

## Chapter 8 - The non-presentation of self in everyday life

*Far overhead from beyond the veil of blue sky which hid them the stars sang again; a pure, cold, difficult music. Then there came a swift flash like fire (but it burnt nobody) either from the sky or from the Lion itself, and every drop of blood tingled in the children's bodies, and the deepest, wildest voice they had ever heard was saying: "Narnia, Narnia, Narnia, awake. Love. Think. Speak. Be walking trees. Be talking beasts. Be divine waters."*

C.S. Lewis<sup>1</sup>

### Selfish evolution?

The title of this chapter is based on a once influential social psychology book by Erving Goffman, *The Presentation of Self in Everyday Life*.<sup>2</sup> In around 250 pages, the author fully covers the ground of his subject, just like it says on the cover, writing (as one reviewer said) not only about

*Vogue models, clergymen and the dead, but also about Shetland crofters, Canadian Army dentists, dukes, beauticians, rajahs and a range of characters.*

But one area is notably absent from Goffman's analysis of the self, and that is the entire non-human world. Given how much emphasis is often placed on the selfishness of the entire process of evolution that brought us into being, that might be seen as a surprising omission. Yet its absence is inevitable and correct, when one remembers that the concept of "self" is an entirely human, even a social human, one. The self, and selfishness, fit neatly into the field of social psychology, but stop making much sense outside it. To speak of other animals as possessing a self is contentious. To speak of plants or bacteria or viruses possessing one is absurd. And to speak of an inanimate *process* like evolution being selfish is simply incoherent.

Let's look for that selfishness in our closest relatives on the evolutionary tree. As experimental psychologists David and Ann Premack write in their study of human intelligence:

*Although a chimpanzee passes the mirror test [touching its own face when viewing itself in a mirror], there is no evidence that it engages in either self- or social approval.*

*The concept of self presupposes causal reasoning, the ability to reason: "Men pay attention to me because I am attractive." As we have seen, this kind of reasoning is not available to the chimpanzee.*<sup>3</sup>

The chimpanzee, then, does not possess a self that could enable it to be selfish. The writers are confirming experimentally only what every thinking person has known for millennia – that there is a vast gulf fixed between us and the animals. If there is only a small difference between our genome

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<sup>1</sup> Lewis, C S, *The Magician's Nephew* (London, Bodley Head, 1955).

<sup>2</sup> Goffman, Erving, *The Presentation of Self in Everyday Life* (Harmondsworth, Pelican, 1971).

<sup>3</sup> Premack, D & A, *Original Intelligence* (New York, McGraw-Hill, 2003) p.215.

and the chimpanzee's (1.6% is the figure the Premacks use) it tells us not that we've been wrong about the gulf, but that coding DNA is not the place to look for an explanation.

If "self" is an inappropriate term when applied even to our nearest relative, how much more so when applied to a natural process of evolution of which its objects – unself-conscious organisms from bacteria to baboons – are completely unaware?

Yet the idea is as old as Darwin – or rather Malthus, whose work gave him the idea – that evolution is an entirely selfish process of struggling to survive, whether one views the selfish agent as the organism, falling over itself and treading on everything else in order to reproduce, or as Richard Dawkins's "selfish genes", cynically puppeteering our bodies and minds to reproduce themselves at our expense.

The reasons it matters, outside of science, are legion. The "struggle for survival" directly justified Eugenic Theory, two World Wars and the Holocaust. It is held up as a natural law in economics and commerce. Accepted comprehensively, it nullifies the very existence of all that is human, by subordinating all human values to varieties of evolutionary self-promotion. And specifically it fundamentally undermines the Christian teaching that Creation is good, leading amongst other things to an evolutionary theology in which creation means very little:

God created autonomous Nature → selfish evolution → selfish species → aboriginal sin

This is expressed by Karl Giberson in a recent book:

*Selfishness, in fact, drives the evolutionary process. Unselfish creatures died, and their unselfish genes perished with them. Selfish creatures, who attended to their own needs for food, power, and sex, flourished and passed on these genes to their offspring. After many generations selfishness was so fully programmed in our genomes that it was a significant part of what we now call human nature.<sup>4</sup>*

But Darwin's "struggle for existence" was never anything more than a colourful metaphor for what, when expressed in more sober and accurate scientific terminology, is simply "differential reproduction." His "competitive warfare" model was very much a product of his English socio-political background, though it has far outlived Victorian social inequalities and colonial empire-building.

