Darwinism, Purpose and Meaning

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Researchers report that people who are asked to give their reason for converting to Creationism often say that they have done so because they see it as the only possible alternative to 'Darwinism' – something which they find intolerable and equate with scientific atheism.

What does Darwinism mean here? No doubt their idea of it often contains a good deal of bloody-minded 'Social Darwinism', a hardy weed which, like ground-elder, never really goes away. Much more recent sources are, however available to them. In *River Out Of Eden* – a book which he has deliberately subtitled 'A Darwinian View Of Life' – Richard Dawkins sums up what he believes to be its message;

> In a universe of blind forces and physical replication, some people are going to get hurt, others are going to get lucky, and you won't find any rhyme or reason in it, nor any justice. The universe we observe has precisely the properties we should expect if there is, at bottom, no design, no purpose, no evil and no good, nothing but blind, pitiless indifference. As that unhappy poet A.E. Housman put it,
>
> > For Nature, heartless, witless nature
> > Will neither care nor know.
>
> DNA neither cares nor knows. DNA just is. And we dance to its tune.[1]

Similarly on page 1 of *The Selfish Gene* he declares that 'we no longer have to resort to superstition when faced with the deep problems; Is there a meaning to life?[i] What are we for? What is man?' These questions have, he says, been given a final, unmistakeably negative answer in 1859 by the publication of *The Origin of Species*.

This is Dawkinsism, not Darwinism, but it should, I think, still be looked at seriously. For a start, we should ask what it means to say that the universe contains 'no evil and no good?' This is biologically odd because that universe does, after all, contain many living organisms, including ourselves, And for any living organism some things are

[1] Dawkins, *River Out of Eden: A Darwinian View of Life* (New York: Basic Books, 1995), 155.

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necessarily evil, others good. Each species has its own natural needs, for which some things are useful, others harmful. When we humans call something 'good' or 'evil', we are not adding mysterious 'non-natural' qualities to the universe but merely reporting facts about how it affects ourselves.

Of course our peculiar kind of conscious awareness makes us register those facts in a particular way. It makes us specially aware of conflicts, especially of cultural differences. It also gives us a special interest in arguing borderline cases But it does not create the thing reported.

Next, what does it mean to say that the universe contains 'no purpose, no design'? This can scarcely be right because human beings – who, again, are a natural part of the universe – plainly do have purposes, among which the purpose of removing religion is just one typical example. And this purposiveness is not a peculiarly human trait. It is one that we share with other animals. Of course (again) the special, articulate, highly conscious form of planning that we use *is* uncommon, being made possible by our specially developed brains. But the purposivenss itself – the strong, persistent, systematic striving till a particular end is reached – plainly is not unique to us. The fact that Dawkins represents the Selfish Gene itself as relentlessly purposive shows how impossible it is to describe the workings of life without using such language.

A human trying to get out of a trap doubtless uses different means from a fox or a rat, and thinks differently about them. But the striving itself – the intense, persistent effort directed to that end – is surely the same for all. Human observers watching the animal will have no doubt about what it is doing, nor about its relation to our own striving. Similarly, seeds that germinate under paving-stones go to incredible lengths to grow past them, or even, if necessary to lift them out of place. As Aristotle noted, there is here a remarkable continuity that runs from our own fully conscious purposes right through the realm of life.

Teleology Is Not Optional

People who claim that there is no purpose in the natural world seem to conceive *purpose* as something peculiar to humans, a cultural construct which we have invented, a fancy that we anthropomorphically project onto neutral, directionless matter. This idea is intended to heal the rift between matter and mind by treating them both simply as matter, and inert matter at that – matter made of the kind of dead, billiard-ball-like particles that used to be believed in, not the highly versatile bundles of energy that physicists deal in today.

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This kind of naïve materialism has, of course, raised great hopes over the last century and many scientists still embrace it. But for some time it has been running into great difficulties over the 'problem of consciousness' and also over this unrealistic attitude to purpose. The concept of matter turns out to be quite as puzzling as the concept of mind; indeed perhaps more so.

