

Re: A simple question?

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David Marcus wrote:

MoeBlee wrote:

I don't see why not. There's no modality of "can" in the formal theory. "can" is a loose way of speaking, which is okay, but I don't know of anything in IN the theory to distinguish 'can' from 'is'.

I think we can give a formal meaning (and I think Enderton would agree with this): If we say "S is a well ordered set", then we really mean "(S,R) is an ordered pair where S is a set, R is an ordering on S, and R is a well ordering".

You left 'R' free in that formulation. But, other than 'S', there is no free variable in 'S is a well ordered set'. So for your formulation to work, it has to be, "There EXISTS an R such that <S R> is a well ordered set" or "There EXISTS and R such that <S R> is structure in which R is a well ordering of S."

If we say "S can be well ordered", then we mean "S is a set and there exists R such that R is an ordering on S and R is a well ordering". So, with "is", R is unbound, but with "can" it is bound.

But you see that, since we do have to bind 'R', as I mentioned above, it turns out that "S is well ordered" is equivalent to "S can be well ordered".

You can't take "S is well ordered" and treat it as if it has an UNbound 'R' in it; you can only treat it as