

Harris Wiseman, *The Myth of the Moral Brain. The Limits of Moral Enhancement*, Cambridge: The MIT Press, 2016, 352 pp.

For the past decade, the academic debate on the possibility of human enhancement¹ has produced quite a substantial record (Agar 2007). The youngest entry to the enhancement debate is the theme of moral enhancement. This rising new field of research, both scientific and philosophical, is “concerned not so much with the improvement of physical or cognitive capacities, but improvements in the way in which we act or reflect morally,” (Raus et. al. 2014) and is very much fueled by the rapid progress in fields of neuro and cognitive sciences. Of the many possible approaches to moral enhancement, the biomedical approach has become the focal point upon which many spears have been shattered in the still ongoing debate’s two opposing camps. These are the proponents of the traditional moral enhancement which include approaches such as moral education, advancement of moral reasoning etc., and those, on the other side, who argue for a direct use of biomedical procedures in trying to advance human morality. As the possibility to enhance morality through biomedical procedures in the past years has become entrenched within the neuropharmacological capacity to facilitate these desired modifications, the debate, unfortunately, hasn’t quite moved on with novel explorations.

In this regard, Harry Wiseman’s most recent work *Myth of the moral brain*, in which he systematically and thoroughly engages the predominant approaches to moral bioenhancement, is more than a welcomed refreshment and, for some, quite a realistic sobering. Wiseman’s work comes out just in the right time when other engaged scholars (including neuroscientists) are also pointing out that the neuropharmacologically based proposals, which have received the biggest impetus, hold serious and somewhere even irreparable flaws. For instance, Dubljević and Racine (2017) in their most recent contribution create a thorough assessment of currently predominant neuropharmacological options for the biomedical approach and find them all wanting,² Wiseman directly contributes to these findings with

¹ “Human enhancement... aims to develop technologies and techniques for overcoming current limitations of human cognitive and physical abilities...rely on advances in genetic engineering, pharmacology, bioengineering, cybernetics, and nanotechnology. The envisioned applications are limitless, and include the enhancement of human traits like muscular strength, endurance, vision, intelligence, mood, and personality” (Brey 2009: 169).

² To name just a few of their important findings, Oxytocin was found to promote trust, but only in the in-group, while with the out-group members of society it can decrease cooperation and selectively promote ethnocentrism, favoritism, and parochialism. Beta blockers were found to decrease racism but also blunt all emotional response which puts their effective usefulness in general doubt. SSRIs (Selective Serotonin Reactive Inhibitors) reduce (reactive) aggression, but have serious side-effects, including an increased risk of suicide. Deep brain stimulation was found to have no effect whatsoever on moral behavior. And so they conclude that biomedical and especially neuropharmacological „techniques are all blunt instruments, rather than finely tuned technologies that could be helpful” (Dubljević and Racine 2017).

a refreshing and, at many places, consummate entry as he aims to offer a realistic critique of the biomedical approach both in its philosophical musings and scientific underpinnings. The main point, and a general motif, of the book is that we require a more realistic approach which Wiseman terms the “bio-psycho-social” (245) model inside which he aims to “base our rationales for moral enhancement upon this foundation of what is realistically possible” (53). The book thus, in general, should be recommended as a good entry point for anyone interested in the moral enhancement debate (at least in its analysis of the ongoing debate) as it aims to dissect the bloated vision of some moral enhancement scenarios as well as trying to show where does exactly real science stand on issues pertaining to it. Following, the book is divided into four main parts: Philosophy, Science, Faith, and Praxis. We will explore them in order.

