

Re: Math as Religion

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- *From:* "Timothy Golden BandTechnology.com" <ttpppggg@xxxxxxxx>
 - *Date:* 12 Nov 2006 03:03:11 -0800
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Dik T. Winter wrote:

In article <1163162640.035005.250540@xx> "Timothy Golden BandTechnology.com" <ttpppggg@xxxxxxxx> writes:

- > Gene Ward Smith wrote:
- >> stephen@xxxxxxxx wrote:
- >>> Who has said that mathematics is THE truth? The "mainstream"
- >>> folks disagreeing with Timothy Golden have made no claims
- >>> of truth. Timothy Golden is the one who seems to think that
- >>> it is THE truth that magnitude is more fundamental than the reals.
- >>> If he wishes to define magnitude rigourously and then define
- >>> the reals based on that, he is free to.
- >>
- >> As has been pointed out on numerous times, this is in fact an old idea,
- >> going back to the Greeks. Landau, for a modern example, develops
- >> positive reals from second order arithmetic of
- >> positive integers, and goes on from there. This has some advantages, in
- >> particular that the positive rationals, as the ratios of positive
- >> integers, may be constructed without worrying about division by zero,
- >> and then the positive reals (or magnitude) can be constructed next.
- >>
- >> One can use polysigned numbers, if one so chooses, for constructions.
- >> But Tim seems unable to say why we should.
- >
- > Gene, like Dik, represents the establishment.

Oh.

- > This is Gene on a prior thread:
- > "I've pointed out several times that you do not have such a
- > construction. I'll repeat it: you have NOT constructed the reals.
- > This is because your definition requires that the reals have
- > already been constructed. "

And Gene was right.

- > The important distinction that allows this conflict is in how we

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> dissect the number system.

No. The important distinction is that you use terms that you define in existing terms (the reals). So you assume the existence of the reals. Otherwise the definition is void.

In the quote on top Gene *did* show how you could define magnitude without any reference to the reals. But for some reason you do not want to follow that road.

> Because the polysign construction impose