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Neuroscience v. Privacy?
A Democratic Perspective

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in

I Know What You Are Thinking:

Brain Imaging and Mental Privacy

Eds. Sarah J. L. Edwards, Sarah Richmond and Geraint Rees
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Recent developments in neuroscience create new opportunities for understanding the human brain. The power to do good, however, is also the power to harm, so scientific advances inevitably foster as many dystopian fears as utopian hopes. For instance, neuroscience lends itself to the fear that people will be forced to reveal thoughts and feelings which they would not have chosen to reveal, and of which they may be unaware.[1] It also lends itself to the worry that people will be encouraged to submit to medication or surgery which, even if otherwise beneficial, alters their brain in ways that undermine their identity and agency. As Kenneth Foster notes, neural implants can have surprising and unintended adverse effects, even when they help to mitigate the loss of bodily control associated with Parkinson's disease, or help to provide hearing for children who would otherwise be profoundly deaf. While the risk of adverse outcomes are scarcely specific to neuroscience, he thinks that 'These issues are perhaps more acute' with the latter than with other medical interventions, 'because they are intimately and fundamentally related to a person's communication with the outside world'. [2006 196]

[1] As Neil Levy says, 'There has been a great deal of interest in the possibility of brain reading as a lie detection technology. The problems with existing lie detectors are well known: they produce high rates both of false positives and of false negatives, and they can be "beaten" by people who deliberately heighten their responses to control questions, which are used to establish a baseline for comparison'. However, as Levy explains, while the hope is that 'lie detection technology can hone in on the neural correlates of lies', it is implausible that 'for every *type* of thought there is a *distinct* neural correlate', so the interpretive problems bedeviling lie-detection are unlikely to go away. Neil Levy 2007 ch. 4 on 'Reading minds/controlling minds', especially pp 132-3 and 144.

Neuroscience, like genomic science, then, is likely to create new ways of harming people. Many of these will involve violations of privacy.[2] However, these are unlikely fundamentally to challenge the reasons to value privacy, or our ability to protect it in the foreseeable future. Rather, I would suggest, the major threat to privacy comes from the difficulty of determining its nature and value and when, if ever, efforts to protect it are justified. So I will start by examining some threats to privacy, and their implications for neuroscience, before turning to philosophical problems in understanding the nature and value of privacy, and the practical consequences of those philosophical difficulties.

Neuroscience holds out the prospect that we can find out what other people think, without their permission and, possibly, without their knowledge. But as Thomas Nagel makes clear, we do not need new technology for that. Nagel is troubled by the way in which recent scholarly autobiographies of Russell, Wittgenstein and HLA Hart implicate us, as readers, in intrusions into matters that most of us would consider, and would wish to keep, private. [Nagel 2002 and 2005] He is particularly disturbed by the way that these autobiographies carefully scrutinise

[2] Ronald M. Green, 2006 'From genome to brainome: charting the lessons learned', provides a helpful comparison of the ethical issues raised by genomics and neuroscience. Specifically, he suggests that the privacy issues raised by genomics are greater and more troubling than those raised by neuroethics, although in both fields, ' research and clinical activities… must start from the premise that information gathered, if wrongly used, can be as toxic as a dangerous drug', p. 106 and 108-9

some of the most excrutiating, piteous and demeaning features of their subjects' lives, thereby opening them to the salacious, obtuse and moralistic scrutiny of people who were not, and would not have been, trusted with such intimacies when Russell, Wittgenstein and Hart were alive. Thus, he refers to

> 'the indecency of being exposed to the depths of Russell's misery and the expression of his sexual passions' and asks 'Why does a great philosopher, or a great artist, or a great scientist, forfeit his privacy forever, so that we all get to read his love letters and sneer at his weaknesses? What such people create is always something far finer than they are. It is extracted from a flawed and messy self so that it can float free, detached from the imperfect life that produced it'. [2002, 63, but see Mendus 2008]

Or consider recent controversy surrounding torture, and its use by liberal democracies. [Lukes 2006 and 2007; Levey 2007; Scarry, 1981 ch. 1; Sussman, 2005] Torture violates its victims' privacy in at least two ways. The first is that it forces its victims to expose their reactions to great pain, fear, desperation and hope, although forcing people to expose themselves in this way – and, particularly, to hostile and unsympathetic observers – is generally considered cruel, contemptuous and demeaning. This helps to explain why the horror of torture – including its invasions of privacy - can be intensified, not alleviated, by the realisation that one has no information to reveal. As Jacobo Timerman explained,

> 'It sounds absurd to read that my torturers wanted to know the details of an interview they believed Menachem Begin had held in 1976 in Buenos Aires with the Montoneros guerrillas. It's less absurd when you're being tortured to extract an answer to that question. To anyone at all familiar with Begin, such an interview sounds unreal. But it seems quite coherent to someone who believes in the existence of an international Jewish conspiracy prepared to utilize any method to seize world power…For many years, Argentine Nazi ideologues had claimed the existence of a Jewish scheme for seizing Patagonia, the southern zone of the country, and creating the Republic of Andinia'. [Timerrman 1981, 72-3].

