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Cognition-Enhancing Drugs: Can We Say No?

Frank Pasquale[1]

Abstract

Normative analysis of cognition-enhancing drugs frequently weighs the liberty interests of drug users against egalitarian values. Yet those who would refuse to engage in neuroenhancement may well find their liberty to do so limited in a society where such drugs are widespread. To the extent that unvarnished emotional responses are world-disclosive, neurocosmetics also threaten to foist faulty data upon all their users. This essay examines underappreciated liberty-based and epistemic rationales for regulating cognition-enhancing drugs.

Keywords

Arms race, psychopharmaceuticals, drugs, enhancement, emotion

New pharmaceutical technology challenges extant philosophical accounts of autonomy and liberty. The classic divide between positive and negative liberty[1] will seem increasingly outmoded as new competitive environments create dire consequences for many of those who fail to normalize behavior and affect in line with ever-more precise neurocosmetic interventions. Paradoxes of precommitment will also develop. If a person at one point in time commits himself to taking a drug that both creates certain patterns of behavior and affect, and generates a need to keep taking that drug, can the continuing use of the drug be said to be autonomous?

We are used to distinguishing between addiction, mere habit, and virtuous commitment by examining the psychic state of the subject and the effect of the subject's use of substances on her or his participation in society. Frequent cocaine use tends to wreck a person's career and family life. A habit of exercising may jokingly be called an "addiction," but is usually admired for its contribution to health and well-being. As large pharmaceutical firms tailor neurocosmetics to generate both feelings of well-being and efficient attention to work, the old methods of distinguishing harmful addictions from virtuous habits will break down. If there is a problem with such drugs, it must be distinguished from the "drug problem" so familiar in U.S. political discourse.

Once utilitarian analysis of the *effects* of drug use is set to one side, other concerns about neurocosmetics emerge. In previous work, I have pursued a sociological critique, focusing on the competitive pressures that render the decision to take neurocosmetics a far from free choice.[2] This essay focuses on epistemological dimensions of advanced neurocosmetic use, characterizing them as emotional "blinders" designed to deny the world-disclosive dimensions of normal emotional life. The first section focuses on current trends in psychopharmacology. The second section queries whether advanced neurocosmetics are compatible with traditional understandings of autonomy. The piece provisionally concludes that overemphasis on autonomy as Dennettian "elbow room" to have "done otherwise" has obscured the epistemological foundations of truly free choice. To the extent advanced neurocosmetics block recognition of difficult truths or feelings, they undermine the very foundations of autonomy.

Pharmaceutical Heteronomy

What happens when pharmaceutical technology grants us the freedom to consider ourselves heteronomous? A recent book on health care rationing in the United States (Can We Say No?) worries that political pressures for health spending will ultimately bankrupt the U.S. economy. This idea of a spending ratchet is a commonplace of the health care finance literature. Less well covered has been a creep toward performance-enhancing drugs. Though less of a threat to the public till, they raise fundamental questions about individuals' capacity for autonomous reactions to technological trends.

Consider a recent discussion in *Edge*, an online magazine that asked 151 luminaries "What Will Change Everything?" Marcel Kinsborne predicted a growing market for "neurocosmetics" that translate the benefits of cosmetic surgery to the social world:

> [D]eep brain stimulation will be used to modify personality so as to optimize professional and social opportunity,

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> within my lifetime. Consider an arms race in affability, a competition based not on concealing real feelings, but on feelings engineered to be real. . . . [Or] switching a personality on and then off, when it becomes boring?
>
> We take ourselves to be durable minds in stable bodies. But this reassuring self-concept will turn out to be yet another of our so human egocentric delusions. Do we, strictly speaking, own stable identities? When it sinks in that the continuity of our experience of the world and our self is at the whim of an electrical current, then our fantasies of permanence will have yielded to the reality of our fragile and ephemeral identities.[3]

It is one thing to read these imaginings in the fiction of a Houllebecq, Franzen, or Foster Wallace; it is quite another to see them predicted by a professor of psychology at the New School for Social Research. The arms race Kinsborne describes is likelier to erode, rather than reveal, humanity's true nature.[4] His complacency at this prospect reveals a technophilic bias at the heart of *Edge*'s inquiry: an implicit belief that certain technologies will inevitably change us rather than being changed or stopped by us.

