

## Re: An instance of Russell's paradox?

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*Source:* <http://sci.tech-archive.net/Archive/sci.logic/2005-08/msg00518.html>

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- *From:* Jim Spriggs <[jim.sprigs@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx](mailto:jim.sprigs@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx)>
  - *Date:* Mon, 29 Aug 2005 21:25:09 +0000 (UTC)
- 

"A.T." wrote:

>  
> Hello,  
> I have been studying Prolog for a while, and stumbled across several  
> difficulties which I seem to be unable to overcome on my own. Since I  
> am doing it all solely for the purpose of understanding FOL (and  
> Russell's PM straight after that) I have let myself choose Sci.Logic as  
> the addressee of my questions. Hopefully, someone can kindly spare a  
> while for me on this.  
>  
> 1. Can all algorithms be enumerated,

Yes. An algorithm can be expressed in finite terms in a formal language. Therefore there are no more than countably many of them.

> or will that be another  
> formulation of Russell's paradox

Diagonalize out of your enumeration to prove that not all functions are algorithmic.

> (with the list of all algorithms being  
> another way of expressing the set of all sets)?

No, just a confusion.

(I'm amused by Eagleson's "I hope I am clear.")

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I don't know who you are Sir, or where you come from,  
but you've done me a power of good.

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    ◇ *From:* A.T.
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Re: An instance of Russell's paradox?

◇ *From:* Barb Knox

• **References:**

◆ ***An instance of Russell's paradox?***

◇ *From:* A.T.

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