

# ENHANCEMENT AND HYPERRESPONSIBILITY

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## 28.1 Introduction

To begin with an important distinction: one can be *causally* responsible for some state of affairs, even a terrible state of affairs, without being morally responsible for it. Say someone starts a wild-fire or causes a traffic accident or makes a fatal error at work. In each of these cases, it is possible, depending on the circumstances, that the person is nevertheless blameless for these tragedies. To determine their *moral* responsibility, we must answer a range of other questions. Could they have anticipated these outcomes, for instance? Or could they have taken reasonable precautions to prevent them?

In saying that someone is “morally responsible” for some wrong act, we mean that they are blameworthy for it and that blaming them would be appropriate. This is a normative conception of responsibility, concerning when blameworthiness is genuinely warranted or deserved, rather than a description of our blaming practice. (When we speak of “responsibility” going forward, we mean moral responsibility.)

Where should we draw the boundary of our responsibility for the world and for ourselves within it? In some respects, it seems to be a small realm, and much smaller than the limits of right and wrong action (we are regularly excused from blameworthiness, after all, despite failing to do the right thing). Responsibility is often thought of as fundamentally capacity-sensitive, and in general, our capacities are very limited: we reason pretty badly; we are deeply self-interested; there’s only so much we’re able to care about; we forget important things; we make very dangerous mistakes; we are, as we so often say, “only human.”

Sometimes our capacities are more limited still, and these diminished capacities often seem to underwrite diminished responsibility. This would explain a range of familiar exemptions and excuses: for immaturity, senility, or certain mental impairments (and even, arguably, for psychopathy). On the face of it, responsibility seems to track the loss of, restoration of, and development of certain agential capacities.<sup>1</sup> It is because a child, for instance, has such under-developed capacities with regard to deliberative moral action that we should excuse them from wrongdoing, or perhaps exempt them entirely. But as a child’s capacities gradually develop, so too does their corresponding responsibility for what they have done.<sup>2</sup>

There are different ways of thinking about how and why capacities matter in assessments of responsibility. In this chapter, we will consider three prevalent views. In the first place, you could take capacities to matter *in and of themselves*, where the foundation of moral responsibility (and its

extent) resides in our individual capacity to respond to normative demands. Call these “capacity-based” views.

Alternatively, you could hold that capacities are intricately related to other features of our agency that are of more fundamental relevance to assessments of responsibility. We will consider two such views. We will call the first sort of view “control-based.” According to these views, responsibility is a function of the degree of control an agent has over her actions and their outcomes, and the foreseeability of these consequences. Thus, we can only be held responsible for a wrongdoing or a harmful outcome insofar as it was within our control to avoid it. (Depending on how “control” is construed, these views can be closely related to capacity-based views, but they can also diverge: for instance, some philosophers have argued that fair appraisals of moral responsibility require deliberate and *conscious* control of one’s wrongdoing.)<sup>3</sup>

Let us imagine a surgeon who has been forced to work a double shift, despite her growing exhaustion. In this fatigued state, she makes a fatal error during an emergency appendectomy, and a young patient dies a needless death. One may well feel that the doctor is not responsible for this tragedy, or at least that her responsibility is significantly diminished. On control-based views, we could understand her diminished responsibility as such: the doctor had no control over becoming fatigued (it is, after all, a natural process), and she had no control over her extended shift (we stipulated that she was given no other choice); furthermore, as her capacities diminished with her exhaustion, certain errors, including her fatal error, also became increasingly out of her control, and therefore increasingly out of the ambit of her responsibility.

Alternatively, we could look at this case according to a different prevalent view. We will call this sort of view “revelation-based.” According to this view, moral responsibility is fundamentally related to what our acts reveal about us as moral agents, and particularly our moral concern for one another, rather than to what we can control.<sup>4</sup> (Although facts about what we can control will often be deeply relevant to assessments of our moral concerns). In turn, we are blameworthy when we act from ill will or insufficient concern, including negligence. So on revelation-based views, the doctor is excused given that, under the circumstances, it is clear that her wrongdoing did not arise from any objectionable attitudes on her part, or lack of concern for the child in her care.

Note, however, that we can sometimes be responsible *for* our incapacitations. If, instead of being blamelessly fatigued, the doctor in our story made a fatal error because she was drunk, the fact that she had diminished capacities hardly seems to be excusing. As Nicole Vincent writes: “What determines whether someone is responsible for their actions (or for the outcomes of those actions) is not just what capacities they actually had, *but also whether they are responsible for the lack of those capacities.*”<sup>5</sup>

Again, we can understand the culpability of the drunken doctor via the views of responsibility just introduced. On capacity and control-based views, since the doctor was in control of getting drunk (and therefore of diminishing her capacities) the errors that arose from her subsequent incapacitation can be traced back to her earlier controlled decisions, and are therefore reined into the ambit of her moral responsibility. While on revelation-based views, on the other hand, the fact that the doctor chose to drink while knowing she might be operating plainly seems to evince insufficient concern, and indeed callous indifference, for the patients in her care.

For the most part, debates on moral responsibility have focused on diminished capacity, and attendant diminished responsibility. But if responsibility is tied to our capacities – and not only those we possess but also our relationship to those that we lack – then the prospect of *enhanced* capacities seems to pose immediate questions with regard to responsibility. The enhancement debate, therefore, opens up new, and potentially complicating terrain in which to explore debates about responsibility. This chapter concerns the intersection of these debates. It is only possible to overview some of the interesting questions and complexities that emerge at this intersection, and our aim is not to argue for a particular position with regard to enhancement and responsibility, but rather to explore some of this generative terrain. In particular, we will consider the implications of enhancement for the demandingness and the fairness of certain responsibility assessments.



