

So You Think You Are a Darwinian?

By David Stove

Most educated people nowadays, I believe, think of themselves as Darwinians. If they do, however, it can only be from ignorance: from not knowing enough about what Darwinism says. For Darwinism says many things, especially about our species, which are too obviously false to be believed by any educated person; or at least by an educated person who retains any capacity at all for critical thought on the subject of Darwinism.

Of course most educated people now *are* Darwinians, in the sense that they believe our species to have originated, not in a creative act of the Divine Will, but by evolution from other animals. But believing *that* proposition is not enough to make someone a Darwinian. It had been believed, as may be learnt from any history of biology, by very many people long before Darwinism, or Darwin, was born.

What is needed to make someone an adherent of a certain school of thought is belief in all or most of the propositions which are *peculiar to* that school, and are believed either by all of its adherents, or at least by the more thoroughgoing ones. In any large school of thought, there is always a minority who adhere more exclusively than most to the characteristic beliefs of the school: they are the 'purists' or 'ultras' of that school. What is needed and sufficient, then, to make a person a Darwinian, is belief in all or most of the propositions which are peculiar to Darwinians, and believed either by all of them, or at least by ultra-Darwinians.

I give below ten propositions which are all Darwinian beliefs in the sense just specified. Each of them is obviously false: either a direct falsity about our species or, where the proposition is a general one, obviously false in the *case* of our species, at least. Some of the ten propositions are quotations; all the others are paraphrases. The quotations are all from authors who are so well-known, at least in Darwinian circles, as spokesmen for Darwinism or ultra-Darwinism, that their names alone will be sufficient evidence that the proposition is a Darwinian one. Where the proposition is a paraphrase, I give quotations or other information which will, I think, suffice to establish its Darwinian credentials.

My ten propositions are nearly in *reverse* historical order. Thus, I start from the present day, and from the inferno-scene - like something by Hieronymus Bosch - which the 'selfish gene' theory makes of all life. Then I go back a bit to some of the falsities which, beginning in the 1960s, were contributed to Darwinism by the theory of 'inclusive fitness'. And finally I get back to some of the falsities, more pedestrian though no less obvious, of the Darwinism of the 19th or early-20th century.

1. The truth is, 'the total prostitution of all animal life, including Man and all his airs and graces, to the blind purposiveness of these minute virus-like substances', genes.

This is a thumbnail-sketch, and an accurate one, of the contents of *The Selfish Gene* (1976) by Richard Dawkins. It was not written by Dawkins, but he quoted it with manifest enthusiasm in a defence of *The Selfish Gene* which he wrote in this journal in 1981. Dawkins' status, as a widely admired spokesman for ultra-Darwinism, is too well-known to need evidence of it adduced here. His admirers even include some philosophers who have carried *their* airs and graces to the length of writing good books on such rarefied subjects as universals, or induction, or the mind. Dawkins can scarcely have gratified these admirers by telling them that, even when engaged in writing those books, they were 'totally prostituted to the blind purposiveness of their genes. Still, you 'have to hand it' to genes which can write, even if only through their

slaves, a good book on subjects like universals or induction. Those genes must have brains all right, as well as purposes. At least, they must, if genes *can* have brains and purposes. But in fact, of course, DNA molecules no more have such things than H₂O molecules do.

2 '...it is, after all, to [a mother's] advantage that her child should be adopted' by another woman.

This quotation is from Dawkins' *The Selfish Gene*, p. 110.

Obviously false though this proposition is, from the point of view of Darwinism it is well-founded, for the reason which Dawkins gives on the same page: that another woman's adopting her baby 'releases a rival female from the burden of child-rearing, and frees her to have another child more quickly.' This, you will say, is a grotesque way of looking at human life; and so, of course, it is. But it is impossible to deny that it is the Darwinian way.

3. All communication is 'manipulation of signal-receiver by signal-sender.'

This profound communication, though it might easily have come from any used-car salesman reflecting on life, was actually sent by Dawkins, (in *The Extended Phenotype*, (1982), p. 57), to the readers whom he was at that point engaged in manipulating. Much as the devil, in many medieval plays, advises the audience not to take his advice.

4. Homosexuality in social animals is a form of sibling-altruism: that is, your homosexuality is a way of helping your brothers and sisters to raise more children.