It is not, in fact, selfish to attend to one's needs for food or sex. A plant or animal not doing so is not being selfless, but dead. "Power" is rather more dubious a concept biologically – an instinct to fight is not at all the same thing as the human will to power, besides being anything but a universal trait in nature.

But let's give a not untypical example of how the "struggle for life" might play out in a real, adaptive, situation. Imagine a very docile, even community-spirited, small rodent whose life is marked by co-operative food-gathering activities and which mates for life in an uncompetitive way, the sexes being pretty equal in numbers. Unfortunately, their main predator is a small weasel that can get into their

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<sup>4</sup> Giberson, Karl, *Living with Darwin's Dangerous Idea* in Berry, R J, *Christians and Evolution* (Monarch, 2014) p.168-9

burrows. Or into most of them – smaller rodents with smaller burrows are not easily reached by weasels, especially once the latter have got fat by eating the bigger rodents. Accordingly, the smaller rodents, though identical in behaviour to the bigger ones, will nevertheless tend to contribute more to the gene pool, leading over time to the evolution of a smaller variety.

Just who is being selfish here? Is it selfish to be slim? Alternatively, if instead we take a large and colourful bird with an elaborate courtship ritual, the more demonstrative variants of which get the girl, then what is being selected for is creativity, not selfishness. *All* the birds dance their hearts out with the same gusto – some are just born more beautiful.

When I was working in a pest control laboratory, captured wild rabbits were used (sadly for them fatally) in the research. Most of them, when their cage was approached, would tear round and round making shrill cries – except for one, which presumably because of some rare genetic variation would come amicably to the door of his cage and put his paw up to be stroked. The animal keepers refused point blank to allow the researchers to take him away. Friendliness was an absolute selective advantage in that situation over self-defence. There can be no universal principle that is guaranteed to provide evolutionary advantage – especially a pseudo-moral quality like “selfishness” in creatures without selves.

The trigger to Darwin's idea of the struggle for life was, as I have already noted, the work of Thomas Malthus on human populations<sup>5</sup>, in which the same idea, that high rates of reproduction amongst the poor inevitably outstrip resources and so lead to differential survival, was the central thesis. He wrote at a time when the Industrial Revolution was producing unprecedented levels of abject poverty, and it was certainly true (metaphorically) to say that life, for millions, was a life and death struggle.

But was it a *selfish* struggle? There's no doubt that dehumanising conditions often lead to dehumanised behaviour – criminality, wife battering, child abuse and so on. But even in such cases, sheer desperation rather than selfishness might be more to blame: drowning hopelessness in gin-soaked oblivion does nothing to aid survival. And as sympathetic and observant writers like Charles Dickens were at pains to point out, poverty was as likely to lead to acts of self-sacrifice actually aiding survival, or to examples of thrift or enterprise improving the lot both of the subject and of others.

As in Darwinian evolution, survival (and therefore offspring) came by many different means that happened to work to resolve the “struggle”. Selfishness might be involved in some of those means, but by no means inevitably – the co-operative, temperance and trades union movements, born out of those times, were its very antithesis. The fundamental difference from evolution is that humans exercised *choices*, for good or ill, and those choices were based on some kind of moral, or immoral, motivation.

All Darwinian evolution, on the other hand, is entirely divorced from any motivations at all<sup>6</sup>, other than those common to all life (to eat if hungry, for example). One is born with some pattern of

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<sup>5</sup> Malthus T R, *An Essay on the Principle of Population* (1798).

<sup>6</sup> Though it is looking increasingly likely that teleology – that is, intention – is very much a factor in real evolution.

variations, and it may or may not result in ones breeding somewhat better and so contributing more to the gene pool.

