

## **Neuroethics and ideals of the citizen-subject: A sociological critique of an emerging discipline**

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Though only recently emerging as a sub-discipline in its own right neuroethics has grown rapidly in scope and influence, spurred on by increasing faith in neuroscience that some (breathless) proponents claim 'may be responsible for a kind of second enlightenment in the twenty-first century' (Farah, 2010: 8). By inscribing properties of normative ethical thought upon the materiality of the brain neuroethics is undertaking a creeping epistemic colonisation of assessments of the ideal subject that were once firmly within the purview of the social sciences and humanities. Furthermore, neuroethics is being espoused as applicable towards increasingly complex aspects of collective wellbeing, with proposals of 'moral enhancement' suggested to alleviate what appear to be intractable problems of manufactured risk. While such hopes are admirable this paper cautions against such a proposed regime, suggesting that these applications of the neurosciences risks rigidly affixing ideals of the ethical citizen-subject in ways detrimental and self-defeating.

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Sociology and social theory have a rich history of assiduously tracing and critiquing the production of scientific knowledge, particularly in illuminating the way in which such processes are inextricably and dialectically entwined with orienting frames of our Western rationality (eg. Kuhn, 1962; Foucault, 1970; Feyerabend, 1975; Haraway, 1988; Latour, 1993; Hacking, 2002). More specifically for this paper I am interested in those knowledge claims from the psy- and neurosciences that then fold back onto the subject as injunctions upon their conduct. As Foucault (1998: 255) pithily observed 'Every psychology is a pedagogy, all decipherment is a therapeutics', and thus every knowledge claim regarding our constitutions is part of an ongoing relationality in the 'making up' of subjects (Hacking, 1985). Processes of coolly and precisely delineating the capacities and bounds of the ethical subject – as I will demonstrate neuroethicists are wont to do – aspire to the generation of 'human kinds' to match the law-like properties of 'natural kinds' (Hacking, 1985). However, a crucial distinction between the two is that 'human kinds' inevitably have 'intrinsic moral value' that 'affects the field of possible intentional actions' (Hacking, 1985: 367-8). This, argues Ian Hacking (1985: 369), results in a 'looping effect', for 'to create new ways of classifying people is also to change how we can think of ourselves, to

change our sense of self-worth, even how we remember our own past'. Thus there is a constant churn of 'new causal knowledge to be gained' and 'old causal knowledge to be jettisoned' that works against the definitive affixing of the subject (Hacking, 1985: 369). In this light as social scientists we are obliged to trace the ways in which our 'historical ontology' has been brought to bear in various contexts (Foucault, 1984; Hacking, 2002: 1-26), and to ward against any potential overreach of those scholars who hold 'romantic cravings' of revealing our 'universal' properties (Hacking, 2002: 7)

This task is of vital importance, for it encourages caution towards current knowledge claims and what contingent worldviews may underpin them. Today, such universalising claims often emerge through 'the notorious tendency of life scientists to support socio-political arguments by transposing their research on flies or mice directly to the realm of human society and culture' (Rose & Abi-Rached, 2013: 12). Moreover, a number of sociological works in recent years have urged us to engage more thoroughly with the cognitive sciences, lest we find ourselves epistemically excluded from endeavours we once led (Cerulo, 2010; DiMaggio; 1997; Fitzgerald and Callard, 2015).

With this in mind, this paper looks to briefly explore some of the claims of the emerging field of neuroethics, particularly those that pertain to the possibility of better realising the ideal citizen-subject through 'moral enhancement' enacted at the neurological level. My concern is that this level of ambition in fields where our working knowledge is still so meagre risks foreclosing too many lines of thought relative to the benefits it may bring, and moreover risks rigidly affixing ideals of the ethical citizen-subject in ways that may prove detrimental and self-defeating.