However, torture can violate victims' privacy in a second way: by forcing victims to divulge information about their friends and associates, their beliefs, ideals and fears, and about their knowledge and opinions of events or personalities. It is this aspect of torture which has generated the most controversy in recent years.

The possibility that the information produced by torture might be used to prevent great evils, such as the indiscriminate bombing of civilians, has led some people, such as the philosopher, Steven Lukes, to wonder whether there might be a liberal-democratic justification for torture. [Lukes 2006, 12] It has led others to insist that torture is an inherently unreliable way of eliciting useful information and that therefore the seeming conflict between ethics and politics, motivating Lukes' arguments, is more apparent than real. [David Simpson 2010] Reviewing Joshua Phillips' new book, *None of Us Were Like This Before*: *American Soldiers and Torture*, Simpson contrasts the apparent influence of American movies and TV shows like *24* with

> ' one fascinating story I had not previously come across: that of Hans-Joachim Scharff, one of the most successful interrogators of World War Two. The Hollywood Nazi comes dressed in a leather coat and wielding a pistol, pliers, bright lights and burning cigarette ends: he has ways of making you talk. Scharff apparently never used violence. His methods involved 'a combination of language proficiency; relaxed, casual conversation over the course of several weeks if time permitted; and above all other things, empathy'. Did we know about his methods? Yes, we did. After the war Scharff was invited by the US Air Force to lecture about his experiences, and what he taught them should have found its way into the manuals. A number of other interrogation experts agree that non-violent procedures are by far the most effective way of obtaining information. But no one has made a movie about them'. [Simpson 2010, 27-28]

Our two examples– of biography, and of torture and the interrogation of prisoners – remind us that the reason why people's thoughts and feelings are not as accessible to us as we might like is due as much to the obstacles created by law and custom, as to any intrinsic difficulty in discovering such things. For example, if laws did not forbid employers from quizzing female employees about their sex lives, marital status and reproductive plans, employers would be able to learn facts about their employees that they might have been unable to discover simply by looking at them, or by investigating their work experience, interests and abilities. So while it is possible that neuroscience will enable us to reveal things that we would otherwise be unable to learn, we currently have plenty of ways to find out what other people are thinking, and of manipulating or altering their dispositions, beliefs and plans. However, we do not always act upon on these, even when we could, because we conclude that doing so would be immoral, and in some cases morality makes the possible inconceivable.

Most of the time we do not weigh up the pros and cons of rape, theft and murder as a way of achieving our ends, because we have internalised norms which rule these out as means of getting our way. Our best protections of privacy, then, are likely to depend on people sharing the conviction that invasions of privacy are wrong and ought to be prevented and, if necessary, punished by law and custom. However, the nature and value of privacy are deeply controversial. Indeed, the difficulty of defining a right to privacy is sometimes thought to be a stumbling

block to the statutory recognition and protection of privacy in the United Kingdom. [3] So if neuroscience threatens privacy, this is as likely to reflect uncertainty about the value of privacy, as dangers inherent in new sciences and technology.

Conceptual Disagreement About Privacy

Although the philosophical and legal literature on privacy tends to dwell on the difficulty of defining a right to privacy, it is unlikely that privacy is intrinsically more difficult to define than any other complex right or value. The main reasons why it is hard to define privacy – the absence of a set of necessary and sufficient conditions which would enable us to agree on what counts as a case of privacy [Allen, 1988, Decew, 1997] - suggest that the fuzziness of allied concepts, such as liberty and equality, are themselves reasons why the boundaries of privacy are so hard to fix for philosophical and legal purposes.[4]

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[3] See, for example, this oft-quoted line from the Younger Report on privacy: 'One of the obstacles to the development of a satisfactory law of privacy has been the difficulty of definition'. [Younger 1972, Para 37, p. 10]. The report notes that some people giving evidence before the Committee favoured the legal recognition of a general right to privacy, [para 34, pp. 9 – 10]. However, 'this has not been the way in which English law in recent centuries has sought to protect the main democratic rights of citizens. Neither the right of free speech nor the right of assembly is embodied in statute law. Reliance has been placed on the principle that what is not prohibited is permitted and the main emphasis in the field of civil rights has been placed therefore on keeping within acceptable limits, and providing precise definitions of, the restrictions imposed by the civil and criminal law on the individual's freed of action'. The incorporation into British Law of the European Convention on Human Rights and Fundamental Freedoms by the Human Rights Act of 1998 has changed this legal situation somewhat, although in practice incorporation had been going on for a while.