Some people are therefore now beginning to suspect that the rift may be better dealt with differently – perhaps in the way that Spinoza proposed, by not letting it arise in the first place. Perhaps there are not two radically different kinds of stuff, mind and matter, but just one great world which has both mental and physical attributes. This can then quite properly be viewed, without contradiction, from both these angles. And it would not be surprising if a single tendency, or *conatus*, runs through the whole, so that our kind of conscious purposiveness is only one part of it,

Such talk is, of course, out of fashion. But the current sweeping denial of purpose outside human life is certainly no less metaphysically ambitious. It only strikes us as less surprising because we are so used to it. Exclusive materialism is an extreme philosophical doctrine just as exclusive idealism is, not a scientific discovery. It is not economical because conceptual economy is not attained by using as few terms as possible but by using just the ones that work, ones that will actually explain the data in question. The proof of these puddings is in the eating. It is true that the concept of Purpose is not used in physics, but then physics is not in the business of trying to explain life. If our aim is to understand a world that includes ourselves, along with our thoughts, and the other organisms, we need concepts that will help us do this.

Purposive behaviour is not, then, something that we humans have invented or constructed but something universal among earthly organisms. Indeed it is hard to see how, if it had not been already there, we could ever have invented it. To innovate on this scale we would surely have had to be creatures unrelated to other life-forms, creatures drawing our capacities from some quite alien outside source. That, indeed, was Descartes' idea when he ruled that minds were pure spirits, unrelated to bodies, and that non-human animals were mere unconscious machines. But that isn't the way we think today.

Making the Best of our Evolved Minds

Purpose and value, then, aren't arbitrary colours painted onto the world by our vanity. They have grown up in that world and are

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natural aspects of it – emergent properties, shapes that appear as soon as its inhabitants become complex enough to need them. Just as there are no aeronautical properties till something starts to fly, and no musical properties till something produces music, so these life-patterns are not found in a lifeless world. But that does not make them any less real or natural. They are aspects of evolution which become steadily more complex as the organisms themselves do so.

These properties involve no fishy supernatural interference, nor – still more obviously – does meaning. To find the universe meaningful is not to decode an extra, cryptic message hidden behind it but simply to find a continuity between its patterns and those of our own lives – enough continuity to confirm that our presence here makes sense. *The point is not that the world belongs to us but that we belong to it.* We do not have to think that it was designed for our benefit, nor that we can understand it completely. We only need to see it as ordered in a way that makes our presence here intelligible. And, since we actually are a part of it, this is not a silly project. It explains why we are naturally disposed to respond to this world with the mixture of caution, trust and reverence that have proved appropriate for our ancestors over many aeons of hard experience.

People often suggest today that we should discount all such natural tendencies because they are merely a part of our evolved human nature. But, since we actually are humans and cannot become anything else, it is hard to see what this would achieve. Psychological surgery conducted on these principles could not be confined to a few special cases; it would call for a wider massacre. For instance, our human nature is also the source of our surprising conviction that the people around us are conscious fellow-beings, not mindless robots, and of our tendency to feel friendly and co-operative towards some of them. It is, too, the source of our remarkable belief that the material world is still there when we turn our backs on it, and of our strange habit of trusting other people's testimony – including, of course, the testimony of scientists – unless there is some special reason not to do so. It is, in short, the only tool-box that we have for living and thinking at all.

Of course we sometimes need to reject thoughts that come naturally to us. But we don't reject them just because they come from our evolved nature. We reject them because they conflict with others that are better supported. And in such cases we always try to reconcile the conflicting insights involved. Indeed, that reconciling is a central business of our intellectual life because we need to integrate our personalities as a whole. We cannot by-pass it by rejecting certain selected ideas simply for being natural.

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The Dream of Infallibility

It is rather remarkable that this kind of sceptical argument is so often invoked specially for the case of religion, as if that were the only unreliable part of the human equipment. Thus Charles Darwin, recounting in his autobiography how his views on religion had developed, explained that he was still impressed by –

> the extreme difficulty, or rather impossibility, of conceiving this immense and wonderful universe, including man… as the result of blind chance or necessity. When thus reflecting, I feel compelled to look to a First Cause having an intelligent mind in some degree analogous to that of man, and I deserve to be called a Theist… [But then, he says] arises the doubt, can the mind of man, *which has, as I fully believe, been developed from a mind as low as that possessed by the lowest animal*, be trusted when it draws such grand conclusions?[2]

This discouraging idea led Darwin to remain agnostic on the matter – agnostic, as he often explained, in a literal sense; he was far too aware of mystery to be an atheist. But if evolutionary considerations took him that far they ought surely to have taken him further. He should surely have distrusted the whole mass of reasoning which made him reject the chance explanation – indeed, he should have distrusted the whole mass of thought, including scientific thought, that had caused his doubts. It all came from the same evolutionary source, and indeed from social sources as well. His complaint about the source suggests that there is some better alternative available, some direct revelation that would bypass these drawbacks. What would that oracle be?

