMOTIONAL animus on your part) that my belaboring- this-point-past-the-point-of-its-being-PAINFULLY-obvious shows that you can prove some metatheorem that I don't understand. That is obviously not the case. I OBVIOUSLY (this has been obvious to you FOR A LONG time, which makes what you have said above COMPLETELY indefensible) know that when you SAY "false" about a statement of this type in this context, YOU MEAN "false in some subclass of structures for which we think we can defend some sort of privilege". Since you know I know that, what power or principality is persuading you to abuse me by falsely claiming publicly that I do not know it? C O U L D I T B E
..... SATAN^H^H^H^H^Hthe ghost
of Torkel Franzen????????????????

I liked your characterisation of my style as "arrant pedantry" better,

That wasn't global. That was an example of you being arrantly pedantic at that time. This time you're just lying abusively.