[4]This explains the difficulty with Judith Thomson's critique of privacy in 'The Right to Privacy' [Thomson, 1984]. I agree with Thomson that it can be useful to disaggregate privacy into its component parts, however, I am not sure that these parts are best described as claims to liberty, private property and 'rights over the person', let alone that rights to this trilogy are any easier to define, or more basic normatively, than the right to privacy itself. For similar worries with Thomson's arguments, see Thomas Scanlon, 1975

For example, we lack a sufficiently clear concept of liberty to decide whether your claim to prevent me from reading your diary is really a claim to ownership or liberty *rather than* to privacy. Likewise, disagreement about what it means to treat people as equals makes it difficult to decide what does – or should – count as a claim to privacy. For example, does equality mean that Joyce Maynard was morally entitled to publish her account of life with the famously reclusive author, John Salinger, or does it not? [5] Clearly, publication undermined Salinger's privacy, while enabling Maynard to describe her experience as a talented 19 year old writer, pursued by a distinguished, and much older, novelist. The problem is to know what a commitment to equality means for their joint privacy, given that one, but not the other, wished to give some of it up. In short, if the boundaries of privacy are obscure, this is partly because we are unsure how best to think about people's claims to freedom of thought, association and expression, and what it means to treat people as equals.

The difficulty of defining privacy, then, is that we are not as clear about the nature and value of allied concepts, such as liberty and equality, as we sometimes think, and no definition of privacy will remove that problem. However, this appears to be no obstacle to philosophical elucidation of concepts like liberty and equality, [Clayton and Williams 2002; Miller, 2006], which have received a great deal of

[5] Daphne Joyce Maynard published *At Home in the World* in 1998, which described the 10 months, in 1972, when she had lived with Salinger. In 1998 she also sold the letters which Salinger had sent her. A court case held that Maynard was entitled to sell them, but nobody was entitled to publish their content without Salinger's permission.

attention in recent years, and this suggests that our ability to clarify the nature and value of privacy does not depend on our ability to define or sharply to distinguish it from allied concepts. Conversely, our ability to define privacy for philosophical or legal purposes will not alter the fundamental fuzziness of the concept, or resolve controversy about its nature and relationship to other values. [6]

The word 'privacy' is associated with a variety of rather different things, typically polarised around control of personal space, control of personal information, and control of personal relationships, because privacy sets limits to the way that outsiders can interfere in our lives. Thus, some synonyms for privacy refer to seclusion, to selective access to an area such as a garden, or a house or apartment, and also to its exclusive or selective, rather than inclusive, character. When associated with control of personal information, synonyms for privacy centre on ideas of confidentiality, anonymity, secrecy, limited disclosure and control of access to information – whether factual, artistic, scientific, legal, religious and metaphysical. Finally, when referring to personal relationships, privacy is associated with the intimate, the sexual, the familial and the domestic.

These are rather different things, and though it is fairly easy to see certain practical, historical and psychological associations amongst them, the things

[6] The Younger Committee on privacy [1972] put the matter well when they wrote that 'The concept of privacy causes little difficulty to the ordinary citizen. He can readily identify the part of his life which he considers to be peculiarly his own, and for which he claims the right to be free from outside interference or unwanted publicity. Nevertheless, the kinds of privacy to which importance is attached and the intrusions against which protection is sought differ … widely from one individual to another and from one category to the next..' para 13, p. 5

‘privacy’ refers to are not tightly related from a logical or a normative perspective. For example, private space can foster control of personal information and enhance our ability to define and shape our personal relationships, but it is equally clear that it can prevent us finding out who knows what about us, who has been saying what about us, and who plans to do what to us. In that sense, privacy can inhibit and, even, threaten intimacy, fostering hypocrisy or mistrust rather than frankness, mutual confidence or love. Nor is that all. Within each category, the things to which privacy refers seem only loosely connected to each other, which makes it hard to tell whether there is any logical or conceptual connection between the different elements of privacy, as commonly understood, or if they are just connected by happenstance, custom and convention.

For example, exclusivity may foster seclusion, but is scarcely necessary for it – how necessary it is probably depends on what sort of access one has to secluded public spaces like parks, roads and countryside, as well as to cinemas, museums and other public buildings which can be quite deserted and peaceful. Confidentiality may protect our anonymity, but people can clearly value the anonymity of a mass demonstration or protest without presupposing, or desiring, that it be confidential. While we sometimes want to confide in others anonymously, the ability to give and keep secrets often depends on a close personal or professional relationship. So the different aspects of privacy as used to refer to control of information are not intimately connected. Nor can anyone who has much experience of the sexual, the domestic or the familial suppose that

these all refer to the same thing, even if the one often leads to, and is associated with, the other. Indeed, many aspects of our supposedly intimate relationships are so bound up with complex social conventions and legal requirements that they say less about *us* and our desires, interests, needs and feelings than about the society we live in, or the needs and desires of *others*.

