

Keith Sutherland

The Perils of Polymathy

Review of Nicholas Humphrey's 'The Mind Made Flesh'

Most readers will be acquainted with the principal interest of the evolutionary psychologist Nicholas Humphrey via his modestly titled essay 'How to solve the mind–body problem', reprinted in this collection.¹ The article was originally published in *JCS* (Humphrey, 2000), with peer commentary (not included in this reprint). But, in addition to his popular science books, Humphrey has also written scholarly essays on the more technical aspects of evolutionary theory along with journalistic articles on religion, politics, history, folk psychology and the supernatural. The book under review attempts the difficult task of bringing these differing topics and styles together in one volume. It would be folly to attempt to cover such a broad collection comprehensively, so I will attempt to focus on those aspects most relevant to the aims and scope of this journal.

Unlike many of his less philosophically-inclined colleagues, Humphrey is at least prepared to admit that there is a mind–body problem. Many psychologists are impatient with philosophical claims that there is an explanatory gap between brain events and experiential qualia (or 'phantasms' as Humphrey describes them, showing his penchant for seventeenth-century natural philosophy). A typical exponent of this sort of philosophical claim would be Colin McGinn's 'you might as well assert that numbers emerge from biscuits or ethics from rhubarb' (McGinn, 1993, p. 160). The psychologist Bernard Baars can scarcely contain his bile when dismissing this sort of 'impossibility proof' from the perspective of those 'toiling in the trenches' of experimental psychology and neurobiology (Baars, 1994, p. 261). As far as Baars and many of his colleagues are concerned, David Chalmers can take his 'hard problem' and stick it . . .

Humphrey, however, concedes that philosophers have a point, and that previous attempts to bridge the explanatory gap, either by redefining sensations as

Correspondence: Keith Sutherland, Imprint Academic, PO Box 1, Thorverton, Devon EX5 5YX, U.K. Email: keith@imprint.co.uk

[1] **Nicholas Humphrey**, *The Mind Made Flesh: Essays from the Frontiers of Psychology and Evolution*, Oxford: Oxford University Press, 2002, £11.99, ISBN 0-19-280227-5 (pbk.). Page references throughout to this volume. An abridged version of this review is published in the *Times Higher Education Supplement*.

complex behavioural or linguistic events (Dennett) or by redefining the brain in a mentalistic direction (Penrose) are ‘too far removed from most people’s intuitions to be persuasive’ (p. 99). No doubt wishing to endear himself with Anthony Giddens, his Director at the London School of Economics, Humphrey instead proposes a ‘third way’ in which both concepts (sensory phantasms and brain states) are ‘re-adjusted’ until they begin to match up. He does this by making the claim that sensory awareness is an *activity* (rather than a passive sensation) — thus aligning his views with the growing fad for ‘enactive’ and other embodied approaches to cognition (Freeman and Núñez, 1999). Seeing as neuroscience has a better understanding of how the brain controls activity than how ‘phantasms’ are generated from protoplasm, the problem is starting to look less intractable.

But is Humphrey’s Third Way any more successful than Tony Giddens’ shotgun marriage of the market and social justice? Giddens has been attacked from both the Left and the Right, but Humphrey’s ‘How to solve the mind–body problem’ was more cordially received. Carol Rovane described Humphrey’s account as ‘the most promising and fertile I have seen’; Andy Clark claimed it ‘holds out the hope of real progress in an argumentative arena depressingly close to stalemate’; and Natika Newton claimed it ‘has the potential to bridge the explanatory gap’. In another essay in this book ‘The uses of consciousness’ (originally published in 1987), Humphrey chides philosophers for their disregard of human biology (p. 81). Judging from the above plaudits, they are now mending their ways.