That even applies to human evolution. It is well known, for example, that genes for lactose tolerance, once uncommon, have been gradually spreading through the human race since dairy farming was invented. You feed your kids milk, and some get sickness and diarrhoea from it. That usually only matters much if times are hard and there is nothing else for the children to eat, but it affects reproductive success, probably through simple survival to adulthood in those hard times. But anyone who says that *selfishness* has anything to do with it at all is crazy – being able to drink milk does not make you selfish. Nobody was even aware that the evolution of lactose tolerance was going on, for several thousand years.

### Selfish genes?

Since Richard Dawkins reconceptualised adaptive evolution in 1976 with an even worse metaphor than “the struggle to survive” – the “selfish gene” – people who should know better have been taking it literally to mean that evolution itself is selfish. Of course, even if genes had discrete identities (which it's increasingly clear they do not – it is whole networks of DNA segments that cooperate to produce phenotypic effects), and even if those identities were rational and morally selfish, it wouldn't at all follow that they would lead to selfish organisms or people.

What I said about the survival of individuals would still apply to a gene selfishly determined to stick around for eternity: if generosity or friendliness were survival traits, genes would use them as readily as a good set of offensive or defensive weaponry. Even amongst people, hypocrisy can be a successful strategy to gain ascendancy. Or perhaps it would be more accurate to say that a gene for selflessness would fight just as hard to survive as a gene for selfishness – if it were true to say that genes “fight” at all, which they don't. They just survive if they happen to code for advantageous traits, or disappear quietly if they are not.

The “selfish gene” is still a more than bad analogy after all the years since Dawkins' eponymous book. Conor Cunningham, in *Darwin's Pious Idea*<sup>7</sup> comprehensively demolishes the concept intellectually by showing it is philosophically meaningless. Even the existence of genes as such is increasingly questionable, or at least fights shy of a simple definition. Incidentally Cunningham adds the reminder that any theology wedded to a consensus scientific theory is destined soon to be widowed – would that more theistic evolutionists would appreciate that with regard to crude 1930s Neodarwinism and its selfish progeny.

Cunningham brings to light work based on wider biological principles than genetics alone, demonstrating that it is co-operation that is global and essential to life, and selfishness (if even that could be a coherent concept in irrational beings with no sense of self) is always merely local and relative. Space forbids entering into that here, but examples would include the fact that both mitochondria and chloroplasts originated as symbiotic organs between different kingdoms of life, that vertebrate digestion depends on bacteria (which in turn depend on digestion) and so on into the mutual interdependence of entire ecosystems. It is a sobering thought that in the human body, microbial cells, from 500-1,000 species, outnumber human cells by ten to one (according to the *Human Microbiome Project*). We are in our very selves a model of interdependence!

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<sup>7</sup> Cunningham, Conor, *Darwin's Pious Idea* (Cambridge, Eerdmans, 2010) ch.2.

## Selfish altruism?

One issue that has challenged evolution since Darwin is that of “altruism”, of creatures sacrificing their lives for others. It has usually been explained in terms of “kin selection” in various forms, *ie* that giving my life for a relative will help preserve at least some of my genes. In this way all altruistic behaviour can be reduced to disguised selfishness. This cynical view reached its peak in sociobiology, where all human moral values were denied in Michael Ghiselin’s quote:

*Scratch an altruist and watch a hypocrite bleed.*<sup>8</sup>

or if you prefer, in J B S Haldane’s calculation:

*“I will die for two brothers or eight cousins”*<sup>9</sup>

But for all the speculative genetic maths, kin selection and its kindred theories dilute the simplistic idea that each organism is pursuing a struggle for its own survival. If the self-sacrifice we see in animals and experience in ourselves “emerged” from such a struggle, it makes the virtue no more or less real than the practice of a science using a faculty of reason that “emerged” from the same struggle. If evolutionary altruism is illusory, then so is the biology that studies it. And if intellectual enterprise can, as we daily see, be pursued without any reference to reproductive success (by elderly bachelors like Alfred Russel Wallace, for example), then so can virtue be its own reward, and attributing everything to self-interest becomes meaningless.

