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**Moral Enhancement, Acquired Virtue, and Theism:  
A Response to Brummett and Crutchfield**

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**Abstract (249 words):** Recently, Brummett and Crutchfield advanced two critiques of theists who object to moral enhancement. First, a conceptual critique: theists who oppose moral enhancement commonly do so because virtue is thought to be acquired *only* via a special kind of process. Enhancement does not involve such processes. Hence, enhancement cannot produce virtue. Yet theists also commonly claim that God is perfectly virtuous and *not* subject to processes. If virtue requires a process and God is perfectly virtuous without a process, however, then theists contradict themselves. Second, a moral critique: theists who reject moral enhancement are selfish, since accepting moral enhancement would (allegedly) reduce widespread suffering. Theists often *condemn* selfishness, however. By condemning selfishness and (simultaneously) rejecting enhancement, therefore, theists contradict themselves yet again. We argue that both critiques fail. Both substantially misrepresent their target. First, Brummett and Crutchfield confuse metaphysical enhancement (attempts to alter *human nature*) with moral enhancement (attempts to become *better* human beings). Authors that Brummett and Crutchfield cite object to the former, not the latter. Second, both conceptual and moral critiques overlook the many resources within theistic traditions that can quickly resolve relevant (alleged) contradictions. The conceptual critique, for example, misrepresents both common views held among theists (regarding God's virtue) and the ways in which virtue may be acquired. Similarly, the moral critique mischaracterizes the relationship commonly posited by theists between enhancement and agency. By attending to what theists *actually* claim—rather than relying on caricatures—it becomes clear that each of Brummett and Crutchfield's critiques fail.

**Keywords:** moral enhancement, virtue, virtue ethics, transhumanism, religion

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## 1. Introduction

Brummett and Crutchfield present two critiques of theists who object to “the use of biotechnology for moral enhancement.”<sup>1</sup> We argue that Brummett and Crutchfield’s critiques rest on misrepresentations of theism, virtue, and objections to enhancement generally. To show this, we proceed in three parts. In section 2, we argue that Brummett and Crutchfield have misunderstood theists’ central objections to enhancement. The theists they cite primarily object to enhancement that destroys human nature (a metaphysical change) rather than moral enhancement per se. Next, we consider the two major critiques that Brummett and Crutchfield advance against theists who do reject moral enhancement: a conceptual critique and moral critique. In sections 3 and 4, we outline and respond to each. While Brummett and Crutchfield’s essay raises interesting questions for theists, we conclude that their critiques are unsuccessful.

## 2. Metaphysical Enhancement vs. Moral Enhancement

Following Brummett and Crutchfield, let “standard theism” be the view that “God is a personal, omniscient, omnibenevolent, omnipotent, transcendent being.”<sup>2</sup> The authors claim that many who accept standard theism also accept “process virtue”: the view that “virtue can only be obtained through a specific process.”<sup>3</sup> We will refer to the combination of standard theism and process virtue as “STPV.”

STPV theorists sometimes oppose the use of biotechnology for enhancement. Brummett and Crutchfield write, for instance, that “the kinds of interventions ... to which the proponent of STPV objects,” include things like “the administration of some biological agent, such as oxytocin or psilocybin, which promote pro-social behaviors,” “interventions that target cognitive capacities,” and “classical conditioning to improve moral capacities.”<sup>4</sup> As evidence of such objections, Brummett and Crutchfield cite Leon Kass, who argues, “to turn a man into a cockroach would be dehumanizing. To try to turn him into more than a man might be so as well.”<sup>5</sup>

At the outset, however, we must distinguish between moral enhancement and interventions that aim to “enhance human nature.” The former involves becoming morally better human beings. The latter involves becoming something other than human altogether. Kass is objecting to the latter, but that does not implicate the former. In the same passage, for example, Kass directs his concerns towards “proposed improvements...impinge upon the nature of the one being improved.”<sup>6</sup> It is

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<sup>1</sup> Brummett, A. & Crutchfield, P. (2021). Two internal critiques for theists who oppose moral enhancement on a process virtue basis. *Bioethics*. Online first, URL = <https://doi.org/10.1111/bioc.12985>.

<sup>2</sup> Ibid: 1.

<sup>3</sup> Ibid.

<sup>4</sup> Ibid: 2.

<sup>5</sup> Ibid. See also, Kass, L. R. (2014). Raymond Waggoner Lectures - Leon R. Kass, Ageless bodies, happy souls: biotechnology and the pursuit of perfection, 2003. Department of Psychiatry, University of Michigan, pp. 20-21.

