

## OVERHEARD IN THE ACADEMY

### Socrates on Drugs: The Controversy over Cognitive Enhancement

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You are renowned throughout the city-state for your great feats of endurance. Whereas those ninnyes in Homer's *Odyssey* are always stopping to eat and sleep in desperate hopes of restoring themselves to "form," terrified as they are of the ravages of time, you, without even thinking of food, once had a long, winding, and extremely demanding discussion with a number of men much younger than you that lasted over a whole night! (The young Polemarchus had enticed you to come to his house with the promise of supper, among other distractions [*Republic*, 328a]; but things more permanent and beautiful freed even the young men from the tyranny of the belly. Poor Odysseus: "Belly must be filled" [*Odyssey*, bk. 7]. How the poets lie!) Then there is the story of how, after a night of feasting and drinking and story-telling about love—and after Alcibiades, and then a number of other drunks, broke into the party and made everybody drink yet more!—you went off, fresh as could be, and spent the whole next day as was your wont, discussing with young men at the lyceum (*Symposium*, 223d). Neither Aristophanes nor Agathon, try as they did, could stay up with you. How *do* you do it?

The secret? Well, what would we think if it were...modafinil?<sup>1</sup>

"Professor's Little Helper" is the title of a commentary published in December 2007 in the journal *Nature* by Cambridge University scientists Barbara Sahakian and Sharon Morein-Zamir. The two discuss the "off-label" use of cognitive-enhancing drugs and remark that, "[i]n academia, we know that a number of our colleagues...already use modafinil to counteract the effects of jetlag, to enhance productivity or mental energy, or to deal with demanding and important intellectual challenges" (Sahakian and Morein-Zamir 2007, 1158). It might be thought that this should hardly count as news—the use of the methylphenidate Ritalin and amphetamine Adderall by cramming college students comes as no surprise, even if it has not lost the power to

shock—but news this story became. Among other examples: Only days later, *The Chronicle of Higher Education* invited comments online (see the news blog “Brain-Boosting Drugs Hit the Faculty Lounge”). *Nature* both opened a “public forum” online (see, “Would you boost your brain power?”) and conducted an anonymous online survey to determine the prevalence of off-label use of such drugs. The journal also published multiple letters in response to Sahakian and Morein-Zamir in its January 31, 2008 issue.<sup>2</sup> Then, in March, *The New York Times* took notice with an article in its Week-in-Review entitled “Brain Enhancement Is Wrong, Right?” According to *The Times*, “an era of doping may be looming in academia, and it has ignited a debate about policy and ethics that in some ways echoes the national controversy over performance enhancement accusations against elite athletes like Barry Bonds and Roger Clemens...” (Carey 2008).<sup>3</sup>

All these articles and discussions are well worth reading; the conceit of Socrates on drugs is taken, in fact, from the *Nature* public forum.<sup>4</sup> It might be wondered, however, whether the questions and concerns that these articles and discussions raise go to the heart of the matter. The questions and concerns that come up again and again are safety (for example, whether there is a risk of harmful side-effects, or a danger of addiction); fairness or justice (would the drugs be available to all? would disparities increase?); whether there would be coercive pressure to use such drugs—and have our children use such drugs—should “everyone” be doing it in the most competitive, highly-compensated professions and in the schools that prepare students for these professions;<sup>5</sup> whether the use of such drugs is in fact unprecedented (think of coffee, tea, and nicotine), or in other words “only” different in degree rather than kind from the consumption of more familiar substances;<sup>6</sup> and finally whether pharmacological enhancements are different in a morally significant way from more mundane forms of “life enhancers” that some people have the fortune to benefit from (like tutors or test-preparation courses).<sup>7</sup> These are surely important questions to ask, and the answers are not obvious.<sup>8</sup> But there are other questions that might be considered just as or even more important and that find expression less frequently, perhaps because they are difficult to articulate, and because some involve considerations that our individualistic, capitalist society has become largely blind to.