Although its criticism of philosophers may now be outdated, ‘The uses of consciousness’ provides a lucid summary of the three main approaches in the field of consciousness studies, and this taxonomy has stood the test of time. Philosophers and phenomenological psychologists take the datum of conscious experience as the starting point and then end up with a seemingly unbridgeable explanatory gap to brain events. Cognitive neuroscientists, by contrast, correlate brain events, behaviour and reported experience but then either ignore or deny the logical difficulty in moving from correlation to a causal model. Francis Crick has championed this latter strategy and likes to contrast it with the third option — evolutionary studies. In a debate with the late S.J. Gould he described the search for an evolutionary explanation of cognitive functions as ‘folly’ — claiming that we would do better to understand the brain structure and embryology first and then look for evolutionary explanations later (Clark, 1994, p. 12). However there have been few conceptual advances using this approach (although undeniable progress on the details) since Crick made the remark nearly a decade ago — ‘despite all this noisy racing of engines, the quest looks as though it’s still stuck on the starting line’ (McCrone, 2002).

While S.J. Gould may not top the reading list at Humphrey’s LSE evolutionary psychology department, nevertheless both writers would have agreed that the most fruitful approach is to study the *natural history of consciousness* and then to construct a plausible story as to how it might have evolved.² Donald Griffin’s

[2] See also Sheets-Johnstone (1998).

discovery of echo-location in bats originates from a study of bats' behaviour in their natural habitat. The discovery of a neurological mechanism for echo-location was a consequence of the natural history approach, rather than the other way round (pp. 76–7).

Given Humphrey's sociobiological assumptions, he argues that we should adopt a similar approach for the study of consciousness. The first task is to discover the *function* of consciousness. Human beings are fundamentally social creatures, so consciousness evolved (according to Humphrey), in order that we could 'understand, predict and manipulate the behaviour of our own species'. Consciousness is a 'socio-biological product' (p. 83).

But not all philosophers are converts to biological and evolutionary thinking, and many would deny that it is the key to solving the mind–body problem. Philosophical objections to Humphrey's claim tend to rely on Flanagan's law:³ 'for any intelligent activity *i*, performed in any cognitive domain *d*, even if *we* do *i* with conscious accompaniments, *i* can in principle be done without these conscious accompaniments' (Flanagan, 1992, p. 5). The very language employed demonstrates the origins of this argument in AI and *computational* functionalism. But the *evolutionary* approach to functionalism, championed by Humphrey, would claim that if we start by discovering how *we* do *i*, we can then go on to generalize beyond the historical case. But this is a controversial claim (Horst, 1999), which — fortunately for the publishers of *JCS* — is unlikely to yield an early resolution.

One of Humphrey's special talents is the imaginative reconstruction of past minds via the medium of the historical record and through modern parallels. Examples in this book include an attempt to understand the miracles and psychology of Jesus via a comparison with Uri Geller (p. 222); a claim that Palaeolithic man was autistic (by comparing cave paintings with the work of the autistic savant Nadia);⁴ and an attempt to understand the minds of mediaeval jurists via the records of animal trials and executions (pp. 235–54). This is all fascinating stuff and Humphrey's reconstructions are often very persuasive. But it's dangerous ground to tread, and not just on account of the usual accusations of 'just so' stories levied at evolutionary psychologists. Given the growth of specialist scholarship, polymaths like Humphrey will always be open to accusations of amateurism. In the original journal symposia following his 'Cave art, autism and evolution' (not reproduced in this collection) he gets a good kicking from an eminent team of anthropologists and archaeologists, and some of the sources on which he relies, such as A.N. Wilson's *Jesus*, would not normally appear in a scholarly study.

But given that these views are all covered in his well-known monographs, why would someone who was not a member of the Nick Humphrey fan club want to buy this book — effectively the second volume of *Humphrey's Greatest Hits* (the first album, *Consciousness Regained*, was released in 1983)? No doubt readers

[3] Not to be confused with Murphy's law.

[4] 'Cave art, autism, and the evolution of the human mind', pp. 132–61. Originally published in the *Cambridge Archaeological Journal*, 8 (1998); reprinted in *JCS*, 6 (6–7), pp. 116–43.

of this review might question the motives behind my judgment,⁵ but is there not a case for reading the essays in their original form, along with the commentaries and responses?