The outline we follow will be: in Section 28.2, we will consider the sorts of capacities that are most relevant to ascriptions of responsibility; with qualifications, we will distinguish between “core moral capacities” and “auxiliary moral capacities” (but we also point to the impossibility of bright-line distinctions here). We will then briefly consider the debate concerning which capacities are amenable to enhancement, and to what extent. In Section 28.3, we turn to engage specifically with questions of responsibility for enhancement. We consider this question at two removes: (1) our responsibility to undertake any safe and effective enhancements that become available (and our culpability for harmful outcomes that arise from our failures to do so); and (2) the ambit of our responsibility *once enhanced*. Some philosophers have argued that we can be “hyperresponsible” once we possess certain enhanced capacities. We will investigate how hyperresponsibility with regard to core moral capacities generates unique divisions between revelation-based views, and control and capacity-based views.

## 28.2 Capacities and enhancements

The area of greatest concern at the intersection of debates on enhancement and responsibility concerns *what we owe to others* (rather than what advantages we can achieve for ourselves).<sup>6</sup> Of particular interest, with regard to questions of responsibility and blameworthiness, are those capacities that might allow us to better avoid bad outcomes, such as serious harm and wrongdoing. On the face of it, the relevant capacities concern at least the three following aspects: (1) to know what we should do; (2) to want to do it; and (3) to be able to do so.

These aspects can come apart. You can want to do what is right, but be utterly mistaken about what that is. You can apprehend what you are required to do but feel no motivation to comply whatsoever. And you can both know what to do, and want to do it, but fail because you were unable to do so (our exhausted doctor – who wished only to carefully and correctly perform the appendectomy – was in this sorry position).

At other times, however, the boundaries between these aspects can become less clear. Let us return to the drunken doctor. Imagine that the doctor truly does not perceive her action as morally wrong: she knows, of course, that it is against the “rules,” but she rationalizes that in her case (as opposed to in general) a few drinks does not hamper her functioning. The doctor, therefore, sees no reason why she should abstain. Imagine further that, at a subconscious level, the doctor reasons in this flawed way precisely because she lacks sufficient concern for the well-being of her patients.

Now in this case it is very hard to clearly distinguish the doctor’s failures of reasoning from her failures of moral concern. Though, superficially, her mistake is in “not knowing” what she ought to do (in believing that she is justified when she is not), at a deeper level her mistake emerges from the fact that she lacks adequate moral concern for those affected. In many cases – including those of callous self-interested reasoning, bias, and prejudice – this sort of interplay of moral judgment and moral concern might be at work.

Or imagine a father who knows he should be patient and kind with his children. But he is notoriously foul-tempered and is often so overwhelmed by frustration that he finds himself flying into rages. Once again, it is not straightforward to distinguish between his motivation and his ability to comply with his preferred course of action.

Despite the difficulty of any stable, bright-line distinctions here, and despite the substantive philosophical disagreement about which abilities constitute our moral agency, in this chapter we are going to distinguish between what we call “core moral capacities” and “auxiliary moral capacities,” both of which are central to our status and functioning as moral agents. (Despite qualifications, we are drawing this distinction because unique divisions emerge with regard to the enhancement of core moral capacities and assessments of responsibility).

Ingmar Persson and Julian Savulescu, who have undertaken pioneering work on the question of specifically *moral* enhancement, put forward that

in order for something to count as moral enhancement, it must enhance your moral *motivation*, your disposition to (*decide* and) *try* to do what you think you ought morally to do, rather than your capacity to *implement* or *put into effect* such tryings, to succeed if you try. Moreover, it must enhance your disposition to try to do *for its own sake* what you think you ought morally to do.<sup>7</sup>

We understand “core moral capacities” as loosely aligning with this narrower interpretation, focused on motivational capacities. We might imagine a particularly compassionate person or a person who felt deeply compelled by what they took to be their moral duty, as having highly developed capacities of this sort.

In contrast, “auxiliary moral capacities” include those which allow us to better ascertain what we ought to do (including certain cognitive capacities), as well as those that better enable us to comply. Concerning the former category: in a manner intricately intertwined with our status as moral agents (and yet in some respects distinct from our moral motivations), there is our capacity for reasoning, and moral reasoning, itself. This includes, among other things, our ability to deliberate clearly and without bias, to take account of relevant considerations, and to grant them the appropriate weight.

Finally, there are those abilities that allow us to better comply with morality’s demands. This is potentially a very wide category, depending on the circumstances.<sup>8</sup> Nevertheless, there will be certain auxiliary capacities that are far more closely associated with our likelihood of avoiding harmful outcomes. The exhaustion of our doctor, for instance, is the sort of incapacitation that would significantly increase the odds of disaster. Likewise, terrible outcomes often arise (sometimes on a spectacular scale) from simple “human error,” like our forgetfulness, our inattentiveness to important considerations, or the tendency of our minds to wander even while undertaking dangerous activities.<sup>9</sup>

Again, there are no bright-line distinctions here, and in describing these aspects of moral agency as “capacities” we have not intended to beg any questions about the underlying nature of these capacities, nor how feasible it is that they could be manipulated or enhanced. These matters are, of course, areas of considerable philosophical and empirical dispute.

In appraising the wide range of extant and potential enhancement interventions, a variety of philosophical disputes have arisen. Among these disputes are, prominently: (1) where “treatment” ends and “enhancement” begins; (2) whether there is a difference in kind between “conventional” forms of enhancement (such as educational instruction, nutritional supplementation, and psychotherapy) and “unconventional” forms (such as pharmaceuticals, neurotechnologies, and genetic screening); and (3) how realistic the prospects of some forms of enhancement actually are, and therefore whether aspects of the debate have become pointlessly speculative.