<sup>6</sup> Kass, op. Cit. note 5: 22.

metaphysical change—not moral change—that is worrisome. Using Kass as an example of STPV theorists who object to moral enhancement, therefore, misrepresents the text.

Similarly, Brummett and Crutchfield quote the 2003 President’s Commission, which cautions against the “aspiration to remake nature, including human nature, to serve our purposes and to satisfy our desires.”<sup>7</sup> Once again, the objection is directed at attempts to change our nature—becoming something other than human—rather than becoming *morally better* human beings. Indeed, remaking our nature into whatever we want—to “serve our purposes” or “satisfy our desires”—makes no mention of morality (and so, may not be a good thing at all). At the very least, radical alteration of human nature—changing the type of being we are—does not guarantee any kind of improvement, morally or otherwise. “Bioconservatives”, therefore, call for “modesty, humility, and restraint” when thinking about changing humans into something other than human.<sup>8</sup> And this seems more sensible than objections to moral enhancement alone. Importantly, whether one agrees with bioconservatives on these points is irrelevant. The central point is this: objections to metaphysical change are not objections to moral improvement. Hence, citing authors who object to the use of technology that aims to alter human nature (a metaphysical transformation) does not show that they would (or must) also reject moral enhancement.

Setting these points aside, however, it is easy to imagine that some STPV theorists *will* have concerns about moral enhancement. For such theorists, Brummett and Crutchfield raise a conceptual critique and a moral critique.<sup>9</sup> We will discuss each in turn, explaining why neither undermines STPV in the ways Brummett and Crutchfield suggest.

### 3. The Conceptual Critique

Brummett and Crutchfield’s conceptual critique aims to show that STPV is internally inconsistent (i.e., “incoherent”).<sup>10</sup> The critique goes like this. Defenders of STPV (Brummett and Crutchfield argue) defend two claims<sup>11</sup>:

(A) God, who is perfectly virtuous, did not get his virtue through a process. (from ST)

(B) Virtue “must be obtained through a particular kind of process.” (from PV)

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<sup>7</sup> Brummett & Crutchfield, op. Cit. note 1, p. 2. See also, Kass, L. (2003). Beyond therapy: Biotechnology and the pursuit of happiness. President's Council on Bioethics, p. 288.

<sup>8</sup> Brummett & Crutchfield, op. Cit. note 1, p. 2.

<sup>9</sup> For a discussion of moral enhancement and arguments that dependency on certain kinds of biotechnological interventions risk a “mere *simulacrum* of true moral virtue” (all from a standardly theistic virtue-theoretic perspective), see Eberl, J. (2014). A Thomistic appraisal of human enhancement technologies. *Theoretical Medical Bioethics* 35(4): 289-310, especially pp. 304-306.

<sup>10</sup> Brummett & Crutchfield, op. Cit. note 1: 4.

<sup>11</sup> Ibid: 3-4.

If (A) is true, then (B) is false. After all, God would serve as a counterexample to (B). And if (B) is true, then (A) is false. This is because, given (B), God’s virtue must have been acquired through a process. Thus, one cannot coherently maintain both (A) and (B).<sup>12</sup>

There are at least two problems here. First, on common versions of STPV, the use of “virtue” is different in (A) than in (B). Second, STPV theorists need not (and commonly would not) accept that virtue *must* be acquired via just one kind of process.<sup>13</sup> We will consider each problem in turn.

### 3a. Different Uses of “Virtue”

First, for traditional theists, the use of “virtue” in (A) is very different from the use of “virtue” in (B). Exposing this shift in the meaning of “virtue” erases the alleged inconsistency. It is not incoherent, for example, to maintain that a dog’s bark is audible while a tree’s bark is not. “Bark” refers to different things in each case. Regarding virtue, STPV theorists commonly maintain that God does not possess virtue or goodness in a way that is univocal to humans.<sup>14</sup> Instead, God’s virtue is *analogous* to human virtue (it bears some connections and similarities, but is not the same thing). Specifically, God is good (and has virtue) by His own essence, unlike humans.

We should, therefore, rewrite (A) and (B) to better reflect the subtleties of theists’ views:

(A\*) God, who is perfectly virtuous<sub>1</sub>, did not get his virtue<sub>1</sub> through a process.

(B\*) Virtue<sub>2</sub> “must be obtained through a particular kind of process.”