This very-believable proposition is maintained by Robert Trivers in his book *Social Evolution*, (1985), pp. 198-9. Professor Trivers is a leading light among ultra-Darwinians, (who are nowadays usually called 'sociobiologists'). Whether he also believes that suicide, for example, and self-castration, are forms of sibling-altruism, I do not know; but I do not see what there is to stop him. What is there to stop anyone believing such propositions? Only common sense: a thing entirely out of the question among sociobiologists.

5. In all social mammals, the altruism (or apparent altruism) of siblings towards one another is about as strong and common as the altruism (or apparent altruism) of parents towards their offspring.

This proposition is an immediate consequence, and an admitted one, of the theory of inclusive fitness, which says that the degree of altruism depends on the proportion of genes shared. This theory was first put forward by W. D. Hamilton in *The Journal of Theoretical Biology* in 1964. Since then it has been accepted by Darwinians almost as one man and has revolutionized evolutionary theory. This acceptance has made Professor Hamilton the most influential Darwinian author of the last thirty years.

6. '...no one is prepared to sacrifice his life for any single person, but *everyone will sacrifice it* for more than two brothers [or offspring], or four half-brothers, or eight first-cousins.'

This is a quotation from the epoch-making article by Professor Hamilton to which I referred a moment ago. The italics are not in the text. Nor are the two words which I have put in square brackets; but their insertion is certainly authorized by the theory of inclusive fitness.

7. Every organism has as many descendants as it can.

Compare Darwin, in *The Origin of Species*, p. 66: 'every single organic being around us may be said to be striving to the utmost to increase in numbers'; and again, pp. 78-9, 'each organic being is striving to increase at a geometrical ratio'. These page references are to the first edition of the *Origin*, (1859), but both

of the passages just quoted are repeated in all of the five later editions of the book which were published in Darwin's lifetime. He also says the same thing in other places.

But it would not have mattered if he had *not* happened to say in print such things as I have just quoted. For it was always obvious, to everyone who understood his theory, that a universal striving-to-the-utmost-to-increase is an essential part of that theory: in fact it is the very 'motor' of evolution, according to the theory. It is the thing which, by creating pressure of population on the supply of food, is supposed to bring about the struggle for life among con-specifics, hence natural selection, and hence evolution. As is well known, and as Darwin himself stated, he had got the idea of population permanently pressing on food, because of the constant tendency to increase, from T. R. Malthus's *Essay on Population* (1798).

Still, that every organism has as many descendants as it can, while it is or may be true of most species of organisms, is obviously not true of ours. Do you know of even one human being who ever had as many descendants as he or she could have had? And yet Darwinism says that every single one of us does. For there can clearly be no question of Darwinism making an *exception* of man, without openly contradicting itself. 'Every single organic being', or 'each organic being': *this means you*.

8. In every species, child-mortality - that is, the proportion of live births which die before reproductive age - is extremely high.

Compare Darwin in the *Origin*, p. 61: 'of the many individuals of any species which are periodically born, but a small number can survive'; or p. 5, 'many more individuals of each species are born than can possibly survive'. Again, these passages, from the first edition, are both repeated unchanged in all the later editions of the *Origin*.

Proposition 8 is not a peripheral or negotiable part of Darwinism. On the contrary it is, like proposition 7, a central part, and one which Darwinians are logically locked-into. For in order to explain evolution, Darwin had adopted (as I have said) Malthus's principle of population: that population always presses on the supply of food, and tends to increase beyond it. And this principle *does* require child-mortality to be extremely high in all species.

Because of the strength and universality of the sexual impulse, animals in general have an exuberant tendency to increase in numbers. This much is obvious, but what Malthus's principle says is something far more definite. It says that the tendency to increase is so strong that every population, of any species, is at all times *already* as large as its food-supply permits, or else is rapidly approaching that impassable limit. Which means of course that, (as Malthus once put it), the young are always born into '*a world already possessed*'. In any average year, (assuming that the food-supply does not increase), there is simply not enough food to support any greater number of the newborn than is needed to replace the adults which die. But such is the strength of the tendency to increase that, in any average year, the number of births will greatly exceed the number of adult deaths. Which is to say, the great majority of those born *must* soon die.