Neuroethics, in its broadest and simplest definition, is the study of (a) how we should conduct research within the neurosciences with regard to ethical, legal, and social implications – thus placing itself firmly amongst bio- and medical ethics more generally – and (b) how neuroscience-based research might productively inform, support, or question the validity of current understandings of morality and ethics (see Roskies 2002; Levy, 2007; Farah, 2010; Buniak, Darragh & Giordano, 2014). It is the latter line of inquiry which is largely the focus of this paper, of how we might better understand and perhaps even neurologically reconfigure ourselves as ethical subjects. Hopes are high for this endeavour, with neuroscientist Martha Farah (2010: 8) suggesting that the field 'may be responsible for a kind of second enlightenment in the twenty-first century'. Such aspirations demand close attention from the social sciences.

Since the field's emergence around the turn of the millennium neuroethics has been endorsed as an avenue of productive self-repurposing, a way to 'make our nervous system our ally' (Moreno, 2002), thus enabling a 'degree of freedom' previously not possible and moreover enhancing our 'sense of self' (Churchland, 2002: 43). Arthur Caplan (2002: 98) went even further in endorsing neuroethics and expanding the breadth of its utility by suggesting that the field will enable us to safely 'move toward optimization of our brains' and to aid us in considering 'how we might modify and design ourselves'. The core purpose of this line of neuroethics is to find the neural correlates of ethical thought, and from these insights look to 'the development of an authentic science of morals' (Changeux & Ricoeur 2000: 179). This is predicated upon the assertion that 'human experience shows every sign of being determined by, and realized in, states of the human brain.' (Harris, 2010: 8). The brain thus becomes both the start and end point for any inquiry into being, including the very quality of personhood and its accompanying moral status (Racine & Zimmerman, 2012: 140-1). In this vein advocates proclaim that neuroethics goes 'to the very heart of what it means to be a human being' (Levy, 2008: 2) and may 'reveal the structure of our minds and, therefore, of our souls'. Note here how 'mind' is implicitly blackboxed into 'brain', which then presumes to stand in for whatever we mean by 'soul'. That 'mind is what brain

does' (Rose & Abi-Rached, 2013: 3) is accepted as axiomatic under the new regime of dutifully cultivating our 'brainhood' (Vidal, 2009).

Medical sociologist Caragh Brosnan (2011: 290-3) suggests that neuroethics has asserted its disciplinary status on two main fronts. First is by the already noted appeal to the equivalency of the brain with our very selves, particularly through the transmutation of normative ethical systems and inquiry into a materiality over which current 'pastors of the soma' (Rose, 2007: 29) may claim an epistemic privilege. The second front regards the dual oversight roles neuroethics claims are within its purview, that is, not only the privilege of monitoring the ethics of neuroscientific endeavour (in a manner similar to bioethics in general), but also investigating morality as it is believed to be realised within the brain, which in turn may have profound implications for how we are constituted as subjects into the future (Roskies, 2002; Illes, 2005; Levy, 2007). The implication, then, is that neuroethics can both supervise its ethical conduct as an empirical and communicative endeavour – which, axiomatically, would require subscription to certain ethical precepts – yet also purport to hold exclusive and unimpeachable authority in potentially debunking some of those very same precepts by pinpointing their varying functionalised aetiology in the brain. The result is a compromised position of regulatory capture that risks 'chasing its own tail' (Brosnan, 2011: 292; see also De Vries, 2007; Pickersgill, 2013). Hence the importance of turning a critical sociological eye to neuroethics, for current discourses within the field 'fail to see the larger context that gave rise to the specialty of bioethics' and too frequently appear to lack the requisite objective remove and sociological contextualising of the phenomena they wish to investigate (De Vries, 2007: 67).