The very fact that the same “selfish” motivations can produce such different outcomes in nature makes it a misleadingly crude way of seeing the world. Consider the European robin redbreast, icon of English Christmas cards and the subject of much folklore because of its friendliness to humans. Few other birds will perch on ones foot, as happened to me as I relaxed in a pub beer-garden this year.

But a small part of that folklore has to do with their distinct *lack* of friendliness to other robins. Andrea Alciato’s *Emblemata*, published in Paris in 1584, contains the proverb: *Unum arbustum non alit duos erithacos* (You won’t find two robins in one bush). It’s estimated that 10% of adult robin deaths result from territorial disputes. How selfish can you get? Well, I’m not so sure – last year near our stable I found a pair of dead robins, perhaps a foot apart, that had evidently *both* died disputing the ownership of a nearby nest box. Red in tooth and claw it may be, but as a selfish survival strategy it failed miserably. God, or perhaps neutral evolution, seems to have simply given robins a fighting spirit – and it works for them because, high mortality or not, they are pretty common.

Contrast them to another British passerine bird, the long-tailed tit. Selfish nature appears not only to have taught them to live in cheerful flocks which flit from tree to tree, but to have decreed that, if a pair loses their brood to predation (despite possessing one of the most carefully woven nests of all British birds), they will find someone else’s brood and help feed it. Why is that not as illustrative of nature’s ways as “red in tooth and claw” is held to be?

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<sup>8</sup> Ghiselin, Michael T, *The Economy of Nature and the Evolution of Sex*, (Berkeley, CA: University of California Press 1974) p.247.

<sup>9</sup> Quoted in McElreath R and Boyd R, *Mathematical Models of Social Evolution : A Guide for the Perplexed* (University of Chicago 2007) p. 82.

Another case of the selective use of evidence for selfishness is the familiar one of man and the apes. Presumably the immediate context for Karl Giberson's quote at the head of this chapter is the genetic similarity between us and chimpanzees, and the violence that has long been noted in their behaviour. Apart from domestic aggression, much has been made of primatologist Jane Goodall's observations of chimps in the wild organising raiding parties on other troops, and even killing and cannibalising their young.

When we see chimps as beasts in their own right, with natures of their own, rather than as funny little people, this poses no great moral issue. There is even an ongoing controversy amongst anthropologists over whether human incursions on chimp habitats produce, or increase, such aggression – which would be a true case of the Fall affecting nature. But the popular idea is that it casts light on a probably evolutionary origin of human warfare in the common ancestor of chimps and men five to seven million years ago.

But in this, the very different behaviour of bonobos from chimpanzees is somehow neglected. They are commonly known as "chimps' peaceful cousins", their social harmony being attributed to a variety of surprising sexual activities. They are famous for making love, not war.

What is forgotten is that they are not only the chimpanzee's peaceful cousin – they are our own. Genomic studies show that we are just as closely related to bonobos as to chimps, and parts of their genome are far more similar to ours than to chimpanzees'.

The obvious conclusion ought to be that one cannot draw clear evolutionary links between behaviours in different species. We humans might just as easily have inherited our times of peace from the bonobos and invented warfare because of sin, as inheriting war from chimps and learning peace from Ghandi or John Lennon. Or, since bonobos (supposed to have diverged from chimps far later than us) have fundamentally changed their behaviour, we might have evolved, or invented, our behaviours entirely separately from both.

Nevertheless it's not infrequently suggested that we might do better learning (by imitation) from bonobos to be less uptight about sex and less violent (by ape inheritance). That, however, is clearly not the point – not least because human experience shows that as a race we are quite capable of customarily combining sexual promiscuity with violence inventively. Quite simply, evolution did not produce "selfish" violence in our *other* closest relative, so it is quite gratuitous to use evolution to explain human selfishness, still less to build a theology of human sin on it.

### Selfish what, exactly?

Yet part of the artificiality of the whole discussion stems, it seems to me, from focusing too closely on the individual metazoan organism – the animal – as that-which-is-to-be-explained by evolution. The popular paradigm of evolutionary selfishness is the bloodthirsty Tyrannosaur rampaging across the Jurassic landscape to look after Number One, or to slug it out with an equally bloodthirsty Stegosaur. I remember that as my very first encounter with dinosaurs, at the age of five, when I saw Walt Disney's *Fantasia*. Three-toed sloths or daffodils are less often used as examples of bloody strife, though they must have evolved too.