Perhaps the real value of this collection is to show the sheer breadth and variety of the author's interests. A deeply cultured man, Humphrey is just as much at home commenting on Shakespearean sonnets for the BBC or broadsheet newspapers like the *Guardian* as he is writing about the technical distinctions between Hamilton's and Trivers' competing models for the evolutionary psychology of altruism (pp. 52–61). Needless to say, the juxtaposition of such pieces in a section loosely labeled 'Selves' makes for an uneven read, and most people will wish to dip in and out accordingly.

Despite his relaxed style, Humphrey is fundamentally an iconoclast, and reading his essays can be an eye-opening experience. Whilst it's easy in the current zeitgeist to disparage the supernatural in the abstract, nevertheless, for those of us who are products of 2000 years of Christian culture, the equation of the miracles of Jesus Christ with Uri Geller's spoonbending can make for uncomfortable reading. Humphrey is right to echo the alarm of Dostoevsky's character Myshkin on seeing a reproduction of *The Body of the Dead Christ in the Tomb* (p. 229). Whatever one may feel about the supernatural claims of Christianity or any other religion, this essay, like Holbein's brutally naturalistic painting, may be a little too much in-your-face for some readers.

And things get even more uncomfortable as they get nearer to home. How many readers still believe that the humble dock leaf has pharmacological properties that soothe the rash from a nettle sting? Humphrey, of course, puts this to the test, using his daughter Ada as the guinea pig (no doubt in order to bypass his university ethics committee), and discovers that this is nothing more than placebo medicine (p. 256). Apparently the origin of this old wives' tale is the similarity between *docce*, the old English name for the dock leaf, and the Latinate *doctor* (and the fact that they happen, providentially, to grow alongside stinging nettles). But faith in providence is hard to jettison, and I wonder if Humphrey's daughter Ada will ever forgive her father for the deception.

Seductions

The final section of the book, entitled 'Seductions', is devoted to Humphrey's political writing. The tone is mostly polemical as the essays were originally lectures presented at meetings of Amnesty International and an organization called Professions for World Disarmament. The Amnesty lecture, 'What shall we tell the children?' is a gloves-off diatribe against organized religion.

Although the specific target is sectarian brainwashing, the scope is sufficiently broad to include Hassidic Judaism, Marxism, bible-belt Christianity and the 'followers of the Maharishi Yogi' (p. 298).

Now we're getting a little personal. Speaking as a follower of the latter from the tender age of fourteen until the TM movement's penchant for circus tricks

[5] As executive editor of one of the journals that hosted the original articles.

and other publicity stunts forced me back into the closet, I suppose that makes me a victim of sexual abuse — even though fourteen is a few years above the Jesuit ceiling for youthful impressionability. But despite all this adolescent indoctrination, I would like to think that I have retained an open mind — indeed my TM experience was the principal stimulus for the launch of this journal (which is proud to include the self-same Nicholas Humphrey amongst its editorial advisers).

Humphrey's concern for the victims of youthful brainwashing would be easier to comprehend in a previous age. But the world is now such a small place that it has become increasingly difficult for cult members to quarantine their children against outside influences. He rails against the 'extraordinarily mistaken' (p. 311) decision of the US Supreme Court to support the Amish claim to be exempt from sending their children to public schools but acknowledges that many Amish children conscripted at the time of the Vietnam war very often chose not to return to Amish life.⁶ Given ever-increasing globalisation it's hard to imagine how groups like the Amish will be able to survive much longer.

In the final essay in this book 'Follow My Leader' Humphrey poses the rhetorical question:

Isn't much of human culture, including many aspects of civilization, best thought of as part of the extended human phenotype, indirectly constructed by the human genes that it helps preserve — rather as, say, a beaver's dam is indirectly constructed by the beaver's genes? (p. 333).

