Washington University in St. Louis

Washington University Open Scholarship

Arts & Sciences Electronic Theses and Dissertations

Arts & Sciences

Winter 12-15-2014

Bio-Enhanced Constructivism: Moral Facts for the Naturalistic but Morally Serious Philosopher

Jason Gardner Washington University in St. Louis

Follow this and additional works at: https://openscholarship.wustl.edu/art_sci_etds

Part of the Philosophy Commons

Recommended Citation

Gardner, Jason, "Bio-Enhanced Constructivism: Moral Facts for the Naturalistic but Morally Serious Philosopher" (2014). *Arts & Sciences Electronic Theses and Dissertations*. 370. https://openscholarship.wustl.edu/art_sci_etds/370

This Dissertation is brought to you for free and open access by the Arts & Sciences at Washington University Open Scholarship. It has been accepted for inclusion in Arts & Sciences Electronic Theses and Dissertations by an authorized administrator of Washington University Open Scholarship. For more information, please contact digital@wumail.wustl.edu.

WASHINGTON UNIVERSITY IN ST. LOUIS

Department of Philosophy

Dissertation Examination Committee: Eric Brown, Chair Carl Craver John Doris Julia Driver Joan Strassman

Bio-Enhanced Constructivism: Moral Facts for the Naturalistic but Morally Serious Philosopher by Jason Gardner

> A dissertation presented to the Graduate School of Arts and Sciences of Washington University in partial fulfillment of the requirements for the degree of Doctor of Philosophy

> > December 2014 St. Louis, Missouri

Table of Contents

Acknowledgments	iv
Abstract	V
Chapter 1: How One Becomes a Bio-Enhanced Constructivist	2
1.1 The Initial Motivation	2
1.2 Bio-Enhanced Constructivism	7
1.3 Explaining Moral Facts with a Descriptive Account of	
Human Moral Behavior	10
1.4 Linking the Moral Facts to Evaluations	15
1.5 Meta-Ethical Conflicts	21
1.6 A Note on Ambition or Lack Thereof, and Meta-ethics	30
1.7 Worries and Moral Seriousness	33
1.8 Moving Forward	35
Chapter 2: The Human Nature Thesis	36
2.1 The Human Nature Thesis	36
2.2 Peculiarly Moral Desires	36
2.3 Species-Level Possessions	41
2.4 Why You Might Think Moral Desires Are	
Evolutionary Products	44
2.5 Why You Should Think Hardwired Moral Desires Are	
Caused by Human Physiology	51
2.6 Conclusion	60
Chapter 3: Disposition and the Construction of Moral Facts	62
3.1 Intuitions and Moral Theory	63
3.2 Construction Claims	72
3.3 Salience Problems for Ideal Constructivism	76

3.4 Objectivity Problems for Actual Constructivism	81
3.5 The Biological Construction Claim	87
3.6 Conclusion	95
Chapter 4: Objections and Replies	96
4.1 Key Feature Objections	97
4.2 Inadequate Power Objections	118
4.3 Normative Conflicts	130
4.4 Conclusion	143

Works Cited	
-------------	--

145

Acknowledgements

I don't have thanks enough to account for the generous assistance I have had with completing this project or surviving while I did so from Eric Brown, Carl Craver, John Doris, Julia Driver, Joan Strassman, Charlie Kurth, Eric Wiland, Tyler Paytas, Nich Baima, Nate Adams, Martin Turner, John Gabriel, Lauren Olin, The Washington University Dissertation Workshop in Philosophy, The Washington University Meta-ethics Reading Group, The Washington University Graduate Research Symposium, The Washington University Department of Philosophy, Washington University, Mariska Leunissen, Richard Burian, Laura Perini, Ronnie Gardner, and Janice Gardner.

Jason Gardner

Washington University in Saint Louis December 2014

ABSTRACT

Bio-Enhanced Constructivism: Moral Facts for the Naturalistic but Morally Serious Philosopher

by

Jason Gardner

Doctor of Philosophy in Philosophy Washington University in St. Louis, 2014 Professor Eric Brown, Chair

There is a tension between being both morally and naturalistically serious because it is doubtful that features philosophers have ascribed to moral facts in order to explain why we should take them seriously can be given a naturalistic accounting. Yet even serious naturalists who think the tension is real and troubling persist in trying to be serious moralists. I do not think they can do so on their own terms. Thus the purpose of this dissertation: to inquire after a perfectly natural way to think about morality, one that begins by examining the colloquially moral behaviors of the natural human animal, one that also demands that we take morality seriously. I call the view that emerges 'Bio-Enhanced Constructivism'. It consists of two theses: the Human Nature Thesis saying it belongs to the human species to have peculiarly moral desires, and the Biological Construction Claim saying moral facts are determined by certain evaluations that these desires dispose us to make. I defend the view in three steps. First I present evidence from the biological and psychological sciences for the Human Nature Thesis. Then I argue that the Biological Construction Claim is the only viable way to make sense of how there could moral facts

determined by our evaluations. Finally, I consider a great number of objections claiming to undermine the justification a bio-enhanced constructivist offers for our taking morality seriously and I show that none of these objections is able to uphold its claim.

Epigraph

you'll never be a wise man, come on, not even a man who's reasonably intelligent, but love and your blood made you take a step, uncertain but necessary, in the middle of the night, and the love that guided that step is what saves you.

-Roberto Bolaño, from the poem "Mr. Wiltshire"¹

¹ Printed in Bolaño, R. (2008) The Romantic Dogs. New Directions

Chapter 1:

How One Becomes a Bio-Enhanced Constructivist

1.1 The Initial Motivation

The purpose of this dissertation is to see what can be said for a maximally naturalistic view of moral facts that I call Bio-Enhanced Constructivism. It consists of two theses saying, roughly, that human beings have hardwired moral desires, and that moral facts are determined by certain judgments these desires dispose us to make. Various philosophers have provided reasons for thinking that a strict adherence to philosophical naturalism undermines our reasons for taking morality seriously. The initial motivation for Bio-Enhanced Constructivism is to show to the contrary that a single view of the moral facts can satisfy philosophers who are both morally and naturalistically serious.

A naturalistically serious philosopher is one who insists that what appears in the natural world – the world described by good science or careful perceptual observations – can only be further explained in naturalistic terms, and that between otherwise equally good explanations of anything else, a naturalistic one is always preferable to one implicating something that isn't natural.² This seriousness is a result of the perceived progress of scientific endeavors relative to

² The concept of naturalistic seriousness I am working with is *somewhat* indifferent to how best to conceive the natural or distinguish it from the non-natural. Naturalistic seriousness is an attitude, and while various theses about the natural are its accompaniments, two people can agree in naturalistic seriousness while thinking different things about what 'the natural' means. My conception, which is not entirely worked out but informs my discussion on some level, is that the natural comprises a vast web of (causally) interacting entities, including those we encounter through ordinary experience or sense perception and rigorous scientific investigation. For this metaphysical way and other ways to think 'the natural', see Copp (2003) and Väyrynen (2009). Finally, notice that what I call naturalistic seriousness is compatible with but weaker than the sort of pan-naturalism (for ontological questions) that is expressed, for instance, by Sellars (1991): "in the dimension of describing and explaining the world, science is the measure of all things, of what is that it is, and of what is not that it is not," p. 173. Naturalistic seriousness as I describe it leaves open the possibility that some of 'what is' is not natural.

other modes of inquiry, including modes that are more philosophical or *a priori*. Only two or three centuries' worth of careful empirical investigation has greatly improved our ability to explain a great variety of things. Physics has replaced Descartes' more geometric substances with fuzzy clouds of subatomic "particles," molecular biology has seen DNA usurp Aristotelian forms in shaping our grownup bodies, and neuroscience has traded non-localized minds for brains. As a result, the entire catalog of philosophy, like an absorbent and colorful map whose corner has been dipped into a rather ordinary puddle, has long been seeing a naturalistic hue overspread its territories.

While naturalistic seriousness seeks natural explanations of our mysteries, moral seriousness seeks moral rationales for our actions. The morally serious philosopher holds that there are certain moral facts one must attend to in deciding how to act. She also regards these facts as competing with and often overriding our selfish reasons to do what benefits only ourselves. Moral seriousness seems to exist because fundamental moral considerations, such as the badness of suffering, have a great and immediate intuitive appeal. When something strikes us as deeply wrong in a moral way, we are moved to respond, even if we often do so only by expressing our exasperation. Some philosophers try to embrace a position opposed to moral seriousness, moral nihilism, but the import accorded to morality by people generally and by philosophers even more so is striking.

The apparent conflict between these two sorts of seriousness arises because moral normativity – the "oughtness" of moral prescriptions – seems to resist a naturalistic accounting while, as a participant in the natural phenomenon of human behavior, it seems to require one. Mackie makes this explicit: moral philosophers tend to view moral facts as states of affairs

3

imbued with what might be called 'objective prescriptivity'.³ If some state of affairs – say, an instance of intense suffering – has moral import it is thought to generate *of itself* a reason for anyone to respond, in the case of suffering a reason to not bring it about. This seems naturalistically problematic because human beings are natural animals who consist of physiological and psychological mechanisms. We operate through and only through the motions of these mechanisms, presumably even when we discern and act for reasons. The *mere fact* that something is an instance of harm does not appear to possess *of itself* any means to modulate these mechanisms and to thereby generate a reason for us.⁴ So a fact's possessing objective prescriptivity would seem to be ruled out on naturalistic grounds.

Joyce extends the problem. He thinks true moral normativity would have to comprise a constellation of features he calls 'practical clout', and of which objective prescriptivity is but a tertiary part.⁵ Practical clout has two aspects.⁶ First, moral facts are thought to be inescapable: they generate reasons regardless of one's ends, aims, or desires. Thus if suffering generates a moral reason against causing it, this reason holds even for those who are indifferent to suffering or delight in causing it. Second, moral facts are thought to have a peculiar sort of authority.⁷ This authority consists of three powers: moral facts must be able to make demands of us (i.e., be objectively prescriptive), these demands must resist being easily overthrown by non-moral reason-giving facts, and the moral facts must make us deserve praise or punishment depending on whether and how our actions respect them. If all of these feature are required, giving a

³ Mackie (1977).

⁴ I take this to be the point G. Harman is laboring in Harman (1986): we cannot find anything in the moral fact of itself, apart from us, that explains how it generates a moral reason.

⁵ Joyce (2007) pp. 57-64.

⁶ Practical clout is supposed to explicate a notion of 'categoricity' that goes back at least to Kant.

⁷ See also Anscombe (1958), who is either worrying that this this special authority is a holdover from outdated supernatural thinking, or making an oblique case for the claim that morality requires religious underpinnings.

naturalistic explanation of how moral facts possess them *of themselves* becomes a deeply vexing project.

One might expect philosophers who think naturalism rules out moral normativity to simply abandon moral seriousness. Yet they are so inclined to moral seriousness that even Mackie, who thinks morality's conflicts with naturalism renders all moral claims literally false, persists in advocating a "moral" life. And Joyce argues that we should pretend there are moral facts and act accordingly, even after we know there are not.⁸ These positions are not reasonable ways of being morally serious. They depend on there being a good reason to persist in or fake moral seriousness in the acknowledged absence of moral facts. But there is no reason to take moral tradition seriously on its own terms if there are no properly moral reasons to do so. At most, there are fleeting, occasional reasons to pass ourselves off as morally good for our own benefit. Joyce and Mackie's views leave in place prudential reasons, the reasons an agent has to do what is in her own behoof.⁹ In the absence of moral reasons, prudential reasons require us to act according to moral tradition only when prudent, and against it when that is prudent. Once this is recognized, it is a mistake to think moral seriousness, which regards moral facts as providing their own reasons, including reasons that can stand against selfish prudential reasons, can be maintained.

Since philosophers have regarded certain features as criterial for moral facts and these features resist a natural accounting, and since moral seriousness is unsustainable in the absence of moral facts, philosophers seeking to understand the moral facts have three dialectical options. One is to deny there exist moral facts and abandon serious talk of morality, embracing Error

⁸ Joyce (2001). See especially chapter eight "Moral Fictionalism", pp. 206-231.

⁹ They seem to believe that these can get a naturalistically explicable grip on us through our selfish wants and desires.

Theory and its most astounding – but typically disavowed – implication that apparently moral considerations can be reasonably ignored. For those who strive to be morally serious, this is an option of last resort; it abandons moral seriousness.

A second approach retains moral facts or properties, but denies they are natural. This conflicts with naturalistic seriousness. The problem is not that merely positing non-natural things automatically causes conflict.¹⁰ It is instead akin to the non-starterly difficulties facing Cartesian dualism. Like the old familiar Thinking Thing, moral objects are entirely caught up, and have a lot of work to do, in the natural world, but as non-natural things they have no discernible way to do it.

Moral Non-Naturalism does not merely posit some realm of facts utterly foreign to us that make no more difference in daily life than the motions of UDFj-39546284.¹¹ It posits facts that play a role in everything or almost everything we *do*, facts we presume ourselves to track tolerably well, we who seem to track things entirely through natural causal impingements. It is thus incredibly hard to see how positing non-natural *moral* facts could amount to something besides saying that certain entities magic us, that they magic our behavior, and that we apprehend them through our own magical powers. None of that will do for the naturalistically serious philosopher.

The third course is to set aside, for the moment at least, those of our philosophical preconceptions about the moral facts that conflict with naturalism and seek facts in the natural

¹⁰ Naturalistic seriousness is compatible with the thought that certain things are non-natural, what it rules out is the thought that these non-natural things can have a natural impact on natural things. So, for instance, a non-natural ghost could not knock over my natural desk lamp, since only physical (and thus natural) things can do that. Of course, this is not to say that naturalistically serious philosophers do not also incline to pan-naturalism.

^{11 &#}x27;UDFj-39546284' is the name that the apparently least poetical beings of all, modern astronomers, give to what they suspect is a galaxy of sorts. At approximately 13.2 billion light years from Earth, it's the farthest off thing they have yet detected (as of June 2014). Bouwens, et al. (2011)

world that are recognizably moral and that warrant our taking them seriously. This course is open to those who wish to maintain both naturalistic and moral seriousness. However, it might prove too difficult to plot. For it might require giving up certain elements of morality that philosophers have traditionally insisted on, or giving up on moral normativity under some favored conception. Success depends on such costs being managed, since on one hand moral seriousness requires moral facts to demand being taken seriously, while on the other the features at risk are the ones traditionally implicated in justifying and explaining such a demand.

The initial motivation for Bio-Enhanced Constructivism, then, is a desire to plot this third course, to discover a way to think of moral facts that honors both naturalistic and moral seriousness.

1.2 Bio-Enhanced Constructivism

I have much more to say about how the path is initially plotted – and about how this leads one to Bio-Enhanced Constructivism – but first I would like to introduce the view with a touch more formality. Many variants of Bio-Enhanced Constructivism are possible, but its most general form resides entirely in two theses:

The Human Nature Thesis: There belongs to human beings, as a species-level possession, a suite of peculiarly moral desires (desires whose central concern is affecting the welfare of some welfare-bearing entity other than and rather than the organism whose desire it is), and

The Biological Construction Claim: Moral facts are determined by evaluations that these hardwired desires ultimately dispose psychologically normal human

7

beings to make.¹²

There is much to say about these theses by way of explication; I say it in chapters two and three. At the present, it might do to simply situate the view amongst its peers.

It is a variant of Moral Constructivism, which says moral facts are determined by some specific kind of evaluative act or evaluative mental state. Moral Constructivism is opposed to other views on the nature of moral facts, such as Moral Realism, which says moral facts are independent of our cares and evaluations, and Moral Error Theory, which says there are no moral facts.¹³

As a variant of Moral Constructivism, Bio-Enhanced Constructivism uses various biological and biologically-controlled psychological facts about a group of human behaviors that ordinary language describes as moral to constrain the class of evaluations that determine moral facts. These constraints "enhance" the view over other forms of moral constructivism in two ways. First, they provide resources for giving a psychological and evolutionary explanation of how moral facts matter to us. And second, they allow the constructivist to avoid an especially pernicious problem for other more naturalistic variants of constructivism, the problem of moral relativism, by rooting the evaluations that determine moral facts in broadly shared features of human nature.

Bio-Enhanced Constructivism has a number of cousin views that are more or less

¹² I describe certain desires as *hardwired* or as *species-level possessions* or even as hardwired species-level possessions. I mean the same thing by each of these phrases, namely, that certain motivational pushes – desires or urges, I call them – are produced by physiological mechanisms found in typical members of the human species. I do not mean to suggest these mechanisms are fully developed and present from birth, or any time before early adulthood, though I see little reason to deny they appear earlier. Nor do I mean to claim there are no environmental or epigenetic factors at play in the development of the mechanisms. But I do assume that once developed, these mechanisms will, in people of different upbringings and cultural influence, cause an urge to respond in the same way to the same stimuli even in their different circumstances. This is spelled out further in chapter two.

¹³ I set Bio-Enhanced Constructivism against these other broad meta-ethical positions below.

explicitly advanced by a hodge-podge of philosophers divided by history, methodological outlook, and theoretical commitments. I call the whole mass of these cousins Human Nature Constructivism, the view that moral facts are determined by evaluations human beings make under the influence of human nature. This sort of view appears early, in the Eudaimonist works of Aristotle and Epicurus. These proto-empiricists think ethics is about achieving aims human beings have by nature, and these aims establish a singular moral standard fixed by human nature.¹⁴ These eudaimonists flirt with constructivism in so far as the ethical facts they describe are very tightly connected with what we judge important, since this is so closely connected to our naturally held aims. Hume's sentimentalism is also in the neighborhood. Hume thinks human beings share built-in sympathetic sentiments and he thinks moral facts are about how things stand with respect to these sentiments.¹⁵ Hume appears to be a moral constructivist, as I use the term, because the sentiments that determine these moral facts have an evaluative side; they involve feelings of approbation and disapprobation.

In more recent work, Richards, Churchland, Kitcher, Street, and Prinz advance views that either assume Human Nature Constructivism or endorse it explicitly.¹⁶ Richards, Churchland, and Kitcher think evolution has "installed" certain social desires in us and that moral facts prescribe how to live in social groups. Street and Prinz believe moral facts prescribe the pursuit of what individual human beings actually value, and they think our actual values are influenced by distant evolutionary causes that have shaped human psychology.¹⁷ While this recent work

¹⁴ For the Aristotelean thought, see Nichomachean Ethics I and in particular I.7, where Aristotle appears to say that human beings ought to aim at achieving well a function that human beings have by nature. Epicurus's thought is even closer to Bio-Enhanced Constructivism, for Epicurus holds the view that we ought to aim at pleasure and avoid pain, and these are things we *desire* by nature. For the Epicurean thought, see Diogenes Laertius Book X.

¹⁵ Hume (1777) See especially §I. "Of The General Principles of Morals" pp. 169-175, §V. "Why Utility Pleases" pp. 212-232.

¹⁶ Churchland (2011); Richards (1986); Kitcher (2011); Street (2006), (2008), and (2010); Prinz (2007).

¹⁷ See especially Street (2006).

makes various sorts of progress in naturalistic moral inquiry, it tends to run into obstacles that Bio-Enhanced Constructivism is able to skirt. I shall say more about that now.

1.3 Explaining Moral Facts with a Descriptive Account

of Human Moral Behavior

Naturalistic moral inquiry begins from two fairly obvious starting points, providing the naturalistic moral philosopher with two perspectives on a single object – a real, observable object squirming around in the natural world. It is complex and messy, but it can straightforwardly be called both natural and moral without violating the conventions of ordinary usage. I call it Moral Human Behavior.

