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#### Abstract

The moral enhancement (or bioenhancement) debate seems stuck in a dilemma. On the one hand, the more radical proposals, while certainly novel and interesting, seem unlikely to be feasible in practice, or if technically feasible then most likely imprudent. But on the other hand, the more sensible proposals – sensible in the sense of being both practically achievable and more plausibly ethically justifiable – can be rather hard to distinguish from both traditional forms of moral enhancement, such as non-drug-mediated social or moral education, and non-moral forms of bioenhancement, such as smart-drug style cognitive enhancement. In this essay, I argue that bioethicists have paid insufficient attention to an alternative form of moral bioenhancement – or at least a likely candidate – that falls somewhere between these two extremes, namely the (appropriately qualified) use of certain psychedelic drugs.

#### 1. Introduction<sup>1</sup>

The world would be a better place if the people in it were more moral than they are. If only there were a way we could enhance the moral character of humanity. Violence would drop. Co-operation would climb. Global poverty might be ameliorated through a boost in charitable giving. And the danger of human-caused climate change could at last be mitigated through improved collective action. Unfortunately, our current methods are not working – or at least, not well enough.

<sup>1</sup> The author would like to thank Michael Hauskeller, Lewis Coyne, and Ole Martin Moen for helpful feedback on an earlier draft of this essay. Please note that a handful of sentences have been adapted from the earlier piece, 'Moral Neuroenhancement' by Brian D. Earp, Thomas Douglas, and Julian Savulescu – see reference below.

<sup>2</sup> Ingmar Persson and Julian Savulescu, 'The Perils of Cognitive Enhancement and the Urgent Imperative to Enhance the Moral Character of Humanity', *Journal of Applied Philosophy* **25**:3 (2008), 162–77; Ingmar Persson and Julian Savulescu, 'Getting Moral Enhancement Right: The Desirability of Moral Bioenhancement', *Bioethics* **27**:3 (2013), 124–31.

Julian Savulescu and Ingmar Persson, 'Moral Enhancement', *Philosophy Now* **91** (2012), 6–8; Ingmar Persson and Julian Savulescu, 'Reply to Commentators on "Unfit for the Future", *Journal of Medical Ethics* **41**:4 (2015), 338–39.

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Maybe it is time to think creatively and ponder new approaches to making morally better humans.

One proposal that has generated a lot of attention in recent years involves the deployment of modern neuroscience and its discoveries. Instead of relying solely on traditional, external means of moral improvement – childrearing, socialisation, political institutions, and the like – this approach suggests that we should try, or at least consider trying, "internal" methods as well. For example, we could explore the use of gene therapies or brain-level neurotechnologies to expand our moral capacities, as it were, from the inside out – perhaps even transcending our presently inherent moral limitations. Since what is at stake is no less than the preservation of the Earth and the welfare of its inhabitants both now and in the future, all options should be on the table. Or should they?

## 2. Reasons for Scepticism

When I first dipped my toe into the moral bioenhancement literature, <sup>7</sup> I was sceptical. I presumed that the idea would turn out to be a dead-end or at best a side-show – a flashy fad set to go out of fashion. Since I had been writing over the years, more or less favourably, about the prospect of using biotechnology to enhance human romantic relationships, <sup>8</sup> and since I had been doing so in close

- <sup>4</sup> Thomas Douglas, 'Moral Enhancement', Journal of Applied Philosophy **25**:3 (2008), 228–45.
- <sup>5</sup> But see: Harris Wiseman, *The Myth of the Moral Brain: The Limits of Moral Enhancement* (Cambridge, MA: MIT Press, 2016).
- <sup>6</sup> Ingmar Persson and Julian Savulescu, *Unfit for the Future: The Need for Moral Enhancement* (Oxford: Oxford University Press, 2012).
- <sup>7</sup> For a recent review, see: Thomas Douglas, 'The Morality of Moral Neuroenhancement', in Jens Clausen and Neil Levy (eds), *Handbook of Neuroethics* (Dordrecht: Springer, 2015), 1227–49.
- The main contributions are: Brian D. Earp, Anders Sandberg, and Julian Savulescu, 'Natural Selection, Childrearing, and the Ethics of Marriage (and Divorce): Building a Case for the Neuroenhancement of Human Relationships', *Philosophy & Technology* **25**:4 (2012), 561–87; Brian D. Earp, et al., 'If I Could Just Stop Loving You: Anti-Love Biotechnology and the Ethics of a Chemical Breakup', *The American Journal of Bioethics* **13**:11 (2013), 3–17; Brian D. Earp, Anders Sandberg, and Julian Savulescu, 'Brave New Love: The Threat of High-Tech "Conversion" Therapy and the Bio-Oppression of Sexual Minorities', *AJOB Neuroscience* **5**:1 (2014), 4–12; Brian D. Earp, Anders Sandberg,

collaboration with one of the foremost architects of the moral enhancement movement, you might think that I would have been drawn to this other enhancement proposal with an air of optimism or even enthusiasm.

But I was not. For one thing, it was hard to pin down what the term "moral enhancement" was supposed to refer to, and the options for achieving it, however defined, seemed either plausible but uninteresting (primarily, those accounts that emphasised continuity with more traditional forms of moral education), or sexy and thought-provoking, but too much like science fiction (morally re-engineering the species to save the planet). In other words, the interventions that were being floated seemed either hopelessly far-fetched or, if more realistic, not worth writing home about.

Moreover, the general focus seemed to be on the potential modification of specific psychological capacities, such as the ability to empathise, rather than more global, flexible capacities that would allow one to respond appropriately to a wide range of situations (whatever those capacities or modifications turned out to be). A problem with the former approach is that the lower-level capacities, while clearly relevant to moral decision-making and behaviour, probably cannot – due to basic facts about neurochemistry – ever be successfully tweaked in isolation like so many dials in the brain. <sup>9</sup>

One reason for this likely impossibility is the delicate interconnectedness of many if not most neural processes and systems. In other words, due to the overlapping web of electrochemical interactions by which the brain carries out its business, any attempt to intervene in some specific low-level cognitive or emotional capacity (assuming that such a target could ever be discretely defined, whether conceptually or in terms of physical instantiation) would likely result in

and Julian Savulescu, 'The Medicalization of Love', Cambridge Quarterly of Healthcare Ethics 24:3 (2015), 323–36; Julian Savulescu and Brian D. Earp, 'Neuroreductionism about Sex and Love', Think 13:38 (2014), 7–12; Brian D. Earp, et al., 'Addicted to Love: What Is Love Addiction and When Should It Be Treated?', Philosophy, Psychiatry, & Psychology 24:1 (2017), 77–92; Brian D. Earp and Julian Savulescu, 'Love Drugs: Why Scientists Should Study the Effects of Pharmaceuticals on Human Romantic Relationships', Technology in Society 52:2 (2018), 10–16.