For the purposes of our conversation on responsibility, and in the interests of entering into this conversation in good time, we need not engage with the first two debates. In crucial respects, and in ways we will soon elaborate on, we can treat as similar, in principle, all those interventions that would reliably, safely, and effectively contribute to the avoidance of serious harm and wrongdoing. This can include both treatment and enhancement, as well as conventional and unconventional interventions.

The third debate, however, on the viability of certain forms of enhancement, has pertinence to our discussion insofar as the limits and extents of our powers to intervene in our moral capacities are concerned. One way in which to think of moral enhancements is to describe those interventions we undertake for moral ends.<sup>10</sup> Understood in this way moral enhancement, including moral bioenhancement, is already prevalent. Should the frustrated father we introduced earlier decide to take a mood enhancer *precisely because* he was trying to avoid future violent rages directed toward his children, we might construe this decision as a moral enhancement; this could be true regardless of whether he was using the drug as a treatment or as an enhancement. This

conception of moral enhancement will, for the most part, be sufficient for the purposes of our discussion.

It is worth noting, however, that the area of most contestation with regard to the potential for enhancement concerns the *bioenhancement* of what we have been referring to as core moral capacities, such as empathy, altruism, and moral concern and motivation.<sup>11</sup> (Less controversial is the notion that we can “work on our characters,” or otherwise improve our moral natures, by non-pharmacological, non-neuroscientific, or non-genetic means.) Some have argued that our core moral capacities are ultimately “biologically based and, therefore, that they are amenable to modification by biomedical means, pharmaceutical, neurological or genetic,” and even suggest that the extent of such modification might enable us to morally transform the world.<sup>12</sup> Among the wide range of pharmacological interventions that have been considered with regard to these capacities are SSRIs, oxytocin, MDMA, and psilocybin.<sup>13</sup> Others have raised doubts about approaching moral functioning primarily through a biological lens, and accused such approaches of providing an “impoverished account of the reality of moral functioning and its various influences.”<sup>14</sup> We will return to specific examples in the sections which follow. By and large, we will try to remain in less empirically fraught waters. However, because the category generates unique dilemmas and disputes with regard to our question of responsibility, and since much of the debate on moral enhancement has focused on the prospects of moral bioenhancement in particular, we will briefly consider the implications, with regard to responsibility, of successful bioenhancement of what we are calling core moral capacities.

## 28.3 Enhancement and responsibility

### 28.3.1 *The responsibility to undergo enhancement interventions*

Generally, the obligation to avoid perpetuating harm is accepted far more readily than the obligation to provide assistance or to intervene (or, indeed, to create a morally utopian world). We commonly take ourselves to have an ordinary duty to avoid harm to others, where feasible, and (in turn) auxiliary duties to better enable ourselves to do so. These duties can concern both what we are obligated to refrain from and what we are obligated to do.<sup>15</sup>

The prospect of new forms of enhancement increases the remit of our auxiliary duties (potentially drastically), and it is in this sense that new forms of enhancement generate complexities for theories of responsibility. Can the emergence of new enhancement interventions increase the realm of our blameworthiness? Can it turn what would have been an excusable error into a culpable error, and potentially even a legally culpable error? How far and how wide can our responsibility for wrongdoings and harmful outcomes extend, as the methods available to us to better avoid them continue to develop and expand?

These questions have become important in various spheres, including with regard to bioenhancement. Philosophers and legal scholars have begun to deliberate about the new realms of culpability and negligence that new bioenhancement technologies potentially generate.<sup>16</sup> Much of this debate has focused on avoiding harmful outcomes through cognitive enhancement (and therefore through what we have been calling auxiliary moral capacities), but in many respects, the key points are relevant to any available intervention, including those regarding core moral capacities, which would better enable us to avoid serious harm and wrongdoing.<sup>17</sup>

Earlier we deemed the exhausted doctor blameless for the death of the patient in her care. After all, there was nothing she could have done to avoid the outcome. But if we imagine that she had ready access to a drug that would reliably reduce the likelihood of resultant harm from her fatigue – methylphenidate and modafinil, for instance, which have been reported to increase wakefulness, attention, concentration, and memory when taken by healthy subjects – would she, therefore, have a responsibility to take it?<sup>18</sup> Would she be made culpable for failing to do so?

There are many quick answers to these questions. Where we imagine that the doctor had better alternatives – where she could have taken a nap, or passed over to a colleague, or where a cup of coffee would have done the trick – it is easy to deny that she had any obligation to further enhance.<sup>19</sup> Similarly, where the proposed intervention is unreliable or ineffective, it would seem to immediately undermine any prospective obligation (the auxiliary obligation is, after all, ultimately derived from the ordinary obligation to avoid bad outcomes and can only be generated when it can reliably achieve this aim). Finally, where the intervention is unsafe or has severe side effects, it would at least seriously complicate or undermine any strong obligations on her part.<sup>20</sup>

To avoid the conversation ending before it begins, it is, therefore, necessary to restrict claims to those occasions where the relevant intervention would genuinely be effective, reliable, and safe. Although the research on these drugs is presently under-developed, it is not fantastical to assume that they (or similar interventions) could come to meet these requirements.<sup>21</sup>

One factor that seems relevant here is that of ease and difficulty. Difficulty is an important consideration in assessments of moral responsibility, and it is often treated as blame-mitigating and in some cases even exculpating. A recent philosophical debate has sought to better understand the relevance of difficulty to degrees of responsibility.<sup>22</sup> This debate has also been explored with regard to questions of enhancement: quite straightforwardly, the extent of our capacities is related to the ease or difficulty of meeting certain normative requirements. Insofar as developments in enhancement reduce difficulty, they can also increase our degree of responsibility. As Naomi Kloosterboer and Jan Willem Wieland write: “when it becomes easier to counter or circumvent one’s incapacities and biases, one is less and less excused for harming others due to one’s incapacities or biases.”<sup>23</sup>

