

Re: the need for relevance

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Tonico wrote:

For Mr. HdB, the (mathematical, to be sure) fact that there exists a bijection between the set of natural numbers and the set of even natural numbers, and thus BY DEFINITION both the set of natural numbers and the set of even natural numbers have the same cardinality, is a contradiction.

Why? Because HE KNOWS there are half as many even natural numbers as there are natural numbers! How does he know that? Who cares! He's said that anyone knows that, and thus it is so. Period.

No and No. He's said that the actual infinite set of THE naturals does not exist and that an infinite set of naturals can only be conceived as a limiting case of a finite set $\{0,1,2,3,4,5,6,7,8, \dots ,n\}$. Don't stop the reasoning about this finite set until you're done. Only at the very end you say: let n become infinite: $n \rightarrow \infty$. This is very standard practice in common calculus. IMO it's the only way to approach infinity, without running the risk of becoming metaphysical. Moreover, this whole idea is far more comprehensible than all of your nonsense about bijections between a set and a proper subset of itself. What you actually do is not even this. You make two sets, one with naturals and one with evens, and you say there's a bijection between them. Duh!

Well, and what does this have to do with contradictions? The hell knows, but HdB, from his non-mathematical point of view (one can't blame him on this: he is not a mathematician, after all), has decided the above bijection is one. Period.

Well, and even assuming all that: then what?! Nothing, but HdB thinks that since mathematicians get money to do their maths, then they **MUST** produce results that he and his friends can apply in what he has decided is "the real world". Why does he think so? I don't know, but this is one of the main points he has to attack, some times pretty viciously, though usually pretty ridiculously and even in a very funny way, mathematics and mathematicians.

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So after all it is not, at all, about contradictions as we know them from logics, with HdB, but about stuff that he can't really understand and thus he calls it "a contradiction". Don't confuse!

There is one and only one real world. And we both live in it. Whether you like it or deny it or not. Anything that doesn't match with the real world is contradictory to it. And if your logic does just that, then it is much of your problem, not mine. I don't claim that I understand the real world. I only want to confess that it's, objectively, out there. The following definition is my favorite one.

"Reality is that which, when you stop believing in it, doesn't go away".
(Philip K. Dick)

Han de Bruijn

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