

# The Solitary Self

Darwin and the Selfish Gene

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ACUMEN

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# Introduction

## On being social

The topic of this book is individualism. It starts from a discussion of Darwin because he is now widely credited – or blamed – as the source of the strange, drastic form of individualism that is current today. He did not actually invent that doctrine. In fact, his views about human relations were quite contrary to it. They centred on the natural, human affections and fears that bind us together, on the conflicts that arise among those natural feelings and on the ways in which we try to arbitrate these conflicts. More than many thinkers, Darwin fully recognized the crucial importance of conflict in our lives. And this makes his views much more realistic, and so more interesting, than the simple current dogmas of neo-Darwinism.

It seems worth while to get the record straight about this because Darwin's authority and influence, which are now considerable, should not be used to back views that are not his. Besides that, however, the whole topic is central to us now because individualism is giving us real difficulties today. Although it is a guiding ideal for our age, accepted as a main achievement of the Enlightenment, it takes many different forms. In a general way we take it to be the

saving sense that people are distinct from one another and must all be considered separately. And in practical politics we often try to get them this kind of freedom. Yet the resulting isolation often makes for loneliness and loss of meaning. Moreover, campaigns for liberation become confused because different individuals have different aims. Free trade can produce very unfree conditions for workers – free house-building can produce cities horrible to live in – but there are individuals on all sides. And so forth.

Clashes like this constantly force us, in practice, to invoke other principles besides individualism in order to decide *which* individuals, and *which* factors in their lives, should have precedence. Different ideologies, favouring different kinds of freedom, make all the difference to what counts as individualism. The ideology that is most influential here at present is essentially a commercial one, centring on the importance of free competition – free enterprise – the deregulation of business. And the philosophic backing now given to it is the supposedly Darwinian belief in natural selection as a pervasive, irresistible cosmic force.

Neo-Darwinian theorists offer this force as the final explanation, not just of evolution, but of all sorts of deep social, physical and metaphysical mysteries as well. Thus it seems that competition lies at the heart of the universe. And what explains our own lives is the unbridled, savage competition between the genes that supposedly rule us. This is the vision that Richard Dawkins offers us in answer to questions about human destiny in his book *River Out of Eden*, which is boldly subtitled *A Darwinian View of Life*: “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 ... DNA neither cares nor knows. DNA just is. And we dance to its music” (1995: 155).

Of course this is meant as a myth, not a detailed scientific thesis, and some people may therefore think it doesn't matter. But

our imaginations feed on striking myths like this much more than we notice. After all, colourful documents such as *The Communist Manifesto* and *The Book of Revelations* have had much more influence than most philosophical writings. In this book I have concentrated on Dawkins's formulations of the neo-Darwinist worldview rather than on more moderate statements because their very extremeness makes them instructive. Their strong colours bring out the disturbing implications of ideas that pass as usable when they are expressed more vaguely. And these ideas, in their more discreet, muted forms, are still very widely shared today, even though they have been often attacked. Many people who would wince at Dawkins's rhetoric probably do not notice that they are taking much of his worldview for granted.

The notable thing about his story here is not its atheism but its fatalism. The drama that it presents of helpless humans enslaved by a callous fate-figure is, of course, not new and, like all such myths, it conveys not just meaninglessness but a positive, sinister meaning – the presence of an active oppressor. The new thing about the current version is merely the cast-list and the backing provided for the story. Fatalism is now offered, not as just one possible philosophical attitude among others with reasons given for and against it, but as a *fact* backed by the tremendous authority of science. The cosmic bully whom it invokes is now not a pagan deity but a chemical, DNA, a part of our own cells that – since we, like other organisms, are just lumbering robots ruled by it – is invoked as the true source of our acts. And the only motivation that it supplies for us is unqualified egoism: “selfishness”.

This story combines two distinct kinds of reduction: the social atomism, which splits human society into separate, isolated individuals; and the physicalist reduction, which splits each individual into the units of his own body. These two strategies don't seem to be necessarily connected; indeed, they are hardly compatible. Blurring

them together produces a highly confused ideology, but their common reductive quality makes people see them both as scientific. Taken together, they mean that all human action is unavoidably selfish. This message of an unavoidable doom is not cancelled by Dawkins's occasional claims that free choice is still possible, or that there might be some slight natural altruistic motivation, because these passages are so contrary to the rest of his argument that they are clearly only added as opium for the sensitive. The doctrine is meant to be a comprehensive one.