It is interesting to revisit this case from the perspective of the paradigms of responsibility introduced at the outset of this chapter. In the initial case, we saw why the exhausted surgeon would plausibly be excused on capacity, control, and revelation-based accounts of responsibility. However, if we stipulate the availability of a safe, reliable, and effective enhancer that would have significantly reduced the likelihood of the fatal outcome, the surgeon seems to be placed in a very different moral position. Insofar as the doctor was initially excused on the basis of her limited capacities, or her lack of control regarding the diminishment of her capacities, these bases no longer seem to apply: now she is inculpated in her incapacitation, given that she had the option of an enhancer, and the fatal outcome seems to attach to her in a far more meaningful sense than in the initial case. The option of an enhancer also seems to change what is revealed, with regard to assessments of sufficient moral concern, by the fatal error: if she cared adequately, someone might contend, she would have taken all available precautions to avoid the tragic outcome. In this sense, the *mere availability* of an enhancer seems to increase culpability, and compound assessments of moral responsibility and blameworthiness, for certain bad outcomes.

So far, the literature on these expanding responsibilities has largely concerned professionals in high-stakes positions: pilots or doctors, with lives on the line.<sup>24</sup> Under such circumstances, where we already take such individuals to have a demanding set of duties related to their professional roles, it can seem that (while burdensome) the stakes involved might potentially generate requirements that we would not impose more generally. Along these lines, various philosophers have argued that (if we grant the stipulations above) our doctor ought to take the pill, and could be deemed blameworthy for failing to do so. In defense of this requirement, philosophers have pointed to a range of other developments in harm reduction that generated new obligations, and which we now take to be uncontroversial: the availability of antiseptic procedures, for instance, generated the obligation for doctors to use them.<sup>25</sup> This can even be true of available pharmacological interventions if they will reliably reduce the likelihood of harm to others: for instance, if the surgeon caused a death in theater because she had stopped taking her diabetes medication (for no good reason) and subsequently fainted while performing an operation, we might consider her culpable for her failure to medicate herself appropriately.<sup>26</sup>

But while the arguments in favor of these responsibilities are most compelling under these limited conditions, concerning high-responsibility professions, it is difficult to see, without *ad hoc* stipulations, why the principles which inform the obligations under these circumstances do not quickly overspill these limits, and start to apply to all of us. It is not only doctors and pilots and judges, after all, who can cause great harm to others. We are all hazardingly loose in the world: we are sometimes implicated in terrible outcomes, and even in the most ordinary of lives we subject other people to our prejudices, cruelties, vindictiveness, negligence, indifference, and selfishness in ways that sometimes constitute legitimate wrongs. Like the frustrated father we discussed earlier, we can all be guilty of bad moods, outbursts, and viciousness that we take out on the people close to us, especially where we lack the emotional resources to respond appropriately. Where a mood enhancer would contribute to the development of these resources, should we be obliged to take it?<sup>27</sup>

Many of us are also causally implicated in massive collective harms: from the perpetuation of child labor in sweatshops to the displacement of people from their lands, to the destruction of environments for extant and future people (among many others). As Judith Lichtenberg memorably put it: “Not harming people turns out to be difficult and to require our undivided attention.”<sup>28</sup> What’s more, given the information saturation of our present era – an epistemic enhancement, or sorts – it has never been easier to find out about the ways in which our seemingly innocuous actions are implicated in these massive harms. Were we not able to find out (were the effects of carbon on the atmosphere still unknown, for instance; or were the upsurge in breathless patients arriving at hospitals around the world still a medical mystery) we might be blameless for our participation in these harms. But the fact that we *can* find out seems to have immediate relevance with regard to our culpability. As Daniel Dennett writes (almost enviously) about our information-scarce ancestors: “They were thus *capable* of living lives of virtue... Of a virtue that *depended on* unavoidable ignorance.”<sup>29</sup>

Initially, attaching responsibility to capacity seems to generate a modest and fair requirement (and even a forgiving one, when we concentrate on diminished capacities). But as the options to enhance these capacities grow, as the realm of what we *could have done* to avoid these harms and bad outcomes extends and extends, the initially modest requirement has the potential to become increasingly burdensome.<sup>30</sup> In what other respects – borne from our expanding abilities to recognize and mitigate harmful outcomes – might we be made incapable of living lives of virtue? And in what other respects might we be deemed culpable, and even legally culpable, for declining to take available measures which would better protect others from our failures and fallibilities, whether cognitive, emotional, moral, or otherwise? Considerations with regard to enhancement, therefore, seem to generate new challenges about demandingness and overdemandingness with regard to the limits of culpability and responsibility.

### 23.3.2 Responsibility once enhanced, and the prospects of “hyperresponsibility”

In this final section, we would like to consider the implications of responsibility for those who *possess* enhanced capacities. Some philosophers have suggested that highly developed or enhanced capacities generate “hyperresponsibility” and that individuals with relevant enhanced capacities are liable to be *more* blameworthy for wrongdoing than ordinary agents in the same way that people with diminished capacities are *less* blameworthy.

To close this chapter, we will briefly consider the implications of hyperresponsibility with regard to both auxiliary and core moral capacities. To reiterate: we take core moral capacities to refer to moral motivation and concern itself, while auxiliary moral capacities refer to those abilities which allow us to better ascertain and comply with what we ought to do. In particular, we will consider how highly developed *core* moral capacities generate divisions between capacity, control, and revelation-based views of responsibility, especially when it comes to interpretations of fair appraisals of blameworthiness.