Assumptions about the plasticity of the self—and concomitant inevitability of technology—are driving the acceptance of new technologies of self-alteration. Helen Fisher, a biological anthropologist and chief scientific advisor for the online dating site Chemistry.com, openly embraces an arms race metaphor as she predicts, in the same *Edge* symposium, that "ever more of us will begin to use [a] new arsenal of weapons to manipulate ourselves and others." In a recent editorial in *Nature* titled "Towards Responsible Use Of Cognitive-Enhancing Drugs By The Healthy,"[5] distinguished contributors have endorsed a "presumption that mentally competent adults should be able to engage in cognitive enhancement using drugs." The editorialists argue that cognitive enhancement is here to stay: "From assembly line workers to surgeons, many different kinds of employee may benefit from enhancement and want access to it, yet they may also need protection from the pressure to enhance."[6] Despite repeated failures of self-regulatory professional standards in drug prescribing in the past,[7] the *Nature* editorialists assume that doctors will suddenly be up to this delicate task in the future.

As humans become more machine-like and machines become more like humans,[8] the assumption that normal emotions are something to be "fixed" or "corrected" is sure to gain currency. At the vanguard of this approach are Patricia and Paul Churchland, who, rather than acting out, expressing, or displaying emotions,[9] appear to prefer to refer to their supposed chemical determinants:

> One afternoon recently, Paul says, he was home making dinner when Pat burst in the door, having come straight from a frustrating faculty meeting. She said, "Paul, don't speak to me, my serotonin levels have hit bottom, my brain is awash in glucocorticoids, my blood vessels are full of adrenaline, and if it weren't for my endogenous opiates I'd have driven the car into a tree on the way home. My dopamine levels need lifting. Pour me a Chardonnay, and I'll be down in a minute.[10]

Fisher, Kinsborne, and the Churchlands suggest the metaphysical foundations of self-mechanization. It's a vision of the self as "multiple input-multiple output transducer," which accepts and extends a long intellectual tradition of reducing "soul to self, self to mind, and mind to brain."[11] This last step of understanding what the brain is as what it does is a functionalism that begs the question Bourne used to put to Dewey: what exactly is the *point* of this pragmatic deflation of our self-understanding?[12]

In an increasingly market-oriented society, cost control is often a key rationale for product success. For example, the *Wall Street Journal* reports that "Nearly 30% of the total nursing-home population is receiving antipsychotic drugs. . . . In a practice known as 'off label' use of prescription drugs, patients can get these powerful medicines whether they are psychotic or not."[13] Drugged patients can be far cheaper to care for than those who are fully aware of their plight. Some businesses and schools are also pushing for more pliant employees and students, expanding the range of what is classified as "mental illness" in order to enhance docility.[14] As Frederick Crews has observed, there is increasing pressure to conform one's personality to a sanguine norm.[15]

Many recent books are questioning the expansive trend toward "medicalizing" emotional responses that were once considered acceptable.[16] Horwitz and Wakefield argue that "instances of what Freud called 'ordinary human misery' should not be confused with real mental disorder"—but there are many pressures toward treating them as such. As the realm of "mental optimization" expands, more employers will request (or demand) employees take certain drugs. For example, someone grieved by a loss might become much more productive if they can nip misery in the bud with the right intervention.[17]

Recharacterizing Advanced Neurocosmetics as Generators of Faulty Data

As advanced neurocosmetics become more common in the workplace, the complex emotional mixture of ennui, detachment, skepticism, and embers of warmth in office life limned in a novel like Joshua Ferris's *And Then We Came to the End*[18] could be flattened into the glad-handing grins of "company men." The neurocosmetics forecast in *Edge* have the

same place in the social world that marketing has in the worlds of goods and services. Such drugs promote a shift in their users from being an object to being a subject of marketing. As Rob Horning has suggested, "consumerism makes the will and ability to concentrate seem a detriment to ourselves."[19] Similarly, neurocosmetics promises to relieve the mental effort of crafting a genuinely integrated response to events from the welter of conflicting emotions they generate, leaving only the feeling induced by drugs.

In a world of advanced neurocosmetics, emotions lose their world-disclosive[20] potential and moral force. Rather than guiding our choices, emotions are themselves among the many "experiences" an individual can "consume." The industrial possibilities are endless; some rigorous cost-benefit analyses may prove a new soma's indispensability to such varied crises as demographic imbalances[21] and mass unemployment.[22]

What kind of common moral language is necessary to a reconsideration of neurocosmetics? Philosophers Langdon Winner and Albert Borgmann have started answering that question as they consider technology's impact on the character of contemporary life.[23] Borgmann notes that "simulations of reality can lead to disastrous decisions when assumptions or data are faulty."[24] Perhaps we should start thinking of neurocosmetics as a faulty source of data about emotional responses to the world around us. As Martha Nussbaum has demonstrated in her work *Upheavals of Thought*, emotional responses blend cognitive and affective reactions in a way that is essential to responsible moral evaluation. For example, in all but the most extreme cases of trauma, a physician who gave a patient a pill to make her forget the death of her father a day before would rightly be viewed as deeply irresponsible. Far from being an annoyance or impediment, the grief is essential to the identity of the griever.