### The varieties of egoism

That claim to comprehensiveness is, of course, not a new one. Thomas Hobbes (1588–1679) resoundingly launched the same claim that all action is self-interested three centuries ago. He did this as a challenge to feudalism: a protest against the aristocratic ethic of chivalry, which told people to lay down their lives in wars of religion. Hobbes wanted them to become selfish enough to stop doing this and form a consensual society, so he told them that they could easily do so because really they were totally selfish already. His very sensible bourgeois protest sowed the seed that grew into Enlightenment individualism, drawing attention to all sorts of ways in which individuals were actually being oppressed. But, as happens with such seminal ideas, the story was far too simple to stand much wear.

People quickly grasped that, selfish though we may all often be, it is absurd to say that we are all always ruled by self-interest. If we were, no such word as *selfish* could ever have been invented. Even apart from altruism, much of human action is either thoughtless or actually self-destructive. Besides this obvious fact, however, as wars declined and people started to attend more to their indi-

vidual lives, the focus of thought gradually shifted from public to private matters – away from “interest” – outward profit or advantage – towards the quality of life itself. People began to concentrate less on prudence and more on autonomy, on authentic experience, on living your own life rather than simply following other people’s example. And here their prophet was not Hobbes, or a pleasure-theorist such as Jeremy Bentham, but Nietzsche, whose many unreconciled insights on these matters still keep us busy today.

Thus, the whole problem of the meaning of self-interest and self-fulfilment – and indeed of what selves themselves actually are – has proved to be much more troublesome than it looked in Hobbes’s day. Attempts to understand selves have long produced an uproar of controversy. Like Darwin, we today already know that our motivation is indeed complicated and is riven by conflicts. What we most want, therefore, is to see how best to deal with those conflicts. And we know that no simple, comprehensive theory of motivation is likely to be much use for this.

It is striking, then, that neo-Darwinians have ignored all these difficulties and have reintroduced egoism in its simplest, most comprehensive form as mere universal “selfishness”. They do not take this, as Hobbes did, to centre on each individual’s alarm about his own safety, making everybody keen to form a social contract. Instead, their whole emphasis is on competition itself as something permanent and incurable, a basic pattern in the cosmos. Their preferred imagery for it from human life is mostly commercial, military or criminal:

Like successful Chicago gangsters, our genes have survived, in some cases for millions of years, in a highly competitive world. This entitles us to expect certain qualities in our genes. I shall argue that a predominant quality to be expected in our genes is ruthless selfishness. This general selfishness will usually give

rise to selfishness in individual behaviour [and any possible exceptions to this are negligible] ...

We are born selfish. (Dawkins 1976 [hereafter TSG]: 2–3)

If this conclusion were printed as an explicit theory of human motivation it would probably not look very impressive. The reason why it passes here as just one more metaphor, rather than as bad psychology, is that this discussion does not, officially, concern motives at all but is purely a biology lesson: an exposition of genes and the workings of natural selection. Readers are too cowed by the general aura of physical science – too impressed by the thought that they are being educated in the grand secrets of evolution – to complain about what is obviously poor thinking on general subjects.

### Natural selection does not need drama

The science itself does not, however, actually support this myth. By now, plenty of biologists have pointed out that it is misleading to dramatize natural selection in this way. Competition is not, in fact, any more prevalent in the biosphere than cooperation. Indeed, it is inevitably less prevalent, because competition cannot get started until there has been a great deal of cooperation to build up the individual competitors. For instance, as we now know, the chloroplasts and other organelles within our cells were almost certainly once separate beings, distinct creatures that ended up playing their instruments in our internal orchestra because they had prospered inside cells. They found that a social life suited them, as, of course, it also suits us. And again, the kind of cooperation that exists between the microbes in our guts and the rest of our bodies, or between flowering plants and pollinators, is widespread.



Of course, prophets who are set on finding a competitive meaning can, if they like, insist that this is all just a wily pretence. But at this point their myth-making intention surely becomes obvious and must raise questions about their own motives. They are not reporting facts but imposing a particular interpretation on them, an interpretation that needs to be justified at its own level in the context of the rest of thought, not privileged as part of science. In fact their vision is not really science but a species of general thinking that uses scientific imagery to give force to its ideas. In this it is like the mechanistic thinking of the Newtonian age, dominated by the imagery of clockwork. That thinking has, of course, been useful in many ways, but its limited imagery has increasingly made it misleading, particularly in physics.

Besides this needless dramatization, however, biologists are now beginning to complain of something more central to neo-Darwinism. They are saying that the role of natural selection in evolution has itself been much exaggerated. This kind of competition cannot be the sole cause of new developments for a simple logical reason; namely, because no filter can be the sole cause of what flows out of it. Strainers strain out coffee grounds; they do not create coffee. Similarly, it is becoming clear that the complex items we see must have had internal causes as well as the filters that eliminated other forms. Some kind of self-organization – some set of positive tendencies within the substance of living things – is necessary to produce these new forms. Organisms must have been so framed as to shape themselves in one way rather than another. The resulting phenomena are so complex that trial and error alone could never have done this job, even if there had been infinite time to do it in.