To begin exploring hyperresponsibility and auxiliary capacities, let us introduce a case. Imagine Bruce is driving down the freeway when a rogue car comes hurtling into his lane. To spare himself Bruce has only two options: he could swerve onto the shoulder where a hitchhiker is standing, who he would surely kill, or he could swerve into the adjacent lane which is obstructed by a reclining flat-bed truck. Almost any other driver would immediately die on impact with the truck, but Bruce is a famed stunt driver, and he perceives immediately that he'd be able to ramp the back of the truck and land safely on the empty road ahead of it. He really is not in the mood for this maneuver though (fed up with such antics after a day on set), and so he kills the hitchhiker instead.

It seems quite patent that Bruce's exceptional capacities in this situation deeply affect the sense in which he is blameworthy for the death of the hitchhiker. Because of his unusual abilities, Bruce was uniquely able to avoid hitting the hitchhiker; he was in control of the fatal outcome in a way that could never be true of an ordinary driver. In turn, various factors about choice, intention, and volition enter the moral scene, transforming what would have been a tragic accident into something closer to murder.

Extrapolating from this case, we can see that there are various methods via which the enhancement of auxiliary capacities can potentially compound blameworthiness, and lay the groundwork for "hyperresponsibility" depending on how far these auxiliary capacities extend. In capacity-based views, the greater realm of capacity *itself* generates the greater realm of corresponding responsibility. In control-based views, the implications of enhanced capacities for what thereby comes to be within our agential control similarly expands the realm of what we can justly be held accountable for. While in revelation-based views, enhanced auxiliary capacities will often have implications for what our failures reveal about our moral concerns and moral motivations (i.e. given his abilities, Bruce's action reveals a profoundly different quality of will to a person who was unable to avoid hitting the hitchhiker).

Let us now consider the driver of the rogue car that was hurtling into Bruce's lane. Imagine that this driver did not have highly developed auxiliary capacities relevant to the case. Instead, after a long journey the driver's mind was wandering leading him to gradually veer from his path; when he realized his mistake he drastically overcorrected his steering, leading to his fateful swerve toward Bruce. Inattention, wandering minds, blameless tiredness, errant reactions under fright or pressure: these are the "all too human" mistakes that often lead to catastrophic outcomes, but where we nevertheless often feel conflicted about questions of responsibility and blameworthiness (how unlucky, in some respects, to have been the driver who inadvertently caused all this harm).

Part of our conflict in such cases emerges from the fact that it is hard to imagine how we could avoid being all too human when we *are* all too human; what should this driver have done to avoid an unanticipated, unwitting, and deeply unwanted error arising from ordinary inadequacies in his auxiliary capacities? Bioenhancement presents itself as one possible answer to this question. If we could all easily take a (safe and effective) pill before undertaking a long drive that would significantly improve our alertness, concentration, and reaction time – and therefore drastically reduce the incidence of road fatalities caused by human error – appeal to human error among those who had chosen *not* to take the pill would be less compelling, and might lead us to feel less conflicted about attributing responsibility for harmful outcomes. As we have seen, the *mere option* of enhancement (even if we do not take it) therefore has implications for our responsibility, potentially generating the concerns regarding demandingness and overdemandingness that we raised in the previous section.

It is a complicated question, however, how we should appraise (1) an agent who (knowingly and needlessly) failed to enhance, and therefore failed to have adequate capacities, and in turn caused some harmful outcome; and (2) an agent who did enhance, and therefore *did* have adequate capacities, but caused some harmful outcome despite this. Are these agents equivalent, since they both ultimately had control (one because avoiding the bad outcome was within their extant capacities,



the other because it could have been)? Or are these agents profoundly different, depending on how we interpret their respective attitudes and moral concerns within their conduct?

Finally, let us turn to the question of *core* moral capacities and the sort of concerns that might be generated with regard to hyperresponsibility. We can look at two kinds of scenarios. One scenario concerns the natural variation in core moral capacities, and the other scenario concerns the bioenhancement of these capacities. As we will see, different issues arise with regard to each scenario: in particular, the “natural scenario” potentially generates concerns with regard to the fairness of hyperresponsibility in proportion to highly developed core moral capacities.

To begin with the natural scenario: irrespective of bioenhancement, there is patently a wide range of core moral capacities already possessed by different individuals; it is a fact of life that some people possess far more moral motivation and moral concern than others. It is also not implausible that (in the normal course of things) these capacities are only within our control to a certain extent, and indeed that they might be susceptible to a “vicious cycle” of sorts: where people with diminished core moral capacities, for that very reason, lack the motivation to develop greater core moral capacities. The lower end of this range has been explored extensively in the debate concerning moral responsibility and psychopathy. In our discussion, however, it is the *higher* end of this range that is of the most interest: what is the implication, as far as responsibility is concerned, for those individuals who naturally possess very *highly* developed core moral capacities?

Imagine two soldiers involved in drone warfare in a foreign land: their missions enacted through keystrokes and cursors and featuring small pixelated targets. Each soldier is ordered to deploy a bomb that they know will generate civilian casualties. Let us grant, for the sake of argument, that these soldiers are wrong to obey the order.

Imagine that the first soldier, easily lulled by the psychological distance established by drone warfare, feels no qualms whatsoever in complying. Imagine further that this ease is ultimately generated through his under-developed core moral capacities: he lacks the ability to register the real consequences of what he is about to do, and he has succeeded in abstracting away any of the real lives involved in his decision. Without any worries, he obeys the order.