Harris Wiseman, 'SSRIs Moral Enhancement Interventions: A Practical Dead End', AJOB Neuroscience 5:3 (2014), 21–30; Molly Crockett, 'Moral Enhancement? Evidence and Challenges' (Presentation at the "The Moral Brain", New York University, New York, March 2012).

undesirable side-effects, at best, and at worst, the disruption or impairment of other important functions. <sup>10</sup>

But even if such capacities *could* be otherwise harmlessly finetuned, <sup>11</sup> what then? I did not see how this approach would guarantee, much less amount to, moral improvement in any reliable sense. Imagine that you could take a drug that made you feel more empathy (without incurring other serious problems). Would that make you morally enhanced? Not necessarily, because the "right" amount of empathy you should feel is not a question with a stable, universal answer. Rather, it depends on the circumstances you are in, the social role you occupy, the specifics of the moral predicament you are facing, and many other factors, all of which might change over time or be different for different people. <sup>12</sup> Biochemically fiddling with dials, then, in an attempt to land on the right "settings" – I hope

Molly J. Crockett, 'Moral Bioenhancement: A Neuroscientific Perspective', *Journal of Medical Ethics* **40**:6 (2014), 370–71; Hannah Maslen, et al., 'Brain Stimulation for Treatment and Enhancement in Children: An Ethical Analysis', *Frontiers in Human Neuroscience* **8**:953 (2014), 1–5.

Tom Douglas has pointed out that, even if such side-effect-free fine-tuning is not likely to be possible any time soon, or even ever, we do not normally require that brain-level pharmaceutical interventions be quite so precise in their effects for us to find their use (for, e.g., medical purposes) appropriate. He writes, 'most medical interventions are rather blunt, and it is thus difficult to prevent them from having overall negative effects in some cases (this is perhaps particularly true of psychiatric interventions)'. However, 'we do not, and should not, regard this as providing us with decisive reasons to abstain from medical treatments. Rather, we take it as giving us reasons to exercise caution in using such treatments, and to try to reduce the risks posed by the treatments over time, for example, by making them more precise'. Thomas Douglas, 'Moral Enhancement via Direct Emotion Modulation: A Reply to John Harris', *Bioethics* 27:3 (2013), 160–68, 166–167.

Robert Sparrow illustrates the problem: '[e]ncouraging empathy and a sense of justice in individuals may usually be a good thing, but enhancing either of these faculties may make individuals more likely to behave unethically in various situations, as when, for instance, a judge declares a person "not guilty" as a result of empathic concern for them, despite the presence of overwhelming evidence that they are in fact guilty of the crime with which they are charged, or when a parent neglects a child out of an excessive concern for duties of justice toward strangers'. Robert Sparrow, 'Egalitarianism and Moral Bioenhancement', *The American Journal of Bioethics* 14:4 (2014), 20–28, 20–21.

this metaphor is not too strained to serve its purpose – seemed to me to be a non-starter.

In response to this kind of concern, which I stress is in no way original to me, <sup>13</sup> some writers have shifted away from a focus on low-level psychological capacities and their attempted biochemical modification, to thinking of moral enhancement in more general terms. G. Owen Schaefer, <sup>14</sup> for example, recommends what he calls indirect moral enhancements centered on improving the capacity to reason and strengthening willpower; while Harris Wiseman has recently advanced a "soft" understanding of moral enhancement that encompasses everything from 'social control', to 'paternalism, law-making, medicine, and mental health, all of whose institutions involve intervening in behavior [...] to prevent and punish activities that are not explicitly immoral, but that have morally related dimensions'. <sup>15</sup>

But that strikes me as changing the conversation. In this respect, I agree with Robert Sparrow, who writes:

Debate about moral bioenhancement is shaped, at least in part, by hopes and fears about the impacts of scientific research into the human brain, especially its anatomy and neurochemistry, into human genetics, and into technologies that might leverage the insights offered by both sorts of research to make people "more moral". Such interventions would alter human biology and not just human behavior. That is to say, the "bio" is essential to the philosophical and cultural buzz around moral bioenhancement. If every revision of social mores, or attempt at institutional design directed toward getting people to behave in particular desirable ways, counts as moral bioenhancement, the category dissolves into meaninglessness. <sup>16</sup>

<sup>&</sup>lt;sup>13</sup> Inmaculada de Melo-Martín and Arleen Salles, 'Moral Bioenhancement: Much Ado About Nothing?', *Bioethics* **29**:4 (2015), 223–32; Wiseman, *The Myth of the Moral Brain*; John Harris, 'Moral Enhancement and Freedom', *Bioethics* **25**:2 (2011), 102–11.

<sup>&</sup>lt;sup>14</sup> G. Owen Schaefer, 'Direct vs. Indirect Moral Enhancement', *Kennedy Institute of Ethics Journal* **25**:3 (2015), 261–89.

Harris Wiseman, 'Would We Even Know Moral Bioenhancement If We Saw it?', *Cambridge Quarterly of Healthcare Ethics* **26**:3 (2017), 398–410, 405.

Robert Sparrow, 'Commentary: Moral Bioenhancement Worthy of the Name', *Cambridge Quarterly of Healthcare Ethics* **26**:3 (2017), 411–14, 412.

So we seem to be stuck with a dilemma. Either we talk about brain-level "bio" interventions that are probably neurologically impossible, or if possible, either too risky to be desirable or unlikely to be reliable moral enhancers; or we stretch out the concept of moral enhancement – and even moral bioenhancement – to the point that we sacrifice the very thing about the idea that made it seem new and exciting and thus worth talking about in the first place. That is, we sacrifice the aspect of moral enhancement that made it distinguishable from the more mundane, traditional methods of moral improvement that have been written about since the dawn of history. John Harris has described the quandary like this:

so far from being susceptible to new forms of high tech manipulation, either genetic, chemical, surgical or neurological, the only reliable methods of moral enhancement, either now or for the foreseeable future are either those that have been in human and animal use for millennia, namely socialization, education and parental supervision or those high tech methods that are general in their application. By that is meant those forms of cognitive enhancement that operate across a wide range of cognitive abilities and do not target specifically "ethical" capacities. <sup>17</sup>

In other words, according to Harris, while high-tech enhancers might plausibly improve our ability to think clearly, concentrate, or rationally pick apart complex scenarios (which in turn could potentially help us identify and respond to moral reasons more efficiently or effectively than we would have done otherwise), there would not be anything distinctively *moral* about either the enhancers themselves or the capacities they would target in the brain. If Harris is correct, then it seems as though the conversation should go back to the somewhat older and more established "cognitive" enhancement debate 18 – concerning the use of "smart drugs" like methylphenidate (Ritalin),

John Harris, 'Moral Enhancement and Freedom', 102.

Nick Bostrom and Anders Sandberg, 'Cognitive Enhancement: Methods, Ethics, Regulatory Challenges', Science and Engineering Ethics 15:3 (2009), 311–41; Simon M. Outram, 'Ethical Considerations in the Framing of the Cognitive Enhancement Debate', Neuroethics 5:2 (2012), 173–84; Hannah Maslen, Nadira Faulmüller, and Julian Savulescu, 'Pharmacological Cognitive Enhancement – How Neuroscientific Research Could Advance Ethical Debate', Frontiers in Systems Neuroscience 8:107 (2014), 1–12; Brian D. Earp, et al., 'When Is Diminishment a Form of Enhancement? Rethinking the Enhancement Debate in Biomedical Ethics', Frontiers in Systems Neuroscience 8:12 (2014), 1–8.

or gene therapy to improve IQ<sup>19</sup> – which, while certainly important and perhaps indirectly relevant to moral enhancement, also feels like changing the topic.

