

## Re: OOL X – The origin of the RNA world.

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- *From:* Tim Tyler <[tim@xxxxxxxxxxxx](mailto:tim@xxxxxxxxxxxx)>
  - *Date:* Sun, 10 Apr 2005 16:53:52 –0400 (EDT)
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Robert Maas, see <http://tinyurl.com/uh3t> <rem642b@xxxxxxxx> wrote or quoted:

>> From: Tim Tyler <[tim@xxxxxxxxxxxx](mailto:tim@xxxxxxxxxxxx)>

>> for there to be selection there have to be alternatives to select  
>> between.

>

> Yes. I'm not aware of anyone disagreeing with that.

>

>> I'm talking more about the possibility of a single large organism,  
>> which doesn't reproduce, and instead maintains itself.

>

> That's not possible, except as the last surviving member of an  
> endangered species which previously evolved by reproduction and  
> differential survival among brothers.

So it *\*is\** possible.

> Accordingly it is best not to call it an "organism" in the first place.  
> This is the mistake Lovelock made, and Gould and Margulis bought into,  
> sigh, acting like the whole Earth's ecosystem is an "organism" despite  
> the fact it never reproduced as a whole hence never could evolve the  
> level of cooperation needed to make it an actual organism.

Lovelock made no such mistake. His thesis was that the planet acted on a global scale as a self–regulating homeostatic system.

Your criticism of Lovelock's ideas is the same as Dawkins' criticism of them – but you are both taking the original idea far too literally.

> Earth's biosphere is *\*just\** an ecosystem, and your proposed  
> non–reproducing thing is likewise *\*just\** an ecosystem, [...]

In a nutshell, the idea is that – in the far future – living organisms may coordinate their cooperative activity on a universal scale. They might dispense with their endosymbionts, symbionts and parasites – and come together to form a single large organism – the last living thing.

> unless at some time in the past it *\*did\** reproduce as a whole with  
> group selection to encourage cooperation.

Re: OOL X – The origin of the RNA world.

Reciprocal altruism and kin selection are responsible for most cooperation in nature. Group selection appears to be of low relevance.

- >> It could be argued that a single large organism would – in
- >> practice – have to keep backup copies of its genome in order
- >> to avoid a mutational meltdown – and would have to identify