On the other hand, imagine that the second soldier, far more developed in terms of his core moral capacities, feels a profound moral concern about the lives he realizes he is about to end. He believes that the order is wrong and he is wrong to obey; nevertheless, fearful of repercussions, this soldier also complies and is left feeling deeply burdened and morally injured in the aftermath.

Understood only in accordance with their relevant capacities, it is the second soldier who is most blameworthy here, and the first soldier who is most excused.<sup>31</sup> From capacity and control-based perspectives, this makes sense: after all, on the basis of his moral insight the second soldier had a far greater capacity to do what morality required, and therefore far more control over his wrongdoing. For such views, this is what fairness in our ascriptions of responsibility demands and the sense in which someone is genuinely *deserving* of blame can only arise when they possess the relevant capacities to respond appropriately. But in other respects, particularly from revelation-based perspectives, this is a troubling determination. Revelation-based views would have a very different understanding of the blameworthiness of the respective soldiers: after all, the first soldier’s conduct seems much more representative of his moral personality, and his lack of moral concern, than the second soldier’s conduct, and (on such views) this is essential to appraising their respective blameworthiness, irrespective of questions of capacity and control.

In exploring the relevance of ease and difficulty as a foundation for responsibility Kloosterboer and Wieland explicitly exclude cases where “things are difficult because one is insufficiently concerned or because one has certain vices.”<sup>32</sup> This is an important stipulation because difficulty seems to have a profoundly different relevance under these circumstances. While, with regard to auxiliary moral capacities (i.e. we lack the physical ability, the time, the intellectual capacity, the concentration span, et cetera, to do what morality seems to demand), the difficulty we face seems to *diminish* blameworthiness, it seems to have quite the opposite effect with regard to our core



moral capacities. When meeting a normative demand is difficult for us because we lack the moral concern or motivation to comply, this difficulty does not seem mitigating in any straightforward sense. Questions of ease and difficulty, and the exculpatory nature of difficulty, therefore seem to have a different relevance for responsibility when they concern auxiliary moral capacities than when they concern core moral capacities.

In discussing “hyperresponsibility” for core moral capacities it is also interesting to consider moral standards higher than those we typically hold ourselves to: for the sake of this exploration, we will draw on the debate about what we owe to distant strangers. (For the time being, we are still in the realm of the “natural scenario,” rather than the “bioenhanced scenario” which we will soon go on to consider.)

Famously, while we generally take ourselves to have extensive obligations to someone in mortal danger right in front of us (the child drowning in the pond, say), we hold no similar obligations to the many people dying preventable deaths far away. Peter Singer and Peter Unger, among many others, have argued that this is a moral optical illusion of sorts, emerging from our limited moral psychologies and that in fact the two sorts of cases are morally equivalent in crucial respects.<sup>33</sup> Let us grant, for the sake of argument, that they are correct in this appraisal.<sup>34</sup>

While many of us grasp the reasoning at play in these arguments, very few of us are motivated to comply with their conclusions. What’s more, we seem quite incapable of complying: we are limited, after all, in the extent of our moral motivation, insight, and compassion; there is only so much we are able to care for strangers, and only so much we can be asked to do on their behalf. Some rare individuals, however, are exceptions. In her book *Strangers Drowning*, the journalist Larissa MacFarquhar profiles a series of “extreme altruists.” In one chapter she considers Aaron:

After he read Singer’s article, everything Aaron bought, even the smallest, cheapest thing, felt to him like food or medicine snatched from someone dying. Nobody would buy a soda if there was a starving child standing next to the vending machine, he thought; well, for him now there is always a starving child standing next to the vending machine.<sup>35</sup>

Aaron plausibly possesses more developed core moral capacities than ordinary individuals. Should this imply that where the rest of us are excused for doing little to nothing about distant suffering, Aaron should not be? Does this mean that should Aaron cease the extremity of his commitment, and start behaving more like an “ordinary” person, he would be uniquely blameworthy for his failure? And what’s more: would the source of his unique blameworthiness be *precisely because* of how much this suffering and injustice weighed on him, whereas those of us who have been so much less moved by these realities would be excused *precisely because* of how easy it has been for us to forget and do nothing? If the guiding intuition in attaching responsibility to capacities is because we ought to be *fair* in our ascriptions of blameworthiness, then we seem to have simultaneously arrived at an unfair place: a place where, insofar as you do not have control over these aspects of yourself, you are excused in proportion to how callous and uncaring you are, and condemned in proportion with how empathetic and concerned you are.<sup>36</sup>

These are complicated cases, that arise especially with regard to highly developed core moral capacities, and they shine a different sort of light onto the central views of responsibility we have been considering. While some adherents of capacity and control-based views might be comfortable with the implications of hyperresponsibility for the likes of Aaron, there are others who might feel that these cases generate unique concerns. That is to say: some people who feel that it is only fair and right to exempt in accordance with (diminished) capacities at the lower end of the spectrum, might nevertheless feel that there is something amiss with blaming in accordance with (highly developed) capacities at the higher end of the spectrum, especially when it comes to core moral capacities.

Matters are quite different when we turn to the second scenario under consideration: the bioenhanced scenario. As we indicated earlier, the question of whether core moral capacities are amenable to bioenhancement is a central debate within the literature. One important question is therefore what the bioenhancement of core moral capacities would imply for responsibility and hyperresponsibility.

Imagine that some future treatment could make the first soldier more like the second soldier, or ordinary people more like Aaron: a moral bioenhancer that could powerfully increase our moral concern for others, and our moral motivation to do right by them. As we saw earlier, on capacity-based views, it is not only the capacities we actually have that are significant to evaluations of responsibility but also whether we are responsible for the capacities we lack. Relatedly, in control-based views, it is not only the control we actually have but also whether we are responsible for the control we lack.

