Chapter 9
The Digital Soul
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ABSTRACT

Contemporary understandings of the mind are seemingly free from the need for a soul of the kind imagined by Descartes. While for Descartes the soul represented a part of the self that could not be accounted for in a materialist, mechanistic explanation, today the soul has been replaced by the mind, which in the era of the computer is widely understood to be produced by information processing. However, while computationalist models seek to provide a purely materialist explanation for the mind, this is compromised by their reliance on a historically specific belief in the immateriality of information. Computationalist accounts of the mind cast information as an immaterial, universal substance that performs the same function as the soul and leads back into many of the problems inherent in the Cartesian account. These problems are illustrated by some of the more extreme speculation regarding the future relationship between brain and computer.

INTRODUCTION

At certain historical moments, particular areas of scientific inquiry have a special hold on the imagination. Breakthroughs in understanding energize both those conducting research and the wider public, suggesting that technologies that were once the stuff of science fiction might soon be with us. In the mid-twentieth century, the splitting of the atom and the launching of satellites and astronauts into space fired the imagination and fuelled fantasies of the future. From the end of the twentieth century to the beginning of the twenty-first, the mapping of the human genome and the leveraging of new scanning technologies to investigate the workings of the human brain have held a similar position, and have been similarly prominent in science fiction narratives and
predictions for the future. While atomic energy, space exploration, and even genetic engineering have already lost much of their glamor by failing to live up to the over-enthusiastic speculation surrounding their initial presentation to the public, today the brain is still considered an exciting new frontier for scientific inquiry and technological development, which has the potential to change our relationship with technology and even change the nature of the human self. Most of the speculation regarding such future transformations relies on a mechanistic understanding of the brain which is in turn based on computation, another influential area of science and technology whose influence has been growing from the mid-twentieth century into the present, shaping our thinking about a variety of phenomena. A mechanistic account of the brain’s workings inspired by the computer has come to replace Cartesian accounts of the self which relied on a soul, but arguably has done little to make the role played by the soul redundant.

**From Soul to Computer**

“The soul is... an empty word,” stated Julien Offray de la Mettrie in 1748, “of which no one has any idea, and which an enlightened man should use only to signify the part in us that thinks” (La Mettrie, 1927, pp. 48-49). At the time this was a controversial, even blasphemous, idea, and *L’homme machine*, the book within which La Mettrie presented it, was publicly burned. Nevertheless, La Mettrie’s suggestion that an acceptance of Cartesian dualism made such a conclusion ultimately inescapable might seem to have been vindicated by history. While René Descartes did maintain a belief in the existence of a soul, in his account physical bodily processes could be accounted for entirely in material terms; according to La Mettrie, once this partially material explanation was accepted, it was only a matter of time before all of human life was rendered in material terms, leaving the soul redundant. For La Mettrie, Descartes’ theory of body and soul contains within it the seed of pure materialism, and constitutes “a trick of skill, a ruse of style, to make theologians swallow a poison, hidden in the shade of an analogy which strikes everybody else and which they alone fail to notice” (La Mettrie, 1927, pp. 63-64).

Certainly, today, it is widely believed that all aspects of human life and experience can be explained without recourse to a soul. But for Descartes there was a remainder which could not be covered by a materialist account; while the physical activity of the body could be explained in mechanical terms — after all, “[w]e see clocks, artificial fountains, mills, and similar machines which, though made entirely by man, lack not the power to move, of themselves, in various ways” (Descartes, 1972, pp. 2–4) — other aspects of human life defied mechanical analogies or illustrations. Some human capacities, such as the use of language, were dependent upon reason, and no clock, fountain or mill demonstrated the mechanical production of thought. For we can certainly conceive of a machine so constructed that it utters words, and even utters words which correspond to bodily actions causing a change in its organs (e.g. if you touch it in one spot it asks what you want of it, if you touch it in another it cries out that you are hurting it, and so on). But it is not conceivable that such a machine should produce different arrangements of words so as to give an appropriately meaningful answer to whatever is said in its presence, as the dullest of men can do. Secondly, even though such machines might do some things as well as we do them, or perhaps even better, they would inevitably fail in others, which would reveal that they were acting not through understanding but only from the disposition of their organs. For whereas reason is a universal instrument which can be used in all kinds of situations, these organs need some particular disposition for each particular action;