Normative Disagreement About Privacy

However, privacy is controversial not simply because it can be difficult to decide what is, or is not, a case of privacy, but because people often disagree about privacy on evaluative grounds as well. For example, while moral philosophers tend to believe that privacy is valuable, and associate its value with the importance of love, care, individuality, and autonomy, feminists tend to see the association of privacy with these things as reasons to fear that privacy threatens the freedom and equality of women.[7] As Catherine Mackinnon trenchantly puts it,

> 'It is probably not coincidence that the very things feminism regards as central to the subjection of women – the very place, the body; the very relations, heterosexual; the very activities, intercourse and reproduction; and the very feelings, intimate – form the core of what is covered by privacy doctrine. From

[7] Quintessential philosophical accounts of privacy, including those by James Rachels, Jeffrey Reiman and Charles Fried, can be found in Schoeman, 1984, alongside classics of the legal literature, such as the article by Samuel Warren and Louis Brandeis, reprinted from the *Harvard Law Review*. Quintessential examples of feminist concerns with privacy can be found in Boling, 1996; Jean Cohen 2004; MacKinnon, 1987; Okin 1998.

> this perspective, the legal concept of privacy can and has shielded the place of battery, marital rape and wonmen's exploited labor; has preserved the central institutions whereby women are *deprived* of identity, autonomy, control and self-definition; and has protected the primary activity through which male supremacy is expressed and enforced'. [101; but see Lever 2000]

Nor are feminists the only ones who are skeptical. Communitarian political theorists, such as Michael Sandel and Amitai Etzioni, worry that paeans to the importance of privacy exaggerate the importance of individual choice morally and politically, and underplay the moral and political significance of social solidarity, and of unchosen ties of affection, loyalty and fraternity. [Sandel 1996; Etzioni 1999] Indeed, the distinguished anthropologist, Edmund Leach, believed that 'Privacy is the source of fear and violence…I am isolated lonely and afraid because my neighbour is my enemy'. [Leach 1968, 46]

Such worries about privacy are not inherently illiberal. After all, in his reflections on democracy in America, Tocqueville famously expressed the fear that individuals in modern societies might come to attach so much importance to their private affairs that they would sacrifice the substance of self-government to a form of administrative despotism, or paternalist government.[8] So, even when

[8] Alexis de Tocqueville, *Democracy in America*, vol 2, ch. 6 'What Sort of Despotism Democratic Nations Have to Fear'. Of the modern citizen, he thinks, 'Each one of them, withdrawn into himself, is almost unaware of the fate of the rest. Mankind, for him, consists in his children and his personal friends. As for the rest of his fellow citizens, they are near enough, but he does not

people agree on what counts as a case of privacy, they may still disagree quite fundamentally about its value.

This might suggest that controversy about privacy is irresolvable philosophically – and therefore, that the regulation of neuroscience, at least in this area, can only be decided by the forces of chance, or by the weight of numbers, money and force. However, such a conclusion would be premature. Granted, some disagreements about value are inevitable in free societies, as Rawls saw, and not all disagreements are reasonable, or consistent with the best interpretations of fact and value. [Joshua Cohen 1993, 281-5 and 2009, ch. 5] Nonetheless, it seems possible to achieve some points of agreement about the nature and value of privacy, although whether these will be sufficient to resolve ethical controversy over the relative importance of people's claims to anonymity, confidentiality and seclusion compared to the quest for scientific understanding, or the development of safe and effective therapies, is another matter.

Privacy, Democracy and Neuroethics

I have argued, thus far, that the main threats to privacy in contemporary societies are less likely to come from developments in neuroscience or genomics, than from the difficulty of securing agreement on the nature and value of privacy.

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notice them. He touches them but feels nothing. He exists in and for himself, and though he still may have a family, one can at least say that he has not got a fatherland'. Tocqueville, 1966, 692).

These problems are particularly acute in democracies because liberties of conscience, association and expression facilitate the airing of differences and, to some extent, encourage the creation and identification of different beliefs, identities and ideals. So, disagreements about the value of privacy which may not even arise in authoritarian regimes, can and do become the object of political, as well as philosophical, controversy in democracies.

But the problem, as well, is that we do not well understand the point of protecting privacy in societies in which people's political liberties are secure, and in which people do not live in fear of arbitrary arrest and imprisonment, religious or racial persecution, the confiscation of their homes and possessions, enslavement, kidnapping and forced labour. Put simply, part of the difficulty we have in deciding how best to respond to the challenges of neuroscience and genomics – or of terrorism, economic depression, environmental catastrophe or political alienation, for that matter – is that we do not know whether privacy is valuable in democratic societies and, if so, how to identify and describe that value.

Our ideas about privacy are, in many ways, relics from a distant past, predating constitutional government, as well as representative democracy. [Boling 1996, ch. 2] Hence, the ideas of individuality, choice, responsibility, equality and solidarity which they presuppose and license are bound up, in all sorts of complex ways, with sexist assumptions about the nature and value of men as opposed to women; of heterosexual, as opposed to homosexual, love and sex; and of ideologies of

race and class fundamentally at odds with the idea that most people are capable of governing themselves, and ought to be able to do so.