Is there any way to have our cake and eat it too? In other words, is there any possible or actual intervention that is both practically achievable and likely to be ethically justifiable (under the right conditions), while also being radical enough to merit the flood of ink that continues to be spilled in this area? Something that would:

- (1) keep the "bio" in moral bioenhancement, which Sparrow argues is essential to the current philosophical and cultural buzz surrounding the concept (thus ruling out "purely" social, environmental, or psycho-behavioural interventions);
- (2) avoid the pitfalls associated with low-level "dial adjustment" (that is, attempts to biochemically intervene in, or fine-tune, particular cognitive or emotional capacities involved in moral decision-making, behaviour, and the like);
- (3) exert a more general or wide-ranging effect on the moral agent that would contribute to her moral improvement in a robust, sustainable, flexible-across-contexts sort of way, without simply collapsing into Ritalin-style cognitive enhancement.

I believe that there is. In this essay, <sup>20</sup> I offer a tentative account of moral (bio) enhancement that sits between the prevailing extremes of boring-but-possible and interesting-but-not-going-to-happen. Indeed, I will suggest that such enhancement is not merely hypothetical or a likely prospect for the future, but is already taking place in some communities today. And by looking at such practices and communities – which, as my title prevents me from mining for suspense, involve the use of psychedelic substances – I claim that bioethicists can gain practical insights to help focus the moral enhancement debate.

<sup>20</sup> I mean essay in its original sense of trying something out – I am only planting a seed here, which others may water if they wish.

<sup>19</sup> Cynthia Forlini and Eric Racine, 'Autonomy and Coercion in Academic "Cognitive Enhancement" Using Methylphenidate: Perspectives of Key Stakeholders', *Neuroethics* 2:3 (2009), 163–77; Ole Martin Moen, 'Bright New World', *Cambridge Quarterly of Healthcare Ethics* 25:2 (2016), 282–87; Jim Kozubek, 'Can CRISPR-Cas9 Boost Intelligence?', *Scientific American Blog Network*, 2016: https://blogs.scientificamerican.com/guest-blog/can-crispr-cas9-boost-intelligence/.

## 3. Defining the Phenomenon

Before I turn to specific interventions, I need to define my terms. In a recent essay, <sup>21</sup> my co-authors and I proposed a novel definition for what we call *agential moral neuroenhancement*, which is a subclass of moral bioenhancement that focusses specifically on durable changes to a moral agent, as effectuated (at least in part) by direct interventions into the central nervous system (CNS). We chose this focus because the CNS is the part of human biology most likely to be modified by any actual intended moral bioenhancer; but if you prefer the more general "bioenhancement" you can make the necessary adjustments to the following:

**Agential moral neuroenhancement**: Any change in a moral agent – effected or facilitated in some significant way by the application of a neurotechnology [i.e., a technology that works directly on the CNS] – that results, or is reasonably expected to result, in the agent being a morally better (i.e., more moral) agent.

You will notice that this definition, by itself, is agnostic about what counts as 'morally better' or 'more moral'. In principle, therefore, one and the same neurointervention could be considered a moral enhancer by one person or moral theory, and a moral diminisher, or something more neutral, by another person or theory; but this should not cause us too much concern. Reasonable people disagree about what constitutes moral improvement compared to baseline, not only in the realm of potential high tech bioenhancers, but also in the realm of more traditional methods of moral education or spiritual practice.

So, you might raise your children to believe such-and-so about ethics and morality, and encourage them to be and behave accordingly, while I might raise mine to believe so-and-such, but this does not mean that moral improvement is impossible or that we should not try to better our children – and ourselves – to the best of our abilities. For one thing, not only is there likely to be a great deal of overlap between our respective sos and suches (there are wide pockets of concurrence across societies and moral systems), <sup>22</sup> but insofar as

Institute of Ethics Fournal 13:3 (2003), 259-74.

Brian D. Earp, Thomas Douglas, and Julian Savulescu, 'Moral Neuroenhancement', in Syd Johnson and Karen Rommelfanger (eds), Routledge Handbook of Neuroethics (New York: Routledge, 2017), 166–84.
Tom L. Beauchamp, 'A Defense of the Common Morality', Kennedy

there *is* a genuine clash between our views or approaches to morality, this is often beneficial from a moral perspective. As Schaefer notes, 'moral disagreement – while potentially inhibiting consensus-building – is actually an important feature of society'. Among other reasons, it is important because

Without dissent, conventional wisdom will go unchallenged and moral progress becomes essentially impossible. This might not be a problem if we were infallible (i.e., already knew all the relevant moral truths), but because we are not, [suppression of disagreement] will prevent the revision of morally odious policies that, at the time of suppression, seemed perfectly sound. Dissent is instrumentally valuable, then, as a constant check on the validity of the conventional moral wisdom of our time.<sup>24</sup>

There is more that could be said about such moral disagreement. But let us set that issue aside: for our purposes, it should be enough for you to fill in whatever account of moral betterness you prefer as needed over the course of what follows. Now that we have a definition of moral enhancement – or moral neuroenhancement – in hand, we can ask ourselves the central question of this essay: Are there any real-life technologies that could facilitate the sort of change described in that definition (again, granting that some people will disagree about what counts as moral improvement in certain cases), while also meeting the three desiderata listed in the introduction? I have already alluded to the idea that certain psychedelic drugs might plausibly play such a role. I will now explore this suggestion more directly.

# 4. Drugs, Spirituality, and Religion

Writing in the *Journal of Philosophy* in 1964, the scholar of religions Huston Smith observed that 'in his trial-and-error life explorations, man almost everywhere has stumbled upon connections between vegetables (eaten or brewed) and actions (yogic breathing exercises, whirling dervish dances, flagellations) which altered states of consciousness'. From a neuroscientific perspective, Smith continues, 'we now understand these states to be the products of changes in brain chemistry. From the sociological perspective we see that they tended to be connected in some way with religion'.<sup>25</sup>

- <sup>23</sup> Schaefer, 'Direct vs. Indirect Moral Enhancement', 262–263.
- Schaefer, 'Direct vs. Indirect Moral Enhancement', 265.
- Huston Smith, 'Do Drugs Have Religious Import?', *The Journal of Philosophy* **61**:18 (1964), 517–30, 518.

More recently, the theologian Ron Cole-Turner – referring to what he calls 'technologies of spiritual enhancement' – similarly notes that drugs and religion have been linked in human societies for millennia. As he sees it, the most readily (bio)enhanceable human trait is in fact 'our capacity for spiritual experience'. Compared to cosmetic surgeries aimed at bodily enhancement, he writes, 'spiritual enhancement is inexpensive and painless'. Compared to cognitive enhancement with drugs like methylphenidate, 'spiritual enhancement is highly effective and enduring'. Compared to lifespan extension, 'compelling evidence indicates that spiritual enhancement actually works in a highly positive and predictable way'. 28

Our topic is moral enhancement, of course, not spirituality or religion. In quoting Cole-Turner and Smith, therefore, I do not mean to suggest that there is a straightforward, much less affirmative relationship between either of the latter notions and agential moral neuroenhancement as I have defined it: indeed religions in particular, as well as perceived religious commitments, often encourage immoral behaviour. I am only setting the stage for the idea that altered states of consciousness, brought about in part or in whole by the ingestion of certain biochemical substances, have long been considered to yield (whether on their own or in conjunction with other teachings or practices) important insights into the nature of reality and human existence, often with transformative implications for how we should live from a moral perspective.

