

Re: Cantor's definition of set

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- *From:* Marshall <marshall.spight@xxxxxxxxxx>
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On Oct 30, 12:16 pm, MoeBlee <jazzm...@xxxxxxxxxxxxx> wrote:

On Oct 30, 2:56 am, John Jones <jonescard...@xxxxxxx> wrote:

Most definitions seem to rely on being able to tell left from right.

Not the definition of ordered pair, in the sense that

- $\{\{x\} \{x y\}\} =$
- $\{\{x\} \{y x\}\} =$
- $\{\{x y\} \{x\}\} =$
- $\{\{y x\} \{x\}\}.$

Of course, though, we do stipulate that printed formulas are read from left to right. But we could as well stipulate the opposite.

Apparently what Laughing Boy is trying to do is sow confusion at the level of distinguishing syntax from semantics. The syntax of set theory is strings of symbols, and these strings are of course ordered. The semantics of set theory is unordered. Maybe he hopes he can confuse some people on this point.

In addition to writing our strings right to left, we could also use a representation that is reminiscent of the abstract syntax tree. We could, for example, use shapes and containment. So the outermost node in the tree would be the largest shape, containing all the others. The first child node would be a circle and subsequent ones would be squares. Child nodes would all be in a chain, with each node having at least one point in common with its neighbor(s). Nodes could have any size, position, or orientation as long as they respected the above, making it clear that left/right or related concepts are irrelevant. Of course, Laughing Boy will now just object that telling a circle and a square apart is hard, or some such lunacy. Or he'll change the subject again; he does that a lot.

Re: Cantor's definition of set

Marshall

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