For example, until the Guardianship Act of 1973, the outcome of Joan Vicker's Private Members' Bill of 1965, women lacked legal guardianship of their children, and this meant that they had to seek the consent of their husbands, even if they were estranged from them, in order to obtain surgery for their children, or to obtain a passport for them. [Cretney, 1998 180-3] So British law rendered otherwise competent adult women incapable of taking moral and legal responsibility for key aspects of their children's wellbeing. Privacy, in other words, was understood in ways that denied women, as parents, freedoms which were taken for granted by men, with deleterious consequences for sexual equality within the family, and outside it.

In order to resolve contemporary controversy about privacy then, we have to concentrate on the value of privacy implicit in, or compatible with, democratic rather than undemocratic forms of government, and cannot assume that current forms of privacy adequately reflect the former. We must therefore consider the different forms that democracy can take, and how best to distinguish democratic from undemocratic government.[9] Otherwise, the ways in which we describe and

[9] This is not easy, partly because the social-scientific literature classifies democracies in so many different ways, but also because the relevance of some of these differences for ethics is not apparent. The real difficulty, however, is that democratic government cannot simply be identified with universal suffrage, common though it is to identity the two, as this risks confusing authoritarian plebiscites and democratic elections. On the other hand, too stringent a set of conditions for using the term 'democracy' risks turning it into an unrealisable ideal, excluding anything that most people would recognize as an instance of democratic government. How we

evaluate privacy are likely to reflect assumptions about what is reasonable, desirable and practicable which are at odds with what we know about the interests and capacities of ordinary men and women, whatever the society we are considering, and however hypothetical the examples we use to elicit and refine our intuitions. Hence, even if we want to consider the value of privacy in undemocratic societies, or to compare what counts as private across democratic and undemocratic societies, we will need to consider the nature and value of privacy in democracies. At least, we will need to do so as long as we want our conclusions about privacy to reflect the claims of ordinary men and women to self-government, for they are unlikely to happen by chance.[10]

The philosophical analysis of politics, therefore, as well as more empirical forms of political analysis, have a central place in neuroethics, and in practical ethics more generally. Arguments for protecting privacy in democracies stand or fall on the connections we draw between people's claims to participate in government and their claims to solitude, seclusion, anonymity and the rest. Familiar differences between moral theories, such as between deontology and

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should navigate between hopelessly minimal and excessively demanding conceptions of democracy, then, bears further study. Two helpful places to start are Albert Weale 1999 and Joshua Cohen 2008.

[10] The point, here, is not that all democracies are legitimate and all non-democracies are not: that would be false. The point, rather, is that if we want to be able to appraise the empirical, conceptual and normative claims made in all societies (real or hypothetical), we will want to do so from a perspective that reflects what can be achieved, what can be judged desirable and what can be condemned, consistent with democratic principles. Otherwise, we may end up endorsing claims about what is beautiful, true, reasonable or possible which tacitly depend on assumptions about the inherent inferiority of women; the incapacity of poor people to make politically informed judgements and so on. In short, I think we may be able to use democratic principles as a more political version of Habermas' ideal speech situation: in order to give us a normatively compelling standpoint from which to understand and evaluate competing claims of fact and value. However, fully explaining how this might be done, and why, is the subject of another paper.

consequentialism, or between virtue ethics and critical theory, may or may not be relevant to the ways we understand the nature and value of privacy. By contrast, the differences between democratic and undemocratic forms of government will be relevant– or should be.

Implications

What practical conclusions, if any, can we draw from these methodological remarks?

1) The *secret ballot* can help us to understand the value of privacy, because it is unquestionably democratic, and an example of our rights to confidentiality and anonymity.[11] Although a familiar justification for the secret ballot is that it helps to protect people from coercion and intimidation, a moment's thought suggests that this is not its sole justification, important though that undoubtedly is.
Were the secret ballot justified only because it protects us from bribery and intimidation, we would have to suppose that, in their absence, there would be nothing wrong with forcing people to discuss their voting intentions and acts with anyone who asks.

In fact, it was precisely because he believed this that, after much agonising, Mill voted against the secret ballot, on the grounds that by the 1860s voters should have no serious fear of bribery or intimidation, and could be expected to stand up

[11] The following paragraphs draw on A. Lever, forthcoming, 2011 and Lever 2007, 2006 and 2005.

to pressure from others. [Mill, 1984; Urbinati, 2002] More recently, Geoffrey Brennan and Phillip Pettit have argued that the secret ballot is undesirable, although sometimes necessary. [Brennan and Pettit, 1990]. So, if the standard justification for the secret ballot is correct, we would have to concede, with Mill, Brennan and Pettit, that there would be no objection to getting rid of it were it not that we were worried for the safety of voters and the fairness of elections.

This seems unlikely. Arguments for open voting suppose that because we can harm others by our vote, and vote on mistaken or immoral considerations, we should be forced to vote openly. That way, others can correct our mistakes and the prospect of being exposed as selfish, insensitive or stupid will promote morally sensitive and considered voting. However, transparency will only improve the quality of voting if there are enough other people willing and able to correct, rather than to ignore or approve, our defects. And, of course, we must assume that people who are immune to information and arguments when they are free not to listen to them will prove willing and able to accept them when forced to do so. So the case for open voting is problematic even if we abstract from problems of coercion and intimidation.

