RE: Darwin and Hamilton

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"whitesickle@xxxxxxx" <whitesickle@xxxxxxx>
> To S.B.E. Readers:
> It is "clear to me" at least kin selection and biological altruism is
> indirectly tied to genocide.

JE:−
So called "biological altruism" has not been defined in a reasonable way. It is not correct to argue that a cost can validly be termed "altruistic" if it can provide a profit for the so called altruist over a lifespan.

It can be proven that inclusive fitness ("kin selection") was and remains just a misused circular argument of mathematics, i.e. represents a misused tautological model. Hamilton's model was produced via one over simplification and one simplification of refutable Darwinism. The model also includes a fatal error. I will discuss each in detail:

1) The uncorrected oversimplification of Darwinism.
This is the deletion of the Total Darwinian Fitness (TDF) of the actor allowing Hamilton's Rule to remain without any frame of reference so that the rule remains 100% relative. TDF is the total number of fertile forms reproduced into one population by each parent. Allowing TDF to be represented by K the corrected rule for this oversimplification is:

rb>K−c ..(1)

In this corrected situation altruism can only be proven for Hamilton's actor, if and only if, the TDF of the actor is empirically documented to be _selected_ to be lowered (by exactly c) via the logic of inclusive fitness. Darwinism entirely prohibits TDF to be selected to be lowered so Hamilton and Darwin contradict each other only allowing one of them to be correct.

Hamilton's deletion of K makes it impossible for the rule to distinguish between altruism and selfishness which are respectively: any positive or negative c within Hamilton's rule: rb>c. This fact was hidden by Hamilton et al because they allowed Hamilton's four social acts: selfishness, altruism, mutualism and spite to become conditional on what _independent_ recipients did with the actor donation represented by b. This destroyed the fitness

separation that has to exist between the actor and recipients. The net result is Enron type fitness accounting where a negative actor credit (negative c) is somehow allowed to remain a credit and not be just a debit as accounting rules demand.

2) The uncorrected simplification of Darwinism via the deletion of all gene fitness epistasis e, from Hamilton's Rule. In nature not one single trait exists that is just the simple sum of the fitness of each gene that codes for it which represents zero gene fitness epistasis. Therefore the fitness of Hamilton's trait for the species Hamilton's rule is being applied requires a minimum of one allele on each chromosome to code for the fitness of that trait and not just a single allele. Mathematically this is represented by r^e correcting the rule to:

(r^e)b>K−c ..(2)

The variable e acts an indicator as to how hard it is for the rule to start. Because e always = 1 within the rule as just a simplification it could be deleted and just forgotten so it has never presented a problem. However, when e must minimally equal the chromosome number of the species the rule is being applied to it becomes fatal, disallowing the rule to even start.

3) The uncorrected fatal error within the model itself: the deletion of the number of recipients n, from the rule. Inclusive fitness employs a non self consistent tally of genes replicated over organism generations and not the self consistent tally over gene generations. Since a self consistent tally would have to include all gene replication within the organism, inclusive fitness is not gene centric it is just simplified organism centric. Thus the use of r to convert the group selective b recipient gain to a gene centric by multiplying it by r was not correct. The group fitness gain b, has to be divided by the number of recipients n and then be multiplied by r because Hamilton's gene centric fitness tally only counts alleles replicated over organism generations. Hamilton et al singularly failed to divide rb by n. When so corrected the model proves itself to be just a tautology because the only viable option now is for Hamilton's proactive actor to kin select itself which of course is just normal reproduction bringing the rule full circle. Fully corrected the rule becomes:

(r^e)b/n >K−c ..(3)

Quite clearly inclusive fitness cannot work.

> According to Hamilton's Rule altruism pays off if rb>c . In other
> words, shared genes will profit if the cost to the altruist is less
> than the benefit to the recipient multiplied by the probability that
> the recipient shares genes with the donor.

JE:−

Like Hamilton et al you have failed to divide rb by n so you have not correctly converted the recipient group gain b to simplified organism centric (misleadingly termed "gene centric' by Hamilton et al) so that you end up comparing the group centric rb gain in genes to an organism c cost in genes which is not valid. Both have to become organism centric before they can be compared.

> Costs and benefits are expressed in units of fitness or reproductive
> success with values between 0 and 1.
> A cost of 1 unit of fitness means that the act would reduce the donor's
> reproductive success by 1 offspring.

JE:−
Ignoring the over simplification of the deletion of K and the simplification of the deletion of e: this 1 unit is organism centric.

> A benefit of 1 unit of fitness means that the recipient would increase
> their reproductive success by 1 offspring.

JE:−
Yes but this 1 unit is group centric. You cannot compare an organism centric fitness to a group centric fitness unless you divide the group centric 1 unit by n (the number of recipients).

> For the sake of argument assume you have spare food that you could give
> to your brother to feed him and his children.
>
> Assume that the cost to you is 0.1 units of fitness (i.e. if you do
> this 10 times you will have one less child)
> Assume that the benefit to your brother is 0.25 (i.e. if he receives 4
> such donations he will have one more child)
> We can test if your altruism would benefit kin selection by putting
> these values into Hamilton's Rule rb>c where:
>
> r (the coefficient of relatedness between you and your brother) = 0.5
> c (the impact on your reproductive success) = 0.1
> b (the benefit to your brother's reproductive success) = 0.25
> rb =0.5x0.25=0.125
> c=0.1
> because rb>c (0.125 is greater than 0.1) Hamilton's Rule is satisfied
> and your altruism would benefit your genes.

JE:−
Altruism has NOT been proven

> You might wonder why b and c are not always equal. Why not use the
> spare food you have to increase your own reproductive success? Well
> there is a limit to how much you can eat. If you have an abundance of
> food and your brother is starving, the cost to you of sharing is small,
> but it may be a matter of life or death to your brother and his

> children.

JE:−
If you have excess you either discard it because it becomes a liability or you exchange it.

Regards,

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