Re: Well Ordering the Reals

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In article <MPG.1e5c1c565758d79c98aa46@xxxxxxxxxxxxxxxxxxxxxxxxx>,
Tony Orlow <aeo6@xxxxxxxxxxx> wrote:

>> TO is, in effect, declaring that his number system is not subject to logic. Non−logical systems, such as his, are also non−mathematical, as mathematics conforms to logic.

> I am saying it is not subject to the standard set theoretical axioms regarding what it calls sequences.

Then what system of axioms is it subject to? Or is it. like Topsy, something that 'jest growed'?

> Your claim that a sequence can't be infinite is bogus

Please get things right, for a change!

I have always allowed that sequences can be countably infinite, just like the sequence of standard naturals is. What I DID say was that a sequence cannot be uncountable in any standard axiom system and neither TO nor anyone else has produced any axiom system in which it can be uncountably infinite.

They are a simple extension of the digital number system allowing
for values of infinite ratio within the set.

But they extend to properties of sets beyond the bounds of any known set theory and in direct conflict with any known set therory. So that, absent an axiom system consistent with them, they are of no more substance than castles in air.

What properties of the set is "beyond the bounds of any known set"?

The property of a "sequence" having more than countably many terms is beyond the bounds of any known set THEORY, as well as being beyond the bounds of any known set.

I
already showed you a sequential ordering of the reals

That would require that every real have another one immediately preceding it ans also one immediately following it.

What are the reals immediately preceding and following \pi\ in this "sequence"?

More generally, if x and y are successive reals, in TO's allegedly sequential ordering, where does (x+y)/2, which must be between them, fit in?

, even if you
don't believe it, so there you have an uncountable sequence. We are not amused with your finite infinities, snicker as we may.

Horses snicker

They scoff at your aleph_0, your cutest little infinity, and countability as a criterion for anything. The T− riffics are immune to your proofs. Haha (I am in a silly mood today).

TO has been in silly moods every day he has posted here. Does he have any other kind?

Oh sure. Sometimes I am quite serious about these things

When? I have never observed TO being anything but silly.

and other
times it rather amuses me. Do you really think I am always silly, or
just plain moronic and crankish sometimes? :)

Always silly, and sometimes those other things into the bargain.

It is not my job to account for your misconceptions regarding infinite sequences.

That's our line!

Sue me!

TO−numbers require a sequentially ordered
uncountable set to
index it digits, but all standard set theories,
with their
standard inductive axioms, allow simple
proofs that
sequentially ordered sets are, at most,
countably infinite.

And yet, it's funny how declaring bits at infinite positions in the string hasn't led to any obvious contradictions. Given the repeating strings defining the infinite distances between limit points, an uncountably infinite string is defined.

> > One can define all sorts of things that do not exist, like four
> > cornered triangles and TO−numbers. One needs to see PROOF that the
> > defined objects actually exist before one need regard them as
> > anything but fantasy.

> I suppose, to be mathemtically rigorous.

That is the point of mathematical rigor. It filters out so much
nonsense.

> And yet, if someone said,
> "why don't you run the bus's exhaust pipe up the back, so it spews
> out the top, and not into people's faces," the equivalent of your
> position would ebe to demand a full schematic of everything in the
> car before even considering if the idea made sense.

I am not aware of any axioms of bus construction which restrict the
placement of exhaust pipes. At any rate, that is engineering, which is
at several removes from pure mathematics, and so irrelevant.

> > > Therefore, the T−riffics are an empirical counterexample to
> > > your
> > > "proof" that no such sequence can "exist".

> > No more empirical than four cornered triangles!

> Well of course trianguloids have four vertices in three dimensions.
> You would call this a tetrahedron.

Triangles are not tetrahedra, as they have at most one "face". So,
though TO might so miscall them, no one else is obliged to join him in
that error.

> > > Now, as far as being able to specify any possible exact
> > > sequence,
> > > this can only be done over a countable domain. So, given

only the
zero point, we have only finite numbers that can all be
specified. When you add limit points at infinite positions,
you
add new countable neighborhoods in what is really,
ultimately, an
uncountably long string of bits, and this doesn't break
anything
concerning the finite numbers. They are the subset of the
T−riffics that only contain a limit point at 0, normally, or in
general, only contain limit points at finite positions, and the
question of infinite repeating strings between limit points is
moot.

Still no more empirical thatn 4 cornered triangles.

Are you honestly saying that you can't see that the normal finite
system is the T−riffic system with a single limit point at the 0 bit?

I can understand that the TO−system, with all the garbage squeezed out,
has similarities to workable systems.

One might wonder at you not having fallen down a well or something,
but perhaps you're tied to your computer.

One might wonder why TO spends so much time trying to sell a system
without an adequate foundation instead of trying to built an adequate
basis. But having seen TO's attempts at reasoning, one sees why such a
foundation is beyond TO's ability, even if it were possible.

SO that absent a TO axiom set for his TO
numbers which somehow
allows uncountably infinite sequentially
ordered sets, TO is
SOL.

Don't be such a potty mouth.

> > I am only describing TO's position. It is his fault that he is in it.

> Oh, I feel quite lucky to be able to discuss this stuff with people all over the world. Life's a miracle, even with all the shit. Have a nice shit, uh, I mean, life!

Where is that elusive axiom system, TO?
.