In a scenario in which a (safe, reliable, and effective) bioenhancer was readily available that would make soldier one as morally astute as soldier two, or an ordinary individual as morally concerned as Aaron, the excuse of incapacity with regard to their moral failures and wrongdoings would no longer be available to these agents in the same way, irrespective of whether they chose to take the enhancer or not. In this respect, the mere availability of effective bioenhancement for core moral capacities might level the playing field between the likes of the first soldier and the second soldier, and the likes of Aaron and the rest of us, even on control and capacity-based views.

It is patent that we often have obligations to take available measures to reduce the likelihood of harm to others. The question of where these obligations end is another matter. Some have argued that there is not necessarily a boundary here: where we can improve ourselves through enhancement, and reduce the likelihood of harm to others, or other forms of moral catastrophe, we have a duty to do so.<sup>37</sup> If we choose not to, we are choosing to have lesser capacities, and lesser control, and we are responsible for our diminished state and the harms that arise from it. From this perspective, if we were to spurn the treatment that would make us as morally compelled and motivated as Aaron, we would not be dissimilar to a drunk driver, who knowingly diminishes their capacities at the potential expense of others.

### 23.4 Conclusion

The objective of this chapter has not been to defend any particular position, but instead to explore some of the generative terrain at the intersection of enhancement debates and debates about moral responsibility.

In general, theories of responsibility endeavor to describe a realm of responsibility for ourselves, our acts, and their outcomes that is not overwhelming or overdemanding, and that is compatible with concerns about fairness and desert in our assessments of blameworthiness. But while theories of responsibility have often been interrogated and stress-tested with regard to how well they cope with *diminished capacities*, much less has been written about how various theories cope with highly developed capacities, or the prospect of enhanced capacities.

As we have seen, enhancement can generate unique concerns with regard to both the demandingness and the fairness of certain responsibility assessments. To begin with demandingness: initially the obligation to take available precautions to avoid harm to others seems like a modest requirement. Likewise, the stipulation that assessments of responsibility ought to be capacity-sensitive seems to generate reasonable boundaries for the extent of our blameworthiness for harmful outcomes. These conditions seem to place limits on what can be expected of us and protect the requirements of responsibility from becoming overwhelming or overdemanding.

But the availability of enhancement interventions unsettles both of these conditions. As what we *could have done* to avoid bad outcomes extends and extends, the modest requirement of our negative duties to avoid bad outcomes can themselves become overwhelming and overdemand-

ing. Likewise, as the initially restrictive stipulation about “capacity-sensitivity” becomes ever more capacious, the sense in which this stipulation limits the extent of our culpability for outcomes is undermined.

With regard to fairness: the plausibility of capacity-sensitivity with regard to moral responsibility gets most of its strength from concerns about fairness. In some respects, it seems straightforwardly unfair to require someone to do something they were incapable of doing (and to blame them for failing). Tying responsibility to an agent’s actual capacities, therefore, seems to generate a realm of responsibility that will always be warranted in an individual case, since it will always concern the relevant abilities of the respective agent. Guided by these (in many respects generous and forgiving) impulses, some philosophers have felt compelled to excuse even the “worst” agents (such as psychopaths) on the basis of their diminished capacities. But once again, viewed from the vantage of highly developed capacities this picture seems to change drastically, especially in the “natural scenario” where agents have less control over the extent of their abilities. When we have to excuse one agent precisely because they lack moral concern while condemning another agent precisely because they possess moral concern in abundance, we might honor one sense of fairness, but we do so at the expense of another. As we saw, the “bioenhanced scenario” changes the dynamics here, since the option of an effective moral enhancer would potentially render agents responsible for their diminished core moral capacities; they would therefore become responsible *for* their lack of concern, in a way which capacity and control-based views could not generate in the “natural scenario.”

So we see that focusing on highly developed capacities, and on the prospect of enhanced capacities, potentially generates new dilemmas for our understanding of responsibility. These dilemmas warrant more exploration. In the first instance, they shed new light on certain long-standing debates concerning the foundations of responsibility, and reveal aspects of the dispute which are obscured in the more familiar conversations concerning diminished responsibility. In the second instance, the effectiveness and availability of enhancement interventions are likely to increase in the coming years and make the practical and legal ramifications of these questions far more pressing. Finally, and on a more general level, it is becoming urgent to theoretically explore the limits of responsibility, and the bases for these limits, *even as* certain of our abilities continue to expand. What will the “good enough” person look like, as we continue to know and understand more and more about the potentially harmful ramifications of our actions over time and space? At the time of writing the most patent example seems to be that of the COVID-19 pandemic (at the time of reading it may well be another). But it seems clear the world over that we are already straining to comprehend the appropriate limits of our responsibilities toward one another, as our capacities to understand the risks and harms involved in our actions, as well as our capacities to potentially avoid them, has extended ever further.

