

Re: A simple question?

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- *From:* "MoeBlee" <jazzmobe@xxxxxxxxxxx>
 - *Date:* 3 Nov 2006 16:38:27 -0800
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David Marcus wrote:

MoeBlee wrote:

David Marcus wrote:

To me, if someone says a set is well-ordered, they mean whatever ordering relation the set has

First, I stress that this is a matter of how we use informal language about set theory. So what is most important is for us to agree on our use so we understand one another, while the question of what is the "correct" (or at least the most common) informal use is secondary though important too.

In accord with Suppes (here, 'e' for the epsilon membership symbol):

R well orders $S \leftrightarrow R$ is connected in S & $\exists b$ (b is a nonempty subset of $S \rightarrow \exists x(x \in b \ \& \ \forall z(z \in b \rightarrow \sim \langle z, x \rangle \in R))$)

Then, personally, my use:

R is a well ordering of $S \leftrightarrow R$ well orders $S \leftrightarrow S$ is well ordered by R

I'll go along with that.

That's a two-place predicate.

So:

S is well ordered $\leftrightarrow \exists R$ R is a well ordering of $S \leftrightarrow \exists R$ R well orders $S \leftrightarrow \exists R$ S is well ordered by R

That's a one-place predicate.

Re: A simple question?

I don't think I've seen that use before.

I'm just saying that when I say "S is well ordered", I mean "There exists an R that well orders S."

But what does your