The first starting point is our immediate participation in and observation of moral activities. These include actions taken under the guidance of our thoughts about what is right, plus various dialectical activities wherein we criticize and are criticized in turn, argue about what is to be done, or deliberate with the help of our truest friends.¹⁸ The second starting point is a burgeoning empirical inquiry, more the property of biology and psychology than of philosophy proper. It seeks to understand the etiology and nature of these descriptively moral events, the roles they play in our lives, and the role our nature – our human biology and psychology – plays in them. It hypothesizes the influence of distant evolutionary causes over our ordinary moral practices.¹⁹ The evolutionary thinker is inclined to see Moral Human Behavior as of a piece with

¹⁸ This experience has long supplied evidence or criteria of adequacy to philosophers who work on a variety of projects in moral philosophy, and in two ways. First, it supports claims about what constitutes the ordinary usage of 'moral', which evidence is can be used to establish criteria of adequacy for giving an account of morality. Second, it is the source of those "intuitions" that are often offered up in normative debates about when it is okay to turn trolleys, kill civilians in wartime, and other such things.

¹⁹ This hypothesis dates back to Darwin, who advances it in *The Descent of Man*, and is nowadays maintained by various philosophers, including Richards and Churchland. See Darwin (1871) and Richards (1986) for further discussion.

social behaviors that bind animal communities generally – Social Animal Behavior – and to see community life as providing fitness enhancements under certain conditions.²⁰

The second starting point also identifies heritable neurological mechanisms that support social behaviors in various mammal species, including moral behavior in human beings.²¹ Studies of these mechanisms are collated and considered in a philosophical way by Churchland.²² She makes a strong case that evolved neurological mechanisms have prototypically moral effects, making human beings care about each other and about taking actions such as punishing cheaters when doing so promises the punisher no benefit. Her work makes great forward progress for naturalistic moral inquiry because it explains in detail how recognizably moral behavior proceeds from the human animal in an entirely natural way, a way mediated by underlying physiology.²³

Although it offers the deepest account of how moral facts can belong to the natural world, Churchland's work falls short on two tasks that are required for a naturalistic account of moral facts as warranting serious attention. One is the explanation of how the moral facts *as she describes them* could emerge from the physiological mechanisms she identifies. On Churchland's view, moral facts prescribe solutions to social problems, conflicts arising from the incompatible wants of different individuals in a single community.²⁴ Imagine, say, Pierre and

²⁰ In exactly what sense sociality might enhance fitness, and in exactly what circumstances it might, are both discussed in chapter two.

²¹ These mechanisms are discussed in some detail below in chapter two.

²² Churchland, 2011.

²³ It is for this reason that I focus on Churchland's naturalistic moral inquiry rather than Kitcher's or Richards'. Churchland (2011) is a better naturalistic explanation of morality than is presented by Kitcher (2011) or Richards (1986). The latter two focus on the thesis that Human Moral Behavior is an evolutionary product. It becomes clear below, in chapter two, that this thesis is relatively speculative in the absence of identifying heritable mechanisms that produce such behavior. Furthermore, once such mechanisms are described, the natural component of Human Moral Behavior – the output of the mechanisms – can be much more easily carved off as a sort of signal that plays over a background of various sorts of cultural and institutional noise.

²⁴ Churchland (2011), p. 9 The moral facts as Kitcher and Richards describe them are similarly facts prescribing effective (fitness enhancing) community action.

Ishmael both want to eat the only remaining cupcake. On this view, there is a moral fact specifying what they should do, whether they should divide it, say, or flip a coin.

Now, it is not obvious that any ordinary understanding of the domain of morality makes moral facts coextensive with facts about social-conflict resolution. Perhaps some wants, such as those for cupcakes, are too trivial for there to be moral facts requiring a friendly resolution. And it could be that even when our wants our confluent, morality still requires us to treat each other with a certain niceness or decorum. But this is not the most serious problem with Churchland's view of the moral facts.

Even if she is right about the pale of morality, it is not clear what social-problem solutions have to do with the neurological mechanisms she identifies as their wellspring. For one thing, if we were purely insensitive and selfish beings possessing no such mechanisms, we would still have coordination problems. Even if Pierre and Ishmael only look out only for themselves, they still need to find an effective way to satisfying their cupcake cravings, and sharing may yet do the job. For another, the mechanisms Churchland describes often seem to interfere with the effective resolution of social problems. Famine or overpopulation might best be solved by culling the human population in a way that would greatly trouble the care we feel toward each other. And our costly pursuit of punishment actually appears to worsen various social problems, as is often noted about the highly punitive criminal justice system of the United States.²⁵ So, in the absence of further explanation, Churchland's account of moral facts is not only ad hoc, but possibly incompatible, with respect to her description of moral physiology.²⁶ She has not given a

²⁵ See, for instance, Hagan and Dinovitzer (1999) which discusses the broader social implications of increased prison terms.

²⁶ This worry is only stronger for Richards and Kitcher, who have far less in the way of determinate details about natural factors controlling morality, and thus far less in the way of natural facts to supply as evidence for the naturalness of their account of the moral facts.

naturalistic accounting of the moral facts as she defines them, but a naturalistic account of certain mechanisms related to morality and an independent account of moral facts that sometimes align with the behavioral outputs of those mechanisms.

Churchland's other shortfall involves the justification of moral seriousness, or how she might respond to questions about why we should be moral if morality is just the output of of our physiology. She assumes moral behaviors are good because, given that they depend on evolved mechanisms, they promote the survival and reproduction of individuals who perform them; she also assumes this goodness justifies serious attention to the moral facts.²⁷ Now, it is not too clear why Churchland thinks a contribution to survival *or reproduction* is good. This is not what many people think; having a ninth child has never been praised as evidence of advanced rational capacities.

Furthermore, even if one grants survival and reproduction are good, the connection between behaviors stimulated by the moral mechanisms Churchland identifies and the promotion of survival and reproduction is too tenuous for the latter to justify the former in a *general* way. The plausible evolutionary claim Churchland must have in mind is that individuals who possess moral-behavior causing mechanisms have at some point out-competed – survived and reproduced better than – individuals who were otherwise similar but lacked these mechanisms. This does not imply that any moral behavior nowadays has any fitness benefit at all; moral physiology might be leftover from a previous epoch in our evolutionary history where community integration was more important to survival than it is now. But even if behaving morally in general is nowadays fitter than not behaving morally in general, it is not plausible to think individual moral behaviors promote survival and reproduction in every instance. As far as

²⁷ Churchland (2011), p. 200

living longer or supporting his kids goes, Pierre may well do best if, ignoring the motivational pushes from his moral physiology, he simply takes the cupcake and runs; or even if he shoots Ishmael, takes his wallet, and then eats the cupcake. If all Churchland has to say about what justifies taking morality seriously is that moral behavior promotes individual survival and reproduction, she cannot justify acting morally when doing so does not best promote these ends. She cannot justify moral seriousness, which requires a rationale for attending to moral considerations in all cases.

Clearly the philosopher seeking a naturalistic explanation of moral facts and a naturalistic ground for moral seriousness walks away from Churchland wanting a bit more. But such a philosopher does not walk away with nothing. Churchland's inquiry provides us with reason to think human beings have hardwired desires for certain descriptively moral states of affairs, such as helping one another and punishing cheaters. This is the Human Nature Thesis in rough form, and accepting it has notable implications for how we think about morality.

Our personal experience of Moral Human Behavior is emotionally rich. It is ridden with anxiety and satisfaction, guilt and indignation, concern, and even feelings of love or despair. This suggests that the physiology behind Moral Human Behavior comprises psychological mechanisms that move us to act by causing a variety of emotional pains and pleasures. Churchland's description of moral physiology bears this out. The mechanisms she describes include parts of the human brain that produce experiences of pleasure and pain. They also use oxytocin, a chemical that has become famous for its emotional potency and especially the role it plays in establishing interpersonal fond feelings.

So, Churchland shows that our neurophysiology includes mechanisms that use affect to

14

produce descriptively moral behaviors, that our brains urge us to take care of each other and to punish cheaters.²⁸ This is of great interest to the naturalistic moral inquirer. As a naturalist, this inquirer is likely to endorse a Humean account of reasons, one according to which reasons exist wherever desires do. These urges, then, are desires and they suggest the existence of correspondent moral reasons. Churchland's inquiry supplies promise to and fodder for the project of providing a naturalistic account of moral reasons.

1.4 Linking the Moral Facts to Evaluations

After adopting the Human Nature Thesis, the naturalistic inquirer seeks to understand how moral facts might exist in relation to moral desires and, if they do, why we ought to take these facts seriously. She is in no position to expect moral facts to be independent from human psychology. On the developing picture, human moral desires are evolutionarily contingent and governed by the physiological mechanisms producing human behavior. Moral facts that depend on these desires are psychologically and historically contingent. The former contingency suggests Moral Constructivism. But Moral Constructivism makes evaluation central to the moral facts, and so far little has been said about evaluations.²⁹ I shall say a bit more now.

Reflection on moral behavior shows it to be a peculiarly human affair. Other animals are social, but we alone think prospective thoughts and enter discussion about how we ought to treat each other. In the more general phenomenon, Social Animal Behavior, hardwired urges – what I call moral desires – cause certain social behaviors.³⁰ Moral Human Behavior alone involves an

²⁸ This is too quick, but the presentation of evidence for this claim is the sole concern of chapter two.

²⁹ In using the words evaluation and judgment, I never mean to imply an important distinction. I do draw a distinction between one's being concerned, which is the state of having something matter to one, and one's evaluating, which is a way one comes to be concerned that results from thinking about what matters.

³⁰ I have a great deal more to say about my use of 'moral desire' in chapter two.

additional step between urge and behavior, the step of rational evaluation wherein the human animal contemplates whether certain conceptualized courses of action might satisfy his moral urge. So, while between two animals an urge to "share" might simply cause neither to bite the other while both try to snarf the cupcake, between Pierre and Ishmael the urge would cause them to think about actions they might take to best satisfy this desire. Discussing the matter, they might conclude that another cupcake is not likely forthcoming, that flipping a coin will not feel like true sharing, and that only dividing it will feel right.

The naturalistic inquirer is thus tempted to theorize as follows about the moral facts. In the contemplations that our moral desires stimulate us to perform for the purpose of satisfying them, we use our fancy human brains to consider and invent various courses of action that might satisfy.³¹ This attempt to identify an action that will actually satisfy the desire is a form of evaluation. It marks certain conceived courses of action as having normative import, as to-be-done, because they appear to achieve what we want. Now it is plausible to infer that the moral facts are determined by certain evaluations of this sort – but not by just any of these, since we often evaluate from ignorance or otherwise faulty thinking. Also, these evaluations establish such things as how we take care of each other without feeling guilt, or how we punish in a satisfying way. At first blush, this plausibly captures our ordinary thoughts about what is peculiarly moral. Thus the naturalistic moral inquirer arrives at Moral Constructivism: the facts we call moral are determined by evaluations we make about satisfying our social desires.

This brings our inquirer to a puzzle, one that has persisted for some time in discussions of Moral Constructivism. Moral constructivists tend to agree at three points. First and most

³¹ It is important to notice that because rational evaluation is a conscious mental process, one way in which the moral facts are contingent upon us is that they depend on what we are capable of conceiving ourselves doing in order to satisfy our moral desires.

obviously, they think evaluations determine moral facts. One of their motivations for thinking this is, second, their agreement that it is far more plausible to expect evaluation-determined facts to get a normative grip on us than it would be to expect moral facts conceived otherwise to do so. But they also recognize, third, that it is implausible to think just any of our often ignorant, muddled, or mean-spirited evaluations could determine a moral fact.

When a moral constructivist ponders how moral facts might be determined by evaluations, the second two points of agreement can pull her in contrary directions. Indeed, they have led different traditional constructivists to take one of two contrary views of moral construction. One is *Ideal*, the view that moral facts are determined by the evaluations a rationally and epistemically ideal agent would make. I have a great deal more to say about why *Ideal* is not satisfactory in chapter three, but the well-known chief problem is that it is hard to explain how *Ideal* moral facts could matter to, and thus comprise the moral facts for, non-ideal agents like ourselves.

Other constructivists endorse *Actual*, the view that moral facts are determined by certain evaluations that actual agents actually make.³² At present, *Actual* is most famously defended by Street, who is no stranger to the thought that moral facts depend on evaluations we make under the influence of distant evolutionary causes.³³ She holds – casting her view in terms of normative facts generally rather than moral facts in particular – that all normative facts, including moral facts, are determined by our actual evaluations and their peculiarly evaluative

³² I focus my discussion on Street, but Prinz (2007) equally endorses *Actual* and with the same acknowledged implication of rather extreme moral relativism.

³³ Indeed, she makes this sort of thought famous in Street (2006).

entailments.³⁴ This endorsement of *Actual* raises a worry about, on the one hand, whether Street's view can capture moral facts that would be recognizable as such and, on the other, whether morality as it would be described by Street is something we could be justified in taking seriously.

The worries originate from the fact that individuals differ a great deal in what they value, so that extreme normative relativism follows. It is known that different individuals evaluate matters differently, and that even under the influence of the same distant evolutionary causes they end up valuing different things. Caligula and Mother Theresa have essentially the same evolutionary past, but very different values as far as human suffering goes. Street acknowledges that, on her view, if Caligula and Mother Theresa have equally coherent systems of value, Mother Theresa's reasons for reducing others' suffering are no better than Caligula's for promoting it. Street acknowledges too that this is in conflict with our intuition that Caligula has good reason to be more like Mother Theresa.

This extreme relativity causes two problems for the naturalistic moral inquirer. First, if a view proposes moral facts that differ so vastly for different agents, it is difficult to believe the view has actually identified the moral facts. I expand on this point in chapter three, but the central issue is that a number of prototypically ordinary moral behaviors assume a single moral standard to which one can appeal. If one accepts a view of the moral facts that rules out such a standard, one cannot rationally and sanely carry on with ordinary moral practice, at least insofar as it involves actually criticizing people whose values differ from one's own.³⁵ So, versions of

³⁴ See Street (2008) and (2010). Evaluative entailments are entailments that Street believes to follow from evaluation in virtue of what conceptually belongs to evaluation and to include such things as, for instance, that I must acknowledge I have a reason to take Flight 3884 if I value traveling to Walla Walla right now and Flight 3884 is the only means for me to do so.

³⁵ It would also be different to criticize one's own actions, even when they seem wrong, if they were made on the basis of values different from one's present values.

Moral Constructivism like Street's that endorse *Actual* cannot accommodate large chunks of Moral Human Behavior. The naturalistic inquirer is thus impelled to seek a different way of understanding how moral facts might be determined by evaluations we make under the influence of distant evolutionary causes.

I argue in chapter three that the naturalistic inquirer should abjure *Actual* and *Ideal* in favor of a third view, *Dispositional*. *Dispositional* simply says moral facts are determined by certain to-be-specified evaluations we are disposed to make rather than by those we actually make or by those an ideal agent would make. The bio-enhanced constructivist argues in particular that moral facts are determined by the evaluations our moral desires ultimately dispose us to make; this is The Biological Construction Claim. Moral theory is supposed to distinguish moral judgments from other judgments, and correct moral judgments from incorrect ones. This *Dispositional* take on moral construction offers the moral naturalist an entirely natural way to draw both distinctions.

The naturalistic moral inquirer arrives at *Dispositional* when she searches for moral facts that could be presumed by ordinary moral practice and also related to our moral desires. Considering the physiological mechanisms that cause our moral desires, she figures natural moral facts would have to be determined by evaluations concerning the satisfaction of precisely these desires. She might at first suppose moral facts are determined by just any evaluations we make, so long as these mechanisms are operating. However, the mechanisms causing moral concern do not normally exercise complete or very direct control over the evaluations we make. When we actually evaluate what to do, we often discount, forget, ignore, or even reject our deepest social concerns. But if moral facts are really about the rational governance of social behavior under the influence of hardwired moral desires, these facts can only be determined by evaluations that crisply reflect what the desires motivate us to do. In the case of Pierre and Ishmael who desire, say, to share, the moral facts must prescribe an action that actually satisfies the desire. The evaluations we actually make cannot always be identical to ones that determine the moral facts because many of them are not particularly moral, being made on the basis of a number of competing considerations that include the moral.³⁶ Thus the inchoate bio-enhanced constructivist takes a *Dispositional* view of constructing evaluations: the moral facts must be determined only by those evaluations we are disposed by mechanisms causing our peculiarly moral desires to make, rather than by the evaluations we actually do make, which exhibit the influence of various other desire causing mechanisms, including the ones that cause selfish hardwired desires.

Simply adopting this *Dispositional* view of moral facts gives the bio-enhanced constructivist a way to distinguish purely moral judgments from others, but it is not yet precise enough to pick out correct moral judgments, the evaluations that would actually determine the moral facts. For, as a completely general matter, we are ignorant, stupid creatures. Even the evaluations we make as a result of being disposed only by our peculiarly moral desires are faulty in the sense that they identify some action that we think will achieve a desired result but does not, as when Pierre chooses to eat this cupcake and let Ishmael have the next when the next is not forthcoming. These are, clearly, evaluations we are disposed by our moral desires to make. They are, therefore, moral judgments. But if we follow the course prescribed by one of these faulty evaluations, the desire that spurs it will remain unsatisfied. The desire will continue to

³⁶ I mean they are not particularly moral in the sense that they reflect a variety of cross-cutting concerns, and are not evaluations about how to satisfy moral desires uniquely or in particular.

urge us toward its satisfaction, and thus to reevaluate matters, to perform further evaluations in search of a satisfying course of action. Pierre will feel guilty, and this guilt will motivate some response.

Faulty moral evaluations are thus not judgments that our moral desires ultimately dispose us to make. The ultimately disposed evaluations, the ones after which we will not be pushed to re-evaluate, do identify actions that satisfy our moral desires. And since these evaluations capture what our desires demand, it seems right to call them the correct evaluations, and to identify them as the evaluations that determine moral facts. So the bio-enhanced constructivist, inchoate no longer, concludes that the evaluations that determine moral facts must be the ones our peculiarly moral desires *ultimately* dispose us to make.

1.5 Meta-Ethical Conflicts

The foregoing is meant to stand as an introduction to bio-enhanced constructivism that says something about why one might be motivated to endorse the view and something about how it differs from and improves upon its closest constructivist cousins, exemplified by the views of Street and Churchland. The focus of the next several pages is to explain why the doubly serious philosopher is likely to prefer Bio-Enhanced Constructivism over other broad-level views, views to which it is opposed for meta-ethical reasons.

The bio-enhanced constructivist does not begin her inquiry with traditional meta-ethical questions about the semantics of moral speech or the metaphysics of moral things. Her attention focuses on a sticky tangle of causal webs, consisting most distinctly of human organisms and their behavior, in which she thinks morality really plays out. This is her focus because her

primary interest is to understand the nature of the Moral Human Behavior, why we should attend to the distinctive concerns it involves, and what our attention to these concerns demands. Nevertheless, her view has clear implications for meta-ethical debates. By affirming a version of Moral Constructivism, a clearly meta-ethical thesis, she makes a clean break from other metaethical views, including other positions that are compatible with naturalistic seriousness.

I reserve no place in the following chapters for an extended defense of the Bio-Enhanced Constructivism against opposing meta-ethical positions, nor do I offer one in this chapter. However, I would like to say why the bio-enhanced constructivist prefers the particular metaethical stance she does. I suppose that explaining this amounts to a *limited* defense because her motivations should resonate with others who share her view of the importance the naturalistic inquiry into Moral Human Behavior has for understanding morality. The views that seem metaethically distinct from Bio-Enhanced Constructivism generally go by such names as Non-Cognitivism, Natural Realism, Non-Natural Realism, and Error Theory.^{37,38} Because the Bio-

³⁷ By Non-Cognitivism, I mean the view that moral utterances follow upon certain emotionally charged mental states but do not refer to, and are not claims that are made true or false by, any facts. Representative non-cognitivist views are found in Stevenson (1937) and Hare (1963). By Moral Realism, I mean the view that there are moral facts and that they are independent of our evaluations. Natural Realism holds that these facts are naturally constituted, Non-Natural Realism holds that they are not. Representative natural realist views are found in the Cornell school of Boyd (1988) and Brink (1986) as well as in the Aristotelian school of Foot (2001) and Hursthouse (1999). Representative non-natural views are defended by Shafer-Landau (2005), Enoch (2011), and Parfit (2011). By Error Theory, I mean the view that there are no moral facts, and that all of our moral claims refer to such facts, with the result that all of our moral claims are false. The chief representatives of Error Theory are Mackie (1977) and, with a "fictionalist" variant, Joyce (2001).