Consider a schematic example. Suppose there is a population, with a constant food-supply, of 1000 human beings. Suppose - a very realistic supposition, in fact a conservative one - that 700 of them are of reproductive age. Suppose that this population is already 'at equilibrium', (as Darwinians say): that is, is already as large as its food can support. According to Malthus's principle, people (or flies or fish or whatever) *will* reproduce if they can. So, since there are 350 females of reproductive age, there will be 350 births this year. But there is no food to support more of these than are needed to replace the adults who die this year; while the highest adult death-rate which we can suppose with any approximation to realism is about 10%. So 100 adults will die this year, but to fill their places, there are 350 applicants. That is, there will this year be a child-mortality of 250 out of 350, or more than 70%.

It was undoubtedly reasoning of this kind from Malthus's principle which led Darwin to believe that in every species 'but a small number' of those born can survive, or that 'many more' are born than can survive. What did Darwin mean by these phrases, in percentage, or at least minimum-percentage, terms?

Well, we have just seen that Malthus's principle, in a typical case, delivers a child-mortality of at least 70%. And no one, either in 1859 or now, would dream of calling 30 or more, surviving out of 100, '*but a small number*' surviving. It would be already stretching language violently, to call even 23 (say), surviving out of 100, 'but a small number' surviving. To use this phrase of 30-or-more surviving, would be absolutely out of the question. So Darwin must have meant, by the statements I quoted above, that child-mortality in all species is *more than 70%*.

Which is obviously false in the case of our species. No doubt human child-mortality has often enough been as high as 70%, and often enough higher still. But I do not think that, at any rate within historical times, this can ever have been usual. For under a child-mortality of 70%, a woman would have to give birth 10 times, on the average, to get 3 of her children to puberty, and 30 times to get 9 of them there. Yet a woman's getting 9 of her children to puberty has never at any time been anything to write home about; whereas a woman who gives birth 30 times has always been a demographic prodigy. The absolute record is about 32 births. (I neglect multiple births, which make up only 1% of all births.) As for the last 100 years, in any advanced country, to suppose child-mortality 70% or anywhere near it, would be nothing but an outlandish joke.

It is important to remember that no one - not even Darwinians - knows *anything at all* about human demography, except what has been learnt in the last 350 years, principally concerning certain European countries or their colonies. A Darwinian may be tempted, indeed is sure to be tempted, to set all of this knowledge aside, as being of no 'biological' validity, because it concerns only an 'exceptional' time and place. But if we agreed to set all this knowledge aside, the only result would be that no one knew anything *whatever* about human demography. And Darwinians would then be no more entitled than anyone else to tell us what the 'real', or the 'natural', rate of human child-mortality is.

In any case, as I said earlier, Darwinians *cannot* without contradicting themselves make an exception of man, or of any particular part of human history. Their theory, like Malthus's principle, is one which generalizes about all species, and all places and times, indifferently; while man is a species, the last 350 years are times, and European countries are places. And Darwin's assertion, that child-mortality is extremely high, is quite explicitly *universal*. For he said (as we saw) that 'of the many individuals of *any species* which are periodically born, but a small number can survive', and that 'many more individuals of *each species* are born than can possibly survive'. Again, this means us.

9. The more privileged people are the more prolific: if one class in a society is less exposed than another to the misery due to food-shortage, disease, and war, then the members of the more fortunate class will have (on the average) more children than the members of the other class.

That this proposition is false, or rather, is the exact reverse of the truth, is not just obvious. It is notorious, and even proverbial. Everyone knows that, as a popular song of the 1930s had it,

The rich get rich, and
The poor get children.

Not that the song is *exactly* right, because privilege does not quite always require superior wealth, and superior wealth does not quite always confer privilege. The rule should be stated, not in terms of wealth, but in terms of privilege, thus: that the more privileged class is the less prolific. To this rule, as far as I know, there is not a single exception.

And yet the exact inverse of it, proposition 9, is an inevitable consequence of Darwinism all right. Malthus had said that the main 'checks' to human population are misery - principally due to 'famine, war, and pestilence' - and vice: by which he meant contraception, foeticide, homosexuality, etc. But he also said that famine - that is, deficiency of food - usually outweighs all the other checks put together, and that population-size depends, near enough, *only* on the supply of food. Darwin agreed. He wrote (in *The Descent of Man*, second edition, 1874), that 'the primary or fundamental check to the continued increase of

man is the difficulty of gaining subsistence', and that if food were doubled in Britain, for example, population would quickly be doubled. But now, a more-privileged class always suffers less from deficiency of food than a less-privileged class does. Therefore, if food-supply is indeed the fundamental determinant of population-size, a more-privileged class *would* always be a more prolific one; just as proposition 9 says.