But if this is true, then surely religion, one of the most widespread manifestations of human culture, is ubiquitous because it is also 'constructed by the human genes that it helps preserve'. There is an extensive literature on the sociology of religion, and it is largely functionalist in tone, even if it is hesitant about the sort of reductive sociobiological functionalism expressed in the above paragraph.

Humphrey answers his own question with a 'Yes, except . . .' and therein lies the rub. To evolutionary psychologists culture may have its origin in the biology of the ape with the oversize brain, but once created it becomes an autonomous sphere — a 'complex dynamical system' that is no longer explicable in terms of biology (p. 333). Culture, to evolutionary theorists like Humphrey and Richard Dawkins,⁷ is the field of memetics, rather than genetics and we need to look to chaos theory and nonlinear mathematics for the scientific tools to help us understand it.

But there is a new school of sociobiology — including writers like Larry Arnhart, David Sloan Wilson and Eliot Sober — that argues that the dualism of (selfish) biology and (altruistic) culture is a betrayal of Darwin's original ideas (Flack and de Waal, 2000). Orthodox neo-Darwinism is epitomised by this quote from Richard Dawkins:

-
- [6] He also, strangely, ignores the Amish coming-of-age custom. *Rumspringa* (running around) is the unsupervised time in many Amish teens' lives that can last for up to several years before they choose a lifetime of faithful obedience or to live in the 'English' world. As some choose to return to the fold and some choose the outside world, obviously the Jesuit rule of the first seven years is not universally true.
- [7] Whilst it would be a mistake to speak of a single Humphrey-Dawkins position — to turn them into some kind of combined Humpty-Dumpty character — nevertheless, the similarity of the anti-religious rhetoric of the two authors (and the frequency of cross-citations) is notable.

Be warned that if you wish, as I do, to build a society in which individuals cooperate generously and unselfishly towards a common good, you can expect little help from biological nature. Let us try to teach generosity and altruism, because we are born selfish (Dawkins, 1976, p. 3).⁸

According to Arnhart, this dualism between our (natural) selfishness and our (cultural) potential for altruism is a reflection of T.H. Huxley's attempt to read Darwin through Hobbesian glasses (Arnhart, 1998). *Pace* Hobbes, 'nature' and 'culture' are analytic rather than natural kinds so, to theorists like Wilson, religion is ubiquitous because it serves a sociobiological function, rather than being the product of memetic propagation (Wilson, 2002).

Humphrey appears to subscribe to Rousseau's view that the state of nature is the domain of the 'bright young lad, full of hope and joy and inquisitiveness' and 'the little maid, fresh to the morning of the world' (p. 301). Then along come the evil cult memes to turn the former into the 'nodding elder buried in the Torah' and the latter the 'washed-up New Age earth mother lost in mists of superstition' (p. 301). But, as Chesterton famously pointed out, in the absence of religion the vacuum will soon be filled by something else. Humphrey would wish that something else to be science and 'free thinking', but in contemporary western society, the God-shaped hole is more likely to be filled by consumerism and a slavish conformism to the memes of popular culture.⁹

Humphrey adheres to the Popperian view of science as a dispassionate process of enquiry:

Science doesn't cajole, it doesn't dictate, it lays out the factual and theoretical arguments as to why something is so — and invites us to assent to them, to see it for ourselves. Hence, by the time someone has understood a scientific explanation, they have in an important sense already chosen it as theirs (p. 315).

If Humphrey were a physicist or even a biologist, then this might be plausible, but he is by training a psychologist. Most assessments of the history of twentieth-century psychology would tend to support the competing view of Thomas Kuhn. In what sense would psychologists sharing the editorial goals of this journal have been free to pursue their interests in a free and unfettered way during the period of the behaviourist hegemony? Even after the so-called 'cognitive revolution' graduate students still rolled their eyes at the ceiling when anyone mentioned the dreaded c-word. The history of psychology, seen through Kuhnian eyes, is more

[8] If generosity and altruism are only learned qualities, then the Humphrey-Dawkins campaign against religion is even more puzzling, given the time that is devoted to teaching these values from pulpits every Sunday morning. No doubt they would claim that words and deeds don't match up, but a similar point could be made about most secular attempts to encourage generosity and altruism.