If “virtue” is used in different ways—i.e., virtue<sub>1</sub> is only analogous to virtue<sub>2</sub>—statements (A) and (B) are not inconsistent. Of course, this line of response may seem opaque (or worse, ad hoc) to non-theists or to STPV theorists that reject Thomistic claims. But recall, the conceptual critique is supposed to show that *STPV* is “internally inconsistent.” This is false, however, since STPV has internal resources to resolve the apparent inconsistency. One need not agree with STPV theorists to recognize that the view is not inherently inconsistent.

Brummett and Crutchfield anticipate this line of response:

The attempt to escape the dilemma by differentiating between divine virtue (that does not require a process) and earthly virtue (that requires a process) will be unsuccessful, because any explanation must contend with the fact that God could have made *any logically possible world*. If it is logically possible for intrinsically valuable virtue to exist without a

<sup>12</sup> Note that this problem arises for STPV independently of any discussion of moral enhancement. The conceptual problem is, therefore, a concern for STPV theorists regardless of whether they accept or reject moral enhancement.

<sup>13</sup> And, related to this second point, we will argue that contra Brummett and Crutchfield, STPV does not imply that instantly-gained virtue is automatically “deficient.”

<sup>14</sup> Austin, N. (2017). *Aquinas on virtue: a casual reading*. Georgetown University Press, pp. 122-123.

process (which the standard theist must admit) then the existence of a world designed for the explicit purpose of creating intrinsically valuable virtue becomes unexplainable.<sup>15</sup>

STPV theorists could simply respond that it is *not* logically possible for intrinsically valuable *creaturely* virtue (i.e., virtue<sub>2</sub>) to exist without a process. That virtue<sub>1</sub> can exist without a process does not imply that God could create a world in which, without a process, some creatures are fully virtuous<sub>2</sub>. If so, then once again, STPV is not inconsistent. And while we will not pursue this line of response further, it shows how flimsy Brummett and Crutchfield’s charge of inconsistency is.

More importantly, in discussing the possibility that creaturely virtue could exist without a process, Brummett and Crutchfield are really just raising a question for STPV: If God *could* create beings with perfect virtue, why wouldn’t God do so (rather than create a world that is merely conducive to the formation of virtue)? This new question may seem important, since if God could create creaturely virtue without a process—but did not do so—then this choice is, to use the authors’ term, “unexplainable.”<sup>16</sup>

For many STPV theorists, the question here is neither new nor “unexplainable”: They will argue that God *did* create both types of beings, those perfect in virtue and those that acquire virtue through a process. St. Augustine, for example, writes, “if the Maker furnished goodness to a creature whose future sins He foresaw, He would certainly furnish this goodness so as to make a creature which He foreknew would not sin.”<sup>17</sup> Even when discussing creatures that err (morally), Augustine writes, “people who are ruined by their greed for material objects, which are praiseworthy at their level, are to be preferred to those selfsame material creations.”<sup>18</sup> Flawed human beings, in other words, are of greater value than the material objects they might abuse. Yet there is nothing “unexplainable” about God’s creation of material objects (e.g., nobody seems to doubt STPV on the basis that trees exist). On STPV, therefore, the world is thought to be fine-tuned for the actualization of a wide range of goods (*including* “intrinsically valuable virtue” that is gained via a process).

Brummett and Crutchfield could object that God—being perfect—must create *only the highest goods*, rather than a range of greater and lesser goods. God’s goodness, they may claim, requires that God create only beings that are perfect in virtue. Such claims would require defense. Certainly Augustine considered and *rejected* these claims (as we just saw), given that creation of a plurality of goods (that range in value) is consistent with God’s perfect goodness.<sup>19</sup> And either way, we seek only to draw attention to the fact that STPV theorists have already engaged with the very questions Brummett and Crutchfield raise (and would note that they have engaged with these

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<sup>15</sup> Brummett & Crutchfield, op. Cit. note 1: 4.

<sup>16</sup> Ibid.

<sup>17</sup> St. Augustine & King, P. (ed.), (2010). *On the free choice of will, on grace and free choice, and other writings*. Cambridge University Press, p. 83.

<sup>18</sup> Ibid: 84.

<sup>19</sup> Ibid.

questions for centuries).<sup>20</sup> Failure to consider the long history of thought within STPV traditions—while, at the same time, declaring that some claims of STPV are “unexplainable”—is a premature dismissal of STPV, to say the least.