## Notes

- 1 Vincent, N. A. 2013.
- 2 Cf. Von Hirsch, A. 2001.
- 3 Notably Levy, N. 2014.
- 4 Contemporary versions of this position are generally traced back to Strawson, P. F. 1962.
- 5 Vincent, N. A. 2008 (our emphasis).
- 6 In this respect, the goods associated with one’s enhancement accrue to others, rather than only to oneself, and therefore certain concerns about fairness and desert associated with these goods are less manifest (or at least more complicated) than they are in other aspects of the enhancement debate (i.e. cognitive and performance enhancement) which concern personal gain rather than moral gain. Cf. Douglas, T. 2019; Faber, N. S., Savulescu, J. & Douglas, D. 2016.
- 7 Persson, I. & Savulescu, J. 2019, p. 7; their emphases. (See also Persson, I. & Savulescu, J. 2012).
- 8 David Wasserman, for instance, considers whether you might sometimes need to *lack empathy* in order to do what you ought. He quotes a neurosurgeon who suggests that: “You can’t have too much empathy

- for the person that you're operating on, because you wouldn't be able to conduct that operation." More broadly Wasserman argues that "complex societies have a division of labour in which some roles call for characteristics that most of us would regard as moral defects." (Wasserman, D. 2014) (See also Bloom, P. 2016).
- 9 Kloosterboer, N. & Wieland, J. W. 2017, p. 428.
  - 10 Cf. Spence, S. A. 2008.
  - 11 Cf. Macpherson et al. 2019, p. 996–7 for an overview.
  - 12 The quotation is from Persson, I. & Savulescu, J. 2019, p. 8. The recent theoretical debate on moral enhancement commenced with Thomas Douglas's (2008) argument that we may be able to biomedically decrease countermoral emotions. Persson and Savulescu have argued extensively that moral enhancement is imperative, especially given the extent of the harm (even annihilating harm) certain technological advances have enabled. Many others have responded in turn, notably John Harris (including Harris, J. 2016).
  - 13 Macpherson et al. citing Crockett et al. 2010, Tennison 2012, Terbeck et al. 2013, Schmid et al. 2014, Crockett et al. 2015. See also DeGrazia 2014 and Earp et al. 2017 for a wider range of non-pharmacological examples.
  - 14 Wiseman, H. 2016.
  - 15 See Kloosterboer, N. and Wieland, J. W. 2017 and also Smith, H. 2014.
  - 16 We engage here, in particular, with Vincent, N. A. 2013; Santoni de Sio et al. 2014a; Santoni de Sio et al. 2014b; Goold, I. & Maslen, H. 2014; and Kloosterboer, N. & Wieland, J. W. 2017. This debate is ongoing in certain professions too, cf. Goold, I. & Maslen, H. 2014. Also see Chandler, J. A. 2013.
  - 17 Santoni de Sio et al. 2014a Consider it a template that could be applied, *mutatis mutandis*, to other forms of enhancement.
  - 18 This example is used by Goold, I. & Maslen, H. 2014 as well as Kloosterboer, N. & Wieland, J. W. 2017. (Cf. Repantis et al. 2010 and Wong et al. 1998).
  - 19 Santoni de Sio et al. 2014a, p. 193.
  - 20 Goold and Maslen have provided a detailed legal analysis (in the UK context) arguing against a legal obligation to enhance in such a case. Their argument crucially depends on doubts about safety as well as "added uncertainty about how predictably efficacious these drugs are." Goold, I. & Maslen, H. 2014.
  - 21 Indeed, reports of the use of these drugs for enhancement are already widespread amongst students and professionals (cf. McCabe et al. 2005 and Weyandt et al. 2013) and some hospitals include discussion of modafinil use in their internal recommendations and reports (Cf. Santoni de Sio et al. 2014(b)). The United States Airforce has also long approved the use of modafinil for pilots involved in certain aviation operations (cf. Caldwell, J. A. and Caldwell, J. L. 2005 cited in Goold, I. & Maslen, H. 2014).
  - 22 Cf. Nelkin, D. K. 2016.
  - 23 Kloosterboer, N. & Wieland, J. W. 2017, p. 423.
  - 24 Cf. Vincent, N. A. 2013; Santoni de Sio et al. 2014(a); Santoni de Sio et al. 2014(b); Goold, I. & Maslen, H. 2014; and Kloosterboer, N. & Wieland, J. W. 2017.
  - 25 Santoni de Sio et al. 2014(b).
  - 26 Santoni de Sio et al. 2014(b) points to legal precedents on this issue, involving traffic accidents.
  - 27 Cf. Liao & Roache who consider how mood enhancers may exacerbate our responsibility for failing to have certain emotional reactions: "One way in which the capacity to regulate emotions pharmacologically may affect our responsibility for our emotions is in limiting our excuses for failing to have the appropriate ones. Even if we have a duty to have certain emotions, we are excused from fulfilling it if our best efforts are unavailing. Alternatively, our duty may be only to make our best efforts. The availability of a pill may limit our excuses by making our efforts more likely to succeed." (Liao, S. & Roache, R. 2011).
  - 28 Lichtenberg, J. 2010, p. 558.
  - 29 Dennett, D. 1986, p. 144.
  - 30 Cf. Nagel, S. K. 2010.
  - 31 Certain versions of control-based views, particularly those which endorse an akrasia-requirement such as Levy's (2009), would also deem the first soldier blameless insofar as he was not in conscious control of his wrongdoing (since he believed he was acting permissibly).
  - 32 Kloosterboer, N. & Wieland, J. W. 2017, p. 423
  - 33 Key texts here include Peter Singer's 1972 essay *Famine, Affluence & Morality* (and many subsequent works) and Peter Unger's 1996 book *Living High and Letting Die*.
  - 34 In drawing on this example we are not meaning to take a position on the debate regarding these obligations, but merely using the example as a means of exploring the more capacious and demanding realms that hyperresponsibility could potentially generate.
  - 35 MacFarquhar, L. 2016, p. 44.

- 36 In response to such concerns Vincent distinguishes between “capacity responsibility” and “virtue responsibility.” (Vincent, N. 2013, p. 328; see also Vincent, N. 2009). She indicates, however, that this is an important question that warrants further debate. (cf. Vincent, N. 2013, p. 328).
- 37 Persson, I. & Savulescu, J. 2012 & 2019.

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