

## Re: Hamilton's rule

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- *From:* Guy Hoelzer <[hoelzer@xxxxxxx](mailto:hoelzer@xxxxxxx)>
  - *Date:* Tue, 22 Nov 2005 13:19:13 -0500 (EST)
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in article [dlotn0\\$gsg\\$1@xxxxxxxxxxxxxxxxxxxx](mailto:dlotn0$gsg$1@xxxxxxxxxxxxxxxxxxxx), Perplexed in Peoria at [jimmenegay@xxxxxxxxxxxx](mailto:jimmenegay@xxxxxxxxxxxx) wrote on 11/19/05 8:22 PM:

> "Guy Hoelzer" <[hoelzer@xxxxxxx](mailto:hoelzer@xxxxxxx)> wrote in message  
> [news:dll6au\\$1qor\\$1@xxxxxxxxxxxxxxxxxxxx](mailto:news:dll6au$1qor$1@xxxxxxxxxxxxxxxxxxxx)  
>  
>> OK. I think I see your logic on this point now. Let me try another taste  
>> test, assuming that you agreed with my claim that the position of the R line  
>> can vary and its mean position is a function of the distribution of 'r'  
>> values from realized altruistic interactions in the population.  
>  
> The R line IS a mean. If you wish to call a simple mean 'a function of the  
> distribution', I guess that is true.

OK. What would a mean be if not a function of a distribution? I was trying to emphasize the idea that your R line can actually exist in any location in your graphical space depending on who interacts with whom.

>> To tie this  
>> discussion more closely to HR, I am also going to invoke 'b' and 'c'. I  
>> think you are saying that if 'b' is marginally larger than 'c', then 'r'  
>> must only be marginally greater than the average relatedness among  
>> individuals in the population for kin selection to favor an increase in  
>> frequency of the altruism allele.  
>  
> Aaaaaarrrrgh! I think that I AM talking to McGinn.  
>  
> If 'b' is only marginally larger than 'c', then 'r' must be near 1.0 in  
> order to favor an increase in the frequency of the allele.

Right. Sorry for my ill-conceived statement. What I should have said was, if  $c=0$  and 'b' is marginally greater than 0, "then 'r' must only be marginally greater than the average relatedness among individuals in the population for kin selection to favor an increase in frequency of the altruism allele." Of course, the allele shouldn't be called an altruism allele when  $c=0$ , but I hope you get my point.

> The average relatedness among individuals in the population is close to  
> zero.

Re: Hamilton's rule

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- > I occurs to me that 'r' has two meanings, and they may be becoming confused
- > here. On the one hand 'r' is a measure of relatedness between two
- > i