[9] Indeed there is a plausible dialectical argument that free thinking is best nurtured by an oppressive environment against which children can fight to establish their autonomy. For Hegel, in order to become a free-thinking individual, the (male) citizen had first to resolve the conflict of wills within the family and other social institutions dialectically (Morefield, 2002). Those of us of a certain age who were lucky enough to have been brought up in a less child-centred culture, when there was something to kick against, seem to be more capable of free thought than our over-cossetted offspring. I would hazard a guess that both Humphrey and Dawkins were similarly privileged and that their own freedom of thought is the result of such a dialectic.

akin to a study of the fashion industry than the onwards-and-upwards march of scientific progress.

And that is to make psychological science sound like a harmless ivory-tower pursuit, by contrast with Humphrey's views on the destructive power of religious memes. According to Humphrey there is no principled difference between enforced female circumcision and enforced religious belief, whereas scientific progress is a case where 'those who have been walking in darkness have seen a great light!' (p. 314). Like all other forms of whiggery, scientific progress is viewed here as an unalloyed good. But even leaving aside Nagasaki and BSE, what about the human sciences? Michael Polanyi claimed that the false idea of scientific detachment 'exercises a destructive influence in biology, psychology and sociology and falsifies the whole outlook far beyond the domain of science' (Polanyi, 1958).

Earlier on Humphrey makes a slightly different claim for the status of science: 'Science . . . represents a set of beliefs that any reasonable person would, if given the chance, choose for himself' (p. 313). Given that he had previously noted (p. 295) that 98% of the US population say they believe in God, 70% believe in life after death and 50% believe in psychic powers, clearly Humphrey feels that American citizens have not been given the chance to freely choose. If so then why not? Given that the US is still viewed by political scientists as the best example of a functioning democracy, what is the explanation for the prevalence of religious belief? Are the American people simply not 'reasonable' or are they under the thumb of evil memeticists? Authors like Callum Brown (2000) have been hard-put to explain the ongoing popularity of religion in the US, and Humphrey comes no closer to offering an explanation.

The model of religion attacked by Humphrey and Dawkins is essentially a straw man. Both authors define religion in terms of belief in the supernatural, for example Humphrey:

Religion makes no pretence of engaging its devotees in any process of rational discovery or choice. If we dare ask *why* we should believe something, the answer will be because it has been written in the Book, because this is our tradition, because it was good enough for Moses, because you'll go to heaven that way. . . . Or, as often as not, don't ask. (p. 315)

Few Western Christians would be able to reconcile this simplistic parody with anything from their own experience. In particular the emphasis on belief ignores how religion is actually *practised*, especially in the United Kingdom. Anthony Freeman (2001) has shown that whilst practising Anglicans may well go through the motions of reciting the Creed (often with their fingers crossed behind their backs), in practice the term 'God' is taken to mean 'the sum of all our values and ideals' guiding and inspiring our lives. Although the publication of his views in such a clear and accessible fashion earned the author the sack from his job in the Church of England,¹⁰ many of his former colleagues adhere to similar views, although a little more fuzzy at the edges. Ironically Daniel Dennett, writing in a

[10] Their loss has been our gain — Mr. Freeman is now the managing editor of this journal.

country where religious fundamentalism is far more prominent, is more relaxed in his views on religion.

