

Re: set of a set etc.

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- *From:* "Mark Nudelman" <markn@xxxxxxxxxxxxxxxxxxxxxxxxxxxx>
 - *Date:* Wed, 20 Jul 2005 22:16:28 -0700
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Jasper wrote:

> Mark Nudelman wrote:

>> Stephen J. Herschkorn wrote:

>>> Jasper wrote:

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>>>> The description is what I would call formal, not conceptual. "My
>>>> cat" and the set of my cat {My cat} are different conceptually. My
>>>> cat likes milk. The "set of my cat" does not, yet the two
>>>> denotations are closely related. What is the conceptual
>>>> relationship between the two?

>>> Your cat is a member of the set of your cat. The set of your cat is
>>> not a member of your cat.

>>>>

>>>> Sets are collections. A collection is distinct from the objects
>>>> therein (usually). Put a ring in a box. The box contains the ring;
>>>> the box and the ring are not the same thing.

>>>>>

>>>>> Just to confuse matters, W.V.O. Quine in "Set Theory and Its Logic"
>>>>> defines the law of extensionality and notes that a consequence of it
>>>>> is that there is only one memberless object. That is, since
>>>>> extensionality says that two things are identical if they have the
>>>>> same members, and individuals do not have members, all individuals are
>>>>> identical to the empty set and to each other. To avoid this, he
>>>>> could treat an individual as a different sort of object than a set,
>>>>> but instead he defines " $x \in y$ " as meaning " $x = y$ " when y is an
>>>>> individual. A consequence of this is that individuals are identical
>>>>> to their unit sets, that is, $x = \{x\}$ but ONLY when x is an
>>>>> individual. Of course, he retains $x \neq \{x\}$ when x is a set. He
>>>>> takes some pains to show why this is harmless, but it does seem
>>>>> rather odd.

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