But the most serious problems with open voting lie elsewhere, and highlight the importance of privacy to democratic citizenship. Democratic citizens are entitled to vote whether or not others approve of this, or of their likely voting patterns. They are entitled to a say in the way that they are governed whether they are rich

or poor, well educated or not. By contrast, no one has a right to represent others politically unless they have been selected for the task. So, while democratic legislators may be more vulnerable to intimidation than citizens – as they are relatively few in number, and hold special power and authority *qua* legislators - it is the former, not the latter, who must vote openly, not secretly. Secret voting for citizens, then, reflects an important democratic idea: that citizens' entitlement to vote does not depend on the approval of others, or on the demonstration of special virtues, attributes or possessions.

There is a second reason, however, why the secret ballot is so important from a democratic perspective which, like the first, connects the value of privacy to membership in a democratic society in ways that can guide neuroethics. Advocates of open voting assume that public shaming can be used to prevent and punish careless, selfish or ignorant voting. But while it is possible that open voting might, on balance, improve the quality of voting, both public shaming and the threat of public shaming are hard to justify for wrongful voting.

The problem is this: that public shaming is likely to be out of proportion to the harm committed in a given case of careless or immoral voting, and out of proportion to the punishments deemed appropriate in other cases of wrongful action. Public shaming is a blunt instrument, and likely to fall hardest on those who are unpopular, poor, shy and inarticulate, rather than on those who have committed the worst offences. Nor do its punishments usually bear any

relationship to the concerns for fairness, rehabilitation and prevention that constrain legal forms of punishment. So, even if it were possible that open voting really would cure careless, prejudiced or ignorant voting, it would fall foul of concerns for fairness and equality. Hence, modern democracies tend to be wary of public shaming as a way to prevent or to punish immorality: for its weight is likely to fall in ways that are morally arbitrary and that make it harder for us to see and treat each other as equals. [12]

What the secret ballot suggests, then, is that people's claims to privacy depend, in part, on the nature of the powers and responsibilities that they hold, and that citizenship, itself, provides the baseline for determining what constitutes *special* power and influence over others, and special responsibility to and for them. In evaluating the implications of neuroscience for people's privacy, therefore, it is important to see that protection for privacy can mark our status as citizens as surely as can the right to vote. Hence, the justification for protecting privacy is not purely instrumental – important though the consequences of protecting privacy are to the assignment and justification of legal rights – because protection of privacy helps to constitute our status as citizens, and to mark the rights and duties which define that status.

[12] My argument here has been greatly influenced by Jonathan Wolff's 'Fairness, Respect and the Egalitarian ethos' [Wolff, 1998] and by Judith Shklar's discussion of the use of exile and ostracism as punishment by the Greeks, and as way of handling the problem posed by exemplary individuals for democratic equality. [Shklar, 1998]. However, for a more positive attitude to shaming see Etzioni, 1999, 58-62.

2) As the secret ballot suggests, people's identities, from a democratic perspective, are not purely personal, but have an important political dimension. That is, as citizens we are required to see each other as equals, equally entitled to participate in determining the laws that govern us all, and equally entitled to stand for positions of power and responsibility in our society.

This is not the same as recognizing our duties to see each other as people capable of suffering and happiness, though Utilitarians are surely right to suppose that morality *also* requires us to recognize this fact about each other, as about other sentient beings. Nor is our duty to recognize each other's capacities for citizenship the same as the Kantian duty to treat each other as ends, rather than simply as instruments, or obstacles, to our purposes. Morality certainly requires this, too. But these are duties which we would have whatever type of society we live in. By contrast, the duty to treat our fellow citizens as our peers – controversial though its content can be[13] - is intrinsic to democratic morality and politics, and we would have no particular obligation to see compatriots this way but for a shared status as citizens.

The content of our claims to confidentiality – and to privacy more generally, then- are partly conventional, and dependent on what threatens, rather than promotes,

[13] One of the main forms of controversy, here, concerns the extent of socio-economic inequality which is compatible with democratic government – though, of course, it is also controversial how much inequality is consistent with Kantian forms of respect, or Utilitarian efforts to prevent suffering and promote wellbeing. The key point, however, is that there is no reason, a priori, to suppose that answers to Kantian, Utilitarian and democratic controversies about economic inequality must be the same.

people's freedom and equality as we best understand them. It depends, in other words, on facts about people's desires, needs, interests and resources, and on the ways that these are likely to conflict. Hence, it is important to realise that people's interests in privacy can, and do, conflict, and that failure to acknowledge the differences in people's interests in privacy lies at the heart of accounts of our rights which claim to treat to treat people as equals while, in fact, favouring some social groups over others.