Other units of evolution are possible, though, for as we have seen Neodarwinism, basing evolution on population genetics, represents that selfish individual by its selfish genome. One should, even in

that case, remember that all sexual reproduction begins by sacrificing a whopping 50% of one's personal genetic inheritance to one's mate's every time a sperm and an egg fuse – mutual help is at the heart of sexual reproduction, even regarding evolution. The rutting stag is fighting to best preserve the hinds' genes as well as his own.

Possible units of evolution don't end there, though. Darwin himself faced the problem of colonial insects whose members, many sterile, sacrifice themselves willingly for the good of the colony. In fact, the idea of kin selection probably started here, once it was realised that the shared traits and genes of the colony could be seen as what was being protected, an insight suggested to Darwin by Wallace.

All is not quite as inward-looking as it seems though: bee colonies, for example, need a high genetic diversity to remain healthy, which is achieved by the queen's mating with multiple external males, and by unusually large-scale (twenty times that of humans) recombination of genes. The workers sacrificing themselves, therefore, are often dying to protect the genes of different fathers from outside the colony.

So "fitness" need not be focused on the individual and its offspring even in the lowly insect. And if insect colonies can be the effective units of selection, then why not an entire species, for example, which shares a common gene pool? After all, the United Nations has laboured to pass resolutions on global warming on the basis that it's a threat to humanity at large. Why should that be regarded as any more odd biologically than workers in a hive seeking the common good, or individuals labouring to survive?

But as well as looking outward beyond the individual, we might look inwards, speaking biologically rather than anthropologically. Even within our own bodies, cooperation can be seen at the level of individual cells. What is a metazoan such as a human being, biologically speaking, but a colony of cells with anything up to 37 trillion members? All day, every day, our individual cells die on our behalf: skin and gut cells are shed, immune cells act as suicide bombers against bacterial invaders, and so on, and we take it for granted that they should. We even have "sterile workers" in the form of red blood cells that never reproduce, lacking even a nucleus. Programmed cell death (apoptosis) is a sophisticated physiological process, quite different from the accidental destruction of cells, which is absolutely essential for individual development and survival.

For some reason we don't see that as the same kind of red in tooth and claw struggle and God-questioning suffering we would attribute to an elephant fighting for her calf, a polychaete worm rupturing in egg-laying, or hard-done-by slave ants working for another species. Instead we see it, rightly, as the harmonious operation of a legitimately constituted being.

So maybe the whole question of competition and death in the biological realm isn't usefully regarded in the sole light of "selfish" reproductive success at all, but rather in terms of various hierarchies of cooperative "commonwealth."

Include the genes in that by all means – if you can find them, since they are getting increasingly hard to define in the light of recent discoveries about the complexity of control networks in cells. Certainly there is also a level at which cells work hard to maintain their identity. Then there is the level of the organism. Then there is the level of the colony, where appropriate, or the social

grouping. Then the species. But above that is the level of the ecosystem, which is an environmental construct – and is not the “environment” supposed to be the mediator of natural selection, and therefore the most obvious “fundamental” unit of evolution? And of course, even above that is the biosphere, which is to the ecosystem what a colony is to an individual bee or ant.

Above that, speaking naturalistically, would be Gaia – the self-maintaining system of the earth itself, of which life is just one part. But as Christians, maybe we need at this point to be even more aware of the providence of God – the governor of the household – as the unifying principle, since nobody seriously suggests “selfishness” to be what keeps the earth itself in equilibrium. Indeed, invoking God takes the *oikonomos* up to the level of the whole Universe, and down to the level of the quark, for all the levels I have written about are, in reality, as inextricably interrelated as the systems of an individual cell or organism.

To summarise, then, since evolution, and the living world generally are found on close examination *not* to be steeped in selfishness at all, but overwhelmingly founded on cooperation and interdependence, human sin and selfishness may be seen for what they truly are – an aberration within God's good Creation.