To return to academics on drugs: Why devote one’s life to study? Why seek knowledge as a profession or vocation? Surely “academic success” should be, if it is not always, a secondary consideration. (If people go into academics with the principal aim of becoming academic “superstars,” do they go into it for the right reason? Or is there, after all, nothing truly sacred in the “sacred

groves of academe,” such that one may behave there as one wishes?<sup>9</sup>) Most academics hold Ph.D.’s: doctorates of *philosophy*, which etymologically means love of *wisdom*, not simply knowledge. And wisdom has to do with living *well* as human beings. Yes, it may be natural to human beings, as Aristotle remarks at the beginning of his *Metaphysics*, to reach out to know; and knowledge does appear to be a basic human good.<sup>10</sup> Further, cognitive-enhancing drugs may serve and advance the accumulation and discovery of knowledge. But does knowledge so discovered serve the person who discovered it, or does he or she begin to serve it? In other, more dramatic terms, has such a person made him or herself a slave to the discovery of knowledge—to change the terms, but keep the drama, made knowledge an idol that he or she serves, to the sacrifice of his or her humanity?

The claim that a human being risks sacrificing or distorting or otherwise damaging his or her “humanity” in doing this or that—in other words, that there is something “essentially human” at stake in a practice—obviously needs clarification and elaboration, and needs it quickly. The claim needs clarification and elaboration since it is undeniably vague; it needs clarification and elaboration quickly lest it be simply dismissed as “nostalgic, sentimentalized” nonsense, another instance of “right-wing arguments that have been made for centuries in the face of anything new”—which was the judgment of a blogger on a recent article in *The New Republic* by Leon Kass and Eric Cohen on the use of biotechnical enhancements in sports.<sup>11</sup> Kass and Cohen make such a claim; what they mean by it deserves at least attention.

Kass is a notoriously controversial figure in the debate on enhancement and in bioethics generally, no doubt in part because of his occasional rhetorical excesses. Another reason, though, may be that he challenges the dogma, whether true or false, of our time and place that the way to happiness or fulfillment is to do what *I* want, as *I* want, when *I* want—and *who is anyone to tell me that I could be wrong?* Kass’s principal criticism of the use of biotechnology “beyond enhancement,” whether for improved cognition, mood, or strength, is that “[h]uman experience under biological intervention becomes increasingly mediated by unintelligible forces and vehicles” (Kass 2003, 22), such that the human being becomes “less doer and more done-to” and “[h]is doings become, in a crucial sense, less ‘his own’” (Kass and Cohen 2008, 36). In other words, we become fields where the drugs we take express themselves; our achievements become effects, no longer of the exertions of our character and cultivation of our native gifts, but of the armamentarium of drugs that happens to be at our disposal. Whereas Kass claims:

[I]f human flourishing means not just the accumulation of external achievements and a full curriculum vitae, but a life-long *being-at-work* exercising one's *human* powers *well* and without great impediment, our genuine happiness requires that there be little gap, if any, between the dancer and the dance... (Kass 2003, 23)

There are yet further important questions to raise about cognitive-enhancing drugs. For example, is it the role of medical professionals to supply such drugs to “patients”? If we answer yes, would this mean a significant change in the nature of the institution of medicine—which is arguably already in a state of conceptual confusion (Caplan, McCartney, and Sisti 2004)—and, if so, would this be a change for the better or worse? Also, do we, as a society, really want pharmaceutical companies to be developing new classes of drugs without a disease in mind, but instead with the aim of “augment[ing] normal encoding mechanisms” (Chatterjee 2006, 110)? It is happening already. For, though most of the earth's people still lack basic healthcare, these companies, which make staggering profits as it is, “have significant economic incentives to expand their markets to healthy individuals” (Chatterjee 2006, 112). The poor can't pay. That healthy academics, many of whom lean politically to the left, would provide these companies a new market—where is that gadfly Socrates when we need him?

The editors have asked our contributors to this second iteration of “Overheard in the Academy” to take up and enrich or rebut these reflections.

## Notes

1. Modafinil is marketed under the label Provigil by, remarkably enough, the biopharmaceutical company Cephalon. (Cephalus is the name of Polemarchus's father. The name means “head.”) According to the manufacturer, “Provigil is a prescription medicine used to improve wakefulness in adults who experience excessive sleepiness (ES) due to one of the following diagnosed sleep disorders: obstructive sleep apnea (OSA), shift work sleep disorder [SWSD], or narcolepsy” (see [www.provigil.com](http://www.provigil.com)). The U.S. armed services are apparently studying modafinil intensively (Chatterjee 2006, 110).
2. To quote a bit from two of the more provocative letters, Nick Bostrom writes:  
 With the cockcrow of enhancement medicine, we need to retool our regulatory paradigm. It is not only special occupations such as military commandos and air-traffic controllers that would benefit from good enhancement drugs. Other jobs are just as important and intellectually taxing—including the jobs of many scientists and academics. Anything that can help our brains deal better with the complex challenges of the twenty-first century is to be not only welcomed but actively sought. But it will require substantial investment

to develop interventions that are both safe and effective in long-term use (Bostrom 2008, 520).