For example, our conceptions of privacy are almost certain to lead to inequality, given familiar social divisions, if the privacy interests of men are held to represent those of women; the privacy interests of heterosexuals to represent those of homosexuals; the rich, those of the poor; white people, those of black people; and the old those of the young. To ignore social conflict and competition when defining or adjudicating people's claims to is to assume that the protection of privacy has no relevance to social conflict, or to be cruelly indifferent to the relevance it has.[Lever, 2000]

People's claims to participate in government, therefore, have an important place in determining such things as the rules for acquiring and disseminating neurological information, for determining how far, and in what ways, neuroscience can influence crime-prevention and counter-terrorism, [14] and how

[14] For debates on privacy and CCTV see Ryberg 2007, Goold, 2008 and Lever 2008 in the journal *Res Publica*. For an introduction to philosophical debate on racial profiling see *Criminal Justice Ethics* 26.1. (2007) with articles by Mathias Risse, Annabelle Lever and Michael Levin, and the

much time, energy and money should be dedicated to neurological research and to restoring, rather than enhancing, people's capacities.[Chan and Harris, 2006; Harris 2007]

Those claims have at least two aspects, the one procedural, the other substantive. Procedurally, they explain the importance of ensuring that conflicting points of view, experience and interest are adequately represented in the decision-making bodies - legislative, administrative, executive, judicial, charitable – which determine the rules governing the development and application of neuroscience. Here, recent experiments with citizen participation and deliberation within the National Health Service and the National Institute for Health and Clinical Excellence might be helpful, as well as experience of more participatory forms of governance abroad. [Weale, 2004 and 2007; Thomas, 2009; Rawlins, 2009; Fenton, Brice, Chalmers, 2009; Fung, 2004; Lever, 2010].

Democracy, however, is not just about the procedures used to make decisions, but the values which justify the particular procedures used to secure legitimate outcomes.[15] Unfortunately, there is no simple test of a Millian sort to tell us

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special issue on the topic forthcoming from *The Journal of Ethics: An International Philosophical Review* vol. 15 (2011).

[15] The importance of this point is well brought out in two important papers by Joshua Cohen, ''Pluralism and Proceduralism', [Cohen, 1994] and 'Procedure and Substance in Deliberative Democracy' [Cohen, 2003]. They help to explain why there is no purely procedural account of democracy, or one that exempts us from the need to decide what forms of equality, liberty and reasoned judgement are necessary for democratic legitimacy.

whether a decision by an otherwise democratic body is, or is not, legitimate.[16] Still, we may be able to make some progress here, too by considering people's claims to self-government. Thus, one of the considerations we should bear in mind when evaluating the legitimacy of decisions which differentially affect the privacy of social groups, is whether the consequences or the rationale of those decisions adequately reflect people's *equal* interests in determining the rules under which they live.

Thus, while there may be good reasons why sex offenders, for example, require greater supervision by experts on their release from prison than would be true of other prisoners,[17] we cannot assume that their interests in privacy are irretrievably selfish, duplicitous and hypocritical, or use such assumptions to justify limits on their privacy. To do so would imply that they are incapable of self-government, because incapable of recognizing and acting on the legitimate claims of others.

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[16] In *On Liberty* John Stuart Mill famously asserted 'one very simple principle, as entitled to govern absolutely the dealings of society with the individual in the way of compulsion and control', namely: ' that the sole end for which mankind are warranted, individually or collectively, in interfering with the liberty of action of any of their number, is self-protection. That the only purpose for which power can be rightfully exercised over any member of a civilized community, against his will, is to prevent harm to others. His own good, either physical or moral, is not a sufficient warrant'. [Mill, 1869, ch. 1] For the latest in a long line of objections to Mill's principle (though not to other aspects of his wonderful book), see [Wilson, 2010]. This is an unpublished manuscript called 'Paternalism and Health Policy' and is available from the author on request: james-gs.wilson@ucl.ac.uk

[17] I am no expert on these matters, so my points here are illustrative and suggestive rather than conclusive. However, it seems important that children and adolescents are not yet as able to protect themselves or to judge adult behaviour as their elders. Hence, concerns about recidivism in the case of some sex offenders may justify greater post-punishment aid and regulation than would be true for thieves, for example, who may have even higher rates of recidivism than sex-offenders. I do not believe this is remotely compatible with efforts, such as Megan's Law, to deprive former sex-offenders of all privacy. However, there is a huge difference between surveillance and regulation by all, and some supervision combined with aid by experts. More consideration of the latter would enable us to avoid the false dichotomies suggested by those like Etzioni, who believe that our options are limited to depriving sex offenders of all privacy, granting them total privacy, or condemning them to some sort of quarantine, albeit one made as pleasant and comfortable as possible. [Etzioni, 1999, 18-43]

Whatever one's views about the merits of prisoner-disenfranchisement,[18] such an assumption cannot be justified for prisoners who are deemed to pose no special threat to others, and are therefore entitled to be set free on completion of their prison sentence. So, while informed, conscientious people can certainly disagree about the morality of abortion and euthanasia, or of homosexual intercourse, before adopting rules or laws that differentially affect people's privacy, we must first consider their consistency with, and likely impact on, our interests in self-government. [19]

(3) From a democratic perspective, our identities importantly include our citizenship, because this sets limits to the ways we can treat others, and helps to determine the ways in which we may be treated. Within those constraints, we can see ourselves as members of families, churches, sporting associations, and of various political and professional groups, as well as members of various national, ethnic and racial ones, transcending the boundaries of our country. The point, however, is that there is no particular way that we have to see ourselves, or define our identity, so long as we are willing to abide by our different duties to others.