Finally, whether or not one agrees with STPV theorists’ claims about value (e.g., Augustine’s positing that God creates a wide range of goods, not just the highest goods) is irrelevant. The central question is whether or not STPV is *internally* inconsistent. Nothing Brummett and Crutchfield say demonstrates any such inconsistency. Hence, the conceptual critique (thus far) is unsuccessful. Its central failing is its inadequate representation of the subtleties within STPV traditions.<sup>21</sup>

### 3b. Acquired Virtues vs. Infused Virtues

Second, and independently, consider the (arguably) most prominent STPV theorist: St. Thomas Aquinas. Aquinas distinguishes between “acquired” virtues and “infused” virtues. Acquired virtues are “acquired through habituation.”<sup>22</sup> The virtue of temperance, for example, may be gained via a process involving “repeated performance of temperate actions.”<sup>23</sup> Infused virtues, on the other hand, are entirely the result of God’s “works in us, without us.”<sup>24</sup> Brummett and Crutchfield focus exclusively on acquired virtues (what they call “process virtue”) without considering infused virtues.

Infused virtues, however, are what “perfect us in regard to our supernatural end,” which is “the enjoyment of God.”<sup>25</sup> As Angela Knobel puts it, “human beings have a nature” and “can cultivate virtues ordered to fulfillment of their nature,” even though “true human fulfillment lies outside nature’s grasp.”<sup>26</sup> True fulfillment consists in “participation in the divine life that occurs in supernatural beatitude” which “utterly exceeds our natural good.” Hence, “no amount of natural virtue can order us to the good that truly fulfills us.”<sup>27</sup> With this in mind, acquired virtues (or

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<sup>20</sup> Excerpts written by Augustine on this matter, for instance, were thought to be written between 391-395 CE. See Augustine & King, op. Cit. note 14, p. xxxiii.

<sup>21</sup> As one last objection, Brummett and Crutchfield ask: Why not attempt to enhance human nature in ways that would create “a transhuman with superior virtues or moral capacities” (beings who do not require a process to develop virtue)? Brummett & Crutchfield, op. Cit. note 1: 4. Even supposing we *could* do such a thing (a dubious claim in its own right), this simply changes the subject from moral enhancement to metaphysical enhancement. Debates about the practicality (and permissibility) of metaphysical enhancement move us well beyond the scope of the conceptual critique though, which was supposed to show that STPV theorists’ claims about *moral* enhancement generate an internal inconsistency.

<sup>22</sup> Dahm, B. (2015). The acquired virtues are real virtues: a response to Stump. *Faith and Philosophy* 32(4), 453-470, p. 464.

<sup>23</sup> Ibid.

<sup>24</sup> Ibid: 457.

<sup>25</sup> Ibid: 463.

<sup>26</sup> Knobel, A. M. (2021). *Aquinas and the infused moral virtues*. University of Notre Dame Press, p. 11.

<sup>27</sup> Ibid: 11-12.

“process virtues”) actually turn out to be of *secondary* importance to many STPV theorists. Some have even denied that acquired virtues are genuine virtues at all.<sup>28</sup>

Returning to the conceptual critique, contra Brummett and Crutchfield we have no good reason to think that STPV theorists will (or must) think that virtues must always be gained via a particular process. On common (Thomistic) accounts of STPV, “acquired virtue” and “infused virtue” differ. The latter is not “process virtue” in the way Brummett and Crutchfield have discussed it. Infused virtue is a gift of grace given by God; it cannot be acquired by human effort (nor via biotechnology, for that matter).<sup>29</sup> If so, then STPV theorists would likely *reject* (B). A more faithful representation of STPV, therefore, would revise (B) as follows:

(B\*\*) Virtue *can be* (or usually is) “obtained through a particular kind of process.”

No contradiction arises between (A) and (B\*\*). Hence, STPV is not internally inconsistent.<sup>30</sup>

Brummett and Crutchfield may object by claiming that STPV theorists will argue that instantly gained virtue is lacking in value. As they put it, STPV theorists will claim that “virtue acquired through biotechnology” would “come too easily” and, therefore, would be “deficient.”<sup>31</sup>

We disagree. If virtue-via-enhancement is *genuine virtue*, then it does not differ in intrinsic value from virtue gained through a process. Virtue remains an excellent state of character, independently of how it is acquired.<sup>32</sup> By comparison, suppose you have two options: spend years toiling away

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<sup>28</sup> See Stump, E. (2011). The non-Aristotelian character of Aquinas’s ethics: Aquinas on the passions. *Faith and Philosophy* 28(1), 29–43.

<sup>29</sup> In fact, *from the perspective of STPV*, enhancement technologies may lead us to believe (mistakenly) that the pain, suffering, and brokenness of the world can be fixed via human effort. As Colgrove argues, on standard theism, our moral failings (and the resulting negative consequences) ultimately “cannot be overcome by political innovation, restructuring of society, or ingenuity of fallen human beings.” See Colgrove, N. (2020). The devil is in the details. *American Journal of Bioethics* 20(12), 18–20.