³⁸ I say 'seem' because it is not always clear that certain versions of Moral Constructivism disagree with certain versions of Natural Realism. The moral constructivist claims there are moral facts – states of affairs that make certain moral propositions true – and she claims these facts are determined by evaluations. Realists also claim there are moral facts, but that their determinants are independent from the evaluations we make. Natural realists hold, in addition, that the determinants of moral facts are composed of entirely natural elements. However, on some views that appear under the Natural Realism heading, indeed the most renowned and developed ones, these determinants include human desires and what satisfies those desires. See Boyd (1988) and Copp (2007), for instance. It seems unlikely that, at the end of a long conversation, a natural realist of this sort and a constructivist will find themselves having very much to disagree about in the relationship between moral facts and evaluatively charged mental states. If he and I have understood each other correctly, Copp, at least, agrees that his own Natural Realism is entirely compatible with Bio-Enhanced Constructivism. Copp, (personal conversation 2013).

Enhanced Constructivist prefers Moral Constructivism over the last three meta-ethical views for largely the same reasons, I shall begin by considering Non-Cognitivism, which can be treated in isolation.

The disagreement between the non-cognitivist and the moral constructivist concerns what is to be made of moral language and whether there are moral facts. The constructivist thinks moral language is referential. She believes moral facts exists and that they are states of affairs constructed by our evaluations. Moral language, on her view, refers to these facts by asserting that things are, say, good or bad, in effect claiming that goodness or badness accrues to actions or other things. The non-cognitivist, by contrast, thinks moral language is merely expressive (or also commendatory), and contains no "cognitive content" or assertions of fact about how the world is. He thinks moral utterances are emotional eruptions, belonging to the same class of events as smiles and screams of rage, rather than to the class that contains assertoric utterances. On his view, these eruptions express feelings of approval and disapproval.

Setting the disagreement aside for a moment, note that among constructivists, the bioenhanced constructivist in particular has a lot in common with the non-cognitivist. Like the noncognitivist, she thinks there is some truth to the claim that a great many moral utterances express our underlying feelings. For she thinks the mechanisms that cause our moral concerns use emotion, or affect, to motivate us, producing positive affect when we identify objects that satisfy our moral desires and negative affect when we identify objects that obstruct them. Also, the bioenhanced constructivist thinks moral language quite generally picks out things that are such as to cause these approving and disapproving sorts of feeling.

These similarities are great enough that one might wonder if the difference between Bio-

23

Enhanced Constructivism and Non-Cognitivism, especially such a clever variant of Non-Cognitivism as Quasi-Realism, is merely terminological.³⁹ Perhaps one's wonder would be on track. Nevertheless, the bio-enhanced constructivist has several reasons for choosing the conceptual framework and associated terminology she does.

First, the view she has developed includes a clear way to speak about moral facts and moral truth, a way of speaking that accords with ordinary – and usually with philosophical – moral speech and practice. Such speech attaches moral predicates to actions and other objects. On Bio-Enhanced Constructivism, there are facts about actions and other objects satisfying our hardwired peculiarly moral desires. These facts are well suited to act as referents and indeed truth-makers for moral language. For moral language is preoccupied with such social actions and whether they are to be done, while these facts combine to-be-doneness with actions in virtue of the actions satisfying our moral, i.e., social, desires. Thus it makes easy sense for the bio-enhanced constructivist to say there are moral facts and that moral speech asserts them.

The constructivist framework also allows the bio-enhanced constructivist to give a rich naturalistic description of moral error. Of course, if moral talk is a simple expression of immediate feelings, as on the most simplistic versions of Non-Cognitivism, moral error is hard to

³⁹ Quasi-realism is the view that the language of moral realism, claims about whether it is true or false to say that something or other is morally right or wrong, can be captured while endorsing a non-cognitivist rather than a realist or constructivist view of morality. While the realist and constructivist hold that moral claims are made true by appropriately representing or "corresponding" to certain facts, the quasi-realist holds that moral claims are correct if they accurately capture, say, what one approves of approving or what one desires to desire. So, on the realist or constructivist picture, it is right to say "eating human babies is wrong' is true" just in case there is a fact of the matter that 'eating human babies is wrong' accurately represents. On a simple version of Non-Cognitivism, it is presumably correct to utter this claim just in case I disapprove of eating babies. By contrast, on the quasi-realist picture, even if I approve of eating or desire to eat human babies, it is correct to make the truth claim just in case I approve of disapproving of eating human babies, even if the culinary act itself fills me with approval. The quasi-realist thus has a way of capturing the correctness of moral claims that is not entirely dependent on our approval of the action described in the claim. It is of course a matter of dispute whether the quasi-realist's 'correctness' can be described as a sort of truth. But if one rejects representational correspondence theories of truth in favor of a deflationary theory, an account of this correctness as truth may be in the offing. Quasi-realism is developed in the separate works of Blackburn (1993) and of Gibbard (1990).

capture. For these versions of the view hold that moral language is correct, if not literally true, when it reflects the approbations or disapprobations of the speaker. This is inadequate for the naturalistic moral inquirer because Moral Human Behavior involves the identification of a great many moral errors as straightforward mistakes of approving or disapproving: we think Hitler made a moral mistake when he approved genocide. Quasi-Realism offers a more satisfying explanation, albeit one that is convoluted in comparison to the Moral Human Behavior it purports to explain. For the Quasi-Realist can say that we make errors of approbation by talking in terms of what we approve of approving. This allows us to correctly – if not quite truly – say Hitler is wrong to approve the things he does if in so speaking we express a feeling of disapprobation toward his feeling of approbation. One can capture even one's own errors with this sort of complex arrangement of approvals and disapprovals.

By contrast, the bio-enhanced constructivist can say that sometimes our moral utterances express our feelings of approval and yet are false because they mistake the moral facts by failing to accord with the evaluations that moral mechanisms ultimately dispose us to make. This better accords with Moral Human Behavior than the quasi-realist story. In actual moral discourse about whether moral claims are correctly made we raise factive considerations that are supposed to settle the issue, and never does this include any insistence that one's mere approval, or indeed one's approved approvals, have a legitimate role in settling the matter. Given that the concepts of Moral Constructivism allow her to account for error in a straightforward manner, and given that it accords with our ordinary experience of talking about, making, and recognizing moral errors as mistakes about facts, the bio-enhanced constructivist prefers the conceptual framework of Moral Constructivism over that of Non-Cognitivism. So much for Non-Cognitivism. The Bio-Enhanced Constructivist finds Natural and Non-Natural Realism, and Error Theory implausible because, as a result of her naturalistic inquiry, the existence of a set of plausibly naturalistic and evaluation-dependent facts that govern Moral Human Behavior makes the other views seem either superfluous, in the case of the Realisms, or fetishistic and overzealous, in the case of Error Theory.

It emerges below, in chapter two, that it is pressingly difficult to deny the Human Nature Thesis. Rejecting it would require an unusually strong skepticism about certain results from the biological and psychological sciences. Most Realists and Error Theorists will thus accept the Human Nature Thesis, and so accept that we have hardwired desires concerning the well-being of others and that there are facts about what they ultimately dispose us to judge, which facts the bio-enhanced constructivist calls moral facts. The Realists and Error Theorists will presumably also accept the role these facts are proposed to play in the natural phenomenon I call Moral Human Behavior.

Once it is granted that these facts exist and causally govern behaviors we can reasonably call moral, the philosopher who is primarily interested in understanding the nature and importance of moral behavior has very little need of Realism and not much interest in Error Theory. Yet, her opponents may grant that these facts exist and argue that they are not moral facts. This can only be because the opponent believes that some necessary feature of truly moral facts is lacked by these bio-enhanced "moral" facts.⁴⁰ The realist believes there are evaluation-independent facts that have this feature or features and the error theorist believes there are no facts that do.

⁴⁰ The special features proposed include those such as objective prescriptivity and the ones that make up practical clout, as discussed above.

The Realist especially is now in an awkward position. For he has acknowledged a class of behavior that can be sensibly identified as moral, and a class of evaluation-dependent facts that actually govern this behavior. On the other hand, he posits an additional class of facts that are not evaluation-dependent and that also govern the same moral behavior. What is more, in all or almost all cases, it is plausible to think that the bio-enhanced facts prescribe the same actions that the evaluation-independent facts prescribe. However, since the former facts are evaluationdependent and the latter are not, the realist must admit we are much better positioned to both know and be rationally influenced by the former, which depend on our own intimate psychology, than to either know or be influenced by the latter, which are independent from our cares and judgments.

It appears, from the naturalistically serious standpoint at any rate, that the realist's proposed facts do little or no additional prescriptive work and that they have a limited or even absent – consider especially the non-natural realist – capacity to impact our deliberations about how to behave.⁴¹ The realist thus insists on a class of facts that the world seemingly has no need of and human beings perhaps no opportunity to use. Given what we now know about human moral psychology, the bio-enhanced constructivist is tempted to think Realism is, at worst, a philosophical hallucination, born in a time of ignorance, that has now seen its day. Or at best, it is an account of facts that run alongside and mirror the natural facts that her view describes, while these facts do all of the work of influencing Human Moral Behavior.

The error theorist, at least, is certainly not hallucinating any facts. And yet, his behavior is almost as curious. For, not having found the sort of fact that the realist insists on, and yet

⁴¹ The natural realist's proposed facts are at least part of the natural world, and thus not in principle undetectable by the usual modes of empirical investigation, and perhaps not even by ordinary perception. The same cannot be said for the facts the non-natural realist proposes.

recognizing the existence of the facts the bio-enhanced constructivist offers, he would conclude that there are no moral facts. Yet there are these bio-enhanced facts that we very much care about, and that do govern what can sensibly be called our moral behavior. To deny there is morality happening here or moral facts in play seems oddly fetishistic, fetishizing whatever special property the realist finds wanting in bio-enhanced facts. It is *oddly* fetishistic because the error theorist thinks the property obtains nowhere, perhaps necessarily so, and yet insists on it. The bio-enhanced constructivist finds it strangely defeatist to give up on moral facts just because some property that philosophers once believed them to possess is nowhere to be found. We have not given up on minds for that reason, nor on heavenly bodies. Indeed, the bio-enhanced constructivist thinks it is pressingly important, from both the practical standpoint of figuring out how to live our lives and the philosophical standpoint of accurately understanding our world, to proceed with an investigation of these bio-enhanced facts, rather than to worry over any cleverly conceived properties they do not have.

Before parting ways with meta-ethics, I would like to engage in some old fashioned Nietzschean Psychoanalysis. This school of analysis is of course distinguished by the peculiar neurotic it aspires to treat, the Morally Serious Philosopher. Nietzsche points out, with his customary rage and hardly accountable insight, that the Morally Serious Philosopher always strives to impose his own moral will on the rest of the world.⁴² Nietzsche thought this was a bad thing when he himself was not doing it. I, however, am not so sure. So, in this spirit, I shall air my suspicions, qua therapist, about why the realist and error theorist have gone wrong, and say a bit about why their errors are admirable.

⁴² Nietzsche (1886). See especially Part 1 "On the Prejudices of Philosophers," and Part 5 "On the Natural History of Morals."

First, the Morally Serious Philosopher is better positioned to identify the moral facts than most other people. This is partly down to his evaluative skill: philosophers generally are more practiced at thinking and at many sorts of evaluation than non-philosophers. But it is also down to features of his circumstance. The philosopher simply has more leisure to look for moral problems, and indeed more incentive to find them.

So philosophers are in a position to recognize that the world contains a great many moral evils and the absence of a great many readily available moral goods. At the same time, non-philosophical types, with less time and practice for recognizing the same, remain largely ignorant of the evils they unceasingly create and the goods they casually destroy. Seeing this all go down, the Morally Serious Philosopher feels deeply motivated to do something about it, at least initially. But he is only a philosopher, after all, writing at a desk, gazing out the window at an oak tree. So he is tempted by his impotence and a yearning to see wrongs righted to describe the moral as if it were overpoweringly strong, as if morality itself possessed some moral force that could patch things up. In this mood, and perhaps not unlike other writers of religion before him, he conceives a sort of god-like force that stands on high and rules us from above, indifferent to our cares, giving quarter to no one, pronouncing its verdict on us all. This, I think, is why the Morally Serious Philosopher becomes enamored of the special properties he projects onto morality, properties the deluded realist insists upon, that the melancholic error theorist cannot find.

Unfortunately, if we wish to understand what Moral Human Behavior really is, and why the moral should matter to us, we cannot project our philosophical dreams upon it, nor insist it has or does what it cannot. We must restrict ourselves to facts we can glean from the world, and from ourselves as part of it. When we do that, we may yet see that morality is something formidable and something we are justified in caring about, but perhaps no more formidable than we ourselves are, and no more worthy of care than us. And we do find something powerful, the bio-enhanced constructivist thinks. But it is more like a mayor, or a warlord even, than a god, and perhaps as weak and imperfect as real monarchs or warlords generally are. So in the past, the Morally Serious Philosopher has made an error by projecting onto morality what is not there. But it is an admirable error, taken as it is in the service of righting wrongs, seeking to give right itself a sort of cudgel by which to do this, and perhaps even scaring two or three other philosophers straight in the process.

1.6 A Note on Ambition or Lack Thereof, and Meta-Ethics

I have introduced Bio-Enhanced Constructivism, and said something about the initial motivation behind it and how it is distinctive from other views. I would like now to take a few pages to specify more precisely, in terms of its ambition in explaining the moral facts, the variant of Bio-Enhanced Constructivism whose defense I consider most particularly in the chapters that follow.

There is ample room for variants having more or less ambition about the extent to which they aim to capture the moral facts. A minimally ambitious variant would claim that at least one evaluation that a hardwired moral desire ultimately disposes us to make determines at least one moral fact. This variant would allow that other moral facts could be explained by some different view. Although unambitious, it would be incompatible with Error Theory and distinct from Non-Cognitivism because it says there is a moral fact. This minimally ambitious view would also be incompatible with Generic Moral Realism, the view that *every* moral fact is evaluationindependent.

By contrast, a maximally ambitious variant of Bio-Enhanced Constructivism would claim that the evaluations our hardwired moral desires ultimately dispose us to make determine every moral fact. It would of course be incompatible with every view the minimally ambitious variant is incompatible with, and with any more limited version of Moral Realism.

A successful defense of the maximally ambitious view would have to accomplish one of the following tasks. On the one hand, the positive case for Bio-Enhanced Constructivism could be combined with principled reasons for doubting there are any evaluation-independent moral facts. The reasons I present above, under which the bio-enhanced constructivist prefers Moral Constructivism to Moral Realism, are not reasons of this sort. These considerations do not entail that there are no evaluation-independent facts, they only show how difficult it is, especially for those who are especially naturalistic, to take seriously a view of morality built upon them. I do not know whether there are principled reasons to doubt that such facts exist, but I will not search for them here.⁴³

The second way in which the maximally ambitious view could be defended is by somehow making the case that all known moral facts deal with the satisfaction of some hardwired moral desire or other. The primary obstacle to this is the requisite preliminary task of determining what the true moral facts really are. This would have to be done in a non-question-

⁴³ I have doubts about whether success in this search is possible. The view that there are evaluation-independent moral facts is compatible with the thought that these facts are, or their normativity is, entirely ineffable to us. Indeed, one worry advanced against Realism is that it allows for ineffable facts or normativity and supplies no way for us to confirm that our moral intuitions have any success in tracking evaluation-independent moral facts because these intuitions are, of course, entirely tied up in our own psychology. If there are moral facts that are entirely ineffable, or that have an ineffable normativity, there is little hope of finding a way to prove their non-existence, since their very existence would involve ineffability.

begging way, whereby the bio-enhanced constructivist would *not* start with our moral desires and then figure the moral facts from them. Unfortunately, her position is such that she is likely to think that the best evidence we can have for the claim that some proposed moral fact really is one is the evidence we have for the presence of some moral desire that corresponds to it. If, say, some Kantian or consequentialist points to a putative moral fact for which the bio-enhanced constructivist cannot detect in us any disposition to abide by it, she is likely to reject it.

It seems, then, that maximally ambitious Bio-Enhanced Constructivism is not a view whose defense promises success in the near term. It will not be pursued here. And yet, it is surely something like this that the typical bio-enhanced constructivist would have in mind. Most bio-enhanced constructivists will incline toward the maximally ambitious view even while they lack decisive grounds for it because they have a good explanation for the provenance of evaluation-dependent facts but no explanation for that of evaluation-independent facts.

At present, they will have to remain agnostic about the latter sort of fact. The version of Bio-Enhanced Constructivism I defend below is thus Relatively Ambitious Bio-Enhanced Constructivism. It holds that reasoning about how to satisfy our hardwired moral desires determines at least the vast majority of those moral facts that common moral intuitions track, and at least the vast majority of moral facts that motivate us. This leaves open a door, a small sort of door by which cherished pets and sometimes vermin may enter, for evaluation-independent moral facts, including ones that are not natural or not determined by natural things. It should be noted that even if only a relatively less ambitious variant can survive objections, this is still significant, since that variant would still give a fully naturalized accounting of some limited sphere of morality while simplifying the choice that faces us when we scrutinize the meta-ethical

32

menu.

1.7 Worries and Moral Seriousness

Opponents of Bio-Enhanced Constructivism will raise various objections to the view. Not all of these will worry the bio-enhanced constructivist. Her aim is not to develop an account that satisfies just any criterial demands other philosophers set for an account of morality, but to develop a naturalistically viable account that can sustain moral seriousness. Of course, some objections purport to undermine either the naturalistic foundation of the view or its ability to sustain moral seriousness and the bio-enhanced constructivist is keen to answer these. That is the lone concern of the final chapter; for now I shall alert the reader to the main sorts of problem waiting there.

One sort deals with supposedly key features of morality. The objector of this sort claims that some key feature must be supplied by any account of morality that warrants our taking morality seriously. The objector will argue that Bio-Enhanced Constructivism, because it lacks the feature or retains it only in some form so reductive that the feature loses its deep importance, cannot sustain moral seriousness. When I address key-feature objections below, my general plan is to show that the bio-enhanced constructivist can, in fact, supply naturalized versions of the key features, and, to the extent that these are somehow different or "less" than alternate versions preferred by the objectors, it can be shown that this does not interfere with our taking bioenhanced morality seriously.

A second sort of objection aims to undermine directly the particular reasons that the bioenhanced constructivist offers in order to justify our taking bio-enhanced morality seriously. The bio-enhanced constructivist argues that we have reason to take morality seriously because hardwired moral desires give human beings reasons to care about moral considerations. These are, of course, Humean reasons – reasons we have in virtue of or because we have certain desires, just as my unaccountably wanting a 1987 Buick Grand National might be thought to give me a reason to buy one. Objections of the second sort challenge the potency of moral desires for determining our moral reasons. Some focus on the presence of countervailing forces in our lives, such as selfish and socially inculcated desires. If our hardwired moral desires are relatively weak, these objectors contend, this would seem to undermine their ability to give us much reason to do anything, so we could not have much reason after all to take bio-enhanced morality seriously. In answer to these objections, I explain how the bio-enhanced constructivist can situate our moral desires in the broader context of our other desires, and I argue that the most plausible description of our actual behavior is one on which our moral desires have great potency and thus a strong influence over what reasons we have.

Finally, I address a third sort of objection that challenges bio-enhanced constructivism on what might be called moral-factual grounds. These objections select some entry or class of entries from a traditional list of moral truisms and argue that Bio-Enhanced Constructivism conflicts with it. The objector holds that the proposed moral truth is so little in doubt, so intuitively obvious, or so generally agreed upon that no moral view that conflicts with it could be taken seriously. My response to these objections takes the form of explaining how Bio-Enhanced Constructivism allows for us to honor the considerations offered up in the objectors' moral truisms, even if in some cases it does not make this a peculiarly moral sort of honor.

