

# Re: Mathematical objects and Discernment

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- *From:* "John Jones" <[jonescardiff@xxxxxxx](mailto:jonescardiff@xxxxxxx)>
  - *Date:* 4 Jun 2006 13:38:07 -0700
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LauLuna wrote:

I'm not sure I have quite understood you, but, for all I can gather, you propose to conceive of sets not really as collections (extensionally) but in a pure intensional way: a set should perhaps be identified with the concept its name includes? I assume all names including the same conceptual content are to be considered the same name (?).

You discard the first (so to say) axiom of the usual set theory.

If I have correctly understood you, your proposal seems highly problematic. Sets are extensional from their very definition. If we are to disregard its extensional nature, what is the use of keeping them; can we not do with just concepts (or names)?

Regards

It is worth staying with this because I came to the same conclusions about sets as you did by a different route but from a common source: The idea of a set as being comprised of intensional objects and the useful application of this idea to tautologies and paradoxes in current set theory, was a leap you made in practical reasoning and a clarification, and I don't doubt that if it is chased up it will be worth the effort. This leap was made upon my idea that 'collections' are comprised of objects of our attention. Further, I argued that as a list of objects of our attention (or intentional objects), a collection has no other hidden parameter that corales its objects together. What brings a collection 'together' is our attention; or, as you say, intentional objects comprise a set. That is, sets are not extensional but comprised of objects of our attention, or intentional objects. There are no frameworks or further properties to be considered. Do your amplifications not suggest that?

(I note that a collection is different from a group. In a group the properties of the elements are conferred upon the group. So for example, a group of cows will show the property of a herd, whereas a

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set (set/collection) of cows will not. So, in a group we find relationship, but we find no relationship in a set. I also note what happens to mathematical objects in a set. Outside of their application a number becomes a numeral, so we would expect that there can be no sets of numbers unless the application for making them is presented in the name of the set. However, in that case, we cannot differentiate between sets and formulae. Concerning concepts, a concept does not differentiate between an idea and its representation as particular objects. So concepts have extension. A set, on the other hand although it treats all its elements as objects, it is only through the name of the set that it does this: the elements themselves are empty marks...)

My question for you is this: If sets/collections are intensional objects, how would you differentiate between these and their extensions?

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