<sup>30</sup> Brummett and Crutchfield may wonder, if God can infuse virtues instantly, why not do so now? In asking the question, however, Brummett and Crutchfield merely rediscover a basic problem of evil for theism. It is an interesting theological question, to be sure, but merely asking the question falls dramatically short of demonstrating any “incoherence” in STPV. For a lengthy discussion of virtue and the problem of evil, see Hick, J. (2010). *Evil and the God of love*. Palgrave Macmillan.

<sup>31</sup> Brummett & Crutchfield, op. Cit. note 1: 3.

<sup>32</sup> Here, we grant (for the sake of argument) that acquired virtue *could* be gained instantly via enhancement. This is rather implausible for the following reasons. On STPV, virtue can be gained instantly via a supernatural act, as in the case of infused virtue. But (STPV theorists like us will claim) virtue cannot be gained instantly via human invention (e.g., enhancement). After all, on standard accounts of virtue, the virtuous agent does not merely *act* in the right way, but, instead, she acts and emotes towards “the right person, to the right extent, at the right time, with the right motive, and in the right way.” Furthermore, virtuous agents act knowingly and voluntarily—perceiving what is good within particular situations and choosing it willingly—all of which proceeds “from a firm and unchangeable character.” See Aristotle & Crisp, R. (ed.), (2014). *Nicomachean Ethics* (2nd Ed). Cambridge University Press. To generate full virtue, an enhancement would have to permanently change the agent’s internal states, reshaping their cognitive, conative, and affective faculties, while also providing them with a kind of *knowledge* and moral perception that allows them to navigate moral terrain well. We cannot imagine that anything like Brummett and Crutchfield’s “pill” could ever do all of this (let alone do it all in an instant!). Yet, we will set these concerns aside.

until you produce an incredibly influential book *or* push a button that causes the book to appear immediately. In this case, the intrinsic value of the book—and its influence—would not change based on how it came to be. Perhaps your “sense of accomplishment”<sup>33</sup> would be reduced, or perhaps there would be something less valuable about *the means you chose*, since we rightly value things like effort, risk, diligence that normally occur in book-producing. But our attitudes toward the thing produced, as well as other goods produced in the process of bringing something about, are distinct from the intrinsic value of the thing produced. STPV is not committed to thinking that virtue is made more valuable by the process that brought it about, even though it is committed to thinking that the process indeed may be valuable *in addition to* the virtue it brings about.<sup>34</sup>

In sum, the conceptual critique fails to demonstrate any inconsistency within STPV, primarily because it oversimplifies STPV. Brummett and Crutchfield could retreat here, arguing that they have only *some* STPV theorists in mind: those who insist upon defending the completely flatfooted versions of (A) and (B). If that is Brummett and Crutchfield’s response, however, we wonder: *who*, exactly, are they critiquing? Is there even *one* serious STPV theorist that holds such simple, unqualified views?<sup>35</sup> We cannot think of any. Worse, if Augustine, Aquinas, Thomists, and other philosophers who follow such traditions do not count as “relevant” STPV theorists, then we begin to suspect that Brummett and Crutchfield are sparring with an imaginary opponent (one solely of their own making).

#### 4. The Moral Critique

Like the conceptual critique, the “moral critique” aims to show that STPV is internally inconsistent. The moral critique proceeds as follows. STPV theorists (allegedly) endorse two premises:

1. You should pursue virtue, rather than accept moral enhancement.
2. You should not act selfishly.

Premise 2 seems uncontroversial. Premise 1 captures STPV theorists’ purported “pro-virtue” and “anti-enhancement” views. Next, Brummett and Crutchfield defend this conditional:

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<sup>33</sup> Brummett & Crutchfield, op. Cit. note 1: 3.

<sup>34</sup> To motivate the value of the means taken as distinct from the end achieved, consider the value of *failed attempts*, wherein an intended end is not brought about but the means taken make the attempt worthwhile anyway. For example, suppose an author spends years toiling on writing a book, only to die before its completion. Even if the incomplete manuscript is never posthumously completed or published, we can recognize that there was something valuable about *the writing* of the book that never was to be. We hasten to add, however, that the value of a process, simply by virtue of being distinct from the result (or by being long and difficult), does not always mean that virtue plus a difficult process is more valuable than virtue on its own.

<sup>35</sup> “Serious” because we believe critiques of STPV should be directed at sophisticated defenses of STPV, rather than, say, at claims made by laypeople (who may have not thought carefully about these matters). By comparison, one does not convincingly rebut atheism on the basis that some atheists hold contradictory views. The same holds for STPV.