This implies that while having a human brain is a *precondition* for our identity as humans and as citizens, it is not therefore an essential *component* of our

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[18] Personally, I entirely agree with Jeffrey Reiman's critique of prisoner disenfranchisement in 'Liberal and Republican Arguments Against the Disenfranchisement of Felons' (Reiman, 2005). However, I do not think my claims, here, depend on agreeing with Reiman.

[19] This is a more expressly political version of the two-part test typically used by American courts to determine whether or not a law is consistent with constitutional guarantees of equality, which, whatever its merits, was rightly criticized by Supreme Court Justice, Thurgood Marshall, for its rigidity and formalism. See, for example, his dissenting decision in *San Antonio v. Rodriguez*, 411 U.S., 1 975).

subjective identities. Empirically, most people are as little of aware of their brains as they are of their hearts, so as a matter of fact having a human brain does not seem to be an essential part of our self-conceptions. Nor, normatively, is it clear what importance we *should* attribute to our brains, as opposed to our skin, our sexual organs, our history, culture, citizenship, habitat – all of which can distinguish us from other animals, as well as from each other. From a democratic perspective, at any rate, there seems no particular reason to give priority to one, rather than another set of these variables in determining what we should do and how we should treat each other. On the contrary, there is every reason to suppose that people who are free to investigate their world, and their place within it, will come to different conclusions about the moral and political significance of these attributes.

If these points are right, we should be wary of a tendency in neuroscience and neuroethics to exaggerate the importance of people's brains to who they are, and how they should be treated.[20] Certainly, damage to the brain can change people's behaviour in all sorts of unexpected, and often unwanted, ways; and seemingly

[20] See, for example, Colin Blakemore 2006 p. v: 'If one accepts that the brain, and the brain alone, is responsible for the entirety of consciousness and action, including the sense of right and wrong, and the capacity to contemplate moral values, then it is legitimate to ask whether there is any sort of ethics other than neuroethics'. But, surely, it is not our brains 'alone' which are responsible for all these exciting things, but our brains in conjunction with a complex concoction of chemicals secreted by our other organs, by oxygen pumped through our blood by our heart, and so on. Brains are thrillingly complicated and important organs, but it seems as misleading to make such grandiloquent claims on their behalf as there was or is to make comparable claims about our DNA. See also Michael S. Gazzaniga, 2006, ch. 10, and, in particular, his aspirations for a 'brain-based philosophy of life' and his claim that 'consciousness…is uniquely human'- a view which seems to suppose that we know a great deal more about how various non-human animals see themselves and the world around them than we do. Pp. 141-2. For a rather different, but influential, take on the differences between human and animal consciousness see Michel de Montaigne's famous question from 'An Apology for Raymond Sebond': 'When I play with my cat, how do I know that she is not passing time with me, rather than I with her?' 1987,505.

slight differences in brain structure or development can have profound consequences for people's capacities, including their ability to have a sense of themselves as agents, to have some personal sense of identity, a sense of their personal history and an ability to project themselves into the future, at least in thought. It does not follow, however, that brain surgery must prove more challenging ethically than changes which, for much of human history, were all but unimaginable, and in many parts of the world still remain impossible, such as the ability to change one's nationality, one's employment, one's marital status, or one's sex and gender.[21]

For good and bad, there are many ways to transform the lives, identities and prospects of people by surgery, as by other means. Apriori, there is no reason to think that surgical forms of change are more threatening or malevolent than the alternatives, or that we can adequately evaluate the ethical threats posed by the former without considering the latter. As we have seen, the reasons to devalue or ignore privacy are as likely to have philosophical and legal, as medical or scientific, causes. So, reflection on the threats that neuroscience poses for privacy highlight the importance of the humanities and social sciences to neuroethics:

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[21] The main worry about brain transplants, (other than the complexities that may make them technically impossible) is that replacing your brain with someone else's will remove access to your memories, your desires, feelings and hopes, even if it does not actually replace them with those of someone else. These are not trivial worries, and were brain transplants possible, we would obviously have to take these seriously. But as impostors and actors show us, and as the weird sensation of reconnecting with one's childhood letters, photos and books may remind us, we can come to 'think like' other people, including our past selves. So transplanting brains may be rather like transplanting faces, in that transplants, if medically justified, would be more like *'becoming ourselves'* once more, than *turning into someone else*. For a fascinating historical account of how one person can recreate themselves as someone else see Natalie Zemon Davis 1984, which was made into an engrossing movie starring Nathalie Baye and Gerard Depardieu.

because the ethical significance of glamorous and exciting scientific developments partly depends on what we think about more mundane forms of human change, enhancement and repression.

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