

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

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 - *Date:* 17 May 2007 15:35:08 -0700
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On May 17, 6:37 am, TXLogic <chris.men...@xxxxxxxxxxx> wrote:

Well, of course, to say that ZF proves something about itself is simply an elliptical way of saying that ZF proves a sentence that, given some initial coding,

It can't just be "some" initial coding!
There are CONSTRAINTS on the KINDS of codings that are ALLOWED and SOMETimes the constraints ARE NOT EVEN FIRST-ORDER DEFINABLE!

There is A LOT GOING ON with the choice of "coding" and the whole import of the incompleteness theorem is that the coding is in some sense NOT POSSIBLY right! There is no coding that is right in all models! There is no first-order definition of a first-order provability predicate that is right in all models!

is correlated systematically

IT IS *NEVER* going to be systematically ENOUGH!

with a certain metatheoretic proposition about ZF

Oh, SHUT UP.
THERE IS NO SUCH THING as "a metatheoretic proposition about ZF". Anything you need to say about ZF, YOU CAN SAY *IN* ZF, if you can say it at first-order at all -- and if you can't, you just CHEAT and say, "in the first-order language of ZF, yes, but INTERPRETED IN THE STANDARD MODEL" -- whose standardness is nowhere near easy enough to describe. But for the specific case of provability, that is not that big a deal -- the only aspect of "standardness" that is needed in that context is the one that makes the finite ordinals actually

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finite.

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