To which John Harris and Muireann Quigley add:

Science and technology will continue to generate all sorts of new enhancers, and the quest for enhancement is not necessarily unfair or unethical. We humans are inveterate enhancers, striving to increase our intelligence and to improve our memory and powers of perception.... We must press for wider and more equitable access, turning our backs neither on technology nor on improving the human condition (Harris and Quigley 2008, 521).

3. The analogy of doping in academia to doping in sports is often invoked, but sometimes only to be rejected. For example, "a phil prof" contributing to the *Chronicle* blog writes that "the analogy with baseball is silly. Research is a joint effort, whether one realizes it or not. Another's good research helps us all. If you need to be hopped up on something, I won't worry that you'll break a record before me...." See <http://chronicle.com/news/article/3673/brain-boosting-drugs-hit-the-faculty-lounge>, number 28.
4. A blogger identifying himself as Nicolau Werneck writes: "We must change all of this, the tests and the competitions in science and teaching. That's not what science is all about! Can you imagine Socrates taking Ritalin? What would be his motivation? I bet he would drink conium before that." See <http://network.nature.com/forums/naturenewsandopinion/816?page=4>.
5. As Michael J. Sandel nicely observes:  
 Unlike the drugs of the sixties and seventies [for example: marijuana and LSD], Ritalin and Adderall are not for checking out but for buckling down, not for beholding the world and taking it in, but for molding the world and fitting in.... The steroids and stimulants that figure in the enhancement debate are not a source of recreation but a bid for compliance, a way of answering a competitive society's demand to improve our performance and perfect our nature (Sandel 2007, 60–61).
6. It is worth noting that not all drugs that have the same effects, and so could have the same uses, necessarily figure in the same ways in human culture. For example, coffee may be used as a stimulant in order to "buckle down," but it may also be used, and often is, as a way to "check out" from the pressures of work. It shouldn't be forgotten that people go to cafés to socialize or read!
7. A blogger identifying himself as Charles Eaton writes:  
 As to the bug-bear of "competitive advantage," that is not a public health issue at all but a personal ethical and philosophical question. Today I will give my 7-year-old granddaughter a piano lesson, lead her in a chemistry experiment, listen to her sums, and encourage her to enter any new words of her vocabulary into her personal dictionary. Do I intend to nurture her toward a "competitive advantage"? Oh, you bet!  
 See <http://network.nature.com/forums/naturenewsandopinion/816?page=2>.
8. See for a synthesis of these questions and concerns Chatterjee 2006.

9. Plato's school or "academy" was located in and took its name from the sacred groves of Athena.
10. It is good to know; even denying it depends on acknowledging it and seeking to know.
11. See the comments of "JSmith125" (#2 of 14) at <http://www.tnr.com/talkback.html?id=ea669633-6736-4302-ac23-cd967bbe64f4>.

## References

Bostrom, Nick

- 2008 Drugs Can Be Used to Treat More Than Disease. *Nature* 451/7178: 520.  
doi:10.1038/451520b

Caplan, Arthur L., James M. McCartney, and Dominic A. Sisti, eds.

- 2004 *Health, Disease, and Illness: Concepts in Medicine*. Washington, DC: Georgetown University Press.

Carey, Benedict

- 2008 Brain Enhancement Is Wrong, Right? *New York Times*, March 9, Week-in-Review.

Chatterjee, Anjan

- 2006 The Promise and Predicament of Cosmetic Neurology. *Journal of Medical Ethics* 32: 110–113. doi:10.1136/jme.2005.013599

Harris, John and Muireann Quigley

- 2008 Humans Have Always Tried to Improve Their Condition. *Nature* 451(7178): 521. doi:10.1038/451521b

Kass, Leon R.

- 2003 Ageless Bodies, Happy Souls. *The New Atlantis* 1: 9–28.

Kass, Leon R. and Eric Cohen.

- 2008 For the Love of the Game. *The New Republic*, March 26.

Sahakian, Barbara and Sharon Morein-Zamir

- 2007 Professor's Little Helper. *Nature* 450(7173): 1157–1159.  
doi:10.1038/4501157a

Sandel, Michael J.

- 2007 *The Case against Perfection*. Cambridge, MA: Harvard University Press.