In the course of answering objections, I often grant that features of bio-enhanced morality

might make it a force somehow weaker than the objector might assume or wish that morality is. I shall say what I can, in the process of answering the objections, to explain why the bioenhanced constructivist thinks the moral facts she describes are nevertheless formidable, and why we should be comfortable with morality so explained.

1.8 Moving Forward

That, in a small handful of nutshells, is Bio-Enhanced Constructivism. In the next chapter, I take up the science behind the Human Nature Thesis, showing to what extent Bio-Enhanced Constructivism enjoys strong support from the sciences, and marking out where a bio-enhanced constructivist might be tempted to speculate beyond the best available evidence. In the third chapter, I take up the question of *Dispositional*, arguing that if one follows the Human Nature Thesis down the path of Moral Constructivism, and intends not to revolutionize our ordinary moral practices, then one must take a *Dispositional* rather than *Actual* or *Ideal* view of the moral facts. That is where I discuss the Biological Construction Claim. And in the final chapter, as I have just laid out, I respond to diverse objections, and make the case that bio-enhanced morality is a naturalistic formation that warrants taking seriously.

Chapter Two:

The Human Nature Thesis

The aim of this chapter and the next is to explain more precisely what Bio-Enhanced Constructivism is and to exhibit the impressively strong positive case that the bio-enhanced constructivist can make for the view. The present chapter explains the evidence supporting the Human Nature Thesis, which says normal human beings possess biologically hardwired and moral desires. I begin with exegetic preliminaries, and then discuss and evaluate the support it receives from the sciences.

2.1 The Human Nature Thesis

The Human Nature Thesis (HNT) states that there belongs to human beings, as a specieslevel possession, a suite of peculiarly moral desires. HNT immediately raises three questions: What are peculiarly moral desires? What does it mean to call them 'a species-level possession'? And what evidence is there for thinking HNT is true?

2.2 Peculiarly Moral Desires

In response to the first question, the bio-enhanced constructivist offers:

(PMD) a desire is peculiarly moral if and only if its central concern is affecting the welfare of some welfare-bearing entity other than and rather than the organism whose desire it is. To put it crudely, the bio-enhanced constructivist thinks there are two kinds of desire: the peculiarly moral and the rest.⁴⁴ 'The rest' names those whose central concern is that the desiring organism get something or other for its own sake. 'The peculiarly moral' names desires whose central concern is that some other entity get something that affects the other entity's welfare, and not because the desirer wants to get the other entity's getting that for the desirer's own sake. So, among the rest of my desires is my desire for me to be healthy and my desire for my lover to learn Sanskrit so that she can explain the Diamond Sutra to me, while among my peculiarly moral desires are my desire for you to be healthy and my desire that you pay dearly for your lie, regardless of how your health or payment affects my own well-being.

Before getting into the intricacies of PMD, something must be said about the way I am using 'desire'. There is no need to restrict the bio-enhanced constructivist to any particular philosophical account of desire, although she is committed to two things. First, what is most important is that a desire motivates its possessor in the direction of some target, where the target could be some action or acquisition on the part of the possessor. To say that a desire motivates is just to say that the desire causally "pushes" the desirer toward its target. The bio-enhanced constructivist does not insist that moral desires offer an overwhelming push or even, in many cases, an effective one. Second, desires are better characterized as feelings than as thoughts. This is not to say that they must be detached from cognitive content. Presumably many "higher" animals will sometimes possess cognitive representations of their desires' targets, while "lower" animals will not. Even so, the bio-enhanced constructivist need not commit to the claim that it is necessary for a human being, no matter how great a thinker she is, to be conscious of the target

⁴⁴ When euphony recommends it, I refer to peculiarly moral desires simply as moral desires. No distinction is intended.

of her desire. That is, one can be a bio-enhanced constructivist and still think that a person can want something, be motivated to acquire it, and even try to acquire it, without having thoughts about it. As a final note, and in order to be as explicit as possible, let me emphasize that this notion of desire includes what might be called mere urges, brute motivational pushes without associated cognitive content. It is meant to include them because the bio-enhanced constructivist believes that a great many of what I am calling peculiarly moral desires are such things.⁴⁵

So, on to PMD. PMD distinguishes moral desires by their peculiar concern with the welfare of other entities. There are three things to note about this. The first is that the class of entities whose welfare might be objects of this concern is broad. Obviously a moral desire could seek to benefit another organism, as do the desire to feed a stray cat and the desire to help a neighbor raise money so he can purchase cancer treatment. However, complex biological systems such as habitats, ecosystems, and even Earth itself also seem to many people to bear welfare.⁴⁶ And human beings really do have desires that seek such things as to keep their families "strong," to protect polar bear habitats, and to save our Allies' sovereignty from the encroaching Axis powers. Thus, PMD conceptually allows that the welfare of groups of organisms such as families, communities, and biological clades, or even the welfare of political groupings such as nation-states, can be a central concern of actual moral desires.⁴⁷ Even if these

⁴⁵ If the reader prefers not use the word 'desire' to pick out things that are little or nothing more than urges, I ask her to read 'urge' wherever I write 'desire'. I persist in using 'desire' because the extension of my concept of does include the cognitively richer phenomena that is captured in more restrictive desire concepts, though my interest in them is their motivational pushiness rather than their cognitive riches.

⁴⁶ It is important to keep in mind that PMD is a description of moral desires, and it does not claim that all moral desires are biologically hardwired. So the fact that, say, desires concerned with the welfare of the Allies may not seem like they could have been biologically hardwired should not be seen as evidence against PMD or against the claim that some other peculiarly moral desires are hardwired.

⁴⁷ A biological clade is any group formed by a branching of the evolutionary "tree," where this tree represents evolutionary descent by genetic relationships. Clades come in greater and smaller sizes, of course: *Mammalia* is a clade, but so is the species *Felix Sylvestrus Catus*. For more on the clade concept and its relation to the species concept, see Sterelny and Griffiths (1999) pp. 180 ff.

entities cannot actually bear welfare, all that is required for their being the concern of a peculiarly moral desire is that they are treated as having welfare by the organism exhibiting the desire.⁴⁸

The second thing to note about the peculiar concern of a moral desire is that it can involve various "directions of attack" corresponding to the several available modes of affecting another's welfare. First, a moral desire may seek to supply something that improves well-being to the entity it targets. The desire to "feed the children," or to help an injured neighbor plant her garden are moral desires of this kind. Second, a moral desire may seek to impose a cost on the entity it targets. It might seem strange to call a desire moral when its central concern may well be to harm. Yet we do have moral desires of this kind. They include desires for remedial and retributive punishment, as well as those for a "fair" redistribution of resources. And of course, PMD does not imply that every desire to impose a cost is moral. If I want to take from another simply to enrich myself, then my welfare is of central concern, not the other's, and so my desire is not moral. Third, some moral desires are concerned only to maintain or sustain the current welfare of another. We might, for instance, wish for the state to act so as to keep the recently unemployed poor from falling into more extreme poverty without wishing it to enrich them beyond their current status. And finally, there are moral desires that seek to relinquish the maintenance or improvement of another's welfare. This includes the desire to, say, finally leave your chronically and persistently alcoholic uncle to his own devices. Here one does not wish to impose any cost, but to withdraw from the matter and leave it finally up to him.

The final thing to note about the concern of a moral desire is that it is something other

⁴⁸ One might think, for instance, that welfare bearing is restricted in one of the following ways: to only things that suffer and delight, to only things that feel pain or pleasure, or to only things that live.

than an *aim*. Now, it might seem more straightforward to distinguish kinds of desire by aim rather than by concern. For instance, we might think some desires are altruistic and others egoistic just insofar as the former ultimately aim at another's benefit while the latter ultimately aim at the agent's own. Accordingly, it is tempting to think peculiarly moral desires would be best described as desires whose ultimate aims involve another's welfare. And perhaps one could formulate PMD in terms of aims with nothing crucial to the plausibility of Bio-Enhanced Constructivism getting lost. However, the 'concern' formulation has two advantages the 'aims' formulation lacks.

First, formulating PMD in terms of concern makes room for a distinction between, on the one hand, a concern as what one is moved to do regardless of what one consciously thinks about doing it and, on the other, an aim as what one actively and thoughtfully tries to do, which clearly does depend on one's thinking. Honoring this distinction, one will say that only agents who think prospectively have aims, while desires "contain" concerns and all desiring animals have concerns because they have desires. This distinction is necessary if we are to avoid confusing what someone wants in the sense of merely feeling some motivational push or urge toward it from what someone wants in the sense of having finally judged that it is what she should pursue.

Second, the 'concern' formulation allows the bio-enhanced constructivist to say something about the similarities and differences between human morality and the famous nonhuman-animal behaviors that resemble it. The bio-enhanced constructivist is not likely to hold that nonhuman animals suffer a full-blown case of morality because she is not likely to think them capable of the evaluations that moral facts constructed upon evaluations require. Nevertheless, she does recognize that various behaviors displayed by certain animal kinds – elephants, crows, and

chimps, to name three – appear to exhibit moral concern, desires on the part of some animals to affect the welfare of a conspecific or of their group rather than their own. Thus she can say that some nonhuman animals have moral desires, and a primitive precursor to full-blown morality, while denying that they achieve morality or are bound by it as we are, and she can explain why this is so.⁴⁹

So much for the bio-enhanced constructivist's peculiarly moral desires. Before moving on to the more difficult second question that HNT raises, I should make it explicit that PMD does not require peculiarly moral desires to be hardwired species-level possessions, nor does it imply that non-hardwired moral desires cannot bear the same relation to moral facts that hardwired desires bear to them. For all PMD has to say, very large parts of what we think of as morality may well consist of moral facts that do not depend on any hardwired moral desires but do yet depend on some moral desire or other. If there are such facts, it is not possible, without saying something detailed about them, to know whether they will cause problems for Bio-Enhanced Constructivism in its relatively ambitious form as an account of morality.⁵⁰

2.3 Species-Level Possessions⁵¹

The second question HNT raises is: What does it mean to call some suite of moral desires a 'species-level possession'? The defender of some particular variant of bio-enhanced

⁴⁹ The thought that some animals are moralish but not so much as we is already be found in Aristotle's idea of political animals: "man is more of a political animal than bees or any other gregarious animals" (*Politics* 1253a 5-10). It is found in a fairly developed form in Darwin (1871). Darwin thinks an evolved "moral sense" exists in various social animals and that it comes in four "stages." The first two merely exhibit a psychology that contains moral desires while the latter stages, which depend on the acquisition of language, exhibit the development of explicit moral rules and institutions that canalize our behavior in response to moral desires. See Richards (1986).

⁵⁰ I discuss this topic further when I discuss objections to Bio-Enhanced Constructivism. See chapter four.

⁵¹ For a note about my use of *hardwired* and *species-level* possession, see chapter one, note 12 above.

constructivism would be welcome to include in his answer to this question an attempt to explain what concept of species is at issue.⁵² Of course, it is often a contentious matter what species concept is right for some inquiry, and I will not attempt to decide this. It would have to be addressed if the rather generic formulation of Bio-Enhanced Constructivism I am providing were forced to accept some particular species concept, but this generic view only requires that we human beings belong to the kind of kind for which it is characteristic for its members to possess certain desires. This is compatible with understanding the kind in a variety of ways, so there is no reason to think the project is endangered by being tied to an idiosyncratic or controversial view of species nor even by any general philosophical concerns surrounding 'species' itself.⁵³

There is a different exegetical task that I prefer not to sidestep. This is to discuss what it means for something to *belong* to a species, or to whatever kind of kind we are. Any particular bio-enhanced constructivist may have one or both of two thoughts in mind.⁵⁴ The first is that something belongs to a species insofar as it is characteristic of species members. A debate could be had about the precise meaning of 'characteristic'. However, the most empiricistically satisfying and mind-independent way to conceive it is the following Boorsian way: something is characteristic of (or normal for) a species just in case it is part of or is caused by the physiological makeup that is statistically typical for members of that species.⁵⁵ The physiological makeup of an organism comprises biological role functions and things such as

⁵² See or Kitcher (1984), or Sterelny and Griffiths (1999), chapter nine: "Species."

⁵³ For the skeptical worry about species, see, for instance Ereshefsky (1998).

⁵⁴ These thoughts mirror the two thoughts about biological function that make up the debate between advocates of a causal-role understanding of these functions ("first thought" below) and advocates of an etiological understanding ("second thought" below). See Cummins (1975) and Neander (1991) for representative presentations of these thoughts about functions.

⁵⁵ I am riffing on, not simply employing, the concept of 'normal' that Boorse offers when he defends the view that health is normal functioning, and this in an objective, statistical sense of 'normal'. His idea is that something is normal if it is exhibited by the vast majority of members of a statistical class, such as a particular sex and age group of a species. See Boorse (1977) and (1997).

biological parts that have them.⁵⁶ That is, it consists of parts and processes that have functions, which are contributions they make to the organism's life. In the interest of advancing the discussion, I shall treat the first thought in this Boorsian way. The way I shall put it is,

First Thought: something belongs to a species if it is caused by the statistically

typical biological operation of physiological parts of the members of the species.⁵⁷

The second thought a bio-enhanced constructivist might have in mind when she says that something belongs to a species is a thought about natural selection. It is,

Second Thought: something belongs to a species if selective forces have caused it

to persist from earlier generations of the species into the present one.

This second thought implies that what belongs to a species has, at some point in its history, conferred a fitness advantage *and* has at no point since conferred such fitness disadvantage that selective forces removed it. It seems most human nature constructivists are inclined to view hardwired moral desires as products of selection, and some think it plausible that these desires still confer a fitness advantage.⁵⁸ I find it vertiginously difficult to see how we might assess the claim that human beings are better off having a suite of moral desires than we would be if we were "otherwise the same" and either simply lacked it or possessed something else in its place. But if we have a suite of moral desires and have built our human world through and around it, it is certainly likely that we do gather myriad useful things through it, such as benefits proceeding from mutually supportive social arrangements and from living among others who can usually be

⁵⁶ This is 'biological function' in a Cummins-style or "role-function" sense: the function of a part is its contribution to some activity of a system that contains it, where the activity is one that we pick out based on interest. So, insofar as our interest as biologically minded inquirers is to understand how organisms live, biological functions are the contributions that parts of organisms make to the the organisms' lives.

⁵⁷ This thought allows, of course, that such diverse things as organs, physiological events, behaviors, and behavioral dispositions can belong to a species.

⁵⁸ Both Churchland (2011) and Richards (1986) appear to endorse the conjunction here.

expected to "follow the rules."

Now, as I said, the bio-enhanced constructivist need not endorse both thoughts. She must endorse the first, though. For one thing, she cannot be a bio-enhanced constructivist without thinking that moral desires are exhibited by normal human beings because it is in virtue of this that morality governs human beings.⁵⁹ For another, her view is distinctive just because she holds that the constructed moral facts grow out from a causal root in human physiology. So, although bio-enhanced constructivists do not tend to do so, there is ample room to defend a version of Bio-Enhanced Constructivism that embraces the first thought while denying the second. For if one doubts that all characteristic features of a species are or have been adaptive, that is, if one is not an adaptationist as one ought not to be, it is coherent to think that things belong to a species in the first sense without belonging to it in the second.⁶⁰

2.4 Why You Might Think Moral Desires Are Evolutionary Products

We can now face the third question head on: what reason is there to think that any peculiarly moral desires are species level possessions? With the foregoing exegesis behind us, this question becomes two further questions about two different bundles of evidence that might be sought in the biological sciences. One question is: why might we agree with most bio-enhanced constructivists that some moral desires are evolutionary products? If they are, this is an excellent reason to think they are species-level possessions in both of the above senses. The other is: why should we agree with all bio-enhanced constructivists that some peculiarly moral desires are part of or are caused by the statistically typical physiological makeup for members of

⁵⁹ The relationship between moral governance and the normalcy of moral desires is discussed at greater length in chapter four.

⁶⁰ As delightful a place as any to get one's first inoculation against adpatationism is Gould and Lewontin (1994).

our species? If moral desires are products of species-typical physiology, they are species-level possessions in the first and requisite sense.

Two views in the philosophical literature bundle the biological evidence that help answer the two questions. The first bundle comprises evidence from evolutionary theorists suggesting that moral desires are fitness-enhancing products of evolution. It is collated by Richards, who defends an evolutionary view of morality that revises a view he takes Darwin to offer in *Descent of Man* (1871).⁶¹ Richards calls his own view 'the Revised Version' (RV).

It is fairly easy to see how RV implies some variant of HNT. RV has two parts: a speculative evolutionary theory and a corresponding moral theory. The evolutionary theory claims kin selection has operated on kin groups, and perhaps group selection on communities, to cause the development in human beings of an evolved moral sense that produces "sympathetic responses and pricks to [corresponding] action" in response to perceptions of others as in pain or in dire need.⁶² The moral theory claims the moral facts concern actions that are "intentionally performed from [the altruistic] motive and [that] can be justified by that motive."⁶³ This identifies moral actions as just those actions that are judged by some evaluative process to satisfy moral desires. It is the evolutionary theory that implies a version of HNT: human beings possess an evolved moral sense for responding to the pains and unsatisfied needs of fellow community members by generating moral desires to help them.

So, what evidence is there that natural selection has caused us to have moral desires?

⁶¹ Richards, R. (1986). Richards does not, as Joyce might seem to oddly suggest in his discussion of Richards, offer RV as a revision of Herbert Spencer's evolutionary ethics, a theory that is substantially more controversial than Darwin's because, unlike Darwin's view, it purports to justify classist and racist behavior. See Joyce (2007), p. 156

⁶² Richards, (1986) p. 272

⁶³ Ibid., p. 276

Richards makes two appeals to evolutionary theory. The first is direct to Darwin.⁶⁴ Everyone who's been living above rocks knows Darwin is a theorizer of evolution. What may be less well known is that Darwin also made a great effort to understand morality from an evolutionary perspective. In *Descent of Man*, Darwin both ponders the origin of morality and aspires to make sense of the fact that human thoughts about vice and virtue have motivational and behavioral effects.⁶⁵ He is especially preoccupied by the curiously cooperative and more properly social animals, partly because they are puzzling in light of a theory that can make the biological world seem more like a field of bloody winner-take-all combat than a place where friendly collaboration might emerge.

To explain cooperation, Darwin proposes the evolution of pro-social behavioral dispositions. Richards characterizes these as "bonds forming animal groups into social wholes."⁶⁶ They are supposed to explain a large diversity of social phenomena, from whatever holds ant colonies together to whatever holds human societies together. Darwin believes that the bonds uniting human communities include such things as a desire to help others and a tendency to feel guilty for behaving viciously – a desire, in my sense, to not be vicious – as well as verbal moral rules and societal institutions, both of which are rooted in those desires and facilitate their satisfaction.⁶⁷

To explain the evolution of animal social bonds generally, Darwin posits 'community selection', wherein natural selection "selects" between conspecific communities rather than

⁶⁴ To be clear, the following is not own my account of Darwin but my account of Richard's account of Darwin.

⁶⁵ Richards (1986), pp. 269-70. Darwin (1871)

⁶⁶ Richards (1986), p. 268

⁶⁷ Darwin thus holds a view friendly to Human Nature Constructivism, if not to Bio-Enhanced Constructivism itself.

between conspecific individuals.⁶⁸ Richards is not for his part anxious to embrace community selection; as a proposed form of selection it has fallen into disrepute among evolutionary theorists since Darwin. So Richards endorses the view that the moral sense has evolved as the result of natural selection operating on groups of *some* kind, and offers kin selection, which operates on groups of closely related conspecific organisms, as his preferred candidate.