In Philosophy, Wiseman focuses on the works of Ingmar Persson and Julian Savulescu, James Hughes, and Tom Douglas. The hardest hit of the three gets the Persson Savulescu duo. And this is not surprising since in general Persson and Savulescu’s approach has generated the broadest amount of critiques. Wiseman aims to deliver the killing blow as he constantly engages their proposal throughout the entire book seeing it as a “hideous visage” a hypothesis that puts forward a “literally, morally enhance or die” (263). He believes that the Persson-Savulescu thesis has “really made a joke of this domain” (263) and hopes that this approach may “be abandoned by commentators completely, leaving nothing over and that it never be spoken of again” (263). The second, James Hughes, Wiseman credits as the “arch-transhumanist, perhaps the most intellectually credible of all transhumanists” (34) and engages his account of “voluntary virtue engineering” which is all about how “you are free to morally enhance yourself in any way which encourages free society” (44). This ought to be done by linking neurochemical changes with achieving the desired liberal personality as the morally superior option. Even though he puts aside the notion of liberal moral superiority, Wiseman is not impressed with Hughes’ approach which he sees as a “clumsy way of conceptualizing the operations of moral enhancement” (46) since it cannot guarantee to attain its specific moral character results and at the same time ignores unexpected side effects. As the “arch-transhumanist” Hughes should be strong on science but this is exactly what Wiseman points out he lacks the most and through him aims to show the focal mistakes of “enthusiast” enhancement proponents in general. Namely, that they are building up a “poorly evidenced and massively overoptimistic account of moral enhancement possibilities based on highly provisional and contested research” (46). Conclusively, Wiseman deems Hughes’ approach as “simply unrealistic” (46). The last one to be tackled, Tom Douglas receives the least critique given and even modest accolades as although, “Douglas’s approach should not be taken as a complete package, Douglas has managed to carve out a very limited but more realistic prospect for moral enhancement” (57). Douglas is not found to be guilty of enhancement enthusiasm but rather, according to Wiseman, offers a sober and precise outlook on the matter and from the looks of it could be taken as a proper example in evaluating the biomedical vision for moral enhancement. Still, his approach is seen only to best function with those

“moral problems that are predominantly or totally impulse-based rather than those requiring moral reflection and discernment” (52).

The second part, *Science*, aims to establish how realistic are the conjectures between regulating different neurobiological substances such as hormones or neurotransmitters with a personal disposal to behave and think morally. Wiseman focuses on the central and most predominantly present themes: Oxytocin which is connected with empathy, trustworthiness and generosity (Paul Zak), Serotonin which is connected with harm, fairness, and aggression (Molly Crockett) and Dopamine which is connected with rewarding behavior (Ed Boyden). The general conclusion Wiseman comes to is that none of these neurochemicals is powerful enough to fulfill the full scope required of the moral enhancement goal. Notwithstanding the many and possibly permanent undesired side-effects, the current state of neuropharmacology is simply inadequate to create the desired effect of moral enhancement. For instance, Oxytocin has a “nudge” potential but only with those who are already disposed towards prosocial behavior or empathy. Serotonin, especially through the SSRI (Selective Serotonin Reuptake Inhibitors)—a broadly available neuropharmacological substance has received a substantial appraisal. But Wiseman shows that not only is it true that what SSRI might improve with respect to one kind of aggression, namely reactive aggression, they may worsen with respect to another, namely premeditated aggression but that the complexity of Serotonin dependent systems (immune system for instance) is highly sensitively calibrated and purposely manipulating with Serotonin levels in the organism could lead to devastating side-effects (Therbeck-Chesterman 2013, Crockett 2014). Thus, in summary, Wiseman tackles not only the inability of neuropharmacology (he does applaud Boyden’s optogenetics approach with whom he shares a disbelief in neuropharm) to address the issue at hand but also tackles the incorrect emotional frameworks inside which certain emotional states (aggression for instance) are seen as being almost necessarily morally inhibitory or unwanted. He also warns of those frameworks which place a sharp distinction between emotions and reasoning and thus espouse an incorrect view of human moral cognition and its underlying sub cognitive processes (Helion and Ochsner 2016).

After dealing with neuropharmacology Wiseman confronts another and perhaps even more important problem—that of conceptual and methodological frameworks found in moral enhancement research. He uses the example of the recently given SSRI research (Molly Crockett) which has been viewed and consequently used by many researchers (Wiseman focuses on DeGrazia) as a very promising scientific result to reaffirm the moral bioenhancement approach. Unfortunately for the enthusiasts, Wiseman confirms another sober awakening (for the entire enterprise) by pointing out to a critical problem—that of external and ecological validity. He humorously (and almost ironically) remarks on the inadequate validity and thus usability of these scientific findings since the experimental frameworks in place are neither contextualized nor embodied—a hallmark of real-life human morality. As he poignantly remarks: “Indeed, it does seem as if most of the science upon which moral enhancement enthusiasts draw is conducted either using Ivy League students, or mice” (117). Wiseman in this regard calls in for a

much-needed refinement of methodological and conceptual paradigms and for a case by case approach in dealing with issues of moral enhancement especially in evaluating certain moral traits since the scientific experiments made and philosophical frameworks built upon these findings are detached from a real-life instantiation of expressing these traits. Additionally, he warns, scientists themselves sometimes publish their work with ingrained “seductive claims” which draw enthusiasts to infer conclusions that are, unfortunately in the end deemed incongruous. Additionally, even the best cognitive science frameworks such as the “Crockett’s Jekyll and Hyde, Greene’s dual-process theory of moral functioning...” (101) are inadequate to be used as a clear-cut extrapolation for philosophical conclusions. As he humorously remarks that, for instance, the trolley problem dilemma cannot be viewed as a realistic scenario “unless one is Oedipus standing before the sphinx” (120) and concludes that “these reductive approaches which rip moral functioning out of its meaningful contexts, strangle it through excessive control...and distort beyond all recognition and meaning the moral phenomena being investigated ... are simply not fit for purpose” (126).