For now, however, sociologists are largely observing from the outside, conducting a sociology *of* neuroethics, rather than a sociology *in* neuroethics (De Vries, 2004; Brosnan, 2011). This general exclusion of sociological insight is concerning given the ambitions of many neuroethicists, who envisage that their work may play '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' (Levy, 2007: xi). Seemingly elusive and ineffable aspects of the human condition are steadily being rendered as biomarkers in the brain, mutating from qualities of character and custom to functions of neurological systems deemed either operational or deficient. Construed as such the self becomes open to re-engineering toward that which is desirable through various levers of governmentality. Ambitions are high for such management of the populace by way of neuroethics:

'If, for instance, it can be shown that some (and only some) of our moral responses are irrational, because driven by raw emotion, then we have a powerful reason for rewriting policy to discount these responses.' Levy, 2010: xxi

Yet the sting of recent history should remind us to be exceedingly wary of views that would grant authorities the privilege to 'discount' certain utterances though appeals to scientific rationales. If not conducted with due caution such 'discounting' of 'irrational' responses speaks to forms of hubris that may not deftly reveal the underlying strata of selfhood but rather bludgeon pre-existing worldviews into new containers and overlays, perhaps to the detriment of many. Moreover the very understanding that one – as a citizen – may find themselves subjected to having their views processed for the corrupting influence of 'raw emotion' is likely to result in knock-on effects difficult to foresee and predict, and thus may negate the very precision such 'neuro-policy' seeks to implement.

Still, for many empirical neuroethicists the 'good' is something determined and realised at the synaptic level. This claim serves as an Archimedean point upon which to anchor and ultimately evaluate wellbeing, implying an equivalency of (once) elusive qualities now observed in material relationality. When the orienting perspectives of our ethical stances are purportedly revealed as merely rationalised tips of evolutionary icebergs (Greene, 2008: 38) we risk the prospect where

life itself becomes overdetermined (Ortega & Vidal, 2011: 7), and where ‘biological citizenship’ (Rose & Novas, 2008) entails corralling and cultivating one’s neuronal capital towards pre-ordained ‘virtuous’ ends.

This may generate an epistemic circularity, one that presupposes certain socio-historically contingent worldviews now rendered into ‘immutable mobiles’ (Latour, 1986) within the brain. Currently, the brain is typically framed within the modes of operation in Post-Fordist society, where the ‘plasticity’ of one’s neurological makeup is championed for its value-bearing potential (Malabou, 2008; Slaby, 2010; Pitts-Taylor, 2010; Ortega, 2011; Thornton, 2011). The brain is increasingly seen as operating within an array of possibilities and potentials to be enacted, adaptable and flexible, and therefore a ‘site of choice, prudence, and responsibility for each individual.’ (Rose & Abi-Rached, 2013: 52). Such appeals are often framed within ideals of autonomy and freedom:

‘When we make decisions to improve our lives by biological and other manipulations, we express our rationality and express what is fundamentally important about our nature. And if those manipulations improve our capacity to make rational and normative judgements, they further improve what is fundamentally human. Far from being against the human spirit, such improvements express the human spirit.’ Savulescu, 2005: 38

Such appeals ‘infused with futurity’ are found throughout biopolitical discourses, stretching the reach of governmentality into the actuarial management of uncertainty (Rose & Abi-Rached, 2013: 14). Within this contemporary precarious milieu some neuro-advocates propose ‘not abandonment of the democracy, but enhancement of the morality of its voters’ (Persson & Savulescu, 2012: 90). Yet this is clearly question-begging, for embedded within these aims are presuppositions of the ‘ideal’ citizen-subject, thereby smuggling conceptions of the self that – while perhaps currently prevailing in the Western world – have been demonstrated by countless sociologists and anthropologists to be anomalous socio-historical entities. Such proposals that purport to better realise our ‘human spirit’ through biological manipulations should therefore be approached cautiously, lest we affix a model of the citizen-subject that may later prove difficult to reconfigure.