3. If you should pursue virtue, rather than accept moral enhancement, then you should act selfishly.

Premise 3 states that if one ought to pursue virtue (to the exclusion of enhancement), then it follows (*in effect*) that one ought to act “selfishly” (at least sometimes). Specifically, Brummett and Crutchfield argue that “the primary aim of moral enhancement is to improve the lives of others by preventing widespread suffering.”<sup>36</sup> In choosing to pursue virtue (to the exclusion of enhancement), however, STPV theorists seemingly suggest that “virtuous self-improvement” is more valuable than preventing widespread suffering. This is “extremely selfish.”<sup>37</sup> Hence, by rejecting enhancement, STPV theorists are (in effect) prescribing extremely selfish actions.

From premises 2 and 3, however, it follows that:

4. It is false that you should pursue virtue rather than accept moral enhancement. (*modus tollens* from 2 & 3)

Premise 4 contradicts premise 1. By condemning selfishness and, at the same time, prescribing “extremely selfish” behavior, STPV theorists contradict themselves. To avoid this, STPV theorists must respond by “rejecting the foundations of their view (e.g., that selfishness is wrong), abandoning their objection to enhancement, or by denying that enhancement prevents suffering.”<sup>38</sup>

Rejecting the claim that selfishness is wrong means abandoning premise 2. Accepting enhancement means surrendering premise 1. Arguing that enhancement does not prevent suffering allows STPV theorists to reject premise 3. If enhancement does not prevent suffering, after all, then foregoing it is not really selfish.<sup>39</sup> Problems arise for premises 1 and 3, however.

#### 4a. Premise 1 and a False Dilemma

Premise 1 relies upon a false dilemma. STPV theorists are told they must either

(i) Accept moral enhancement (e.g., a “pill”) which will “over a very short period” result in the agent “exhibiting more moral behavior,” or

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<sup>36</sup> Brummett & Crutchfield, op. Cit. note 1: 5.

<sup>37</sup> Ibid.

<sup>38</sup> Ibid: 6.

<sup>39</sup> More carefully: If enhancement does not prevent suffering, then Brummett and Crutchfield’s reasons for labeling the foregoing of enhancement “selfish” would no longer stand.

(ii) “Forgo” enhancement and “engage in a long, difficult process...to achieve the same moral judgments, motivations, and behaviors” as one “would have had much sooner” by accepting enhancement.<sup>40</sup>

Brummett and Crutchfield suggest that STPV theorists will likely defend (ii). After all, on STPV, virtue is of significant “intrinsic value”—perhaps the highest value—and enhancement “requires the person to sacrifice the intrinsic value of the virtue that” would result from the process of developing virtue.<sup>41</sup> In other words, Brummett and Crutchfield are claiming (explicitly) that accepting enhancement is incompatible with the pursuit of virtue.

Why think this? On STPV, enhancement is neither sufficient for virtue nor is it a substitute for virtue.<sup>42</sup> But neither point implies that enhancement *precludes* the pursuit of virtue. The dilemma—that one must accept enhancement or pursue virtue (but one cannot do both)—is a false one. By analogy, consider an Olympic figure skater. Would taking performance-enhancing substances *preclude* them from developing their abilities as a skater? No. They could still work towards perfecting their techniques, increasing their endurance and coordination, etc. Performance-enhancing substances are *insufficient* for becoming an excellent skater. But the substances do not preclude someone from honing their abilities. Naturally, we might frown on the use of performance enhancing substances. But this is likely because taking these substances commonly involves cheating (breaking the rules to gain unfair advantages over competitors).

Similarly, does moral enhancement constitute “cheating”? That is a different question. The question at hand is whether enhancement precludes further development of virtue. Clearly, the answer is “no.” Thus, Brummett and Crutchfield’s claim that enhancement “requires the person to freely sacrifice some of the development of their own personal virtue” is unfounded.<sup>43</sup> With this in mind, STPV theorists would seem to qualify premise 1 as follows (which renders the moral critique unsound):

1\*. You should pursue virtue, *whether doing so involves accepting moral enhancement or not.*<sup>44</sup>

Brummett and Crutchfield do consider this response, but they worry that it reduces STPV to “garden-variety consequentialism.”<sup>45</sup> Not so. Crude consequentialist theories tell us to maximize the greatest good for the greatest number of people. STPV need not adopt the same central aim.

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<sup>40</sup> Ibid: 4-5.

<sup>41</sup> Ibid: 5.