Finally, in the third and the fourth part aptly named Faith and Praxis, Wiseman’s proposal for moral enhancement is, it could be said, not far from that ancient Benedictine motto *Ora et Labora*. Thus, in the first part, faith, Wiseman tries to offer a distilled number of core Christian theological points that portray a “Christian virtue ethical theology” (297) in putting forward a realistic attitude (the *leitmotif* of the book) which espouses that “moral enhancement cannot exist as a free-floating entity (as if apolitical, or here as a-religious), but rather needs to recognize the nature of the ground upon which it is to stand and build” (142). Since a big percentage of the human population, at least declaratively, are professing a certain religious stand, he takes that any “strong vision of moral enhancement will and must be understood in a way that can cater to the billions of persons who self-identify with one faith tradition or another ... and who will not be satisfied by a generic account of moral enhancement which attempts to simply ignore crucial tenets of their faith” (142). In this regard, he echoes some of the growing concern for urgency in that it is better for religious thought to engage the debate on moral enhancement sooner rather than later since “faith communities are not going to be neutral on moral questions, nor upon questions regarding moral formation” (141).

But why does he pick Christianity? The reason, it is said, is purely practical as he believes that “Simply put, there is a familiarity with the Western audience with matters of Christian faith, much of which is absorbed by osmosis, and often unconsciously and anonymously” (140). He doesn’t aim to put the Christian approach as the supreme approach but merely as one with which many thinkers are acquainted. Still, just a bit later he introduces the notion of Christian generosity, “the outward-facing” focus as an antidote to the “self-obsession and tremendous anxiety” (145) which results from the self-absorbed contemporary culture’s way of life. So perhaps the Christian approach is not here as just *the most practical option* but also serves as a critique of the contemporary culture and resembles previous Christian critiques of transhumanist philosophy and enhancement in general. Additionally, as is presented later on in the text, it seems that the Christian

community has the greatest generative power and overall functionality to foster a virtue-based remedy-like approach to moral enhancement which Wiseman espouses and thus, it seems, Wiseman's reason of choice goes beyond a practical "secular familiarity" with Christianity.

Still, before presenting us with his main proposal Wiseman once again reiterates his already well-established critique of unrealistic ME scenarios. And he wishes to deal them a final blow by confirming the inadequacy of biomedical approaches to solve those dimensions of morality which are completely out of their scope or category such as the "context, ambiguity, moral scaffolding, the predisposition of will" (189). For instance, concerning the context or ambiguity of moral goods, he cleverly remarks that "none of the enthusiasts in the philosophical literature want to get inside the heads of those who are to be enhanced. Yet people are motivated by different things, they understand their moral goods in different ways, and they need to be spoken to in different ways" (180). And on the issue of scaffolding: "moral enhancement might help augment a given vision of the good, but it cannot itself create a vision of the good" (185).

This conclusion is in line with his priory emphasized anti-reductionist stand but this time it is reinforced with regards to religious moral beliefs: "the empirical work conducted on 'the moral brain', makes no reference at all to the manner in which a person's religious faith may or may not be modulating their responses to the various tests that are applied" (147). This also serves as foreshadowing the socio-political acceptance of moral enhancement within the religious landscape: "a strong vision of moral enhancement must by implication propose some rationale for...contributing to the salvatory structures idiosyncratic to the faith traditions of those upon whom such strong visions of moral enhancement are to be impressed" (147). This ties in directly with the discussion and the distinction on the voluntary/compulsory enhancement since one could presume that a religious person would also seek religious (in between other) reasons when deciding to voluntarily pursue moral enhancement. In addition, policymakers would have to take into consideration religious sensitivities when engaging enhancement possibilities. Wiseman believes that what is important to have in mind in both of these cases is that we cannot devise a general like solution applicable to each and all but that "we need to be asking which *particular* intervention is best understood in voluntary terms and why the particular facts on the ground make things so" (203). This conclusion is especially important if we recall that the true problem with a compulsory general-like moral enhancement of the population is not only in the inability of the neuropharmacology to achieve such a precise level and intricacy of interaction with our biological systems—for instance by providing to the entire population an "empathy pill" but that even if we could do so (and we cannot) we must remember that certain emotional states which humans exhibit are there for an (evolutionary) reason—more often than not as a fail-safe survival mechanism. As such, if one would follow the idea to its end we might come to see, as I call it, the birth of an Eloi society. As the famous Eloi, the surface dwellers of the far future Earth depicted in the H. G. Wells *Time Machine* show, a being completely lacking the capacity to express anger or aggressiveness even if just to defend itself is a sitting duck in a world of evolutionary sur-

