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Source: *Philosophy*, Vol. 72, No. 279 (Jan., 1997), pp. 133-136

Published by: Cambridge University Press on behalf of Royal Institute of Philosophy

Stable URL: <http://www.jstor.org/stable/3751309>

Accessed: 22/03/2010 21:20

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Stove's Anti-Darwinism

JAMES FRANKLIN

Stove's article, 'So you think you are a Darwinian?'¹ was essentially an advertisement for his book, *Darwinian Fairytales*.² The central argument of the book is that Darwin's theory, in both Darwin's and recent sociobiological versions, asserts many things about the human and other species that are known to be false, but protects itself from refutation by its logical complexity. A great number of *ad hoc* devices, he claims, are used to protect the theory. If co-operation is observed where the theory predicts competition, then competition is referred to the time of the cave-men, or is reinterpreted as competition between some hidden entities like genes or abstract entities like populations. In a characteristic sally, Stove writes of the sociobiologists' oscillation on the meaning of kin altruism:

Any discussion of altruism with an inclusive fitness theorist is, in fact, exactly like dealing with a pair of balloons connected by a tube, one balloon being the belief that kin altruism is an illusion, the other being the belief that kin altruism is *caused* by shared genes. If a critic puts pressure on the illusion balloon—perhaps by ridiculing the selfish theory of human nature—air is forced into the causal balloon. There is then an increased production of earnest causal explanations of *why* we love our children, *why* hymenopteran workers look after their sisters, etc., etc. Then, if the critic puts pressure on the causal balloon—perhaps about the weakness of sibling altruism compared with parental, or the absence of sibling altruism in bacteria—then the illusion balloon is forced to expand. There will now be an increased production of cynical scurrilities about parents manipulating their babies for their own advantage, and vice versa, and in general, about the Hobbesian bad times that are had by all. In this way critical pressure, applied to the theory of inclusive fitness at one point, can always be easily absorbed at another point, and the theory as a whole is never endangered.³

Now, it is uncontroversial to assert that Darwinism *is* a logically complex theory, and that its relation to empirical evidence is distant and multi-faceted. One does not directly observe chance

¹ D.C. Stove, 'So you think you are a Darwinian?', *Philosophy* 69, 1994, 267–277.

² *Darwinian Fairytales* (Aldershot: Avebury, 1996).

³ 167.

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genetic variations leading to the development of new species, or even continuous variations in the fossil record, but must rely on subtle arguments to the best explanation, scaling up from varieties to species, and so on. The strength or otherwise of these arguments, individually and collectively, is a purely logical question. It is therefore no answer to Stove's attack on Darwinism to sermonise, as Blackburn does,⁴ about how disgraceful it is for philosophers to delve in matters that do not concern them. Marxists, or Freudians, or astrologers, or phrenologists are not allowed to 'answer' philosophers' doubts about the relation of their theories to the evidence by saying, 'Trust me, I'm a doctor'. Evolutionists have no such rights either.

Stove's article listed ten propositions that were, he claimed, asserted by Darwinians, and indeed were characteristic of Darwinian theory, but were obviously false. The statements are all universal generalizations—'every organism has as many descendants as it can'; 'all communication is manipulation of signal-receiver by signal-sender'; 'in every species child-mortality is extremely high', and the like. To answer Stove, it would be initially natural to claim that the 'all' in these statements was not seriously meant. But, obviously, that would be to fall into Stove's trap, since his claim is precisely that Darwinians save their theory by weakening contentful assertions they appear to have made. If they don't mean 'all', why do they say it, if not to dress up a logically flabby theory as much more falsifiable than it is?

Yet this is exactly the strategy Blackburn uses in attempting to refute Stove. The problem is most evident in his answer at the point where he thinks Stove has most grossly misrepresented the Darwinians. Stove listed as one of the 'Darwinian falsities':

... no one is prepared to sacrifice his life for any single person, but ... everyone will sacrifice it (for) more than two brothers, or four half-brothers, or eight first-cousins.⁵

Blackburn points out that the original quote began, 'To express the matter more vividly, in the world of our model organisms, whose behaviour is determined strictly by genotype, we expect to find that no one is prepared to sacrifice his life for any single person, but that everyone ...' He is then much scandalized at Stove's omission of the phrase 'in the world of our model organisms', and treats this correction as a full answer to Stove.

⁴ S. Blackburn, 'I rather think I am a Darwinian', *Philosophy* 71, 1994, 605–616.

⁵ W. D. Hamilton, 'The Genetical Evolution of Social Behaviour', *The Journal of Theoretical Biology*, 1, 1964, 1–52, at p. 16.

But this does not help the Darwinian evade Stove's attack. What is the point of 'model organisms' unless they *model organisms*? As Blackburn himself says, 'Hamilton went on to *apply* (my italics) the model to solve a famous problem for Darwinian theory: how it can be that in species of hymenoptera, sterile workers exist?' If Hamilton is speaking about a purely mathematical world of model organisms, then he has said nothing about biological evolution, while if real organisms satisfy the assumptions of the model, then there can be no objection to taking the predictions of the model as literally asserted of the organisms. It was a point not lost on Stove, who wrote:

It is true I have omitted a qualification which Hamilton prefixed to the words just quoted: namely, '... in the world of our model organisms, whose behaviour is determined strictly by genotype ...'. But Professor Hamilton could hardly object to this omission. For his disciples such as Dawkins constantly do the same thing: that is, read off the results of Hamilton's 'model', as being true descriptions of biological reality. No doubt the reason is, that they believe that the proviso—behaviour being determined strictly by genotype—is satisfied everywhere *in fact*.⁶

If Stove is to be criticized for omitting the words of others, it is fair to ask that others criticize him only after having all his own words on the subject to hand.

Of course, it is perfectly true that models do not fit real cases perfectly, and a degree of looseness of fit has to be allowed to any theory. But there is little comfort for Darwinians in this line of thought. To the extent that organisms do satisfy the model, to that extent failure of the predictions tells against the theory; and to the extent that organisms do not satisfy the model, to that extent Darwinians are asserting something apparently contentful, then withdrawing it under pressure. And this particular model would be ill-advised to compare itself with respectable mathematical models. In a case like Newton's theory of gravity, there is a clear sense of numerical approximation, and the predictions of the theory can be measured to be true to within so many percent. Nothing could be further from the situation that obtains with Hamilton's 'prediction'. It is not as if the model predicts that animals will sacrifice themselves for 8 first cousins, whereas observation shows the true figure is 8.3. The truth is more, as Stove says, that a robin red breast cannot tell the difference between his first cousin and a bit of red wool on a wire.⁷

⁶ *Darwinian Fairytales*, 156.

⁷ 152.

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In the rest of his paper, Blackburn strives to assure us that Darwinian theory deals only in *possible* explanations, and that 'nothing in Darwinian theory allows you to say that because some pattern of behaviour would increase the amount of genetic material in future generations, therefore it will exist'. Dawkins does not really mean what his extreme rhetoric seems to mean, while Trivers' explanation of lesbianism in gulls is merely 'speculative', and it is quite easy for Darwinism to explain why some species have low birthrates, even though they are trying to maximize their descendants. All of which is true, and confirms Stove's central thesis that Darwinism can 'explain' anything. It is sad that he is no longer around to enjoy such 'refutation'.

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