

'Navie set theory': why when $S(x)$ is $(x = x)$, the specified x 's do not constitute a set?

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I'm reading 'Naive Set Theory' and the end of Section 3 there is a following sentence:

[quote]

In case $S(x)$ is $(x \notin x)$, or in case $S(x)$ is $(x = x)$, the specified x 's do not constitute a set.

[quote]

The first one, $(x \notin x)$ is Russell's Paradox, that one I understand. I'm not clear what's wrong with the second one, $(x = x)$. Seems like this is tautology, always true. So if I have something like

$$B = \{ x \in A : x = x \}$$

then $B = A$, since $(x = x)$ is valid for all x 's in A .

I assume I'm missing something, but what?

TIA.

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◇ From: Dave Seaman
 - ◆ **[Re: 'Navie set theory': why when \$S\(x\)\$ is \$\(x = x\)\$, the specified \$x\$'s do not constitute a set?](#)**
◇ From: William Elliot
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