William Godwin, as early as 1820, pointed out that Malthus had managed to get the relationship between privilege and fertility *exactly* upside-down. In the 1860s and '70s W. R. Greg, Alfred Russel Wallace, and others, pointed out that Darwin, by depending on Malthus for his explanation of evolution, had saddled himself with Malthus's mistake about population and privilege. It is perfectly obvious that all these critics were right. But Darwin never took any notice of the criticism. Well, trying to get Darwin to respond to criticism was always exactly like punching a feather-mattress: 'suddenly absolutely nothing happened'.

The eugenics movement, which was founded a little later by Darwin's disciple and cousin Francis Galton, was an *indirect* admission that those critics were right. For what galvanized the eugenists into action was, of course, their realisation that the middle and upper classes in Britain were being out-reproduced by the lowest classes. Such a thing *simply could not happen*, obviously, if Darwin and Malthus, and proposition 9, had been right. But the eugenists never drew the obvious conclusion, that Darwin and Malthus were wrong, and consequently they never turned their indirect criticism into a direct one. Well, they were fervent Darwinians to the last man and woman, and could not bring themselves to say, or even think, that Darwinism is false.

A later Darwinian and eugenicist, R. A. Fisher, discussed the relation between privilege and fertility at length, in his important book, *The Genetical Theory of Natural Selection*, (1930). But he can hardly be said to have made the falsity of proposition 9 any less of an embarrassment for Darwinism. Fisher acknowledges the *fact* that there has always been, in all civilized countries an inversion (as he calls it) of fertility-rates: that is, that the more privileged have always and everywhere been the less fertile. His explanation of this fact is that civilized countries have always practised what he calls 'the social promotion of infertility'. That is, people are enabled to succeed better in civilized life, the fewer children they have.

But this is evidently just a re-phrasing of the problem, rather than a solution of it. The question, for a Darwinian such as Fisher, is how there can be, consistently with Darwinism, such a thing as the social promotion of infertility? In every other species of organisms, after all, comparative infertility is a sure sign, or even the very criterion, of comparative *failure*. So how can there be if Darwinism is true, a species of organisms in which comparative infertility is a regular and nearly-necessary aid to success?

Fisher's constant description of the fertility-rates in civilized countries as 'inverted', deserves a word to itself. It is a perfect example of an amazingly-arrogant habit of Darwinians, (of which I have collected many examples in my forthcoming book *Darwinian Fairytales*). This is the habit, when some biological fact inconsistent with Darwinism comes to light, of *blaming the fact*, instead of blaming their theory. Any such fact Darwinians call a 'biological error' an 'error of heredity', a 'misfire', or some thing of that kind: as though *the organism in question* had gone wrong, when all that has actually happened, of course, is that Darwinism has gone wrong. When Fisher called the birth-rates in civilized countries 'inverted', all he meant was that, exactly contrary to Darwinian theory, the more privileged people are the less fertile. From this fact, of course, the only rational conclusion to be drawn is, that Darwinism has got things upside-down. But instead of that Fisher, with typical Darwinian effrontery, concludes that *civilised people* have got things upside-down!

Fisher, who died in 1962, is nowadays the idol of ultra-Darwinians, and he deserves to be so: he was in fact a sociobiologist 'born out of due time'. And the old problem for Darwinism, to which he had at least given some publicity, even if he did nothing to solve it, remains to this day the central problem for sociobiologists. The problem (to put it vulgarly) of why 'the rich and famous' are such pitiful reproducers as they are.

Of course this 'problem' is no problem at all, for anyone *except* ultra-Darwinians. It is an entirely self-inflicted injury, and as such deserves no sympathy. Who, except an ultra-Darwinian, would *expect* the highly-privileged to be great breeders? No one; just as no one but an ultra-Darwinian would expect women to adopt-out their babies with maximum expedition. *For* ultra-Darwinians, on the other hand, the infertility of the privileged is a good deal *more* than a problem. It is a refutation.