So that's what Richards gets from Darwin. Richards' second evolutionary appeal is to the sometimes controversial but always delightful work of E. O. Wilson.⁶⁹ Wilson, who knows more than anyone else about ants, is a leading expert on the curiously cooperative and social animals that preoccupied Darwin. He holds the advantage over Darwin that he postdates the Modern Synthesis in evolutionary biology, which brings results from molecular genetics into evolutionary theory, something not possible in Darwin's time when little could yet be known about mechanisms of inheritance. Wilson is thus able to theorize that morality is driven by genetically determined psychological mechanisms. This has two implications. First, it implies that the mechanisms fundamental to morality are in some sense "encoded" in our physiology rather than waiting outside of us in the social world. Because these mechanisms are coded in our genes, they develop as part of our normal physiological development. Second, it implies that these mechanisms can be subject to selective forces. Whatever else genes are, they are factors of inheritance: things that allow aspects of phenotype to be passed from generation to generation and that thereby account for some of our similarities and differences. Thus mechanisms that are subject to some sort of genic control are likewise vulnerable to natural selection.

To sum up, Richards thinks evolutionary theory can tell some defensible story like the

⁶⁸ It should not be thought that the proposal requires sociality to have evolved once and then have been handed down through the generations to all social species. For the same sorts of environmental constraints in different places would presumably cause sociality to evolve multiple times in different and unrelated species.

⁶⁹ As with Darwin, I am presenting Richard's view of Wilson rather than my own.

following. Darwin observes organisms from the outside. He considers their behavior and finds certain patterns to emerge between species: some kinds of animal are social, they do things that benefit other members of their group and some even follow rules that strengthen the group. Darwin has worked out the idea of evolution by natural selection, so it is a matter of course for him to posit that these behaviors are evolutionary products. Evolution provides an especially powerful and likely explanation for the social behaviors of "lower" animals who have no capacity for talking about morality or for forming institutions that cultivate the success of their groups: their social behaviors are simply hardwired species-level traits passed down through the generations. Furthermore, human social behaviors resemble those of the lower animals. And introspective evidence suggests that a central part of what keeps us contributing to our group efforts is something hardwired rather than learned: we find that we have emotional responses that promote our own social behaviors. We seem to just care about other human beings and we seem to just care about behaving virtuously rather than viciously. So Darwin can reason from analogy and introspection that human morality proceeds from an evolved mechanism that holds social groups together, one that has evolved as a result of the same cause or the same sort of cause that has caused similar mechanisms to evolve in other species. Darwin has, in a sense, given us a picture from the outside, one drawn from observing the surfaces of animals and their behaviors. Missing, however, is a story that explains how social bonds come to be hardwired into species and how they can be subject to selective forces. This part of the story is partially filled in by Wilson. Social bonds are hardwired because they are genetically determined, and they are subject to selective forces because the genes that determine them are targets of natural selection.

48

For my purpose of considering what support there is for HNT, the upshot of Richards' appeal to evolution can be captured in two claims. First: certain intrinsic biological forces bond various animal groups together and human morality is rooted in such forces. Second: these forces exist in human beings as a result of group selection acting on human groups. In the next section I discuss further evidence for the first claim, so I shall put it aside for the moment, except to note that it is very much a hypothesis whose evidential merit depends wholly on the strength of its coherence with whatever else we know about animal and human biology and behavior. I shall now consider the strength of support for the second claim.

The usual and most forceful challenge it faces denies the plausibility of group selection. I am not presently qualified to judge the debate about group selection nor do I think it necessary to devote the time and space here that a fair accounting would require.⁷⁰ For the question of whether evolution has produced biologically hardwired moral desires, it does not matter whether selection acts on groups. For the bio-enhanced constructivist who thinks moral desires have provided a fitness advantage, these desires might just as well be products of individual selection. And it is certainly not obvious why moral desires could not have provided an advantage directly to individuals. Living in well-organized communities offers such apparent advantages to individuals as access to shared stores of food, companions in hunting and combat, fingers for hard to reach lice, and fellows to raise the alarm when hungry raptors dive. Being motivated to behave in a way that bonds communities together could only make these benefits greater and stabler. So, the bio-enhanced constructivist who thinks that moral desires are products of natural selection can meet the usual challenge to Darwinian ethics by reformulating the second claim in

⁷⁰ To get a general idea of the debate, the reader is welcome to read: Williams, G. C. (1966), Maynard Smith, J. (1976) Wright, S. (1980).

a way that does not require peculiarly group selection: the forces that bond human groups together exist as a result of natural selection acting on human beings who live in groups.

Given that the most pressing challenge fails to cause problems for the Bio-Enhanced Constructivist, what exactly is the strength of the positive evidence evolutionary science supplies to the claim that moral desires are fitness-enhancing products of natural selection? I am afraid that it is not particularly strong. Richards' story is coherent and plausible. It fits with what we know about human and non-human animal behavior, and it connects this to things we know about evolution and genetics. However, it does not in any clear way rule out two competing views of morality. One is that human moral desires are social products that we acquire from without rather than products of our biology. The evidence against this would seem to have to come from physiology, and indeed that is my next topic of discussion. On the other hand, Richards' evidence does not rule out the view that moral desires are byproducts of a part of biology that has a fitness value for some other reason. For instance, it is conceivable we are hardwired to care about others generally because caring about our immediate families has fitness value and whatever mechanism has evolved to generate familial care happens not to discriminate much between family and others. I also discuss this possibility in the next section. If something like it is the case, moral desires would still be evolutionary products, or by-products at any rate, but they would not likely be fitness enhancing insofar as they cause us to care about persons outside the family.

For the present, Richards' story must be viewed as only plausible, a promising line of inquiry for the bio-enhanced constructivist, but not a firm support for her view. However, the next bundle of evidence lends much stronger support to Bio-Enhanced Constructivism and some

50

additional support to the evolutionary thesis.

2.5 Why You Should Think Hardwired Moral Desires Are Caused By Human Physiology

The bio-enhanced constructivist must feel that the greatest shortcoming of Richards' evolutionary evidence is its lack of clear support for the existence of any physiological system that causes human moral desires. If such a system exists, some moral desires have to be hardwired, and then at least a variant of Bio-Enhanced Constructivism embracing the 'first thought' about species-level possessions can get off the ground. There is evidence for such systems; it has been collated by Patricia Churchland.⁷¹

Churchland does not pretend to have a comprehensive explanation of the physiological causes of human morality. What she does have is a detail-rich story about low-level biological components that evidently play a central role in governing Animal Social Behavior, including our own, and a less detailed story about how these components have evolved. It all begins with the point that nervous systems exist because they facilitate organisms' "taking care" of themselves. That is, one biological function of a nervous system is to help the organism promote its own survival.⁷² Among the operations by which some nervous systems facilitate this self-care are the production of positive and negative affect. The subsystems that create affect play a motivating role, prompting an organism to pursue and avoid various activities that tend to have

⁷¹ Churchland (2011). As in the case of Richards, Churchland's view of morality also commits her to a variant of Human Nature Constructivism. She is committed to HNT because she thinks morality is a product of hardwired biological mechanisms that make us care about others, that is, that make us have desires to promote their wellbeing. She is committed to a construction claim because she thinks moral facts are our solutions to social problems, that is, results of human judgments about how to best satisfy these desires.

⁷² More precisely, this is the both the etiological and the role function of the nervous system. Self-care is both that for which natural selection has "selected" nervous systems and it is an activity by which a nervous system contributes to the life of the organism that possesses it.

certain implications for its well-being.73

By causing their possessor organisms to take care of themselves, nervous systems provide an obvious fitness advantage in all circumstances. In some circumstances, further systems that promote the survival of organisms other than their possessors also offer a fitness advantage by advancing the propagation of the possessors' genes.⁷⁴ Among animals generally, the most common behaviors of this kind constitute what is called maternal care: mothers of some species care not only about their own survival but also that of their offspring.

Churchland provides evidence that various forms of parental care result from natural selection by describing how certain environmental factors exert a selective pressure that promotes its evolution. One such factor is the presence of environmental cover from predators. When there are ample places to hide from predators, a species is under less selective pressure to evolve offspring-protection behaviors that keep offspring hidden, since the environment does that, than it would be in a visually "open" environment. But in open environments, parental care behaviors, such as retrieving straying offspring, provide a fitness advantage. This sketch of a story explains, for instance, why the prairie vole, who evolved in open country, possesses more systems of parental care than the closely related montane vole, who evolved under woodland cover.

Churchland goes on to describe certain physiological systems that control maternal

⁷³ Churchland (2011), pp. 27-28. The reader should, as always in such cases, be wary of reading Churchland's thoughts from my words. What occurs here and in the following is my own understanding of the system that she details, based on her details, and in an order of presentation that differs from her own. I would be surprised if I do not make some claims about the system that Churchland does not endorse and I do not endorse all of the claims that Churchland makes in her own discussion. Nevertheless I strive to accurately present the mechanism she describes as she describes it.

⁷⁴ This claim requires subscribing to the notion of 'inclusive fitness', according to which an organism is more fit the better it is able to propagate its genes – that is, the more predominant they are in the "gene pool" of future generations. This notion originates with Hamilton (1964) and is popularized, of course, in Dawkins (1976).

behavior in mammals, since we are mammals and it is ultimately our own behavior that is of interest.⁷⁵ For the bio-enhanced constructivist, one of the more important facts Churchland presents is the following. The system that causes mammal mothers to care about their infants results from the evolutionary "extension" of the affect system such that it responds in mammals to chemical outputs of a reproductive system shared with our pre-mammalian ancestors for whom the chemical ancestors to these chemical outputs lack affective consequences.⁷⁶ The mammalian chemicals in question are oxytocin (OXT) and arginine vasopressin (AVP). They are relatively simple amino acids and they are related in the dual sense that they have several proteins in common and that they have evolved from a common "ancestor" molecule. This ancestor is the amino acid vastocin. It is still found in amphibians and "plays a role in … mating behavior and … egg-laying," a role of the sort that it is also presumed to have played for our own distant ancestors.⁷⁷

Through some complicated history the sexy details of which are hard to know, evolutionary forces have remodeled and re-purposed this ancient amino acid from an amphibianstyle reproductive system to aid in production of maternal care as follows. In mammals, the chemical descendants of vastocin regulate a variety of processes that collectively amount to what Churchland calls 'maternalizing' the brain. OXT is understood to play a particularly important role. For one thing, OXT plays a causal role in physiological phenomena such as lactation. But it also has behavioral upshots that begin in pregnancy, such as nesting and increased eating, and

⁷⁵ Churchland (2011), p. 31

⁷⁶ To say one chemical is an ancestor of another means here that at one point in evolutionary history some mechanism in some organism produced one chemical, then through evolutionary changes the mechanism that produced that chemical evolved into a mechanism or mechanisms that produced "descendant" chemicals having similar but distinct molecular structure to the ancestor.

⁷⁷ Churchland (2011), p. 32.

others that continue after the offspring is born, such as the mother keeping the offspring nearby.⁷⁸ As OXT and AVP have evolved, the affect system has evolved in tandem so that the performance of behaviors promoted by OXT, such as breastfeeding and infant grooming, cause pleasure by the release of endogenous opiates while the failure to perform certain behaviors, such as the mother's failing to protect her offspring from predators, produces anxiety via the spinothalamic tract, a bit of neurophysiology that is also implicated in the production of colloquially "physical" pains.⁷⁹

This neurological system for maternal care produces hardwired, peculiarly moral desires in mammalian mothers. Through the same affect system that the mother is motivated to perform activities that support her own survival, so too is she motivated to perform activities that promote the wellbeing of her young offspring. By way of the same bit of physiology that she feels physical pain when she is attacked by a predator, she feels anxiety when a predator threatens her babies.

So mammal mothers, during at least the early stages of offspring rearing, exhibit hardwired peculiarly moral desires as I define them. These maternal concerns do not amount to a suite of moral desires that produces full-blown morality nor one that moves normal human beings in general. Yet they do offer a proof of concept, showing how physiology motivates certain individual mammals – including human mothers – to care about and promote the wellbeing of others. Furthermore, this is only the beginning of Churchland's story. Systems involving OXT and AVP are known to produce further moral desires that do not show up in females only and do not concern offspring only. These are systems that produce the behaviors

⁷⁸ Churchland (2011), p. 33.

⁷⁹ Churchland (2011), pp. 35-40

known as mate attachment and male parenting.

'Mate attachment' refers to the phenomenon of long term pair bonding, where a pair of mates tend to live in close proximity for a relatively long duration of their lives. It is associated with cooperation, and it can be associated with mate exclusivity but usually isn't, probably not even among usually human beings. The physiological systems that cause mate attachment produce peculiarly moral desires whose central concern is the wellbeing of an organism that is not closely related to the desirer.

Mate attachment is fairly rare in mammals and it is not found it our closest primate relatives – indeed, it is far more common in birds.⁸⁰ Given its rarity, and that neither bonobo nor chimp goes in for the temptations of domestic partnership, one might worry that human mate attachment is a cultural product rather than a biological one. This worry is not entirely ill-founded and it cannot be put to bed now, nor until a bit more is understood about the neurophysiology of human mate attachment in particular. However, the fact that two closely related species differ with respect to mate attachment does not establish that the species who exhibits it thereby exhibits a cultural rather than a biological product. Two closely related species that do so differ are the aforementioned prairie vole, who attaches to his mate, and the montane vole, who does not. For these species, a difference of physiology does explain the difference in mate attachment. In comparison with their mountain-dwelling cousins, male prairie voles have a relatively "much higher density of receptors for AVP and OXT in ... the *ventral pallidum* and the *nucleus accumbens*" which, Churchland tells us, belong to "the reward-and-punishment [or affect] system."⁸¹ If these receptors are blocked, prairie voles behave in the

⁸⁰ Churchland (2011), pp. 46-47

⁸¹ Churchland (2011), p. 49

fashion of their montane cousins, forgoing attachment. So there is a physiological mechanism that regulates mate attachment in prairie voles. There is also good reason to think it is somewhat general throughout mate-attaching species of *Mammalia*. For the relatively high density of AVP and OXT receptors in these particular brain regions is mirrored in other species who practice mate attachment, including certain primates.⁸² So, while it cannot be ruled out that human mate attachment is uniquely a social product, given that we are socially quite different from our closest relatives and "everyone" else, there is nevertheless good reason to suspect that it proceeds from a physiological mechanism essentially like the one producing it in other mammals.

Another trait of male prairie voles is that they participate in parenting activities such as the retrieval of pups to the nest and pup licking, which is said to "soothe" them. Male montane voles do not do this. But, until they partner up with a mate, male prairie voles exhibit caring behaviors even toward pups that are not their own. OXT and AVP are again implicated. If receptors for both are blocked, the male prairie vole does not parent; if either receptor is allowed to operate, he does.⁸³ So again, there is a physiological mechanism that governs male parenting behaviors in some mammals and no evidence to suggest that a homologous mechanism is not responsible for male parenting in human beings. This mechanism generates a moral desire whose central concern is the welfare of others, including some who are not biologically related to the desirer.

So far the evidence from Churchland lends a strong plausibility to the claim that human beings and other mammals have biologically hardwired moral desires. They possess physiological mechanisms that use OXT, AVP, and the affect system to motivate certain other-

⁸² Churchland (2011), p. 52

⁸³ Churchland (2011), p. 57

regarding behaviors. This lends credence to HNT but in a way that demonstrably supports only a relatively *un*ambitious variant of Bio-Enhanced Constructivism. The support it offers is only indirect for a more ambitious variant involving biologically constrained moral facts that prescribe behaviors outside our dealings with conspecific young and favorite mates.

Although it is not as strong as the physiological evidence discussed so far, there is reason to think OXT, AVP, and the bio-mechanisms that involve them cause moral desires whose concern reaches past mates and relatives. For one thing, there is some reason to suspect that the same mechanisms that cause us to care for mates and the young also cause us to care for other human beings more generally. Consider the young male prairie voles who has not yet attached to a mate and, seeing the neighbors' pups wander onto dangerous ground, retrieves these unrelated pups to the nest.⁸⁴ Now, it is likely that male parenting behaviors have evolved in prairie voles because the genes that produce these behaviors thereby promote the genes' own persistence by causing the male vole to protect his offspring, who share his genes.⁸⁵ What is less likely is that this behavior also evolved because helping an unrelated neighbor's pups promotes the survival of his genes. Pup retrieval can be extremely costly to the one who performs it: when a vole ventures into open ground, he exposes himself to the hawk's searching eye, which can lead to his becoming a crunchy morsel. So why do young males parent others' pups? Perhaps there is no particular fitness advantage or no evolutionary cause, but the male-parenting mechanism is just too dumb to avoid producing these behaviors in the presence of straying pups even when they are not related to the helper: he perceives straying pups, the mechanism responds by producing a desire to retrieve them, and so he does. This mechanism may have evolved because it causes the

⁸⁴ Churchland (2011), p. 56

⁸⁵ Hamilton (1964), Dawkins (1976).

prairie vole in one circumstance to protect his own young, but it has the fitness-accidental, or even slightly detrimental, added result that in a different circumstance he protects others.⁸⁶ Similarly, if mechanisms involving OXT and AVP persist in us because they have been selected for causing human beings to care about their offspring and mates, it is plausible to suspect that these mechanisms are likewise dumb in that they respond at times, or to a degree, to human beings more generally, and even to some other animals.⁸⁷

Reflection on one's own experience tallies well with the thought that moral concern for human beings generally is an extension of hardwired responses to mates and offspring. We often feel emotionally compelled to take care of our own children, or of closely related children such as nieces and nephews. But if our encounters with our neighbor's children, or images of needy children in far off countries to not exactly compel the same response, they nevertheless elicit concern or a kindly appreciation for their cuteness. And if our mates especially inspire both sacrifice and, unfortunately, a keen desire for retribution when we perceive they have wronged us, such feelings are nearly as strong for our friends, even when they are the sort of people we eschew as mates.

So it is plausible to think there is an extended suite of hardwired moral desires that simply results from a lack of sensitivity in mechanisms that ensure we care for mates and offspring. This view is worthy of tentative assent so long as we don't find some strong empirical support against it.

Churchland herself offers further support for the existence of hardwired human moral

⁸⁶ So, insofar as we can say that the unattached male prairie voles have moral desires concerning the pups of others, the most likely hypothesis suggests that these desires do not exist because they provide any fitness advantage.

⁸⁷ That would explain, for instance, why we take pity on lambs that would be delicious, or spend our savings on chemotherapy for canines.

desires that concern human beings generally by collecting evidence from experiments in what she calls 'neuroeconomics'. In these curious experiments, an attempt is made to produce, or sort subjects according to, differences in the possession of, or receptivity to, OXT and AVP, and then to see what effect these differences have on reactive attitudes that have an intuitively moral character, such as feelings of trust or the desire to punish.

Churchland focuses on evidence in support of the view that OXT-involving neural mechanisms regulate trust behaviors, behaviors wherein an agent exhibits an expectation that another agent will protect his own well being. These experiments make use of a game itself called 'Trust'.⁸⁸ It involves two players, an 'investor' and a 'trustee' – the latter is typically a confederate – and it begins with a provision of money to both. The investor can send a portion of his money, how much if any is up to him, to the trustee. The trustee then accumulates triple the "invested" value in addition to his own bank and has the option of sending back however much he chooses, if any, to the investor.⁸⁹ The more trusting the investor is, the more he anticipates generosity on the part of the trustee, the more money both parties stand to make.

The Trust experiments Churchland discusses test the effects of intranasal OXT supplementation on the investor. Among the findings are that increasing OXT increases investing, but only when the investor thinks the trustee is human, not when the investor thinks the trustee is a computer. This provides evidence that some moral desires deriving from the mechanisms Churchland spotlights concern human beings generally, as follows.

In the Trust experiments, an OXT-involving system is manipulated. And we know that

⁸⁸ What follows is a paraphrase of Churchland's description of Trust at Churchland, pp. 71-2. She is describing the study presented in Kosfeld et al (2005).

