

Neuroethics

Neuroscience has dramatically increased understanding of how mental states and processes are realized by the brain, thereby opening doors for treating the multitude of ways in which minds become dysfunctional. This book explores questions such as: When is it permissible to alter a person's memories, influence personality traits or read minds? What can neuroscience tell us about free will, self-control, self-deception and the foundations of morality?

The view of neuroethics offered here argues that many of our new powers are continuous with much older abilities to alter minds. They have, however, expanded to include almost all our social, political and ethical decisions. Written primarily for graduate students, this book will appeal to anyone with an interest in the more philosophical and ethical aspects of the neurosciences.

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Preface

In the late 1960s, a new field of philosophical and moral enquiry came into existence. *Bioethics*, as it soon came to be called, quickly mushroomed: it developed its own journals, its own professional associations, its own conferences, degree programs and experts. It developed very rapidly for many reasons, but no doubt the main impetus was that it was needed. The problems and puzzles that bioethics treats were, and are, urgent. Bioethics developed at a time when medical technology, a kind of technology in which we are all – quite literally – vitally interested, was undergoing significant growth and developing unprecedented powers; powers that urgently needed to be regulated. The growth in life-saving ability, the development of means of artificial reproduction, the rapid accumulation of specialist knowledge, required new approaches, concentrated attention, new focuses and sustained development; in short, a new discipline. Bioethics was born out of new technical possibilities – new reproductive technologies, new abilities to intervene in the genetic substrate of traits, new means of extending life – and the pressing need to understand, to control and to channel these possibilities.

Predicting the future is a dangerous business. Nevertheless, it seems safe to predict that the relatively new field dubbed *neuroethics* will undergo a similarly explosive growth. Neuroethics seems a safe bet, for three reasons: first because the sciences of the mind are experiencing a growth spurt that is even more spectacular than the growth seen in medicine over the decades preceding the birth of bioethics. Second, because these sciences deal with issues which are every bit as personally gripping as the life sciences: our minds are, in some quite direct sense, *us*, so that understanding our mind, and

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increasing its power, gives us an unprecedented degree of control over ourselves. Third because, as Zeman (2003) points out, the neurosciences straddle a major fault line in our self-conception: they promise to link *mind* to *brain*, the private and subjective world of experience, feeling and thought with the public and objective world of hard physical data. Neuroscience (and the related sciences of the mind) does not simply hold out the promise, one day soon, of forestalling dementia or enhancing our cognition, and thereby raise urgent questions concerning our identities and the self; beyond this it offers us a window into what it means to be human. Our continuing existence as conscious beings depends upon our minds, and the medical technologies that can sustain or improve our minds are therefore vital to us, but we are also gripped by the deep philosophical questions raised by the possibility of finally coordinating dimensions of experience that so often seem incommensurable.

For these reasons, I suggest it is a safe bet that neuroethics will take off as a field; that it will take its place alongside bioethics as a semi-independent discipline, sheltering philosophers and scientists, legal scholars and policy analysts, and spawning specialists of its own. Hence, too, the need for this book. This book is not the very first to reflect upon the ethical issues raised by the neurosciences and by the technologies for intervening in the mind they offer us, though it is among the first.¹ It is, however, the first to offer a comprehensive framework for thinking about neuroethical issues; a vision of the relationship between mind and the world which (I claim) will enable us better to appreciate the extent to which the sciences of the mind present us with unique and unprecedented challenges. It is also the first to attempt to understand the ways in which the neurosciences alter or refine our conception of ourselves as moral agents. Since the neurosciences seem to penetrate deeply into the self, by offering us the chance of understanding the mind, subjectivity and consciousness, and because they require that we seek to understand the relationship between the subjective and the

objective, a philosophical approach to neuroethics is necessary. I do not claim that it is the *only* approach that is necessary: obviously neuroscientists must contribute to neuroethics, but so must specialists in other fields. Neuroethics is, by its very nature, interdisciplinary. But the kind of approach that only philosophy can provide is indispensable, and, I believe, fascinating. Moreover, I shall claim, the broader philosophical perspective offered here will help illuminate the ethical issues, more narrowly construed. Only when we understand, philosophically, what the mind is and how it can be altered can we begin properly to engage in the *ethics* of neuroethics. Indeed, I shall claim that understanding the mind properly plays a significant role in motivating an important alteration in the way ethics is understood, and in what we come to see as the bearers of moral values. What might be called an *externalist ethics* gradually emerges from the pages that follow, an ethics in which the boundaries between agents, and between agents and their context, is taken to be much less significant than is traditionally thought.