Brian Goodwin points this out in considering the case of an ant colony where the ants all move in rhythm and rest harmoniously in concert:

It is clear that natural selection in no way explains the *origin* of the rhythmic activity-pattern in the brood-chamber ... It is an example of self-organization as the origin of a biological form. It is clear that any biological form must arise spontaneously before it can be selected, and one of the jobs of science is to explain how this might occur .... Darwinism and neo-Darwinism propose that new forms arise as a result of random change in genes. This may well be the case, but we are then left asking how the observed patterns and form of organisms are generated from known properties. What makes them possible? Complexity theory addresses the question of origins, providing an explanation by describing a pattern of interactions in a complex system from which the form can arise.

(1988: 40)

Thus, as Ilya Prigogine and Isabelle Stengers explained in *Order Out of Chaos* (1984), new patterns arise spontaneously, both in the inorganic and the organic world. Complex wholes such as an ant colony or a living body act *as wholes*. The structural properties that make this possible could not possibly be inferred from a knowledge of their separate parts. In fact, these ants do not act rhythmically in small numbers, but, when more of them are added, at a certain point they all do it at once.

One way and another, then, it emerges that, in general, the reductive thinking that theorizes about large-scale behaviour from analogy with the behaviour of small parts is not reliable or scientific. And in the case that now concerns us, where this interpretative method is used to expound Darwin's ideas, it is doubly misleading.

On psychological topics it totally distorts his message. It ignores the deeply social analysis that he actually gave of human behaviour, implying that he backed the crude, extreme individualism that is popular today. About the mechanism of evolution, on the other

hand, the divergence from Darwin's views is less extreme but it is still serious. Darwin did indeed think that natural selection was very important and that it was probably the main cause of evolutionary change. But he said firmly that it could not be the only cause. He was sure there were other causes, even though he did not know what they were, and he thought they ought to be investigated. Thus the kind of enthusiasm that leads neo-Darwinists to inflate natural selection into a metaphysical principle pervading the universe was foreign to him and ought not to be sold under his name. Moreover, it distracts attention from what needs to be the next business of evolutionists, which is to understand the workings of self-organization.

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This discussion obviously spreads over a panorama of topics. It has to do this simply because neo-Darwinism already jumbles together a mass of different arguments – metaphysical, biological, psychological and the rest – that need to be sorted out.

I think we owe its prophets a great debt for doing this. These topics really are connected and only the obsessive specialization of our age has made us neglect the relation between them. That relation, however, is a real one. It is entirely different from the connection that neo-Darwinism traces and is actually much more interesting.

When I thought of writing a book about this I saw that it would have to be either impossibly long or very short: just a sketch of the scene. From natural laziness I promptly chose the sketch, but this has made the book rather hard to summarize, since the different topics are connected in multiple ways and don't fall tidily into different sections. In fact, I have been circling around, or rather spiralling in on, what seems to me to be the central matter – which is how we conceive of our own individual nature – and in doing this I have often encountered the same topic repeatedly when it emerged in a

different connection. With that apology, here is a rough summary of the book.

The first two chapters set out the general problem about the meaning of individualism and contrast what Darwin actually wrote on the importance of human sociability with neo-Darwinist separatist doctrines. Darwin emphasized how the development of human intelligence did not displace our species's highly complex range of social feelings but simply showed up conflicts among them and gradually suggested ways of dealing with these conflicts within society, notably morality. He explicitly rejected "selfishness" as an explanation of that morality. By contrast, Dawkins's book *The Selfish Gene*, as well as E. O. Wilson's *Sociobiology* and much other like-minded literature, use a very simple concept of selfishness derived not from Darwin but from a wider background tradition of Hobbesian social atomism, and give it as a general explanation of all behaviour, including that of humans. Chapter 2 discusses how this fits with the recent history of individualism, noting how, during the age of Ronald Reagan and Margaret Thatcher, various egoistic lines of thought converged to drive that doctrine ever further towards extremes. T. H. Huxley's earlier contribution to this pugnacious, egoistic interpretation of the struggle for existence is then noted, and the chapter ends by discussing controversies about group selection, in which the differences between Darwin's views and those of his supposed followers have been particularly striking.

In Chapters 3 and 4 the discussion turns to consider how Darwin's approach provides a useful change from the traditional philosophical debates in which Feeling and Reason have often been treated almost as opponents: separate, alternative faculties between which we are forced to choose. It explains Darwin's more usable model, in which rationality appears not as opposing feeling, but as the technique by which we bring our different kinds of feeling together. We see how helpful this perspective is for various problems and especially in

making possible more realistic and constructive ideas of our relation to other animals. Darwin points out how much friendly order and cooperation – how much, indeed, of what we call humanity – there is already in the lives of other social animals and so undermines the notion that our own “animal nature” is something unmanageable and alien to us. His remark that much of the species difference is a difference “of degree and not of kind” is thus not really objectionably reductive. We note how, interestingly, Nietzsche, although he was a crucial prophet of Individualism, held views quite close to Darwin’s on the evolution of morals.