⁸⁹ For example, the investor might be allocated \$10. He could keep the \$10, netting \$10, with the trustee getting \$0. Or he could send all \$10 to the trustee, who would then have \$30 and the option of sending any portion back to the investor.

some OXT-involving system is responsible for the fond feelings we experience in parenting or romantic attachments. One reason to think the Trust experiments exhibit moral desires akin to those that regulate parental care and mate attachment is that these behaviors are the ones where trust is most common. Furthermore, the trustee confederates in the human trustee condition are not family members, they are strangers. So this indicates that the familial-like moral desires exhibited by the Trust experiments reach beyond the family.

Also, the fact that OXT supplementation generates trust in response to human beings generally but not in response to machines indicates that the OXT-involving mechanism manipulated by the experiments is sensitive to a difference between kinds – human versus machine – that has intuitive moral significance. And thus we have a relatively strong reason to think that the same physiological mechanisms that produce familial care target human beings broadly, or some category that includes human beings but not machines, generally.⁹⁰

The "neuroeconomic" evidence does not forever settle the matter of whether there are enough hardwired moral desires to make the case for HNT and thus for Relatively Ambitious Bio-Enhanced Constructivism. But it does show that there are are biological mechanisms that generate recognizable moral desires, and that there is a plausible story, one that enjoys reasonably strong empirical support, that can explain how these mechanisms might generate morality more broadly. What is more, there is no clear empirical evidence to the contrary for the opponent of Bio-Enhanced Constructivism to introduce against the claim that moral concern is generally hardwired, nor indeed is it clear what would lead anyone to endorse or abide by moral judgments if she did not first possess something within her that would incline her to do so in the

⁹⁰ This category could, of course, include some non-human animals as well as human beings. It is possible, for instance, that the same perceptual cues that stimulate our care for human infants – big eyes, say – also lead us to care for kittens and puppies.

first place, especially given that moral concern and selfish concern are so often at odds.

2.6 Conclusion

In the foregoing pages I offer what I take to be a strong empirical case for HNT, one that warrants its endorsement in the absence of contrary evidence. The physiological evidence shows that human beings are hardwired with concerns that can reasonably be called moral, and the evolutionary story shows that these concerns are likely to have been caused by natural selection. Of course, to have moral desires is not yet to have morality. But that is the topic of the next chapter, the Biological Construction Claim, which maps the course from moral desire to moral fact.

Chapter 3:

Disposition and the Construction of Moral Facts

Once the naturalistic moral inquirer has accepted HNT, Moral Constructivism appears to be a plausible complementary view of the moral facts. For HNT says our moral behaviors are caused by hardwired cares, while Moral Constructivism says moral facts are determined by evaluations, and we know that our evaluations reflect what we care about. So the question arises: what could be the right way to understand the relationship between our care-driven evaluations and the moral facts?

In trying to make sense of this relationship, moral constructivists in general heed two common sorts of intuition about morality. One sort, objectivity intuitions, leads us to think moral facts make stable prescriptions through time and across persons. The other, salience intuitions, leads us to think moral facts are relevant to our deliberations about how to act. Constructivists tend to recognize the second sort of intuition as especially important; one is likely to endorse Moral Constructivism at least in part because one thinks relevance-to-us is a necessary feature of moral facts. But the former sort of intuition is equally important.⁹¹ If constructivism cannot accommodate it, it cannot provide an account of morality that resembles morality as human beings ordinarily practice it.

Satisfying both sorts of intuition turns out to be difficult. It is more plausible that the moral facts are relevant to us the more intimately they relate to our actual cares and judgments.

⁹¹ This is not a claim I take for granted, given that some constructivists such as Street and Prinz deny any robust sort of objectivity to the moral facts. Is defend it in the following section.

But the more tightly moral facts are controlled by these bits of human psychology, the more one worries that the corresponding facts are not objective in any interesting sense, but relative to differences between or even within individuals.⁹² Conversely, the more one insists on the stability of moral facts, the less it seems that the ever-changing and diverse catalog of what actually matters to us could be their determinants.

Different constructivists try to navigate this tension in different ways. The purpose of the present chapter is to explore the two standard routes, and to show that the bio-enhanced constructivist's distinctive third way of handling the tension is far and away more successful. These "routes" are mapped by what I call 'construction claims', claims that specify how judgments determine facts. Accordingly, a secondary project of this chapter is to present the second central thesis of Bio-Enhanced Constructivism, the Biological Construction Claim, and thus to explain how moral facts and peculiarly moral desires are related.

3.1 Intuitions and Moral Theory

In the following pages I argue that Bio-Enhanced Constructivism is better than other constructivist accounts of morality because it exhibits superior intuitional fit. Let me explain, then, what I am calling 'intuitions' and why I think intuitional fit can and in this case does make one philosophical view better than another.⁹³

What I call 'intuitions' are inclinations to believe. Often they influence us unnoticed, but

⁹² The differences within individual would be diachronic differences arising from the shifting of an individual's attitudes – his changing his mind – across time and perhaps through accumulations of life experience.

⁹³ To be clear, the present argument will distinguish between variants of moral constructivism based on their compatibility with our intuitions, but it is not meant to defend constructivism against more skeptical positions such as moral Error Theory. An error theorist could simply reject ordinary moral practice as wrongheaded, and thus needn't heed ordinary moral intuitions in the way that a constructivist, who seeks to avoid a revolution against ordinary moral practice, does.

they tend to make themselves known just prior to or in the early stages of deliberation or inquiry – that is, when we're intentionally trying to figure something out. Not every inclination to believe is an intuition. Intuitions are distinguished by the presence of a peculiarly epistemic pressure to believe. So, while I might wish I could believe, say, that my friend hadn't been diagnosed with cancer and that this is only a nightmare, and thus have an inclination of sorts to believe she hadn't, wishing alone does not make it *seem* so, so wishing to believe is not intuition.⁹⁴ In what follows, I often talk about intuition in terms of seeming – it is perhaps best understood as mere or brute seeming – though not all seeming is intuitional.⁹⁵

There are different categories of intuition and multiple cross-cutting features by which one can categorize them. For instance, it is possible to distinguish intuitions based on how we react to them. This is how one distinguishes pre-theoretical from philosophical intuitions. In both cases some inclination inspires a belief by supplying it with positive doxastic force, or seeming. But when intuitions become philosophical, the force of the inclination is rationally corralled. Philosophical intuitions result from doxastic "styling," a process of reflecting on an intuitive belief in the light of other considerations relevant to its truth and consequently adjusting how one forms beliefs in response to the intuition. The beliefs inspired by pre-theoretical intuitions, on the other hand, remain uncut and uncombed – one simply believes what they incline one to believe.⁹⁶ For instance, I might pre-theoretically intuit that possessing large sums of money is dangerous for the soul, but in a more philosophical moment recognize it not to be

⁹⁴ Of course, wishing could lead to seeming, and thus to intuition through some process of self-deception, but mere wishing is not itself seeming.

⁹⁵ Perceiving or otherwise grasping evidence also involves seeming, but this is not intuition because it is not *mere* seeming. In these evidentiary cases we can point to a source of the seeming that rationally supports our belief in what seems, whereas in mere seeming, while we might be able to explain how the intuition came about, we do not grasp a rationale – beyond the seeming, if it counts – for believing what seems to be.

⁹⁶ Though I present philosophical and pre-theoretical intuitions dichotomously, it is also reasonable to view the matter continuously, such that intuitions differ by how carefully we vet the beliefs they inspire.

dangerous in some circumstances, and actually salubrious in one, or even two. With either sort of intuition, the belief I form connecting danger to money arises purely from an inclination – money just seems dangerous to me – but in the philosophical intuition, further consideration has put limits on the circumstances in which I grant this "just seeming" the right to settle the matter.

Another way to sort intuitions is by their source.⁹⁷ Some intuitions could be present by nature, if we happen to be beings of a sort inclined toward certain beliefs.⁹⁸ Consider as a toy example, a so-called "god gene."⁹⁹ Such a gene would belong to human physiology and incline us to believe in divine beings or mystic forces. Other intuitions arrive through social pressure: we are probably inclined to believe a lot of things just because everyone around us acts as if they are true. This could account for the belief some people have in American Exceptionalism, and for the prevalence of other more troubling stereotypes.

The inclinations relevant to meta-ethical dispute may well derive *in part* from one or both of these two sources, but what makes them important for deciding among different construction claims is that they come also from a third source, a practical pressure to believe arising from our being caught up in ordinary human practices. I call intuitions of this sort 'practicality intuitions'.

⁹⁷ The following is not meant to be a comprehensive list, it is merely a first gesture at some of the more obvious likely causes of pre-theoretical intuitions.

⁹⁸ For a related thought, see Street (2006) for a discussion of 'basic evaluative tendencies' as genetically heritable traits. Street's thought seems to be that inclinations to make certain value judgments are genetically heritable. Street would presumably include epistemic judgments, or instances of belief formation, among the ones for which there are such inclinations, since she thinks these judgments are as debunkable by evolutionary considerations as, say, moral judgments are – see Street (2011) for her views on epistemic value.

⁹⁹ There is not any good evidence that there exists a gene inclining us to believe in god, certainly not for any gene that would do so in the absence of religious institutions. Hamer (2004), the main root of temporary discussions about the so-called 'god gene', argues only that the presence of a certain gene, VMAT2, increases one's susceptibility to what might be called spiritual experience. (The same gene is also implicated in addiction.) But even this claim of Hamer's is disputed. A skeptical response is found in Zimmer (2004).

Of particular interest are what I call 'transcendental practicality intuitions'.¹⁰⁰ They incline us toward beliefs that are transcendental in a metaphorical sense related to the philosopher's use of 'transcendental' to describe the venerable argument form: "We know *Y*, and *Y* could only be true if *X* were true, therefore *X*." Various ordinary practices transcendentally incline their participants toward certain beliefs because the practices consist of or involve actions that would be crazy or pointless unless certain things, things for which we have no further evidence, were true. These transcendental beliefs allow us to carry on our daily activities without feelings of foolishness, dissonance, confusion or insanity. The fact that we do carry on these activities with some apparent success no doubt contributes to the beliefs seeming true.

I suspect transcendental intuitions are ubiquitous and hard to detect, but there are a couple of spheres where they show up plainly. One is religion. Some people grow up having lived a deeply religious life, one that involves a large commitment of time and emotional investment to activities such as prayer and proselytizing. This sort of life generates various pressures to believe in a system of supernatural beings so that these activities can remain satisfying and seem a worthy use of time. Lifetime believers sometimes acknowledge that they possess no evidence that divine things exist, yet they feel very strongly that they must exist. Transcendental intuitions are also prominent in the life of people who care about "achievement." For example, the devout

¹⁰⁰ A sort of practicality intuition I pass over in the main text are "inductive" practicality intuitions, which arise because agential action involves planning. When we plan, we think about what we will do in order to achieve some aim. Such thinking needs a store of predictions and other generalizations that we can use in making our plans. This need for predictive facts inclines to acquire and affirm various general or "inductive" facts, even though we typically have recourse to nothing more than unscientific summings-up of our own experience or conventional wisdom. I emphatically do not mean to call these generalizations proper inductions; they are rarely acquired in a thoughtful or even conscious manner. (Indeed, insofar as beliefs are acquired in a thoughtful, conscious manner they are not best thought of as mere intuitions, since they will have a degree of rational support.) In the not-too-reflective course of daily life some experiences loom larger than others, and many things happen right before our eyes that we notice not at all. Or we acquire generalizations that are current with our peers, or uttered by passing strangers, simply by hearing them – and often we forget the hearing. These experiences leave us just feeling, for instance, that certain general facts or true, or that certain effects tend to accompany certain causes. (These inductive intuitions are, of course, quintessentially Humean.)

amateur athlete devotes large chunks of energy, money, and time, to winning contests against other amateur athletes. She rarely receives any material compensation, and never enough to cover her costs, nor does she receive any recognition outside the small group of other locals who practice her sport.¹⁰¹ Yet her way of life inclines her to believe that sporting achievements possess a distinctive importance, and that her trophy has some special property other cups lack. These beliefs, that there are gods or glory, sustain practices their believers are engrossed in, justifying the sacrifices they make and allowing them to continue their various practices without cognitive dissonance.

The point of all this talk of intuitions is to show how transcendental practicality intuitions can settle the dispute between different versions of moral constructivism. It is not because intuitions constitute a sort of brute evidence for the beliefs they inspire. Indeed, my own view is that a belief's arising from mere intuition is an invitation to deep skepticism. Especially when we do moral philosophy, we should be as aware as we can of whether our convictions rest merely on the feeling that something is true. We should be especially skeptical of intuitions arising from nature, social forces, and negligent "inductions" from haphazard daily experience.¹⁰² Beliefs arising from these intuitions cannot arbitrate philosophical disputes precisely because we are either in no position to independently verify the claims they lead us to accept, or, if we are, we have evidence that should supersede intuition in determining our conclusions.

Nevertheless, some philosophical disputes can be settled by showing that one view better accommodates certain transcendental practicality intuitions than its competitors do. These are disputes wherein all disputants aim to give an account of some practice that they themselves

¹⁰¹ The same can be said, of course, about the devout philosopher and the value he or she accords to his or her philosophical achievements.

¹⁰² See note 100 above, about "inductive" practicality intuitions.

accept and are committed to continue practicing. If transcendental beliefs are beliefs that one must have – indeed, beliefs that must be true – in order for one to engage in the practice without being foolish, irrational, or crazy, successful accounts of the practice must accommodate these beliefs. For if some account of the practice contradicts beliefs that are transcendental with respect to the practice, the result will be that those who accept the account can no longer rationally engage in the practice.¹⁰³ Of course, these intuitions do not justify the practice; but they are a required part of any view of the practice that is reasonable for those who accept the practice to take.

With respect to moral practice, this is the sort of boat in which moral constructivists very much find themselves. They aim to give an account of morality that allows them to take it seriously in the way people ordinarily do. This rules out defending a view that would make it irrational to continue engaging in moral practice. Constructivists must fit their accounts to transcendental intuitions arising from moral practice, if there are such, and an otherwise coherent constructivist view of morality that fits must be preferred over one that does not.

The two sorts of intuition mentioned at the outset, ones that inspire beliefs about the objectivity of moral facts and others that inspire beliefs about the salience of moral facts, are transcendental moral intuitions that constructivists must fit into their views. First consider objectivity. Moral philosophers of various stripes, not just realists, believe moral facts are

¹⁰³ Of course, outside of such disputes, a destructive result might be acceptable or even welcome. I mentioned the error theorist in note 73. Especially revisionary moralists such as Nietzsche also do not care to leave accepted moral practice standing. He seems to delight in insisting that practices based in pity or beneficence are irrational – see Nietzsche (1887). But the parties to the dispute between constructivists will regard rational destruction of the practice they describe as evidence that a destructive view is false or inadequate because it fails to capture the very practice it claims to describe.

objective in some interesting sense, though in what sense is not a catholic matter.¹⁰⁴ The originating force behind these beliefs is the fact that in our most basic moral practices – discursive practices of criticism and discussion – we treat the moral facts as stable across time and uniform across cultures. A great many of our everyday moral conversations are conversations about things having gone morally wrong. In these discussions we freely and naturally find ourselves criticizing the actions of people in circumstances that are both culturally and historically distant from our own. In everyday conversation, we readily reject certain judgments and practices of Bin Laden or Kim Jong II, of the Spanish Inquisition or Caligula. I call the general class of these intuitions – inclinations to believe in some sort of moral objectivity because in moral practice one criticizes *all* actions by some presumed single standard – 'objectivity intuitions'.¹⁰⁵ They are transcendental inclinations to believe in some sort of moral objectivity because ordinary moral practice requires the belief.

Now, Moral Constructivism says moral facts are evaluation-dependent. One might worry that it is therefore undermined by our objectivity intuitions. If it were, either the Moral Constructivist would have to abandon either rationality or morality, or she would have to insist on some revolution in our ordinary moral behavior. Any of those options is a failure with respect to her initial aims of providing a constructivist account of morality as we know it. Luckily there

¹⁰⁴ A short catalog of the sorts of moral objectivity philosophers discuss is offered by Prinz. Collecting and extending some thoughts of Dennet (1991), Leiter (2001), and Nagel (1986), he identifies – I here omit his finer distinctions – three basic senses of 'objective' that appear in the philosopher's use of 'objective moral fact'. One is impartiality. A moral fact is objective in this sense just in case it is recognized as a moral fact by anyone who has "all the evidence, no biases, and a good capacity for reasoning." The second sense is representation-independence. A moral fact is objective in this sense just in case it obtains whether or not we are able to represent it or conceive of it. Finally, 'objective' can refer to mind-independence. A moral fact is objective in this sense just in case it would obtain whether or not the world contained any minds. (If there is some fact about human psychology that human beings are unable to grasp or represent, this fact is representation-but not mind-independent.) Prinz (2007), pp. 138 ff.

¹⁰⁵ Temporal stability and cross-cultural uniformity are meant to be illustrative of our objectivity intuitions. I am not claiming they constitute a comprehensive list of such intuitions.

is a minimal sort moral objectivity that Moral Constructivism can support; I call it 'Discursive Objectivity'.

Discursive Objectivity is, simply, the belief that all actions can be criticized against the same standard. It is not a belief about whether some relation obtains or does not obtain between human psychology and the moral facts. Rather, it is about whether a certain sort of practice is possible and whether the thing – a standard – that would make it possible exists. In this case, the standard consists of a ground for agreement among those who discuss the moral appropriateness of things.

The following test, then, is posed for each variant of Moral Constructivism: is it compatible with Discursive Objectivity? Does it provide a single standard by which we can rationally challenge the actions of, and enter moral discussion with, people from all sorts of background or circumstance, with respect to any sort of moral error? Or does it instead leave its proponents unable to rationally accuse people who differ from them in some way of certain sorts of moral error, with the result that it recommends a revision of our everyday practice of corrective moral discourse?

So much for objectivity. The second sort of transcendental moral intuition constructivists must deal with involves practical salience, the influence normative facts exert when we deliberate about what to do. Anyone who has taught a course in applied ethics will have run across students who exhibit the following behavior. First, the instructor proposes that some consideration is relevant to the moral valence of some action. For instance, she might propose that being exploitative makes offering high-interest payday loans morally impermissible. Next, the student rejects the proposal on the grounds that many people recognize this consideration without being tempted to judge the action according to the instructor's proposal. Following the example, the student might say everyone knows payday loans exploit the poor, but nobody thinks they're morally prohibited just because of that. This common pedagogical experience exhibits our inclination to regard the absence of judging some consideration in some proposed moral way as evidence that the consideration lacks the proposed moral import. I call intuitions of this sort salience intuitions.

Salience intuitions lead us to think the normative facts we are aware of have some power over judgment or action.¹⁰⁶ Just as objectivity intuitions inspire various beliefs, salience intuitions inspire various and different ones in different people. They incline some of us to believe normative facts recognized as such must motivate, and others to believe that they exert a merely rational force that is not also motivational.¹⁰⁷ Salience intuitions also incline people to think normative considerations must have some force in practical deliberation – that if a fact is moral it will be accorded some weight when two parties discuss taking an action that involves it, and that if a fact is moral and relevant it should be brought up in practical discussions.

Like Discursive Objectivity, there is a transcendental salience intuition. I call it Deliberative Salience. Two core activities of ordinary moral behavior are deliberation, or trying to figure out what we should do, and remediation, or trying to make someone else recognize what he should do. These practices strongly incline us to believe that moral facts must be able to play some role in our discourse about appropriate action. We expect them to lead us to the

¹⁰⁶ This is what Smith calls the vague version of internalism: "*Believing I should* seems to bring with it *my being motivated to* – at least absent weakness of the will and the like" (his italics). Smith (1994), p. 60.