This is surely a nostalgic vision, drawn from pre-evolutionary Platonic thinking, of a directly inspired hot-line to knowledge, a by-pass available only to our spiritually-privileged species. But, as he himself had showed, this is a dream. We know now that we are not purpose-built knowledge-machines but composite creatures who have acquired our intellectual capacities by the way as part of our general equipment for life. This does not, of course, mean that our brains are a mere helpless jumble, shaped haphazardly by any passing meme. But their powers are limited. They find it much harder to grasp some kinds of question than others, They find questions about purpose and about our own relation to the world

[2] *Thomas Henry Huxley and Charles Darwin, Autobiographies* (London: Oxford University Press, 1974), 54.

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particularly difficult. And there are very few questions, in science or anywhere else, to which they can give us a final answer.

What, then should we do about these strangely ambitious tendencies of our minds, such as the teleological one that Darwin noted? Simon Conway Morris, having laid out the tidy reductive answer which is so popular today, remarks –

> Yet, there are nagging doubts. Yes, it may all be due to a few misfiring neurons, perhaps an extra dollop of neuropeptide or whatever, but the fact remains that humans have an overwhelming sense of purpose. As a species we are strangely comfortable to find ourselves embedded in a teleological matrix.[3]

We need, he says, to ask why this is and whether this idea of a *telos* is really redundant. As he points out, such things are now usually explained by the methods of 'evolutionary psychology' by saying that these habits cheer people up, so they confer a selective advantage by preventing despair. But these answers, even if there were enough evidence for them, would still miss the point by a mile. The way in which they would miss it is perhaps best conveyed by citing a parallel.

Suppose that scientists from Alpha Centauri are studying human life and are wondering how to account for the practice of music, which of course they find pointless. Following prevalent doctrines, they decide that music cheers people up, perhaps by being bond-forming. And they cite research which seems to support this finding. In what sense have they now got an adequate explanation?

The trouble is, of course, that this story only provides an *outside* context – a causal framework inside which the puzzling phenomenon can occur – not a conceptual one. It does nothing to show just what work music does in people's lives. And if these researchers, encouraged by their success, go on to investigate other puzzling human activities such as laughter, flower-arrangement or football, they are surely likely to give the same explanation, Thus, all these activities really have the same function, and any one of them can always be substituted for any other.

Has something gone wrong here?

It has. When we ask about the point and meaning of an activity like music we want to understand what makes it worth doing – what is its importance, what place it has in life. This is a question that arises from the inside. I use the example of music because its role really

[3] *Life's Solution; Inevitable Humans in a Lonely Universe*, (Cambridge: Cambridge University Press, 2003), 313.

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does puzzle people. It isn't easy to spell out in clear terms just what music does for us. But nobody supposes this means that music doesn't do anything, that it is trivial, and need not be taken seriously. The trouble may be rather that it is too important – that it is so widely entangled in our lives that we can't easily see it as a whole.

How does this compare with the question about our natural leaning towards teleology? Unluckily, that question is mired in the history of past political and economic conflicts between scientists and the churches. That background has produced a situation where, for some time, many scientists have seen the issue as one of tribal warfare, a battle in their cold war against religion. Any notion of cosmic purpose or meaning strikes them as a dangerous superstition which will discredit science, so they avoid it. Paul Davies cites that great physicist Richard Feynman, who said that 'the great accumulation of understanding as to how the physical world behaves only convinces one that this behaviour has a kind of meaninglessness about it'.[4] And Steven Weinberg, taking a deep breath, blows up this sentiment to the full, declaring that 'The more the universe seems comprehensible, the more it also seems pointless'.

