

## Comment on Damasio, Eliot & Hauser

A distinctive feature of recent popular science writing is the parade of books by distinguished scientists – from Roger Penrose to Francis Crick and Gerald Edelman – which attempt solutions to the traditional problems of mind and consciousness. *The Feeling of What Happens* by neuroscientist Antonio Damasio lies squarely in this tradition, as did his earlier *Descartes' Error*. These books, like those of Penrose, Crick and others, attempt a difficult double task: to explain scientific results to the general reader and to use these results to illuminate the deepest mysteries of the human mind. Their declared aim is not to debunk the traditional philosophical debates and problems, but to solve them by the employment of rigorous science. There are two dangers implicit in this kind of project. One is that in trying to synthesise very different areas of knowledge, a thinker can easily run the risk of neglecting the subtleties of the area in which they are not an expert. The other is that the significance of particular scientific discoveries is often difficult to summarise for the non-specialist, and the effect can be that the results of these self-proclaimed revolutionary syntheses can seem almost bathetic. The claim made with something of a flourish at the end of *Consciousness* by Edelman and Giulio Tononi that ‘consciousness arises from certain arrangements in the material order of the brain’ is something which would have been endorsed by Thomas Hobbes, and is virtually a commonplace in 20<sup>th</sup> century Anglophone philosophy. Of course, the interest is all in the details of *how* the brain produces conscious awareness. But these details are often technical, and resist simple summary. No scientist should have to expect that their work must be intelligible to a non-specialist, though many seem to think it ought to be. One is reminded of Stephen Hawking’s bizarre conjecture at the end of *A Brief History of*

*Time* that when physicists eventually find an equation which unifies the fundamental physical forces, then it should 'be understandable in broad principle by everyone, not just a few scientists'. But why? Certainly, many educated people know that Einstein's famous equation is  $e=mc^2$ ; but how many even know what the 'c' stands for?

The problem for much popular science is how to steer a course between stating the obvious ('consciousness is produced by the brain') and describing things whose proper understanding requires some specialist knowledge ( $e=mc^2$ ). Lise Eliot's *Early Intelligence* manages to steer through the horns of this dilemma, presenting lucidly what is known about how the brain develops in early life (though the reader has to tolerate on the way some mawkish descriptions of the experience of child-care). But the price of clarity is a certain dullness, at least for the reader looking for answers to the traditional 'nature versus nurture' question. The bland (and obviously correct) answer suggested by Eliot's book is that both inheritance and environment play a role in shaping a person's mind. Once again, the interest is in the complex, messy details, which cannot be captured in any general slogan.

Perhaps we would not need to be reminded of these obvious truths about scientific research, were it not for a widespread assumption that the traditional philosophical problem of consciousness has only become tractable since science got its hands on it. But this is an illusion. Damasio tells us that 'science can now successfully distinguish among several components of the human mind' and offers the distinction between *consciousness* and *conscience* as an example. But we did not need science to tell us this; all we needed was a dictionary. Similarly, in his readable account of the latest research on animal minds, *Wild Minds*, Marc Hauser dismisses the questions, 'do animals think?' and 'are animals conscious?' as unhelpful because they are 'vague', preferring to replace them with more 'precisely specified' questions,

such as whether an animal can ‘understand its own beliefs’. But how could an animal understand its own beliefs if it were not a thinker, since understanding and believing are surely kinds of thinking? The first question is no vaguer than its ‘precise’ replacement. There can be an illusion of rigour in these discussions, a spurious sense that now that scientists are involved, the traditional concerns of the philosopher and the non-scientific reflective thinker can be sorted out.

Despite its many merits – most of which lie in his brilliantly lucid descriptions of his own neuropsychological research – Damasio’s latest book perpetuates this illusion. Central to his account of consciousness is a distinction between what he calls ‘core consciousness’ which provides an organism with a sense of self about the ‘here and now’, and ‘extended consciousness’ which gives the organism an ‘elaborate’ sense of self. The distinction is suggestive, but it raises more questions than it answers. Philosophers have for a long time operated with a distinction between consciousness and self-consciousness: to be conscious is for the world to be present to one’s mind, while to be self-conscious is to be aware of oneself. There may be a reason to reject this distinction; but Damasio does not give us one. Rather, in assuming that core consciousness involves a ‘sense of self’ he builds the rejection of the traditional distinction into his starting point. The point is not that he is wrong to do this; it is rather that he shows no awareness that he is doing it at all.

Like any subject of scientific explanation, discussions of consciousness need to start with a clear conception of the phenomena to be explained. But in the case of consciousness, there is an especially acute danger of being captivated by an image or picture of the inner life, which can lead at best to dead-ends and at worst to confusion. Damasio describes one problem of consciousness as that of how we get a ‘movie-in-the-brain’, but although he notes the limitations of this metaphor, he does not mention

its most obvious limitation: being conscious of the world is *nothing like* watching a movie. When we watch a movie, we are aware of something happening in a represented space, and we are aware of the boundaries of that space. Ordinary states of consciousness, by contrast, do not involve awareness of a represented space, or of representations at all; we feel ourselves to be immersed in the world which we perceive. Descartes, often portrayed in these discussions (as he is by Damasio) as the source of many misconceptions about the mind, described things so much more convincingly: 'I not lodged in my body, like a pilot in his ship, but I am joined to it very closely and indeed so compounded and intermingled with my body, that I form, as it were, a single whole with it.' Trying to combine this important insight with the metaphor of the movie in the brain leads nowhere. Whatever Descartes's error was, it did not lie in his description of the phenomena of consciousness; scientists of consciousness may still have much to learn from the antiquated philosophers.

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