In the final, and most political, essay of the book, Humphrey outlines a plausible evolutionary psychology-inspired explanation of the segue from democracy to dictatorship via the ‘seduction of the masses’ (p. 335). Humphrey is right to argue that these two political models are very closely related. The explanation that he offers is based on Heinrich and Boyd’s (1998; 2001) work on the evolution of cooperation. In quoting Carl Schmitt’s observation that ‘the Fuhrer’s word was supposed to be law not because it was the will of a particular individual but because it was supposed to embody the will of the German people more authentically than could any representation’ (Arato, 2000), Humphrey, unwittingly or otherwise, is drawing similar conclusions to Max Beloff (1999), Mike Diboll (2000) and others on the parallels between Blairism and fascism. But that’s another story.

References

- Arato, Andrew (2000), ‘Goodbye to dictatorships?’, *Social Research*, **67**, p. 943.
- Arnhart, Larry (1998), *Darwinian Natural Right: The Biological Ethics of Human Nature* (Albany, NY: SUNY Press).
- Baars, Bernard J. (1994), ‘Roger Penrose and the quest for the quantum soul’, *Journal of Consciousness Studies*, **1** (2), pp. 261–3.
- Beloff, Max (1999), ‘Third Way or Third Reich’, *The Times*, February 1999.
- Brown, Callum (2000), *The Death of Christian Britain* (London: Routledge).
- Clark, Jane (1994), ‘Interview with Francis Crick’, *Journal of Consciousness Studies*, **1** (1), pp. 10–17.
- Dawkins, Richard (1976), *The Selfish Gene* (Oxford: Oxford University Press).
- Diboll, Michael (2000), ‘Democracy direct’, in *The Rape of the Constitution?*, ed. Keith Sutherland (Thorverton: Imprint Academic).
- Flack, Jessica C. and de Waal, Frans B.M. (2000), ‘“Any animal whatever”: Darwinian building blocks of morality in monkeys and apes’, *Journal of Consciousness Studies*, **7** (1–2), pp. 1–29.
- Flanagan, Owen (1992), *Consciousness Reconsidered* (Cambridge, MA: The MIT Press).
- Freeman, Anthony (2001), *God in Us: A Case for Christian Humanism* (Thorverton: Imprint Academic).
- Freeman, Walter J. and Núñez, Rafael (1999), ‘Restoring to cognition the forgotten primacy of action, intention and emotion’, *Journal of Consciousness Studies*, **6** (11–12), pp. ix–xix.
- Heinrich, Joseph and Boyd, Robert (1998), ‘The evolution of conformist transmission and the emergence of between-group differences’, *Evolution and Human Behavior*, **19**, pp. 215–41.
- Heinrich, Joseph and Boyd, Robert (2001), ‘Why people punish defectors’, *Journal of Theoretical Biology*, **208**, p. 79.
- Horst, Steven (1999), ‘Evolutionary explanation and the hard problem of consciousness’, *Journal of Consciousness Studies*, **6** (1), pp. 39–48.
- Humphrey, Nicholas (1983), *Consciousness Regained* (Oxford: Oxford University Press).
- Humphrey, Nicholas (2000), ‘How to solve the mind–body problem’, *Journal of Consciousness Studies*, **7** (4), pp. 5–20.
- McCrone, John (2002), ‘The thinking machine’, *The Guardian*, July 13.
- McGinn, Colin (1993), ‘Consciousness and cosmology: hyperdualism ventilated’, in *Consciousness*, ed. M. Davies and G.W. Humphreys (Oxford: Blackwell).
- Morefield, Jeannie (2002), ‘Hegelian organicism, British New Liberalism and the return of the family state’, *History of Political Thought*, **XXIII** (1), pp. 141–70.
- Polanyi, Michael (1958), *Personal Knowledge* (Introduction), cited in Ivo Mosley, *Dumbing Down: Politics, Culture and the Mass Media* (Thorverton: Imprint Academic, 2000).
- Sheets-Johnstone, Maxine (1998), ‘Consciousness: A natural history’, *Journal of Consciousness Studies*, **5** (3), pp. 260–94.
- Wilson, David Sloan (2002), *Darwin’s Cathedral: Evolution, Religion, and the Nature of Society* (Chicago: University of Chicago Press).