Yet nevertheless it appears that some influential advocates of neuro-enhancement have a decidedly fixed view of the ideal citizen; one who is coolly rational and of liberal-democratic persuasion, but also dedicated to a firmly consequentialist view of wellbeing. Such framing of the subject often invokes evocative rhetoric of collective urgency and imperatives to repurpose ourselves in light of our contemporary calamities:

‘To solve problems we have created—such as environmental pollution, over-population, and global warming—human beings may have to enhance their cognitive capacities and perhaps their moral capacities as well.’ Buchanan, 2011: 2

We are thus called upon to adopt a vocation of ‘moral enhancement’ through – amongst other methods – neurological means (Douglas, 2008). Such an endeavour ratchets the Foucauldian ‘conduct of conduct’ into another level, wherein we come to dutifully adopt an ethic of personal ‘neuroasceticism’ (Ortega, 2011). In this vein philosopher of mind Thomas Metzinger proposes a ‘consciousness ethics’ whereby rather than delineating ‘good action’ we must step back in the causal chain by first determining ‘a good state of consciousness’ (Metzinger, 2009: 233). Such a potential (self-)regulation of permissible brain states entails a curious new means of governing at a distance (Rose & Miller, 2010). What we are witnessing, observes social theorist Maurizio Meloni (2012: 26) is a ‘revival of biological arguments in the interpretation of what makes us human’. Meloni is actually quite receptive to this possibility, envisioning in the neurologising of ethics a true Cartesian ‘universal method’ that promises a way out of our conflicting perspectives. At times these hopes verge on the fantastical, perhaps dangerously so:

'My hypothesis is that the prospect of moral principles "firmly grounded" in neurobiology ... as well as the promise of bringing to light – via neuroscience – the building blocks of ethics and even politics, have gained attractive force today as they provide a vital solution to two profound intellectual needs of the post-1989 world. On the one hand, neuroscience ... has started to work as a substitute of the grand narratives discredited by the shortcomings of the twentieth century ... filling the void they have left behind. On the other hand ... neuroscience's project of bringing to light the natural, bare substrate of human faculties, no longer contaminated by cultural and linguistic differences and resistant to the pressures of society and political regimes, seems to offer solid ground, and a safe anchor against the return of many of the traumas of the twentieth century: neuroscience appears to promote a message of universal brotherhood ... and, with its emphasis on our natural, hardwired inclination to moral life and empathy, seems to provide a firmer basis for a newly possible ethics.' Meloni, 2012: 37

These claims are deeply unsettling, and ironic in ways likely not intended. Was not many of 'the traumas of the twentieth century' also predicated on the belief of having finally arrived at an objective measure of the ideal composition of our species? Should we place any trust in an intellectual authority that purports to remove the 'contamination' of cultural and linguistic differences in order to reveal the 'natural, bare substrate' of our species? How would such an authority quarantine themselves from this supposed contamination in order to objectively delineate the bounds of our humanity? Might any potential 'looping effects' be especially volatile in looking to ground a form of universal ethics in the brain? All things considered the suggestion that neuroscience could aid a 'political project of global sympathy' (Meloni, 2012: 41) seems recklessly naïve to posit at this time.

Still, found throughout the neuroethical discourse are imperatives claiming that we must be willing to neurologically reconfigure ourselves in order to protect our very way of life in the 'approaching post-human era' (Kahane, Savulescu & ter Meulen, 2011). Perhaps most influential in this area has been Oxford bioethicist Julian Savulescu (2005, 2010; Persson & Savulescu, 2008; Savulescu & Sandberg, 2008). With philosopher Ingmar Persson, Savulescu suggests that we are currently 'unfit for the future' and thus 'have a moral obligation to enhance human beings' (Persson & Savulescu, 2012). Current shortfalls in our capacities as ethical agents, argue Persson and Savulescu, make collective action towards countering manufactured global risk all but impossible, for we simply do not have the necessary capabilities at the neurological level to resolve these issues. Thus, they argue, it 'is crucial that we be aware of the moral limitations of our nature, and do whatever we can to correct these limitations, by traditional or new scientific means' (Persson & Savulescu, 2012: 133). A number of justifications are given for this view, mainly deriving from a perceived mismatch between our 'common sense morality' and the 'Ultimate Harm' that we are now capable of inflicting upon one another thanks to rapid technological development and the sensitive mechanisms of our global interdependence (Persson & Savulescu, 2012: 46, 122-3, 126).