But they react to it in accordance with a well-tryed rule of present-day scientific research. The rule is: 'When your theory meets with a refutation, call it instead "a problem", and demand additional money in order to enable you to solve it.' Experience has shown that this rule is just the thing for keeping a 'research program' afloat, even if it leaks like a sieve. Indeed, the more of these challenging 'problems' you can mention, the more money you are plainly entitled to demand.

10. If variations which are useful to their possessors in the struggle for life 'do occur, can we doubt (remembering that many more individuals are born than can possibly survive), that individuals having any advantage, however slight, over others, would have the best chance of surviving and of procreating their kind? On the other hand, we may feel sure that any variation in the least degree injurious would be rigidly destroyed.'

This is from *The Origin of Species*, pp. 80-81. Exactly the same words occur in all the editions.

Since this passage expresses the essential idea of natural selection, no further evidence is needed to show that proposition 10 is a Darwinian one. But is it true? In particular, may we really feel *sure* that *every* attribute *in the least degree* injurious to its possessors would be *rigidly destroyed* by natural selection?

On the contrary, the proposition is (saving Darwin's reverence) ridiculous. Any educated person can easily think of a hundred characteristics, commonly occurring in our species, which are not only 'in the least degree' injurious to their possessors, but seriously or even extremely injurious to them, which have not been 'rigidly destroyed', and concerning which there is not the smallest evidence that they are in the process of being destroyed. Here are ten such characteristics, without even going past the first letter of the alphabet. Abortion; adoption; fondness for alcohol; altruism; anal intercourse; respect for ancestors; susceptibility to aneurism; the love of animals; the importance attached to art; asceticism, whether sexual, dietary, or whatever.

Each of these characteristics tends, more or less strongly, to shorten our lives, or to lessen the number of children we have, or both. All of them are of extreme antiquity. Some of them are probably older than our species itself. Adoption, for example is practised by some species of chimpanzees: another adult female taking over the care of a baby whose mother has died. Why has not this ancient and gross 'biological error' been rigidly destroyed?

'There has not been enough time', replies the Darwinian. Well, that *could* be so: perhaps there has not been enough time. And then again, perhaps there has been enough time: perhaps even twenty times over. How long does it take for natural selection to destroy an injurious attribute, such as adoption or fondness for alcohol? I have not the faintest idea, of course. I therefore have no positive ground whatever for believing either that there has been enough time for adoption to be destroyed, or that there has not. But then, on this matter, everyone else is in the same state of total ignorance as I am. So how come the Darwinian is so confident that there has not been enough time? What evidence can he point to, for thinking that there has not? Why, nothing but this, that adoption has *not* been destroyed, despite its being an injurious attribute! But this is palpably arguing in a circle, and taking for granted the very point which is in dispute. The Darwinian has no *positive* evidence whatever, that there has not been enough time.

Mercifully, Darwinians nowadays are much more reluctant than they formerly were, to rely heavily on the 'not-enough-time' defence of their theory against critics. They have benefited from the strictures of philosophers, who have pointed out that it is not good scientific method, to defend Darwinism by a tactic

which would always be equally available *whatever* the state of the evidence, and which will still be equally available to Darwinians a million years hence, if adoption (for example) is still practised then.

The cream of the jest, concerning proposition 10, is that Darwinians themselves do not really believe it. Ask a Darwinian whether he *actually* believes that the fondness for alcoholic drinks is being destroyed *now*, or that abortion is, or adoption - and watch his face. Well, of course he does not believe it! Why would he? There is not a particle of evidence in its favour, and there is a great mountain of evidence against it. Absolutely the only thing it has in its favour is that Darwinism says it must be so. But (as Descartes said in another connection) 'this reasoning cannot be presented to infidels, who might consider that it proceeded in a circle'.

What becomes, then, of the terrifying giant named Natural Selection, which can never sleep, can never fail to detect an attribute which is, even in the least degree, injurious to its possessors in the struggle for life, and can never fail to punish such an attribute with rigid destruction? Why, just that, like so much else in Darwinism, it is an obvious fairytale, at least as far as our species is concerned.

It would not be difficult to compile another list of ten obvious Darwinian falsities; or another one after that, either. But on that scale, the thing would be tiresome both to read and to write. Anyway it ought not to be necessary: ten obvious Darwinian falsities should be enough to make the point. The point, namely, that if most educated people now think they are Darwinians, it is only because they have no idea of the multiplied absurdities which belief in Darwinism requires.