Despite this insistence on the necessity for philosophy, I shall not assume any philosophical background. Since I believe that philosophical reflection will illuminate the ethical issues, and that these ethical issues are the concern of all reflective people, I shall attempt to provide necessary background, and to explain terminology and debates, as it becomes relevant. I do not aim here to produce a work of popular philosophy, which too often means philosophy over-simplified. Instead, I aim to produce genuine philosophy that is also accessible to non-philosophers. Since I am constructing a case for a novel view of neuroethics, I expect that professional philosophers will find a great deal of interest in what follows.

In this brief preface, I have added, in a small way, to the hype surrounding neuroscience and neuroethics. I have claimed that the sciences of the mind have the potential to help us understand the nature of the self, and of humanity, our very identity. These claims are, I believe, true. Yet this book defends a somewhat deflationary

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thesis, so far as the ethics of neuroethics is concerned. I shall argue for what I call the *parity thesis*: our new ways of altering the mind are not, for all that, entirely unprecedented, and ought not to be regarded, as a class, as qualitatively different in kind from the old. They are, instead, on a par with older and more familiar ways of altering the mind. New technologies are often treated with suspicion simply because they are new; sometimes they are celebrated for precisely the same reason. Neuroscientific technologies ought not be celebrated or reviled for being new: in fact, they – typically – raise much the same kinds of puzzles and problems as older, sometimes far older, technologies. That is *not* to say that they do not present us with genuine ethical dilemmas and with serious challenges; they do. But, for the most part, these dilemmas and challenges are new versions of old problems.

If the new sciences of the mind often pose serious challenges, they also present us with opportunities: since the challenges they pose are often new versions of old challenges, they present us with the opportunity to revisit these challenges, and the older technologies that provoke them, with fresh eyes. Sometimes we accept older practices simply because they are well established, or because we have ceased to see their problems; reflecting on the new neurosciences gives us the opportunity to reassess older ways of altering minds. I hasten to add, too, that the parity thesis defended here concerns the new technologies of the mind as a *class*. Some particular applications of these technologies do raise new, and genuinely unprecedented, challenges for us. We must assess each on its own merits, for the powers and perils it actually possesses and promises.

I will defend the parity thesis, in large part, by way of reflection on what it means to be human. Thus while the thesis is deflationary in one sense – deflating the pretensions of the technologies of the mind to offer entirely novel and unprecedented possibilities for altering human beings – it is also exciting in another: it offers us a perspective upon ourselves, as individuals and as a species that is,

if not entirely novel (for as I shall show the thesis, or something rather like it, has its philosophical defenders) at least little appreciated or understood. We are, I shall claim, animals of a peculiar sort: we are self-creating and self-modifying animals. We alter our own minds, and use technological means to do so. This is not something new about *us*, here and now in the “postmodern” West (for all that so much about *us*, here and now, *is* genuinely new). That is the kind of animal we human beings are. We are distinctive inasmuch as we have public and distributed minds: minds that spread beyond the limits of individuals, but which include and are built out of other minds and the scaffolding of culture. The sciences of the mind offer us new opportunities for altering our minds and increasing their powers, but in doing so they offer us new means of doing what we have always done; the kind of thing that makes us the beings that we are.

End note

1. The honor of publishing the very first *philosophical* monograph on neuroethics falls to Walter Glannon (Glannon 2006). The first monograph on neuroethics, appropriately enough, was written by the distinguished neuroscientist Michael Gazzaniga (Gazzaniga 2005). Several important collections of papers have also been published; see, in particular Illes (2006) and Garland (2004).

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The ideas here have developed over many years; earlier versions of some of them have previously been published. Chapter 6 contains ideas that previously appeared in "Addiction, autonomy and ego-depletion," *Bioethics*, **20** (2006): 16–20 and "Autonomy and addiction," *Canadian Journal of Philosophy*, **36** (2006): 427–47. Chapter 7 builds on "Libet's impossible demand," *Journal of Consciousness Studies*, **12** (2005): 67–76. Chapter 8 is a modified version of "Self-deception without thought experiments," to appear in J. Fernandez and T. Bayne, eds., *Delusions, Self-Deception and Affective Influences on Belief-formation*, New York: Psychology Press, and Chapter 9 builds on "The wisdom of the Pack," *Philosophical Explorations*, **9** (2006): 99–103 and "Cognitive Scientific Challenges to Morality" *Philosophical Psychology*, forthcoming. I thank the editors of all these journals and books for permission to reprint relevant sections.