¹⁰⁷ Smith calls the former 'the practicality requirement'. He puts it like this: "If an agent judges that it is right for her to Φ in circumstances C, then either she is motivated to Φ in C or she is practically irrational." The latter is related, but different. It could be put: "If an agent judges that it is right for her to Φ in circumstances C, then either she is motivated to assent that she should Φ in C or she is practically irrational." The latter leaves open the possibility that the agent might recognize that she should Φ in C without feeling any impulse to do so. Ibid., pp. 61-62.

correct action when we are thinking about what is correct. We also expect other people, on having the moral import of some circumstance revealed to them, to respond. If some considered fact has no impact on the course of deliberation and discussion, we do not regard it as moral. We thus treat facts as if they are not moral if they are deliberatively ineffectual; they must involve considerations that can have some impact in the discursive practices that make up ordinary Moral Human Behavior.¹⁰⁸

3.2 Construction Claims

I am in the process of arguing that Bio-Enhanced Constructivism is better than other constructivist accounts of morality – the only viable one, in fact – because only it fits both with Deliberative Salience and Discursive Objectivity.¹⁰⁹ This argument keys in on differences between how different moral constructivists describe the mental states that "construct" moral facts. These differences can be encapsulated in "construction claims," claims about how facts of one sort "construct" facts of another.¹¹⁰ Because moral constructivists often label the construction relation as 'determination', moral construction claims become claims about evaluations, or evaluation facts, determining moral facts.

¹⁰⁸ Deliberative Salience is compatible with both Smith's practicality requirement and its denial. It does not, then, stake out a position in the debate between externalism and internalism as Smith understands it. The intuition here does not require us to believe that when we are aware of a moral fact, it must motivate us. It merely inclines us to believe that when we are aware of or discussing a moral fact, it must have an impact on our deliberation or discussion of what to do. It is compatible with the thought that we could could come to the conclusion that we ought to do something without being motivated to do it. This is Smith's "stronger form of externalism, or the denial of the practicality requirement" mentioned in the previous note. Smith (1994), p. 63

¹⁰⁹ Of course, other *Dispositional* forms of constructivism could be defended that would have the same advantages claimed here for Bio-Enhanced Constructivism. What is less likely, though, is that they could have the sort of independent evidence Bio-Enhanced Constructivism receives from the naturalistic inquiry into Moral Human Behavior.

¹¹⁰ The 'constructs' relation is metaphysically interesting, but I won't dwell on metaphysics here other than to note that construction is presumably a species or instantiation of the grounding or in-virtue-of relation, whereby facts that construct other facts likewise ground them while constructed facts are what they are in virtue of the constructing facts being what they are.

There can be as many detail-rich construction claims as there are possible variants of moral constructivism. Fortunately my present task, dictated by the present argument, is only to capture core commitments that belong to a diversity of traditional and influential views, and this can be accomplished by considering just a few construction claims.

Every detailed construction claim is a development of the maximally indeterminate and entirely general construction claim,

Generic: Moral facts are determined by certain evaluative states that certain agents exhibit or would exhibit under certain conditions.

Generic presents a lot to discuss, not much of it on the express agenda here. What is a moral fact? What more can be said about the metaphysics of this curious determination/construction relation? Which evaluative states are privileged and why? Which agents are privileged and why? How are these evaluative states exhibited? If it is not unheard of, it is rare for a moral constructivist to have worked out answers to every question. However, their answers to the 'which agent' and 'which evaluative state' questions often are spelled out. These "spellings" are captured in the construction claims below. It would be delightful to explore the vast space of conceptual possibility opened by *Generic*, but the present concern is two traditional claims between which traditional constructivists seem to think they are forced to choose, plus the distinct third claim advanced by Bio-Enhanced Constructivism. Unsurprisingly, each traditional claim appears to embody an intention to satisfy one of the two transcendental moral intuitions discussed above.

The one most particularly squared up to this task of vindicating beliefs inspired by Deliberative Salience is

73

Actual: Moral facts are determined by certain evaluations that actual agents actually make.¹¹¹

Actual is inspired by a dual commitment to both the view that moral facts must get a deliberative grip on actual agents and the view that such grip-getting proceeds from their actual evaluations. *Actual* does as good a job as could be expected of honoring Deliberative Salience. For if every moral fact appeals to him whom it governs more or less as such – that is, as something he has already judged in a way corresponding more or less to its moral valence – it is not hard to see how every moral fact might get a grip on his deliberations about acting.

Actual is only a touch less a sketch than *Generic*; its proponents can still dispute the nature of the actual evaluations that determine moral facts. For instance, there is room to disagree about whether these evaluations must be motivationally laden in the sense that they actually motivate us to take the actions they identify, or if they might instead result from a procedure of pure reason aloof from what moves us. There is also room in *Actual* for differences about the degree to which moral facts are relative. It does not require relativism – the evaluations in question could conceivably be agreed by *every* agent – but it is compatible with relativism in extreme forms. It clearly allows for moral facts relative to individuals whose morally determinant evaluations might differ, and it even lets its defender believe the relevant evaluations could change within individuals over time, yielding a rapidly shifting diachronic relativism even within the individual agent.

While *Actual* upholds Deliberative Salience by identifying our actual evaluations as the determinants of moral facts, the other traditional alternative more particularly reflects our

¹¹¹ The three ways of defending the *Actual* construction claim are exemplified by Street (2008), (2010) who defends a relativistic version, Korsgaard (1996) who defends what I call Kantian *Actualism*, and Hume (1777) who establishes the view I call Humean *Actualism*.

objectivity intuitions.

Ideal: Moral facts are determined by certain rational assessments that would be made by an agent who is rationally and epistemically ideal.¹¹²

Ideal is perhaps ambitious because it describes a morality that is constructed, yet universal for rational agents. Universality comes from the nature of *Ideal*'s agent.¹¹³ She is ideal both rationally, reasoning in a procedurally perfect way, and epistemically, knowing whatever non-moral facts are relevant to her assessments. These assessments are held to produce a singular moral standard because they result from the processing of non-moral facts in an error-free, rational way. Anyone convinced of *Ideal* will thus be confident that moral facts are universal, and perhaps not only for human beings but for all agents who possess rationality.¹¹⁴ As with *Actual, Ideal* leaves room for various disagreements among its defenders. One question concerns rationality: is it merely a matter of being a perfect logician, or are there also practical elements, things like a requirement to reason from the fact that one has some aim to the conclusion that one should take its necessary means?

Traditional constructivists make various attempts to combine the apparent intuitive successes of *Actual* and *Ideal* by outfitting one view or the other with additional resources. Some endorse *Actual* and argue that the moral-fact determining evaluations are so general – agreed upon by enough, perhaps by all agents – that objectivity concerns are mollified. Maybe

¹¹² Firth (1952) originates the sort of view described by the *Ideal* construction claim while Rawls (1980), (1993) is in the neighborhood – but see Street (2008) regarding the categorization of Rawls.

¹¹³ This kind of "objectivity" is not to be confused with stance-independence.

¹¹⁴ *Ideal* also captures another kind (or feature) of objectivity, the idea that moral facts are unchanging or eternal. Because rational procedures presumably stand valid across eternity, and since the non-moral facts, once temporally indexed, do not change, anyone who can defend *Ideal* also seems well-positioned to insist the moral facts are entirely stable across time. By allowing for a single group of moral facts that govern all rational agents equally for all time, *Ideal* would seem able to match objectivity-intuition inspired beliefs about moral universalism as well as moral realism does, even while leaving the moral facts mind-dependent.

this is the sort of view Hume has in mind: human beings are sympathetic by nature and this, our shared nature, causes us to agree in our actual evaluations.¹¹⁵ Others endorse *Ideal* while adding a story about how the evaluations of ideal agents achieve practical relevance. They might contend, for instance, that ideal agents are only making the same evaluations we make in lucid and well-informed moments, and so we could be led to see things as they do.

So much for the traditional construction claims. The claim endorsed by the bio-enhanced constructivist is a variant of:

Dispositional: Moral facts are determined by certain evaluations that actual agents are disposed to make.

Dispositional is another bare pile of bones, but it contains fairly clear resources for meeting the demands of each transcendental moral intuition. If moral facts depend on dispositions we actually possess, the constructivist can hope to muster these dispositions into a plausible story about the practical salience of *Dispositional* moral facts. And if the dispositions belong to us collectively, she can hope to adduce a moral standard of the singular sort Discursive Objectivity requires. So as a sketch, *Dispositional* is promising. But whether it can be exploited for the development of a plausible claim about the moral facts depends entirely on how it is fleshed out. Flesh is added below, when the discussion returns to the second central thesis of Bio-Enhanced Constructivism, the Biological Construction Claim.

^{115 &}quot;The final sentence, it is probable, which pronounces characters and actions amiable or odious, praise-worthy or blameable; that which stamps on them the make of honour or infamy, approbation or censure; that which renders morality an active principle and constitutes virtue our happiness, and vice our misery: it is probable, I say, that this final sentence depends on some internal sense or feeling, which nature has made universal in the whole species" Hume (1777), pp. 172-3.

3.3 Salience Problems for *Ideal* **Constructivism**

Views that endorse *Ideal* suffer two sorts of irremediable conflict with Deliberative Salience. First, *Ideal* judges make moral-fact determining evaluations on the basis of information actual human beings are unable to gather. On the not very controversial assumption that knowing very distant causal upshots of one's possible actions could influence how one evaluates them, it follows that knowledge of these upshots is relevant to ideal assessment.¹¹⁶ An *Ideal* judge would thus need to possess and consider a rich knowledge of some very large expanse of possible futures that actual agents could not possess. Even if we had adequate means to investigate possible futures, we would not have time to acquire this knowledge in the paltry lifespans we are allotted. Since actual human beings lack this knowledge, our evaluations will differ from those of the ideal judge. Any moral fact that depends on this difference will be not be deliberatively salient: it will be a fact that we cannot know.

The second conflict between *Ideal* moral facts and Deliberative Salience has to do with the ideal information processing. The ideal agent would perfectly apply some Spock-style rational procedure in order to make evaluations that determine moral facts, while actual agents evaluate by means of evaluative processes that differ from those exhibited by Mr. Spock in two important ways. First, our actual minds cannot effectively make use of large quantities of information. Indeed, we often cannot reason effectively by considering all of the few crumbs of

¹¹⁶ One needn't be a consequentialist to endorse this assumption. For instance, if one thinks the moral rules include a a cause-no-harm principle, whether one's present course of action violates it depends on the ultimate causal upshots of the present action.

information we actually possess.¹¹⁷ It is a sad fact about the human animal that the decisionmaking benefit it derives from gathering information decays rapidly once the animal finds more than a few relevant things to consider. For instance, human beings do a much more satisfying job of choosing between cars for purchase when they only consider four points of comparison than when they consider a dozen.¹¹⁸

Our evaluating capacities are simply overwhelmed by any great wealth of information. In moral deliberation, these capacities would be rapidly swamped if we tried to keep in view every different good and bad quality or consequence each of our possible actions might have or produce, especially in the causal downstream. What actual agents can effectively judge is the result of considering only a few especially salient concerns.¹¹⁹ Insofar as procedures of evaluation that admit only a few salient features of a decision differ from those that take in every possible difference in choices, *Ideal* moral facts are not facts we can discern using our actual cognitive capacities, and this would seem to rule out their being deliberatively salient.

The second important difference between actual and Spock-like evaluations has to do with emotion and intuition. We suppose Mr. Spock is a good first mate because he lets neither

¹¹⁷ I am cribbing this point from Doris (2009), who finds the evidence in Dijksterhuis et al. (2006). In a manner of speaking, the former argues that explicit reflective reasoning is not as central to personhood as one might think. The latter is an empirical study he offers in support, for it "found that subjects who reflected on a hypothetical choice of automobiles were more likely than non-reflectors to choose the vehicle with more desirable attributes when the decision was framed in terms of four attributes, but less likely to do so when the decision was framed in terms of 12 attributes" – Doris (2009), p. 73. The point is that when people examine information relevant to a choice they are about to make, they can improve on the choice they would make by going with a gut feeling by considering small amounts of information – four attributes – but they do worse than by gut feeling if they consider larger amounts – 12 attributes.

¹¹⁸ Dijksterhuis et al. (2006)

¹¹⁹ Of course the point here is not that we cannot relate to judgments that, like ideal ones, consider spatially or temporally far off results of our actions, but that insofar as we can relate in a practically relevant way to the results of an evaluative procedure, that procedure must be one that produces similar results to our own evaluating, which processes a very limited number of very important factors rather than taking in every relevant factor from here to eternity and coast to coast.

his emotions nor his merest intuitions make an appearance in his evaluations of strategy.¹²⁰ This is not how human beings evaluate. We depend on intuitive beliefs that lack any support beyond mere seeming. Without these, it is unclear how we would arrive at our evaluative conclusions. *We* have no further support for claims such as 'suffering is bad' or 'children deserve special protection'. Emotions too are central to our ability to evaluate.¹²¹ Psychologists are nowadays convinced that emotions constitute not an impediment to human evaluative activities, but a necessary part of them.¹²² Without emotions to point us somewhere, and to paint the world in lovely or terrifying colors, we could not function much as agents. Emotion and intuition will lead us to care about and judge as valuable things that the ideal judge ignores in favor of other things. But if the ideal judge values things our emotions and intuitions prevent us from caring about, or fails to make evaluations in the places where these human factors point us, the resulting *Ideal* moral facts cannot seem to matter when we deliberate and discuss what to do.

Deliberative Salience is a transcendental intuition; it arises from ordinary moral practice and inspires us to have beliefs that, were they entirely ruled out as false, would force us to

¹²⁰ Kirk, by contrast, is emotionally volatile and fully willing to regard his own mere intuitions as decisive evidence, yet he is supposed to be a good captain.

¹²¹ In my use of 'emotion' I follow Zhu and Thagard (2002) who say "emotions are evaluative and responsive patterns that emerge through the evolution of the species and the development of individuals . They serve the function of providing appraisals about whether what is happening is harmful, threatening, or beneficial to our well-being under certain conditions" (p. 20). I do not mean to assert that this is the best analysis of 'emotion' or that it is the appropriate way to understand emotions in every context in which they are discussed, but only that emotion in Zhu and Thagard's sense is relevant to evaluation and action in the ways I discuss.

^{122 &}quot;Damasio (1994) studied some patients with brain damage in some specific spots in the prefrontal cortex and associated areas. These patients' intellectual abilities and general knowledge reflected in IQ and other measurements remain intact. But they have severe impairment in making decisions in real life situations, especially those involving complex personal and social matters. They cannot maintain a normal social life and they keep on making decisions that are disadvantageous to themselves and to persons close to them. They have no difficulty considering a rich variety of options for action and evaluating consequences accordingly, but they have difficulties making choices and initiating actions. Surprisingly, they also show apparent reductions in emotional feelings and responses. Damasio therefore conjectures that their deficiencies of decision-making arise because the brain damage prevents the patients from making emotional evaluations that are indispensable to decision-making in real life situations." Zhu and Thagard (2002), p. 30 For further confirmation Zhu and Thagard refer us to Finucane et al. (2000) and Isen (2000).

revolutionize our moral practice or leave it riven by rational conflict. But the constructivist takes pains not to destroy morality or cleave its essential activities with endemic rational conflict. This result is unacceptable and she must reject *Ideal* moral construction.

Before going on, I should acknowledge that some will be tempted to reject *Ideal* as a straw-man. For some think the constructivist who endorses an ideal-judge view would not think this judge is ideal in the sense of possessing information or evaluational capacities different from ours, and so they think moral facts so-determined would be deliberatively salient. So, consider an ideal judge that has been "improved" by limiting its knowledge or making it more of an emotional thinker. One worry is that such a judge would no longer be ideal, and that the standard based on its evaluations would be faulty for evaluating from ignorance or emotional bias. Set this worry aside; perhaps the differently conceived ideal judge shares our emotive concerns but simply knows better than we do how to satisfy them.

The moral facts determined by the evaluations of such a judge might then largely correspond to those described by Bio-Enhanced Constructivism, in that the ideal judge could simply be identifying what we are ultimately disposed to approve. If that is the case, then the Bio-Enhanced Constructivist may well accept *Ideal* (with improvement) as a legitimate tool for identifying the moral facts. However, she will still reject it as an account of how moral facts are determined. For if HNT is correct, what determines them – what causally makes them be what they are – is the work of the human mind to dispose us to see certain things in a certain way, rather than the machinations of some idealized procedure of reasoning, even one that starts with premises about the value of things that corresponds to our emotions. So, if one is on board with HNT, *Ideal* (with improvement) would seem to answer the wrong question, since one's question

is: "how are moral facts constructed?"

3.4 Objectivity Problems for *Actual* **Constructivism**

Everyone who thinks about constructivism recognizes that the more intimately moral facts are tied to actual evaluations, the more does relativism threaten. *Actual* allows the most intimate sort of bond. One could hold *Actual* and think every evaluation any agent makes gives rise to some moral fact. Agents disagree and change their minds, so this would yield moral facts varying between individuals and shifting within them across time.

Obviously this conflicts with Discursive Objectivity in the severest way. A constructivist defending such an extreme relativism could not reasonably criticize the moral beliefs of anyone whose beliefs reflect his own, the believer's, evaluations. But a great deal of ordinary moral discourse involves criticizing mistakes precisely where we think someone is wrong in holding a moral belief that accurately reflects his own evaluations. Everyone knows that Hitler approved genocide and Caligula just loved torture, but nobody has qualms accusing them of making moral mistakes in these matters.

Now, it is rare for constructivists to defend extreme relativism.¹²³ Nor does *Actual* require it; it only says that 'certain' actual evaluations determine moral facts. *Actual*'s proponent, if she wants to avoid extreme relativism, must restrict 'certain' in an otherwise plausible way that

¹²³ But not unheard of. Street, for instance, accepts that on her view a perfectly coherent Caligula – one whose values are not in conflict – would have reason of the same sort to torture for entertainment's sake as the rest of us, who coherently disvalue this behavior, have to prevent it (Street, 2010). She also speaks as if the normative facts – she tends to talk of these generally in the place of discussing the moral particularly – can be in constant flux even within individuals. If Street does accept this degree of relativism, then moral criticism on her view would seem to reduce to charges of "your judgment that B doesn't match your judgment that A (and A¹, A², ... Aⁿ)." And it is not clear on Street's view whether the critic has any grounds for suggesting the rejection of B rather than A (or one of A¹ through Aⁿ). Prinz (2007) similarly endorses a high degree of relativism, although his own view contains cultural resources that limit *to a degree* the disagreement of moral facts between individuals within a culture.

minimizes or eliminates relativism.

Tradition includes two attempts at this. One is Kantian. Kantian constructivists hold *Actual* alongside a thesis about rational implication, such that moral facts are determined by certain basic and actual moral commitments we hold plus whatever these commitments rationally imply.¹²⁴ The Kantian thinks we – and any other beings who pass an agency test – have our basic commitments automatically.¹²⁵ These are commitments to such things as promoting the necessary conditions of agency – autonomy, for instance. The Kantian believes we hold them automatically because we are, or in virtue of our being, rational agents. These commitments have all sorts of further implications, and our 'being rational' in the Kantian's sense means in part that we are alive to these implications when we deliberate.

Being automatic to agents, these actual commitments are or give rise to universal evaluations: since all of us are agents, we all in some sense judge in accord with these automatic agential commitments. Consequently, we are universally governed by a single standard built of our agential commitments and their implications. The Kantian thus supplies just what Discursive Objectivity requires; if his view is correct, we can rationally criticize everyone because everyone possesses this singular program of commitments.

Unfortunately, it is simply false that all of us are actually – not to mention automatically –

¹²⁴ The referent of 'rational implication' is not too easy to pin down. It involves, but is presumably not exhausted by, a logical relationship between the objects of our moral commitments and other objects. For instance, if I were committed to not killing innocents, and Danny were an innocent, then my commitment to not killing Danny would be rationally implied. After logic, the remainder of rational implication involves a variety of rules that are, in some sense, the rules of proper deliberation. Included here are things like means-end reasoning. So, if I were committed to ending poverty, and if the only means for ending poverty were violent revolution, then my commitment to violent revolution would be rationally implied. More on this can be found in Korsgaard's discussion of what agency commits us to and in Street's discussion of the constitutive entailments of practical commitment. Korsgaard (1996) and Street (2008) §§6-7.