In *The Doors of Perception*, Aldous Huxley writes of his experience taking mescaline, a cactus-derived drug most commonly used today

Ron Cole-Turner, 'Spiritual Enhancement', in Calvin Mercer and Tracy J. Trothen (eds), *Religion and Transhumanism: The Unknown Future of Human Enhancement* (Denver: Praeger, 2015), 369–83, 369.

For critical discussion, see: Arianne Shahvisi and Brian D. Earp, 'The Law and Ethics of Female Genital Cutting', in Sarah Creighton and Lih-Mei Liao (eds), *Female Genital Cosmetic Surgery: Solution to What Problem?* (Cambridge: Cambridge University Press, forthcoming).

<sup>&</sup>lt;sup>28</sup> Cole-Turner, 'Spiritual Enhancement', 369.

<sup>&</sup>lt;sup>29</sup> Sam Harris, *The End of Faith: Religion, Terror, and the Future of Reason* (New York: W. W. Norton & Company, 2005); but see Cecil Anthony John Coady, 'Violence and Religion', *Revue Internationale de Philosophie* **3** (2013), 237–57.

<sup>&</sup>lt;sup>30</sup> Graham Harvey, *Shamanism: A Reader* (New York: Psychology Press, 2003).

by members of the Native American Church.<sup>31</sup> The 'mescaline experience', Huxley writes,

is what Catholic theologians call "a gratuitous grace", not necessary to salvation but potentially helpful and to be accepted thankfully, if made available. To be shaken out of the ruts of ordinary perception, to be shown for a few timeless hours the outer and the inner world, not as they appear to an animal obsessed with survival or to a human being obsessed with words and notions, but as they are apprehended, directly and unconditionally, by Mind at Large – this is an experience of inestimable value. 32

Notice the 'helpful' rather than 'necessary' effect of the drug in bringing about the experience that was, to Huxley, of inestimable value. I will say more about this issue in a later section, but for now I wish to simply raise the suggestion that if psychedelic substances are ever to feature in a prudent plan for personal moral bioenhancement, <sup>33</sup> they should probably serve a *facilitating* or *adjunctive* role, rather than *determinative* one, in the overall enhancement

Peter N. Jones, 'The Native American Church, Peyote, and Health: Expanding Consciousness for Healing Purposes', *Contemporary Justice Review* **10**:4 (2007), 411–25; John H. Halpern, et al., 'Psychological and Cognitive Effects of Long-Term Peyote Use among Native Americans', *Biological Psychiatry* **58**:8 (2005), 624–31.

The quote finishes with 'to everyone, but especially intellectuals'. Aldous Huxley, *The Doors of Perception* (London: Chatto and Windus, 1954): http://nacr.us/media/text/the\_doors\_of\_perception.pdf. See page 53 of the version available online at the preceding link.

I am just flagging my use of the word 'personal' in this sentence. In this essay, I am concerned only with mature individuals' voluntary attempts to morally self-enhance, which is prima facie not only morally permissible, but desirable. Top-down or coerced moral enhancement of others - particularly if psychedelics were involved – would be much harder to justify from a moral perspective and I will make no attempt to do so here. Still, you might ask, what about drug-mediated moral enhancement of children by their parents or guardians? In some contexts, such enhancement may indeed be appropriate - the careful administration of methylphenidate to children with severe conduct disorders, for example, may be consistent with moral neuroenhancement as I have defined it, and in some cases is presumably justified - but a full discussion of the ethics of such interventions is beyond the scope of this essay. See: Rachel G. Klein, et al., 'Clinical Efficacy of Methylphenidate in Conduct Disorder with and without Attention Deficit Hyperactivity Disorder', Archives of General Psychiatry 54:11 (1997), 1073-80.

process.<sup>34</sup> In other words, they should not be taken "in a vacuum" – that is, by oneself or with unprepared others, without adequate mental or emotional groundwork, stripped of all cultural context – with the expectation that they will somehow *cause* moral improvement all on their own. Writing about psilocybin, the active ingredient in "magic mushrooms", Johns Hopkins psychologist William Richards highlights the need for realistic expectations:

It is clear that [the drug] never can be responsibly administered as a medication to be taken independent of preparation and careful attention to the powerful variables of [one's mindset] and [physical] setting. One cannot take psilocybin as a pill to cure one's alienation, neurosis, addiction, or fear of death in the same way one takes aspirin to banish a headache. What psilocybin does is provide an opportunity to explore a range of non-ordinary states. It unlocks a door; how far one ventures through the doorway and what awaits one [...] largely is dependent on non-drug variables.<sup>35</sup>

Over a century earlier, a more famous William advanced a similar perspective in reference to the altered states of consciousness occasioned by his use of nitrous oxide.<sup>36</sup> In his 1902 masterpiece, *The Varieties of Religious Experience*, William James writes that such drug-induced subjective changes 'may determine attitudes though they cannot furnish formulas, and open a region though they fail to give a map'.<sup>37</sup> Elsewhere in the same passage, he presages

William A. Richards, 'Understanding the Religious Import of Mystical States of Consciousness Facilitated by Psilocybin', in J. H. Ellens and B. Roberts (eds), *The Psychedelic Policy Quagmire: Health, Law, Freedom, and Society* (Denver: Praeger, 2015), 139–44, 140.

William James, 'Subjective Effects of Nitrous Oxide', *Mind* **7**:1 (1882), 186–208.

William James, *The Varieties of Religious Experience* (Mineola, New York: Dover Publications, 1902).

I have made similar arguments using the example of "love drugs" in greater depth elsewhere: Brian D. Earp, Anders Sandberg, and Julian Savulescu, 'The Medicalization of Love: Response to Critics', Cambridge Quarterly of Healthcare Ethics 25:4 (2016), 759–71; Brian D. Earp and Julian Savulescu, 'Is There Such a Thing as a Love Drug? Reply to McGee', Philosophy, Psychiatry, & Psychology 23:2 (2016), 93–96; Olga A. Wudarczyk, et al., 'Could Intranasal Oxytocin Be Used to Enhance Relationships? Research Imperatives, Clinical Policy, and Ethical Considerations', Current Opinion in Psychiatry 26:5 (2013), 474–84.

Huxley's point about the potential value of non-rational aspects of mental life:

One conclusion was forced upon my mind at that time, and my impression of its truth has ever since remained unshaken. It is that our normal waking consciousness, rational consciousness as we call it, is but one special type of consciousness, whilst all about it, parted from it by the filmiest of screens, there lie potential forms of consciousness entirely different. We may go through life without suspecting their existence; but apply the requisite stimulus, and at a touch they are there in all their completeness, definite types of mentality which probably somewhere have their field of application and adaptation. 38

Might one of those fields of application be moral neuroenhancement? To answer this question, let us zoom out from the specific examples we have so far been discussing and consider the class of relevant substances all together.

