Re: Implementable Set Theory and Consistency of ZFC

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- *From*: Han de Bruijn <Han.deBruijn@xxxxxxxxxxxxxx>
- *Date*: Tue, 23 Oct 2007 10:41:16 +0200

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lwalke3@xxxxxxxxx wrote:

> On Oct 22, 12:21 am, Han de Bruijn <Han.deBru...@xxxxxxxxxxxxxx>
> wrote:
>
>> It's impossible to have infinity without Infinity. If not, show us such
>> a model, please.
>
> It appears that the confusion stems from HdB's
> failure to distinguish a model from a theory,
> once again.

It appears that the confusion stems from mainstream mathematics failure to distinguish a childish model from any serious implementation, once again. Look, my Implementable Set Theory e.g. is covering all Database Applications on Earth, which is .. a billion dollar business!

> HdB apparently believes that his bitmap model
> is the _unique_ model of ZFC−Infinity (or
> indeed, the unique model of the theory of the
> four Abian axioms). Much of what he writes is
> based on this assumption −− especially his
> proof that ZFC is inconsistent. In other
> words, HdB believes that since Infinity is
> false in the bitmap model, therefore Infinity
> cannot be an axiom of the theory without
> introducing a contradiction.

Meanwhile, I've _withdrawn_ my claim that ZFC is "inconsistent". Because that bothers me less than the fact that Infinity is a suspect axiom from the start. I'm not yet finished with Infinity, though ..

> I believe that many people would take HdB and
> the other so−called "cranks," who are also
> guilty of this error, by realizing that one
> must distinguish between model and theory.

Between the implementation and the theory. Yes. And the implementation
is a judge for the theory, at least as much as the theory is a judge for
the implementation.

> Notice that if T is a theory and phi is any
> axiom, then if M is a model of T+phi, then
> M is a model of T. In other words, any model
> of a theory is a model of any subtheory.
>
> ZF−Infinity is a subtheory of ZF, since the
> former is a subset of the latter. And so any
> model of ZF is a model of ZF−Infinity.

Yes. And a "model" of (ZF−Infinity) is not per se a model of ZFC, which
is the very difference between an "if" and an "iff".

Han de Bruijn

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