vival and predation (Prinz, 2011). And although Eloi, as well as Morlocks, were engaged in literal survival and predation, where Morlocks used Eloi as food, our own world is fraught with survival and predation with the difference that we, true enough, don't literally each other. As Wiseman remarks: „What use is an intervention to generate empathy in a society which rewards and valorizes cruel, self-serving, aggressively competitive behavior?“ (187).

And maybe this is the main reason why Wiseman wants to incorporate the biomedical procedures within a virtue-based character development inside a communal Christian narrative. If I am interpreting his intentions right, it seems that if we cannot opt for a global compulsory approach (due to its obvious problems) and neither can we rest our hopes upon the voluntary approach since the majority is not interested in moral enhancement at all—the only viable solution we are left with is the arduous “renewal” of society from within. And this *moral enhancement renewal*, it is presumed, could be achieved by the Christian community since it could create the cohesive and generative power to venture forward towards a realistic goal of a morally enhanced humanity. Be it as it is, his vision of the remedial moral enhancement proposal “one in which a biomedical intervention takes place in a mental health context, in a person-centered and fully bio-psycho-social fashion, one which respects the value and influence of personal agency, cultural scaffolding, and quality relationships” (220) should be applauded. Still, as he is fully aware, problems remain. As is the case with all interpersonal and group dynamics, the ones in charge are the ones who have the greatest influence in determining the outcome of the procedure. Since Wiseman requests a communitarian approach, with healthcare experts and counselors aiding or guiding the process of moral formation and providing the necessary scaffolding or moral motivation to the individual—a natural question arises: “*Who then watches the watchers?*”.

Wiseman is aware of the problem but is not able to provide a direct solution instead of pointing out that “we need responsible institutions in place, along with healthcare professionals who are not swayed by ... inappropriate shortcuts and easy remedies to complex problems” (223). And this leads me to a concluding remark in which I am left to wonder is Wiseman's proposal fulfilling or limiting the vision offered to us by moral enhancement? Surely, Wiseman gives his best in giving thorough argumentation why exactly currently present neuropharmacological means to moral enhancement will not be able to do the trick. And he does it successfully. Still, one is left to wonder if in pointing out all the faults and lacks the neuropharmacological approach holds both in its science and philosophical interpretation Wiseman doesn't leave us with much in striving for and achieving the grand vision of moral enhancement. According to Wiseman, it seems that the sobering reality of human biology, the complexity of the socio-political landscape and intricacy of even our everyday human morality calls us to reconsider our moral enhancement proposals to “sacrifice fantasy for something that might actually be of use, here and now” (226). But I cannot shake the idea that this approach no matter how much it works to be as realistic as possible, in its fervor for realism loses the hope beyond the horizon. The vision of moral enhancement has to be able to provide us with more than simply putting

it all, like so many times in the past, on the back of the individual. Unfortunately, for Wiseman the project of moral enhancement “is absolutely dependent upon the efforts and will of the person so enhancing” (279). Even if provided with a community to support the incentive and the lack of motivation by providing a safe guidance of a counselor, or a *moral doctor*, and if necessary administering remedy-like pharmacological means (Nalmefene and alcoholism example (233)) it all rests once again on the individual will, on the individual openness to attain or not to attain moral enhancement. So, as it seems, everything within the process has an instrumental role while the will of the individual determines the success of the procedure. And this conclusion is not something I can agree a moral enhancement vision should be built upon for the simple reason it lacks the capacity to enhance that what needs enhancing the most—human will. Surely neuropharmacology alone cannot be deemed as a “one size fits all” solution or even an efficiently applicable solution but the lacking’s of the neuropharmacological approach do not entail our incapacity to accomplish a grand vision of moral enhancement. And although the complexity of the moral life far exceeds the narrative neuroscience and neuropharmacology can currently provide us with, that doesn’t mean we are doomed to remain at the level of the individual effort while trying to accomplish this most noteworthy goal. And what could help us achieve such a goal—technology and science? Yes, but not biomedical.

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