Concluding Reflections: Questions of Degree

Admittedly, the precise gradations between normal and pathological grief are difficult to draw. As Peter Kramer noted in his book *Listening to Prozac*, some cultures require widows to mourn publicly for five years after a husband's death; others value more rapid resilience. It is difficult to say, as a general matter, which is the "best" response, and technology may be a useful tool for some in oppressive societies to escape from the worst aspects of their cultural heritage.[25]

Yet technological pressures to engage in certain modes of behavior and affect, simply in order to enhance efficiency, deserve deeper consideration. As Dr. Anjan Chatterjee, a neurologist at the University of Pennsylvania Hospital, has observed, pharmaceutical self-control could transform autonomous humans into "automatons that are very good at implementing things but have nothing to implement."[26]

A movement from autonomy to automata-dom is not on the agenda of any current innovators in psychopharmacology. Nevertheless, one of the great lessons of the philosophy of technology is the slow transformation of "optional" technologies into mandatory accoutrements of daily life. The "free choice" to take a mood-enhancing drug can quickly morph into a de facto requirement of market competition. For example, many students now feel that they must take attention-enhancing drugs in order to adequately compete in final examinations. Before celebrating drugs' capacity to remake ourselves, the advocates of advanced neurocosmetics need to articulate more seriously precisely what the endpoint of their project is.

Only a few legal scholars have begun to examine the institutional mechanisms needed to bring about such a public articulation and examination of pharmaceutical innovation. Dov Fox has convincingly argued that "The FDA must step outside of the cost-benefit framework and reformulate its decision making" to accommodate "a more holistic . . . style of decision making governing biomedical enhancement activity."[27] Fox argues that such decision making would necessitate ongoing monitoring of the use of enhancing drugs in order to ensure full understanding of their social effects. Fox also proposes that

> Congress should amend the Food, Drug, and Cosmetic Act to give the FDA limited authority to regulate the practice of medicine [because] even where all uses of a given biomedical technology are equally safe and effective, some such uses are appropriate, while others are inappropriate, and can have serious social consequences.

Such authority would enable the agency to avoid the false dilemma of either flatly denying or approving given enhancement technologies.

In an essay titled "The Ends of Economics," Dupre and Gagnier comment on the remarkable fact that "most economists believe that the core of economics can be developed with no assumptions at all about what an economy should aim to provide."[28] Neurocosmeticians similarly presume to develop ideal emotional states for individuals while neglecting to aim to calibrate such responses to the particular phenomenon their "patients" will encounter. The resulting simulation of experience threatens to be as detached from reality as the "irrationally exuberant" financial models that led to the great financial market meltdown of 2008. Just like market participants who assume that housing prices can only go up, users of neurocosmetics who only seek the feeling of happiness and calm are blinding themselves to the darker realities of human nature and experience. Sadly, there are many middlemen and psychiatrists *manques* who can profit from such self-delusion.

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Notes

1. See Berlin (1969). For a prescient critique of Berlin's dichotomy, see Taylor (1985).
2. See Pasquale (2006b, 2007). For a fuller discussion of how choices can be both "forced and free," see Grewal (2008).
3. The World Question Center (n.d.).
4. See Pasquale (2007).
5. See Greely et al. (2008).
6. See Greely et al. (2008).
7. See Angell (2009).
8. See Henig (2007).
9. See Kagan (2007).
10. See Portico (2007).
11. See Pasquale (2002).
12. See Bourne (1992).
13. See Lagnado (2007).
14. See O'Donnell (2007).
15. See Crews (2007).
16. See Conrad (2007), Horwitz and Wakefield (2007), Ian Jakobi (2007), and Lane (2007).
17. Compare Jennifer Chandler (2007) on court effectively requiring injured person to undergo back surgery in order to "mitigate damages" before allowing damages claim to go forward.
18. See Ferris (2007).
19. See Horning (2009).
20. See Kompridis (2006).
21. See Pasquale (2006a).
22. See Wong (2009) and Friedman (2007).
23. See Borgmann (1984).
24. See Edwards (2000).
25. See, for example, Sunder (2001).
26. See Gibson (2008).
27. See Fox (2005).
28. See Dupre and Gagnier (1999).

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