#### 5. Psychedelics and Moral Neuroenhancement

In their study of spirituality in psychedelic drugs users, Levente Móró and colleagues write that the class of psychoactive substances most closely associated with transpersonal and spiritual domains is psychedelics.<sup>39</sup> The word psychedelic, coined in the 1950s, is a mashup of the Ancient Greek words psychē (ψυχή, "soul") and dēloun (δηλοῦν, "to make visible, to reveal"), roughly translatable as "mind-revealing". Some psychedelics may be found in nature; others are produced in the lab. The most prominent examples include lysergic acid diethylamide (LSD); psilocybin and psilocin from the mushroom Psilocybe ("magic" mushrooms); mescaline from cacti, such as peyote (Lophophora williamsii); and N,Ndimethyltryptamine (DMT), along with ingestible preparations containing that molecule plus MAOI inhibitors, such as the plant-based brew ayahuasca. 40 On some classifications, 3,4-Methylenedioxymethamphetamine (MDMA), commonly known as ecstasy, also counts as a psychedelic substance, although it has a

Móró, et al., 'Voice of the Psychonauts'. Paraphrased.

James, The Varieties of Religious Experience, 388.

Levente Móró, et al., 'Voice of the Psychonauts: Coping, Life Purpose, and Spirituality in Psychedelic Drug Users', *Journal of Psychoactive Drugs*, **43**:3 (2011), 188–98, 189.

different risk profile and mechanism of action compared to the others; it will therefore be treated separately in this chapter.<sup>41</sup>

Primarily acting on serotonin receptors in neocortical pyramidal cells, psychedelics may induce 'temporary and reversible altered states of consciousness by destabilizing and repatterning several psychological subsystems, such as perception, attention, cognition, memory, and sense of self'. Such changes may result in marked shifts in subjective experience, sometimes involving hallucinations across multiple modalities, synesthesia (blending of senses), 'strong emotions varying from terror to awe, encounters and communication with seemingly autonomous entities, space and time distortions, and feelings of oneness, understanding, or insight'.<sup>42</sup>

Generally considered physiologically safe and nonaddictive, psychedelics are characterised by much lower acute toxicity than other drugs such as alcohol. In carefully structured research or therapeutic settings with appropriate supervision, the above-mentioned mental states can typically be reached in a controlled way, reducing the risk for negative long-term physiological and psychological aftereffects to a minimum.

- There is some debate about whether MDMA should be counted as a psychedelic (for an interesting discussion, see the YouTube video, 'Is MDMA a Psychedelic?': https://www.youtube.com/watch?v=yuXWDV LaRzQ). Psychedelic drugs are typically serotonin receptor agonists: they mimic serotonin and tie to serotonin receptors in serotonin's place. MDMA, on the other hand, causes a very significant release of serotonin, as well as dopamine and norepinephrine, and it has a higher potential for abuse and neurotoxic effects. See: David E. Nichols, 'Differences Between the Mechanism of Action of MDMA, MDBD, and the Classic Hallucinogens: Identification of a New Therapeutic Class: Entactogens', Journal of Psychoactive Drugs 18:4 (1986), 305-13; Erika Check, 'Psychedelic Drugs: The Ups and Downs of Ecstasy', Nature 429:6988 (2004), 126-28; Una D. McCann, et al., 'Serotonin Neurotoxicity after  $(\pm)3,4$ -Methylenedioxymethamphetamine (MDMA; "Ecstasy"): Controlled Study in Humans', Neuropsychopharmacology 10:2 (1994), 129-38. I thank Ole Martin Moen for calling my attention to these distinctions.
  - <sup>42</sup> Móró, et al., 'Voice of the Psychonauts', 190.
- David E. Nichols, 'Hallucinogens', *Pharmacology & Therapeutics* **101**:2 (2004), 131–81.
- Matthew W. Johnson, William A. Richards, and Roland R. Griffiths, 'Human Hallucinogen Research: Guidelines for Safety', *Journal of Psychopharmacology* **22**:6 (2008), 603–20.

Adverse reactions, including persisting hallucinations<sup>45</sup> and 'bad trips',<sup>46</sup> do sometimes occur. Generally these are associated with 'unintentional or unattended usage, a disturbing or overstimulating environment, inadequate preparedness and a careless attitude toward drug use, pre-existing or dormant psychiatric conditions, and earlier or recent unprocessed traumas of the psyche'.<sup>47</sup> Moreover, too-frequent or highly repeated use may increase the risk of neurotoxic effects, especially in the case of MDMA, and even more especially when combined with other drugs such as the stimulants cocaine or methamphetamine.<sup>48</sup> More moderate or occasional use, by contrast, particularly in a supportive environment and with 'proper conceptual and ideological background',<sup>49</sup> can trigger

See, e.g., Leo Hermle, Martin Ruchsow, and K. L. Täschner, 'Hallucinogen Persisting Perception Disorder (HPPD) and Flashback Phenomena - Differential Diagnosis and Explanation Fortschritte der Neurologie-Psychiatrie 83:9 (2015), 506–15; and John H. Halpern and Harrison G. Pope, 'Hallucinogen Persisting Perception Disorder: What Do We Know After 50 Years?', Drug and Alcohol Dependence 69:2 (2003), 109-19. Hermle, et al. note in their abstract that persisting hallucinations can occur in the form of 'flashbacks', which refer to 'brief visual perceptual, mood, and altered states of consciousness effects reminiscent of acute hallucinogen intoxication effects', and that 'many users regard flashback phenomena as benign and even pleasant'. If altered perception persists for months or years, however, and causes severe individual distress, then Hallucinogen Persisting Perception Disorder (HPPD) may be diagnosed. According to Halpern and Pope (see second reference), HPPD is uncommon and is associated mostly with the unmonitored, recreational use of LSD.

<sup>46</sup> Robert L. Taylor, John I. Maurer, and Jared R. Tinklenberg, 'Management of Bad Trips in an Evolving Drug Scene', *JAMA* 213:3

(1970), 422-25.

Móró, et al., 'Voice of the Psychonauts', 190; see also: R. J. Strassman, 'Adverse Reactions to Psychedelic Drugs: A Review of the Literature', *The Journal of Nervous and Mental Disease* **172**:10 (1984), 577–95.

<sup>48</sup> Edmund Silins, Jan Copeland, and Paul Dillon, 'Qualitative Review of Serotonin Syndrome, Ecstasy (MDMA) and the Use of Other Serotonergic Substances: Hierarchy of Risk', *Australian & New Zealand Journal of Psychiatry* **41**:8 (2007), 649–55.