Persson and Savulescu (2012: 103) suggest that 'it is necessary to widen the horizons of our moral consciousness', and thus we are essentially framed as failed citizens in our current makeup. Such a proposal is a fascinating and unnerving development, espousing a form of 'neuro-essentialist', self-instrumentalising logic whereby we must decide what aspects of our higher 'humanity' to embrace and cultivate at molecular levels of causality (Racine, Waldman, Rosenberg & Illes, 2010). Such a vision implies that processes of care of the self may in time disaggregate the subject into neurological functions and causalities that are deemed either 'operational' or 'defective' in any given context. We are informed that we are plastic, malleable entities, laden with potential, but of course still beholden to and inextricably entangled with our material 'wetware between the ears' (Safire, 2002), and hence we must practice a form of care through the enhancement of a molecular assembly that is now 'persuadable' (Pruchnic, 2008: 194).

All that we supposedly need then, say the hard materialists of neuroethics, is sufficient knowledge of this malleable substance inside the skull so that ‘descriptive knowledge of the brain will inform us on what we should do’ (Schleim, 2014). Altogether this amounts to a form of reconstituted subjectivity and citizenship; an ethic of purposefully (but also subversively) modifying the purpose-maker themselves in ways adhering to overarching ideological dictates that presume to know their own ends. An idol that carves itself. Tangled up in this process are the contingencies of ‘recurrent histories’ (Canguilhem, 1988) and ‘situated knowledges’ (Haraway, 1988) of how the subject is conceptualised and may be best realised. If governing of the neoliberal subject is ‘to act upon action’ (Rose, 1999) in ways that do not constrain agency and ‘freedom’ but rather governs *through* such aspirational labours (Rose, 1996, 1999) by aligning individual volitions with societal imperatives, then how will the citizen-subject be constituted in a time where ethics of self-governance compels a virtue of *hyper*-reflexivity, of urging subjects to labour upon the sub-conscious mechanisms of their ‘freedom’?

In such a stupendously complex entanglement it is of concern that many current rationales for neuro-enhancement are closely tied to rigidly affixed ends that pre-emptively preclude the possibility that we may not actually know what is most conducive to our wellbeing. Further to this is the potentially disquieting irony that in attempting to maximise our capacities to uphold broadly liberal democratic principles we would take action that subverts those very same principles by intervening upon ourselves in a state-driven program of ‘moral perfectionism’ (Sparrow, 2014). Those of us resistant may consequently find ourselves wedged in defending a classical humanism that has become similarly banal and rigid beyond saving, and so equally stuck in notions of our ‘essential’ and thus ‘inalienable’ qualities that obtain less and less but require ever more upkeep to uphold (Braidotti, 2013).

To conclude, it is difficult to envision how a widespread regime of moral modification at the neurological level does not risk generating looping effects difficult to foresee. Harris (2011: 104) similarly observes that a ‘fundamental problem’ in current debates around moral enhancement is that ‘the sorts of traits or dispositions that seem to lead to wickedness or immorality are also the very same ones required not only for virtue but for any sort of moral life at all’. Such proposals of moral enhancement thus advocate an unsettling circumventing of the ethical subject in one sense but with added personal responsibility in another, for we may find ourselves practicing a self-care ethic of hyper-reflexivity whereby our conscious selves induce propensities to ‘good’ action at the neurological level. The result is that whatever we mean by ‘ethics’ risks becoming fixed and rigid in the material, and so subverts and forecloses potentialities of subjectivity we may later need to draw upon in coping with rapid societal change. We should exercise due caution against proposals that threaten to reduce the space where an affirming sense of our being can be exercised.

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