<sup>42</sup> See footnote 32.

<sup>43</sup> Brummett & Crutchfield, op. Cit. note 1: 5.

<sup>44</sup> Note that this revision is consistent with the view that *metaphysical* enhancement should be rejected altogether (in line with section 2). It is also consistent with the view that in many (or most) cases, moral enhancement should be avoided (a view we discuss below).

<sup>45</sup> Ibid.

Roughly, the aim of STPV is not necessarily centered on generating the best consequences, but on generating the best agents. Both consequentialism and STPV may (sometimes) prescribe enhancement. But it is trivially true that two types of ethical theories sometimes prescribe the same course of action.

#### 4b. Premise 3: Selfishness and Self-Directedness

Setting premise 1 and our criticisms aside, premise 3 is dubious as well. Recall premise 3: *If you should pursue virtue, rather than accept moral enhancement, then you should act selfishly.* Essentially, if one rejects enhancement (for the sake of self-improvement and when enhancement would reduce suffering), then one acts selfishly.

The relation between selfishness (or self-centeredness or egoism) and virtue theories has been explored at length.<sup>46</sup> We can, however, distinguish between ethical theories that emphasize *self-directedness* and those that emphasize *self-interestedness* (i.e., selfishness). Virtue theories are all self-directed, in that the moral agent is concerned with her own agency. Am *I* giving others their due? Am *I* being sufficiently generous? Am *I* attending to others' needs? But being self-directed does not mean that one's own private goods are prioritized over others. The contrast class of virtue theories, therefore, is not "other-interested" ("non-selfish") ethical theories. Rather, competing ethical theories include those that remove human agency from ethical consideration (or, at least, minimize human agency). Such theories focus on questions like: Are people getting their needs met (regardless of how it gets done)? Can suffering be reduced (regardless of how it gets done)? And so on.

To illustrate, suppose you are near a shallow pond, where a child is drowning. Suddenly, a robot implants itself on your neck and takes control of your nerves and muscles. The robot sends electrical signals which move your limbs, leading you to save the child. Meanwhile, the robot feeds your brain thoughts like "I should help the child immediately!" Your consciousness, in this case, is only along for the ride, while your body and mind are moved by external causes. Have you acted with other-regarding interest for the sake of relieving suffering?<sup>47</sup> On STPV, such a question is inappropriate: *you* haven't acted at all. There was a series of events in which your mind thought, your body moved, and the child was saved. But there was no exercise of reason or choice, no agency that we could morally evaluate (at least, on the conception of agency STPV commonly assumes). As Kass puts it, "the point [of virtuous agency] is less the exertions of good character against hardship, but the manifestation of an alert and self-experiencing agent making his deeds flow intentionally from his willing, knowing, and embodied soul."<sup>48</sup>

<sup>46</sup> See, especially, section 3(g) in Hursthouse, R. & Pettigrove, G. (2018). Virtue ethics. In Zalta, E. N. (ed.), *The Stanford Encyclopedia of Philosophy*, URL = <https://plato.stanford.edu/archives/win2018/entries/ethics-virtue/>.

<sup>47</sup> The way we have phrased the question is important: we are not asking whether a good thing happened (obviously it is good that the child was saved), but whether you acted well. STPV holds that these are distinct questions.

<sup>48</sup> Kass, op. Cit. note 5: 26-27.

If we are agents of the kind STPV assumes, then the choice between moral enhancement (using external causes to achieve certain kinds of behaviors) and finding other means (e.g., virtue education) is not the choice between agency for the sake of *other-interest* and agency for the sake of *self-interest*. Rather, if enhancement and agency are incompatible, the choice is between seeking to reduce (or eliminate) agency and seeking to perfect agency. But if STPV is correct that moral evaluation is about the actions of agents—agents as posited by STPV—and not merely the evaluation of states of affairs, then moral enhancement does not result in other-regarding action. It results in something that is less of an action.

Brummett and Crutchfield may respond that the types of agents (and agency) posited by STPV do not exist. They claim, after all, that “as we learn more about the brain and mind, it is clear that factors external to the person strongly influence one's judgments and subsequent behavior. Most of these factors are beyond an individual's control.”<sup>49</sup> The moral critique, however, is supposed to show that there is an *internal inconsistency* within STPV. Brummett and Crutchfield cannot demonstrate such an inconsistency by assuming claims about agency (or by assuming a metaphysics of action) that STPV theorists would likely reject.<sup>50</sup> Even if there are no such agents of the kind STPV posits, those who reject enhancement would not be selfish on STPV anyway (since, in that case, human beings would not be the sorts of robust agents that could be responsible for prioritizing their own interests above others). If that were the case, human beings would be no more selfish (or selfless) than atoms giving or taking electrons from one another.