The last two chapters round up a range of problems raised by the whole discussion so far and draw together the guiding threads that now emerge about them. These problems are, as I have suggested, of three main kinds: metaphysical, biological and psychological.

### *Metaphysical*

First, led by the confident manifestos of the neo-Darwinists, we turn to the vast topic of cosmic meaning. Dawkins, Peter Atkins and others present the claim that the universe is meaningless as something factual, scientific and, more specifically, Darwinian. Their ground for considering the biosphere – or sometimes the whole cosmos – to be meaningless is that it is ruled by natural selection, which they present as simply a form of chance or, as Jacques Monod put it, a lottery. From this they conclude, as Steven Weinberg did at the end of *The First Three Minutes*, that “this is an overwhelmingly hostile universe ... The more the universe seems comprehensible, the more it also seems pointless” (1977: 154).

Darwin, however, made no such claim. Although he abandoned the rather naive Christianity of his childhood, he remained deeply impressed by cosmic order and still saw that order as akin to mind. Questions about the transcendent struck him not as meaningless, but as genuinely mysterious. He did not think we could expect certainty

about them. And, of course, this view fits well with the thought that our faculties have largely been evolved for more modest uses.

But his tentative attitude also fits well with that of many physicists today who are struck by the coincidences that are emerging in the cosmic order: quite specific arrangements, such as those concerning the cosmological constant, for which no reason can be given. These are facts which seem highly improbable, but without which life, or indeed the whole material world, could never have existed. This leads a number of scientists – including some who are quite fiercely secular – to suspect that it may be more rational to conceive the universe as in some sense having a purpose or direction than to rule dogmatically that it must be random. Randomness is not, after all, something that could ever be scientifically established. Taking it for granted it is more a matter of temperament and intellectual fashion than of reasoning.

### *Biological*

Scientists such as Brian Goodwin and Simon Conway Morris, along with philosophers such as Jerry Fodor, have developed this thought by noting that organisms too display active tendencies in their formation that are unmistakably independent of natural selection. Indeed, those tendencies are necessary to supply the raw material on which natural selection works. Mutations alone could not have produced all of it. Self-organization – natural creativity – which appears even at an inorganic level in such things as crystal formation, clearly accounts for many obvious features of organic form and seems likely to have played a part in more subtle ones as well. In the course of evolution, organisms have repeatedly converged towards certain forms for which no obvious mechanical reason emerges, but which seem to be naturally favoured. This suggests that selection from the outside is far less important in evolution than has often been suggested. And of course this selection itself is not actually

very like a lottery, since the element of chance supplied by mutation is subordinate to the intelligible continuity provided by the environment. Lotteries are actually a highly artificial product of civilization, not something found in nature.

Thus, in the organic as well as the inorganic world, matter itself seems to contain tendencies to develop in one way rather than another. No extraneous, engineering God on the seventeenth-century model is needed to make this possible, although the traditional theological idea of an immanent God, pervading and animating the world, is perfectly compatible with it.

Darwin's own view on the matter is quite close to this conception. Although he did think that natural selection was the main cause of change in evolution, he was sure that it could not possibly be the sole cause. He never suggested it was a universal explanatory principle and he hoped that other evolutionary causes might later be investigated. And today's biologists are beginning to oblige him by doing this.

### *Psychological*

In the last chapter, we come back to the crucial topic of human motives. Having seen that egoism cannot really be supported from outside by theories about evolution, we look at the two forms of it – the Hobbesian and the Nietzschean – that are still influential in our lives today and consider their various strengths and weaknesses in their own terms.

Both these ways of thinking have contributed a great deal to our current form of individualism and they each contain some precious, timeless insights. Neither of them, however, gives the universal guidance that people tend to expect from a moral prophet. Each of them was invented to guard against the excesses and abuses of a particular epoch. Hobbes stressed self-interest so as to debunk the exaltation of self-sacrifice that drove people into seventeenth-century wars of

religion. His message, therefore, was: keep the peace and strengthen your society, because you personally want to be safe rather than gloriously dead. Nietzsche, however, arrived after that bourgeois lesson had been thoroughly learnt. He saw the need to reverse it, so he exalted solitude and self-assertion to debunk the complacent humbug of nineteenth-century life.

Both these protests have surely been necessary, both are still valuable. Both are elements in present-day individualism. But, as the conflicts between them show, each of them is only one part, not the whole, of the moral scene. We always have to decide afresh what is most needed in our own time.