Móró, et al., 'Voice of the Psychonauts', 190. As with the issue of moral disagreement discussed above, it is likely that people will also disagree about what constitutes the 'proper conceptual and ideological background' for a successful drug-mediated experience, as well as the appropriate setting in which the experience should take place. Following Foucault, for

subjective experiences that may be interpreted by the drug-user as including – or fostering the development of – profound moral insights, <sup>50</sup> 'deeply meaningful religious revelations', and even 'spiritual awakenings'. <sup>51</sup>

For example, in a recent double-blind clinical study, Roland R. Griffiths and colleagues reported that psilocybin, when administered to carefully pre-screened volunteers, 'occasioned experiences which had marked similarities to classic mystical experiences and which were rated by volunteers as having substantial personal meaning and spiritual significance'. Moreover, 'the volunteers attributed to the experience sustained positive changes in attitudes and behavior that were consistent with changes rated by friends and family', including increased patience, good-natured humour and playfulness,

example, one might worry that, rather than psychologically emancipating people, an institutionalised or clinical setting could perform an ideological function in terms of producing people who better conform to societal expectations (I thank Lewis Covne for bringing this possibility to my attention). That certainly may turn out to be the case – however, the deeper question is whether or when societal expectations are consistent with one's moral enhancement aims as opposed to in conflict with them, and this is something that will have a different answer depending on the individual. There are no simple solutions here. Any person who seeks to improve herself as a moral agent, whether with the adjunctive use of drugs or through more conventional means, will have to grapple with such contextual matters. Should one attend church services, and follow the teachings of a particular religious leader? If so, which one? Should one embed in this spiritual community or that one? And so on. Needless to say, there are many institutions in place already to try to get people to conform to (potentially problematic) societal expectations, even setting drug use aside. If anything, the voluntary use of psychedelic substances as part of a carefully considered programme of moral self-development seems more likely to bring such institutions into a sceptical light than to blindly reinforce them or compel conformity. Nevertheless, the basic point Coyne raises is right: the social, physical, and ideological setting of the drug experience could undoubtedly influence which of those outcomes was more likely, and a "clinical" atmosphere in particular may very well pose special risks.

Sam Harris, Waking Up: A Guide to Spirituality Without Religion (New York: Simon and Schuster, 2014); Thomas B. Roberts, The Psychedelic Future of the Mind: How Entheogens Are Enhancing Cognition, Boosting Intelligence, and Raising Values (New York: Simon and Schuster, 2013).

Móró, et al., 'Voice of the Psychonauts', 190.

mental flexibility, optimism, interpersonal perceptiveness and caring, and compassion or social concern. 52

Similar effects have been reported for ayahuasca, the above-mentioned brew containing DMT and MAOI inhibitors. Although less-well studied in a scientific context, ayahuasca has been used in traditional shamanic ceremonies across the Amazon basin and elsewhere for hundreds of years.<sup>53</sup> The medical anthropologist Michael Winkelman argues that the active ingredients in ayahuasca, in combination with an appropriate diet, facilitate altered states of consciousness in the initiate that allow him or her to better appreciate the teachings of the shaman:

Ayahuasca is often seen as opening the heart, expanding love for others, and leading to healing of both self and relationships. Ingesting the brew is seen as expanding awareness, healing the personality, and providing the insight and energies to restore personal relations. The effects also enable people to better deal with personal death and dying, as well as that of their loved ones and the grieving process. [...] Some spoke of ayahuasca as [...] enabling [them] to control their own spiritual energies. <sup>54</sup>

It is not entirely clear what it means to be able to control one's 'spiritual energies', but some insight into the matter may be gained from observational studies looking at the positive effects of ayahuasca on mindfulness, <sup>55</sup> which preliminary research suggests may augment one's ability to resist powerful urges (thereby allowing one to act less impulsively), reduce a person's susceptibility to acting in response to addictive drug cues, and increase one's capacity to maintain perspective in response to strong emotional states. <sup>56</sup>

Roland R. Griffiths, et al., 'Psilocybin Can Occasion Mystical-Type Experiences Having Substantial and Sustained Personal Meaning and Spiritual Significance', *Psychopharmacology* **187**:3 (2006), 268–83, 280.

Dennis J. McKenna, 'Clinical Investigations of the Therapeutic Potential of Ayahuasca: Rationale and Regulatory Challenges', *Pharmacology* 

& Therapeutics 102:2 (2004), 111–29.

Michael J. Winkelman, 'Psychedelic Medicines', in J. H. Ellens and B. Roberts (eds), *The Psychedelic Policy Quagmire: Health, Law, Freedom, and Society* (Denver: Praeger, 2015), 93–117, 108.

<sup>55</sup> G. Thomas, et al., 'Ayahuasca-Assisted Therapy for Addiction: Results from a Preliminary Observational Study in Canada', *Current Drug* 

Abuse Reviews **6**:1 (2013), 30–42.

J. Soler, et al., 'Exploring the Therapeutic Potential of Ayahuasca: Acute Intake Increases Mindfulness-Related Capacities.', *Psychopharmacology* **233**:5 (2016), 823–29; Katie Witkiewitz, G. Alan Marlatt, and Denise Walker, 'Mindfulness-Based Relapse Prevention for

If such findings turn out to be robust and replicable,<sup>57</sup> they would appear to support the existence of a biochemically assisted means of improving a higher-level, flexible capacity to modulate one's moral and emotional responses across a range of settings – akin to what was described in the third desideratum for a plausible real-life moral neuroenhancer (see Introduction). Given such suggestive findings, as well as many others that could be cited, it is curious that bioethicists engaged in the current moral enhancement debate, with few exceptions,<sup>58</sup> have written hardly a word about psychedelic drugs.<sup>59</sup> How might this apparent blind spot be explained?

In his recent book on the revival of hallucinogen research since the "decade of the brain" – the 1990s – Nicolas Langlitz argues that the idea of using biotechnology for moral enhancement, in roughly the sense intended by current advocates, had already been raised in earnest in the second half of the last century. Among others, Timothy Leary and his followers, as well as the wider hippie movement, actively hoped that psychedelic drugs (in concert with other factors including changes to prevailing social norms and institutions) 'would turn us into a more virtuous, more creative, and happier species'. <sup>60</sup>

Alcohol and Substance Use Disorders', *Journal of Cognitive Psychotherapy* **19**:3 (2005), 211–28.

This caveat is important to highlight as there are now serious concerns about the reproducibility of many published findings across medicine and social psychology. See: Brian D. Earp and David Trafimow, 'Replication, Falsification, and the Crisis of Confidence in Social Psychology', Frontiers in Psychology **6**:621 (2015), 1–11.

E.g., Rafael Ahlskog, 'Moral Enhancement Should Target Self-Interest and Cognitive Capacity', Neuroethics 10:3 (2017), 1–11; Michael N. Tennison, 'Moral Transhumanism: The Next Step', The Journal of Medicine and Philosophy: A Forum for Bioethics and Philosophy of Medicine 37:4 (2012), 405–16.

That is not to say that philosophers or ethicists generally have not written about psychedelic drugs and the moral implications of their use; rather, it is the ethicists involved in the moral bioenhancement debate specifically who seem not to have noticed the potential relevance of these substances to their arguments. For good introductions, see: S. Luper-Foy and C. Brown (eds), *Drugs, Morality, and the Law* (New York: Garland Publishing, 1994); Douglas N. Husak, *Drugs and Rights* (Cambridge: Cambridge University Press, 1992); Rob Lovering, *A Moral Defense of Recreational Drug Use* (New York: Springer, 2015).