As Davies observes (18), Weinberg came in for some flak from his colleagues for writing this comment – not because he denied that the universe had a point, but for even suggesting that it could have a point. The odd thing here is, however, the conclusion that Weinberg draws from this pointlessness. The only thing that cheers him up on this wintry scene, where all normal value has been proved senseless, is the fact that people are still researching about astrophysics:

> If there is no solace in the fruits of our research, there is at least some consolation in the research itself. Men and women are not content to comfort themselves with tales of gods and giants… they build telescopes and satellites and accelerators and sit at their desks for endless hours working out *the meaning* of the data that they gather… The effort to *understand* the universe is one of the very few things that lift human life a little above the level of farce, and give it some of the grace of tragedy.[5]

But if the universe has already been shown to be pointless, why can it be important to study its workings? What is this *meaning* that the

[4] Paul Davies, *The Goldilocks Enigma; Why Is The Universe Just Right For Life?* (London: Penguin, 2006), 17–18

[5] *The First Three Minutes* (London: Andre Deutsch, 1977), 155. Emphasis mine.

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researchers are looking for? Why are they doing science at all? Clearly Weinberg has cheerfully swallowed Jacques Monod's assumption that scientific truth can still survive as the only ideal left after a general holocaust of all other values, that science still makes sense in an alien universe of pure chance.[6] Paul Davies points out that this won't do:

> Doing science means figuring out what is going on in the world – what the universe is up to, what it is "about". If it isn't about anything there would be no reason to embark on the scientific quest in the first place… So we might justifiably invert Weinberg's dictum and say that *the more the universe seems pointless, the more it also seems incomprehensible*.[7]

This is a difficulty about the nature of understanding, one that arises from within science itself, not a criticism thrust on it by an alien religious tribe. And it is a problem that quite a lot of distinguished scientists have lately been raising. Many of them, like Davies, do so in reference to the remarkable coincidences which physicists have lately noted in the conditions that make intelligent life – or indeed any kind of life – possible in the universe The improbability of this happening by chance is, says Freeman Dyson, so startling that it becomes perverse to talk of our presence as due to chance. Plainly we are not alien creatures, as Jacques Monod thought, marooned in a universe that we cannot expect to understand. As Dyson puts it:

> I do not feel like an alien in this universe. The more I examine this universe and study the details of its architecture, the more evidence I find that the universe must in some sense have known that we were coming.[8]

This thinking does not, of course, involve commitment to any particular religious position. It simply declares the metaphysical and religious sphere open once more to scientists for serious discussion. Initially, of course, it points towards the territory of philosophers like Spinoza, Aristotle and Kant (none of whom can be suspected of being an agent for fundamentalist Christianity) but there are plenty of other directions in which it can be carried further. Davies, having described the cosmic coincidences and weighed the various possible interpretations, concludes:

[6] See Monod, *Chance and Necessity* (Glasgow, Collins, 1972), 154, 159.
[7] Davies, *The Goldilocks Enigma*, 18.
[8] *Disturbing the Universe* (New York: Harper & Row, 1979), 250.

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> It seems to me that there is a genuine scheme of things – the universe is "about" something. But I am equally uneasy about dumping the whole set of problems in the lap of an arbitrary god, or abandoning all further thought and declaring existence ultimately to be a mystery… Even though I do *not* believe *Homo Sapiens* to be more than an accidental by-product of haphazard natural processes… I do believe that life and mind are etched deeply into the fabric of the cosmos, perhaps through a shadowy half-glimpsed life principle.[9]

Similarly in biology, Simon Conway Morris sees the prevalence of evolutionary convergence as showing another set of apparent coincidences parallel to those revealed in physics, and just as hard to dismiss as mere chance. The idea that evolution is a wild, random casino is, he says, badly mistaken. Evolutionary convergences reveal both a clear order and a remarkable kind of creativity:

> For all this exuberance and flair [in evolution] there are constraints; convergence is inevitable, yet paradoxically the net result is not one of sterile returns to worn-out themes; rather there is also a patent trend of increased complexity. Some cosmologists like to speculate that the universe is designed to be the home of life, to which some biologists might add "Yes, and not only that but we have a pretty shrewd idea of what was on the cards" [namely, the development of intelligence. We need, then, to ask] if some of our predecessors who saw their religious faith either ebb or haemorhrage were both misinformed and over-pessimistic, and to enquire whether some common ground can be regained.[10]

It is surely to be hoped that, instead of waging unprofitable cold warfare against all religion, scientists can indeed carry this kind of dialogue further.

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[9] Davies, *The Goldilocks Enigma*, 302–3.
[10] Morris, *Life's Solution*, 21 and 113.

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