Brummett and Crutchfield may insist that agents posited by STPV still have a choice: either accept enhancement—which will reduce your agency and subsequently reduce others' suffering—*or* take the “long route” of perfecting your agency, which most of us will fail to do and which would, presumably, allow more suffering.<sup>51</sup> Isn't it selfish to preserve our own agency at the expense of permitting others' suffering? Not exactly. Again, assuming the STPV conception of agency, reducing agency would not lead to our being selfless in the sense of being self-sacrificial or other-

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<sup>49</sup> Brummett and Crutchfield, op. Cit. note 1: 6.

<sup>50</sup> As to whether or not findings in neuroscience disprove (or are inconsistent with) claims about agency as posited by STPV theorists, this debate is best left for another day.

<sup>51</sup> “Presumably” because the claim that more suffering would occur without enhancement is not obviously true. As Brummett and Crutchfield set things up, one must choose between helping people (e.g., save a drowning child) or working on self-improvement (the “long” route, which ends with the drowning child dying). Acquired virtue is gained (in part), by practicing virtuous acts, however, not abstaining from them. One does not choose between virtue and helping others, but, instead, pursues virtue *through* helping others. Which route—enhancement or non-enhancement—would lead to less suffering is (as Brummett and Crutchfield rightly note) an empirical question. Yet, at no point do they present empirical evidence to support the claim that enhancement would reduce suffering (compared to non-enhancement). This is especially troublesome since their main example of enhancement (a “pill”) does not exist. Not only is there no empirical evidence as to its benefit, but there cannot *be* any such evidence at this stage. Ultimately, this means that empirical questions about the benefits of relevant enhancements remain open. If it turns out that our best enhancements do *not* reduce net suffering, then premise 3 is *clearly* false.

regarding. Rather, reducing agency would be selfless in the sense that it would, little by little, eliminate the selves who can prioritize their own (or others') interests in the first place.

By comparison, imagine that you could take a pill that would empower you to do the most good that you possibly can. Your consciousness, however, would be utterly erased (you would become an automaton for good). Alternatively, you may not take the pill and remain free to do whatever good you can on your own (or not). Is refusing to take the pill "extremely selfish"? It seems intuitive (to us) that refusing to take the pill is morally permissible. Refusing to eliminate the self (for the sake of bringing about greater goods) is not "selfish." Taking the pill (in this case) is not even *selfless*. It is self-destructive.

Brummett and Crutchfield could respond that if self-destruction brings about greater goods, then it is indeed the right (*unselfish*) thing to do. This is a difficult pill to swallow. We do not usually condemn as "selfish" those who refuse to give up their spare organs (kidneys, lobes of liver, corneas, etc.), even though doing so would reduce suffering. Nor do we call people "selfish" when they refuse to commit suicide (even though doing so could save lives via heart and lung transplants). If Brummett and Crutchfield's suggestion, ultimately, is that we must either do the greatest good that we possibly can or be labeled "selfish," then they seem committed to an extreme form of consequentialism (one that no STPV theorist of which we are aware would accept). Brummett and Crutchfield could disagree with STPV theorists regarding what is or is not selfish, of course. But doing so does not show that STPV is *internally* inconsistent.

## 5. Conclusion

Brummett and Crutchfield's critiques of STPV fail to show that STPV is internally inconsistent. First, the authors they cite seem to reject metaphysical enhancement, but this does not implicate *moral* enhancement. More importantly, both conceptual and moral critiques are unsuccessful. In each case, the complexities within STPV traditions seem to be overlooked. Specifically, the conceptual critique imposes on theists a view they might often reject (that God's virtue and creaturely virtue are univocal). Further, it imposes on theists the view that all human virtue must be gained via a process (again, something they need not, and commonly do not, accept). The moral critique fails, as it relies on a false dilemma (attributing to theists the view that enhancement *precludes* the pursuit of virtue, which some will take to be implausible). Independently, the moral critique also presumes that enhancement would reduce widespread suffering (an empirical claim for which we are offered no evidence). The critique also requires that the theist accept an account of agency foreign to common STPV views. In every case, therefore, Brummett and Crutchfield appear to be constructing their own idea of STPV, before knocking it down, rather than adequately engaging with views held by actual theists (or within STPV traditions broadly). Thus, while Brummett and Crutchfield's essay provides an opportunity to clarify the claims of STPV theorists, it fails to show that STPV is internally inconsistent in any way.