Nicolas Langlitz, Neuropsychedelia: The Revival of Hallucinogen Research Since the Decade of the Brain (University of California Press,

Continuing into the 1970s, many academic researchers besides Leary were convinced that their investigations into psychedelic experiences 'would contribute to propelling human consciousness toward unheard of capacities'. But by the 1990s, following a conservative shift in the culture, research into mind-altering substances had taken an entirely different turn: 'utopian dreams gave way to a less fanciful conception of enhancement as optimization of already known human capacities'. In contrast to the earlier 'psychedelic explorations of human potential', Langlitz notes, 'this one-dimensional notion of enhancement lent itself to an experimental operationalization', consistent with the increasingly reductionist approach of contemporary science. <sup>61</sup>

Thus, while we do see research into psychedelic substances being conducted today, it is almost exclusively within a highly medicalised context that has not had much bearing on the moral enhancement literature. In the meantime, as noted earlier, advocates of moral bioenhancement have focussed their attention primarily on "one-dimensional" interventions into specific capacities (relying on oxytocin sprays, brain stimulation devices, and the like), or on more global drug-based interventions that are confined to the "cognitive" realm. To see how a psychotropic drug, by contrast, might be used in practice to foster apparent moral improvement (without reducing to the augmentation of purely "cognitive" capacities like attention or reasoning ability), consider the case of MDMA.

## 6. How Would it Work? A Case Study With MDMA

In the 1980s, before it was made illegal, MDMA – popularly known as "ecstasy" due to the feelings of euphoria it can induce – was

<sup>2013), 233.</sup> Following up on this idea, Ole Martin Moen (personal correspondence) suggested to me that 'one possible path from psychedelics to moral enhancement might be that, used in the right way, psychedelics can help make people become more happy and satisfied. Of course, happy and satisfied people might do pretty bad things (vote for bad parties, support practices that are cruel toward animals, etc.), but it is presumably uncommon that happy and satisfied people commit atrocities'.

<sup>61</sup> Langlitz, Neuropsychedelia, 233.

<sup>&</sup>lt;sup>62</sup> Attila Szabo, 'Psychedelics and Immunomodulation: Novel Approaches and Therapeutic Opportunities', *Frontiers in Immunology* **6**:358 (2015), 1–11.

being used as an aid in couple's therapy by professional counselors. Writing in the *Journal of Psychoactive Drugs* in 1998, George Greer and Requa Tolbert described a method of conducting MDMA-enhanced therapeutic sessions based on their experience with roughly 80 clients between 1980–1985. After careful pre-screening and obtaining informed consent, Greer and Tolbert met with the clients in their homes, believing that a more personal setting would be best for facilitating comfort and trust. Consistent with the caveat raised by William Richards concerning psilocybin that I quoted earlier, they emphasised the importance of non-drug variables, such as the person's mindset, intentions, and expectations, in shaping the drug-mediated experience:

We never recommended an MDMA session to anyone seeking to be a passive participant who would be "cured" of [a] psychological problem. We believed that the person treated or cured themselves, with the assistance of MDMA and their relationship to us. <sup>66</sup>

Depending on client preference, they started the session with meditation or prayer. Then, they administered a controlled dose of 75 to 150 mg, adjusting for the client's sex or body mass, with a 50 mg booster if requested later on. Clients wore eyeshades to shut out visual distractions and reduce the risk of overstimulation. While waiting for the drug to take effect, they listened to classical music, usually through a pair of headphones – Mahler and Beethoven were among the more popular choices. Then, when they felt ready, clients spoke with their romantic partner. Often, they would speak for hours.

Not everyone had a major breakthrough. But some did. Three years after her treatment, one client, the thirty-something daughter of Holocaust survivors, wrote: 'I still am a different person. I'm not prone to getting caught up in the negative dark influences in my character. I have more choice over how I feel'. Previously prone

- Julie Holland, Ecstasy: The Complete Guide: A Comprehensive Look at the Risks and Benefits of MDMA (Rochester, VT: Inner Traditions / Bear & Co, 2001).
- George R. Greer and Requa Tolbert, 'A Method of Conducting Therapeutic Sessions with MDMA', Journal of Psychoactive Drugs 30:4 (1998), 371–79.
- <sup>65</sup> Greer and Tolbert, 'A Method of Conducting Therapeutic Sessions with MDMA', 365.
- <sup>66</sup> Greer and Tolbert, 'A Method of Conducting Therapeutic Sessions with MDMA', 372.

to 'anxiety attacks' and intrusive thoughts about concentration camps, she now said: 'I can handle my emotions [...] I understand how they work more'. 67

Through their own research and that of other pioneers, Greer and Tolbert came to argue that MDMA – administered in the right way, and with the careful oversight of an appropriately qualified guide – could help some individuals achieve 'a more healthy and accurate perspective of who and what they [are] psychologically', by decreasing irrational fear responses to perceived emotional threats. Their clients seemed to agree. According to Greer and Tolbert, 'roughly 90%' of their clients 'had generally positive and useful experiences' after participating in MDMA-assisted therapy, with some reporting that they felt more love toward their partners and were better able to 'forgive the pain of the past'. 69

Some of these outcomes seem consistent with moral improvement; others seem to apply to other domains such as mental health. Nevertheless, the immediate effects of MDMA wear off after a few hours. Especially at lower doses, the drug does not seem to 'significantly distort perception, thinking, or memory'. To Greer and Tolbert speculate that the 'learning that took place during the session often became consolidated and applied to clients' everyday lives long after the session had ended'. For example, couples who experienced a session together 'frequently reported basing their relationships much more on love and trust than on fear and suspicion'. But these

<sup>&</sup>lt;sup>67</sup> Greer and Tolbert, 'A Method of Conducting Therapeutic Sessions with MDMA', 377.

<sup>&</sup>lt;sup>68</sup> Greer and Tolbert, 'A Method of Conducting Therapeutic Sessions with MDMA', 371.

<sup>&</sup>lt;sup>69</sup> Greer and Tolbert, 'A Method of Conducting Therapeutic Sessions with MDMA', 372.

<sup>&</sup>lt;sup>70</sup> Greer and Tolbert, 'A Method of Conducting Therapeutic Sessions with MDMA', 378.

Greer and Tolbert, 'A Method of Conducting Therapeutic Sessions with MDMA', 378. Generally this sort of outcome is a good thing, but it is obviously possible to be "too trusting" toward one's partner, particularly if the partner habitually takes advantage of one's trust. This consideration highlights how important it will be, if drugs ever are to be used in a context such as the one illustrated here, to ensure that they are used thoughtfully and that their personal and interpersonal effects are monitored and reflected upon both during the drug-mediated experience and after the effects of the drug have worn off. That said, insofar as psychedelics do allow one to gain deeper insights into one's mind and situation, as is often claimed by those who use them, then it is quite possible that (to pursue the present

results were not simply *caused* by MDMA – or so it seemed to Greer and Tolbert. Rather, they were 'achieved by the clients making decisions based on what they learned during their MDMA sessions, and [by] remembering and applying those decisions for as long as they were able and willing after the session was over'.<sup>72</sup>

What practical lessons might bioethicists take from the historical example of MDMA-assisted marital therapy for the debate about moral bioenhancement? To my mind, at least two main points stand out:

- (1) If drugs are to be used for moral enhancement, they should be administered in a carefully controlled setting to willing volunteers who have been properly prepared for the experience, ideally under the guidance of an appropriately qualified person or persons (i.e., someone with requisite experience with the drug, its likely effects, means for addressing any problems, etc.).
- (2) Moral neuroenhancers would likely not function by simply causing moral improvement in the agent, nor should they be expected to work in such a way. Instead, they would most likely foster states of mind that that allowed one to engage with the moral domain in a more productive or insightful way, storing away any lessons learned for application in the "real world" once the effects of the drug had worn off.

