

Re: The meaning of set?

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Rupert wrote:

Perhaps recursive enumerability is not the main point. But I think it's important to have some precise characterization of what you accept as a sound argument and what you don't. Arguments in set theory are in principle formalizable, and then it is machine-checkable whether an argument is sound or not. So we have a precise characterization of what counts as correct reasoning and what doesn't.

We have a precise characterization of what counts as correct reasoning, though we have no precise characterization of what counts as an acceptable principle of set theory. In practice, the axioms of ZFC are sufficient, but an indefinite number of principles not provable in ZFC follow from the basic informal principles of set theory, although this observation isn't at all interesting in context of ordinary mathematics; also, in practice we almost never produce machine checkable proofs, only proofs we're sure could be formalized in ZFC in some idealized sense.

I was encouraging Zuhair
to try to give a precise characterization of what he would be prepared
to accept as a sound argument.

That's certainly a good idea. Asking for an algorithm listing what he is prepared to accept as a sound argument doesn't strike me as a particularly useful way of doing that, however. Surely just laying down the basic principles and the basic ideas is sufficient. I haven't got the impression that he's trying to introduce a new logic, so evaluating his arguments – provided he's given a coherent explanation of his new conception of sets – is no different from evaluating arguments in mathematics in general. There's no particular need to go formal, unless we're actually interested in, say, proof theoretical properties of his own system.

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"Wovon man nicht sprechen kann, darüber muss man schweigen"
– Ludwig Wittgenstein, Tractatus Logico-Philosophicus

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