The second point is important to emphasise. Some people might be concerned that "popping a pill" to achieve deep moral insights would be in some sense too easy, superficial, or unsustainable – the sort of thing that, quickly obtained, could just as quickly be lost. As Huston Smith has put it: 'what promised to be a shortcut will

example) the partner's tendency to betray one's trust would become more, rather than less, apparent to the user while under the influence of the drug, thereby allowing her to make a better informed decision about whether the relationship should continue. In other words, at least anecdotally, psychedelics such as MDMA do not seem to have a context-insensitive or generalised "trust-enhancing" (or other similar) effect, whereby one simply becomes *more* trusting (etc.), regardless of the dynamic between oneself and the other people in one's life. Rather, the idea is precisely that greater genuine insight into the nature of what is really going on can be facilitated by the use of psychedelics (under the right circumstances), at least in many cases.

Greer and Tolbert, 'A Method of Conducting Therapeutic Sessions with MDMA', 378.

prove to be a short circuit; what began as a religion will end as a religion surrogate'. 73

Thinking of the "pill" as an *adjunct* to moral development, however, leaves plenty of room for active, non-superficial engagement and intentional moral learning. As Smith wrote, the evidence concerning psychedelics that was available to him as early as the 1960s

would seem to [suggest] that chemicals can aid the religious life, but only where set within a context of faith (meaning by this the conviction that what they disclose is true) and discipline (meaning diligent exercise of the will in the attempt to work out the implications of the disclosures for the living of life in the every day, common sense world).<sup>74</sup>

Again, Smith is focussing on 'religion', but the word "moral" could be swapped in and the sentence remain just as plausible. The point is that the drug should not be doing all the work. Rather, it should be used, if at all, as an aid to moral enhancement – and on an "as needed" rather than routine basis. Moreover, whatever insights are gained through such use should be combined with 'diligent exercise of the will' to be properly understood, much less productively applied to the agent's normal waking world.

James Hughes has given a helpful illustration of this approach in his essay, 'Using Neurotechnologies to Develop Virtues: A Buddhist Approach to Cognitive Enhancement'. According to Hughes, 'a distinctively Buddhist approach to the use of neurotechnologies' would seek to 'avoid being stuck in any one set of moods or mental states' by constantly turning to biotechnologies to elicit the desired states of mind. Thus, 'using a drug or nanoneural device that created an addiction to a blessed out state of pleasure would [be] unwholesome' and morally problematic.<sup>75</sup>

In other words, there is an important difference between 'a dynamic *eudaemonic* happiness grounded in [genuine] self-awareness', and 'the constant stimulation of dopamine [or other brain chemicals] on a hedonic treadmill'. So, while some Western Buddhists 'credit their experimentation with psychedelics with catalyzing their interest in meditation, and providing an initial glimpse of their inner lives that they would not otherwise have had', few such Buddhists believe that the

<sup>&</sup>lt;sup>73</sup> Smith, 'Do Drugs Have Religious Import?', 529.

Smith, 'Do Drugs Have Religious Import?', 529.

James Hughes, 'Using Neurotechnologies to Develop Virtues: A Buddhist Approach to Cognitive Enhancement', *Accountability in Research* **20**:1 (2013), 27–41, 32, internal citations omitted.

psychedelics, on their own, were responsible for effectuating the positive changes to their personality over the long-term, further recognising that 'habitual use of psychedelics would be very unhealthy'. <sup>76</sup>

The approach advocated by Smith and Hughes seems sensible. Psychedelic moral enhancers should not be regarded as a panacea, or as something that magically overrides all conscious, rational thought to directly instill the desired moral changes in the agent. Instead, they should be seen as potentially contributing to an opportunity for moral growth, in part by providing or fostering the recognition of insights into oneself and one's inner workings, as well as the world around one, that might not otherwise be so readily obtained. Then, it is up to the agent to make good use of those insights in her process of moral development.

#### 7. Conclusion

I would like to conclude with a note of caution. Because I have been interested to explore the potentially positive role of psychedelics in moral self-development, I have primarily focussed on "successful" anecdotes – that is, cases in which people seem genuinely to have benefitted, morally or otherwise, from their drug-enhanced experiences. But more negative experiences are certainly possible, as mentioned earlier. As the prominent drug researcher Ben Sessa argues, we are right to adopt a stance of healthy scepticism toward any proposal that, 'in the eyes of the general public, is associated with recreational drug abuse'.<sup>77</sup>

Indeed, psychedelic drugs – just like other drugs such as alcohol or prescription medication – can, when used irresponsibly, cause 'physical, psychological and social harm, and even deaths'. So we must be cautious, and take seriously the concerns of those people who fear that the use of such drugs may cause 'greater social and health problems than it may solve'. Even so, Sessa suggests that there is more than enough evidence already from recent, controlled studies to render plausible the folk knowledge – accumulated over centuries – that psychedelics can also be beneficial. At a minimum, he concludes, the

Hughes, 'Using Neurotechnologies to Develop Virtues', 32, internal citations ommitted.

Ben Sessa, 'Is There a Case for MDMA-Assisted Psychotherapy in the UK?', Journal of Psychopharmacology **21**:2 (2007), 220–24, 223.

<sup>&</sup>lt;sup>78</sup> Sessa, 'Is There a Case for MDMA-Assisted Psychotherapy in the UK?', 223.

'evidence against at least researching' psychedelics for therapeutic or enhancement purposes 'appears to be very scant indeed'.<sup>79</sup>

That is my position as well. While others may wish to argue that people should be free to ingest whatever substances they like toward whatever ends they choose, my offering here is only to suggest that careful research – both empirical and ethical – into the potential use of psychedelic drugs as moral bioenhancers should be carried out. Armed with better data about the likely effects of different drugs on different people at different dosages and in different settings, and drawing inspiration from earlier periods of history (or from contemporary communities where such drugs are used in a richly contextualised way), it may then be possible to outline the ideal conditions for voluntary moral neuroenhancement with the aid of psychedelics.

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<sup>&</sup>lt;sup>79</sup> Sessa, 'Is There a Case for MDMA-Assisted Psychotherapy in the UK?', 223. See also Ben Sessa and David J. Nutt, 'MDMA, Politics and Medical Research: Have We Thrown the Baby Out With the Bathwater?', *Journal of Psychopharmacology* **21**:8 (2007), 787–91.