¹²⁵ This Moral Constructivist of the Kantian *Actual*ist flavor must not be confused with various other Kantians who think we have certain basic reasons – as opposed to actual commitments – automatically in virtue of being agents.

committed to the necessary conditions of agency. The Kantian position thus cannot work as an account of our *Actual* evaluations, one that leads to a single standard for moral behavior that actually exists in virtue of what we actually care about. The Kantian doesn't initially see this problem, having reasoned as follows:¹²⁶ I must value autonomy – where autonomy is something like one's ability to choose how one acts – because I am stuck being an agent and I require autonomy in order to be an agent. All other agents are likewise stuck being agents, so they too must value autonomy. This reasoning is faulty. The fact that I am stuck being an agent and need autonomy in order to be one is perfectly compatible with my not valuing autonomy.

I do not think the Kantian is mistaken to point out that insofar as we are constituted in a certain way, there is a sense in which autonomy necessarily has value for us. Autonomy is clearly useful for agents. The less restricted our autonomy is, the more things we are able to do, and the ability to do things is useful – perhaps even as an analytic matter, given what 'usefulness' and 'ability' mean. But the present question is not about whether autonomy is useful, it is about whether agents generally must or even do value it. In spite of its usefulness, it is plainly clear that a great many people are indifferent to autonomy and some even reject it as something bad.

In applied ethics, a great many arguments hang on the importance of autonomy or its relative importance as compared to utility. It is illuminating to see the contrast between how these arguments are assessed by undergraduates from the most privileged backgrounds and how they are assessed by students who lived through circumstances of life-threatening need and imminent threats of physical or sexual violence.¹²⁷ The latter often view their lives as having been filled not so much with what struck them as choices as with circumstances that forced

¹²⁶ What follows is my interpretation of the argument offered in Korsgaard (1996) for why we should value the conditions of agency.

¹²⁷ The reader should not forget that globally the vast majority of human beings populate a category more like the latter than the former.

certain actions upon them. They can be incredulous in the face of the overarching value luckier people place on getting to choose the minutiae of one's destiny, identity, or occupation. Their incredulity reflects a system of values that largely regards autonomy and many sorts of choice as ornaments of privilege, and extreme autonomy as a sort of frivolity that wastes the time of life on things like choosing the most personally expressive smart-phone cover. This autonomyindifferent value system also crops up in the old collectivist political ethos. What is claimed to matter by the rhetoric of cold-war era Communist states was that the state provided the necessities of a good, healthy life, generally at the cost of denying individuals the chance to make their own idiosyncratic career choices or to purchase an individualized variety of goods that would "express" their individual identities.

So, some people are not committed to promoting autonomy, seeing it as an accoutrement of privilege (and even exploitation) rather than as something to be pursued and protected. Others take advantage of their autonomy, recognizing its usefulness, but insist on its ultimate dis-value. They are like the ultra-small-government ideologue who has no qualms about driving publicly maintained roads and breathing publicly protected air, but only because they allow him to advance an agenda that aims to eliminate the public provision of these very same goods. Regarding autonomy, there are characters who think everyone should trade her chance to choose her own course in life and instead follow the dictates of the Church, the State, or some other abstract principal (sic). They use their own autonomy to enact various mad gambits that aim to make everyone, themselves included, a slavish devotee of some singular life and identity.

So, the Kantian specification of Actual does not succeed; it is a false account of our actual

values. There is also a Humean way to formulate *Actual*.¹²⁸ The Humean holds that the actual evaluations that determine moral facts are controlled by elements of human nature. On this view, our nature causes us to make certain evaluations, such as that it is good to give food to the hungry or bad to let cheaters get away with it, and these evaluations determine the moral facts. Since the Humean thinks human nature causes these evaluations, he also thinks they are universal, or nearly so, among human beings. Thus the Humean hopes to defend a version of *Actual* that avoids extreme relativism.

One thing at issue here is how tightly the Humean thinks human nature controls our actual evaluations and, as a result, how universally these evaluations are shared among human beings. The more universally they are shared, the less is relativism a threat. However, the Humean presumably does not expect an ignorant or poorly reared person to come to the same evaluative conclusions as someone who is knowledgeable and reared with care, so he cannot think human nature is the sole determinant of everyone's evaluations nor that it causes us to agree universally. What he seems to think instead is that a certain sort of education is necessary for proper human development and that this will serve as a sort of conduit through which our nature is able to bring us to make singular moral evaluations. One might worry that this already concedes the game to relativism. I am not so sure, though, and, at any rate, it does not matter for my present purpose. Like Kantian *Actual*ism, Humean *Actual*ism is a false view of our actual

¹²⁸ The Humean constructivist I describe differs significantly from the character Street labels the Humean constructivist (Street, 2010) but my Humean has the maybe virtue of being a bit more like Hume. Street's Humean constructivist holds *Actual* and believes – in contrast to Street's Kantian constructivist – that we are not rationally bound to any particular commitments. We *might* value anything without incoherence. On Street's Humean view, an individual's commitments instead depend on various causes, many or all of them being mere contingencies or accidents of personal history. Thus Street's Humean *could* wind up being an extreme relativist, since the factors that affect and effect values might vary widely in their impact on individuals. By contrast, The Humean I wish to consider is one who intentionally tries to avoid extreme relativism and believes that our nature provides certain automatic commitments. This is not meant as a historical criticism of Street's use of 'Humean'. Her distinction between Humean and Kantian constructivists is meant to pick out a Hume vs. Kant style difference between certain constructivists, and it does that.

evaluations.

It is simply not true that the vast majority of us agree in our evaluations, nor that our evaluations in moral matters always follow the part of our human nature that controls our moral sentiments. Even if we focus on evaluations reflecting the sort of universal sentiment that Bio-Enhanced Constructivism attributes to normal human beings in the form of moral desires, even those human beings who are reared and educated well do not consistently judge they should behave as these desires incline them to behave. Evaluations that favor selfishness are not less common than those that favor altruism. Those whose judgments agree with Hitler and Caligula are rare, but those whose evaluations favor behaviors that are callous, unhelpful, greedy, or wasteful are certainly not.

Actual appears in three guises, none satisfying. The extremely relativistic guise conflicts flatly with Discursive Objectivity and as such constitutes a failure in the constructivist project. It would require a revolution in ordinary moral practice because it renders ordinary critical moral discourse irrational. The other guises represent attempts to argue that for moral facts determined by *Actual* evaluations that might be shared broadly enough between agents to satisfy Discursive Objectivity. Unfortunately, the evaluations that each describes are not, in fact, generically actual. We do not automatically value the conditions of agency, as the Kantian says. Nor do we generally evaluate even moral matters in the way that the moral part of our nature inclines us to value them, especially when these things are set beside other things we might care about. If constructivist positions endorse these variants of *Actual* – as Street's relativistic constructivism, Korsgaard's Kantianism, and Hume's Sentimentalism appear to – they cannot satisfy our transcendental intuition about moral objectivity while hewing to the facts.

3.5 The Biological Construction Claim

Whether *Dispositional*'s proponent can meet with more success than other constructivists depends entirely on how she characterizes the dispositions relevant to moral construction. There surely must be other ways to do it, but the present task is to discuss the bio-enhanced way and to show that it fits fine with transcendental intuitions while also reflecting the facts about actual human evaluations. The bio-enhanced way is, of course:

The Biological Construction Claim (Biological): Moral facts are determined by evaluations that hardwired and peculiarly moral desires ultimately dispose psychologically normal human beings to make.

The bio-enhanced constructivist does not think hardwired moral desires force us to evaluate certain actions or objects in a way that reflects their *Biological* moral status, not even if we are reared and educated in a certain way. She does not claim that people evaluate in this way most of the time, not even that they would have to if someone were to point out an object of one of their own deep-seated moral desires. Rather, the bio-enhanced constructivist thinks, following the Human Nature Thesis, that psychologically normal people possess psychological mechanisms leaving them prone, or disposed, to evaluate in a way corresponding to the *Biological* moral status of things.

Also, *Biological* does not ascribe the determination of moral facts to just any evaluation peculiarly moral desires might dispose us to make, but only to those they *ultimately* dispose us to make, the ones that identify what actually will satisfy our moral desires. Because we are

predisposed by our own desires to affirm such evaluations, the moral facts have salience.¹²⁹ When one person points out some moral fact to another who did not previously know it, the former thereby points to some feature of the fact that the latter is disposed to evaluate in a way that accords with its moral status. This does not mean mere pointing will immediately grip a person thus informed. But if accompanied by a suitable explanation, one clarifying how the object is indeed the sort of thing that satisfies a moral desire, and if the audience of the pointing is psychologically normal and attentive, it will get a grip on his action planning. For it will identify a course of action that satisfies some desire he actually has.

Biological moral facts thus satisfy Deliberative Salience. But some object that it does not because some *Biological* moral facts must be unknowable. For, the objector says, if the inscrutability of *Ideal* moral facts upsets Deliberative Salience, so too must the inscrutability of *Biological* moral facts. The motivating thought behind this objection is that in some cases we cannot know the true objects of our hardwired moral desires. If we cannot grasp their objects, the objector holds, we could not find our way to recognizing them as to-be-acquired. And if we cannot recognize them as to-be-acquired, they could surely get no grip on us when we deliberate about what to do.

A bio-enhanced constructivist might be tempted to respond here that while some moral desires might have inscrutable objects, such desires could not dispose us to make any evaluations because we cannot evaluate what is inscrutable. Accordingly, no bio-enhanced moral facts could be determined in relation to inscrutable objects. But there is no such limit on what we

¹²⁹ Of course, the moral facts do not have salience for sociopaths or for certain other psychologically abnormal human beings. But the intuition about salience is not that moral facts have salience even for psychopaths – presumably no view could provide this – but only that they have salience for the sorts of beings who are attuned to moral facts at all.

evaluate.¹³⁰ Not much knowledge about an object is required in order for us to evaluate it in some way. Indeed, we often evaluate objects under relatively empty concepts, thinking "I should do *whatever* eliminates this guilt I feel." We are also familiar with the following thought, which arises in early stages of deliberation when one first encounters a morally distressing problem: "*Something* must be done." It seems clear, then, that when the objects of our desires are unknown we are nevertheless disposed to evaluate them.

The bio-enhanced constructivist might also be tempted to deny that our moral desires could have inscrutable objects. But there are reasons to suspect they can. For one thing, much of our motivational psychology is opaque. Many desires are less than transparently conscious, such that we do not even realize we have them. If a desire itself is invisible, its object might be insuperably difficult to know.¹³¹ Also, conscious desires often have objects we cannot specify accurately or completely, or sometimes even at all. For instance, we often feel "antsy," wanting to do something and having no particular activity in mind. Furthermore, it is possible that the objects of some desires are simply inconceivable. This may be an especial problem for the bio-enhanced constructivist. There is no reason to assume we can conceive of just anything that natural selection might have caused us to desire, since the limits on what it can cause us to want need not correspond to the limits on what we are able to conceive.¹³²

So, moral desires with inscrutable objects are a possibility. This is a good place to

¹³⁰ As Descartes realizes, when he explains error by pointing out that our infinite will is capable of evaluating things even where our finite intellect protests ignorance. Descartes (1641): "Meditation Four: Concerning the True and the False."

¹³¹ Of course, one might suspect another person's observation of one's own behavior to go a long way toward overcoming difficulties discerning one's less conscious desires.

¹³² I find perfectly plausible the view that, because the conceptual limits on what concepts can be formed are likely to differ significantly or even arbitrarily from (and thus not be analogous to) the biological limits on what desires can exist, there may well exist desires – mere urges – whose objects cannot be conceived. Of course, this controversially supposes that there are limits to what human beings can conceive.

introduce a distinction between two sorts of *Biological* moral fact, since only facts of one sort could be unknowable. The moral facts that *could* have inscrutable objects particularly concern what we can call the 'proper objects' of hardwired moral desires. These are multiply realizable states of affairs that psychologically normal human beings seek to realize regardless of circumstance. It is most precise to say that *these* are the things natural selection has left us prone to seek. They can be relatively abstract and might include things aptly captured by such labels as 'the absence of suffering', 'community stability', or 'a fair distribution of resources'. Other *Biological* moral facts concern what we might call the 'realizing objects' of our moral desires. These are the various actions that realize or instantiate the proper objects in the various circumstances in which we act. Realizing objects are not abstract; they are courses of action built of the ordinary events, acts, and objects that populate our manifest reality.

Proper-object moral facts could be unknowable because their objects can be obscure products of natural selection and hidden aspects of our psychology. Realizing-object moral facts cannot be on account of two features they possess. First, their objects are courses of action. Actions are part of agency, and they correspond to the plans of agents. These plans are built from concepts, so actions are necessarily conceivable. Even if some proper object is inscrutable because it is inconceivable, the same cannot be true for its realizing objects. Second, realizing objects are objects we are disposed, by our moral desires for the proper objects they realize, to evaluate in a way that accords with the moral facts. This means that our psychology leads us to discover them.

Imagine that the absence of suffering is literally inconceivable and thus that we cannot identify it as something to be achieved. The desire would nevertheless urge us to act, though

90

perhaps in a blind, erratic fashion. But we could hit upon actions that satisfy it to some degree by reducing suffering. When these realizing objects satisfy the desire, we recognize them as actions that ought to be done because they produce an experience of desire satisfaction, a reduction of the aversion that suffering causes. We are able to make evaluations about them that correspond to the realizing-object moral facts that concern them. Thus we can know those facts in the sense that we can grasp their normative import, their to-be-doneness.

The same cannot be said for proper-object moral facts. They could be inscrutable. However, unlike unknowable *Ideal* facts, these facts would be deliberatively salient.

A non-human animal does not conceptualize or understand the objects of its desires in any clear way, but it is driven to pursue them. There are facts about, say, what the male prairie vole must do in order to protect his neighbor's pups, and there are desires that urge him to act in accord with these facts. Even though our rodent friend can have no concept of protecting pups, the facts about pup-protection matter to him, he cares about them. Similarly, if any hardwired moral desires have inscrutable proper objects, the desires nevertheless drive us to pursue their objects. They make us feel that something, we know not what, is missing, or that things are a little off. They move us to seek what satisfies, whatever it is. Our psychology thus makes us care about the inscrutable moral facts, if there are any, even if we cannot formulate them in a contentful or descriptively useful way. So, whatever that obscure object of desire is, however obscure it is, it remains the case that we are urged toward it and this provides practical salience to the fact that we should pursue it.

Before moving on to how *Biological* sits with Discursive Objectivity, I should note that there are many things to say about how, on Bio-Enhanced Constructivism, the motivational grip

that moral facts get on us might vary. We are sometimes in a mood or circumstance where hardwired desires do not cause the moral facts to grip us very strongly, and in some of us – the sociopath, for instance – the facts get no grip at all. At present, all I wish to say is that this does not conflict with Deliberative Salience. Deliberative Salience requires that if a fact has moral import, we expect people to respond to it in everyday moral practices such as moral deliberation and moral argument, even if this response amounts to little more than a fleeting, silent recognition.¹³³ But we do not expect moral facts to grip psychopaths; we realize that some people simply can't be brought to care about the moral. Furthermore, psychopaths do not participate in everyday moral practices except by pantomime. They have no interest in plying the morally right course; they do not earnestly engage themselves and others in an attempt to discern it.

On to Discursive Objectivity. The bio-enhanced constructivist says the evaluations that determine moral facts are ones normal human beings are ultimately disposed to make by the peculiarly moral desires they possess. The hypothesis that moral desires are a species-level possession allows for a unique moral standard by which to judge human behavior. Whenever we observe or imagine ourselves or others behaving in a way that appears to conflict with the pursuit of the objects of moral desires, we can criticize the behavior against this singular standard. This behavior is contrary to a human being's moral reasons.¹³⁴

¹³³ Also, there in dire circumstances – of, say, one's own survival or the survival of one's children – we should expect at least some moral facts to temporarily lose salience. It is not when soldiers are under heavy fire that we insist they consider the merits of pacifism, nor do we lecture on the merits of veganism to those who have nothing but bugs and mice to eat.

¹³⁴ Different human beings will find the appeal to this sort of wrongness persuasive for *different sorts of reason* corresponding to how moral desires grip them. Psychologically normal people will typically have reason not to do what it is morally wrong for a human being to do because their own desires give them Humean reasons not to do it. However, in various circumstances even a normal person's desires may be short-circuited (by threats arising from war, say, or famine). And sociopaths lack moral desires. These people will still have reasons to behave morally, but of a different and not properly moral sort. This is discussed in chapter four.

One thing to note about this standard, however, is that it is not the sort of thing that could be captured in a simple spreadsheet pairing actions with moral valences.¹³⁵ For even though there is a single standard for everyone, actions will have different valences in different circumstances, and thus have a different value for different people. This goes back to the difference between proper and realizing objects. The proper objects are those very things, whatever they are, at which peculiarly moral desires aim normal human beings: no suffering, friendship, altruism, punishing cheaters, and so on. Proper-object moral facts are thus moral facts for human beings generally. They are the same for everyone. But, as I have said, they are often multiply realizable and, what is more, differences of circumstance will make for differences in what must be done in order to realize them. Multiple realizing-object moral facts differing relative to circumstance will correspond to a single proper-object moral fact. Consider marriage. Given the near universal human penchant for maintaining ties with extended family, it is not implausible to think there is a hardwired moral desire for something like family stability. However, the same family structure will not be stable for everyone; environmental and social factors will affect this.

The impact of such factors on marriage customs is fairly well attested. For instance, the persistence of polyandrous forms of marriage over polygynous or monogamous forms appears to be a response to environmentally caused resource scarcity.¹³⁶ Other factors, such as mutable historical accidents of a political nature – the presence or absence of a Salique law, for instance – can mean family stability is better promoted by some some ways of arranging property

¹³⁵ I mean an infinitely long list in something like the following format "aardvark eating: permissible; aardvark torture: impermissible; abortion: permissible; accounting tricks: impermissible; adultery: permissible"
136 Prinz (2007), pp. 229-230.

ownership among family members than by others.¹³⁷ There will be myriad other cultural and environmental and historical factors that impact to how any proper object is to be realized by members of a particular community.

So, there is a single set of *Biological* moral facts for all human beings at the level of proper-object moral fact, but diverse realizing-object moral facts specify different actions for human beings living in different communities and otherwise inhabiting different circumstances. This *is* a sort of cultural relativism. One might momentarily worry that it is a troubling form of relativism, that is, a form that violates Discursive Objectivity. It is not. Discursive Objectivity inclines us to think all actions can be criticized by one standard, some single standard by which we can criticize the actions of anyone, anywhere, and in any region of history. The singular proper-object-based standard is such a standard. It is, the bio-enhanced constructivist holds, a standard built upon what matters most deeply to us, a suite of concerns programmed into our psychology.

In practice, people disagree a great deal about what the single standard comprises, and we are often convinced that the behaviors regarded as morally right within our own community, culture, or political affiliation actually constitute the standard. But part of ordinary moral practice is a debate about and inquiry into this single standard. It often leads us to see that behind our differences there lies something more important, and that both of us are right in a way, or that when we disagree about an action one of us has correctly identified its ability to promote one thing that matters deeply, while another has correctly identified its likelihood of

¹³⁷ A Salique law is one that it denies women the right of inheritance. "The name of a code of laws so called from the Salians, a people of Germany, who settled in Gaul under their king Phararaond. [...]No part of the salique land passes to females. [...] This rule has ever excluded females from the throne of France" (Bouvier, 1856).

obstructing something else that matters deeply.¹³⁸ So, the picture provided by Bio-Enhanced Constructivism fits with Discursive Objectivity, and with our ordinary modes of debate and inquiry about what is right more generally.

3.6 Conclusion

In Chapter Two I showed that the bio-enhanced constructivist has good reasons for accepting the HNT, which, along with a few truisms about human psychology, leads the bio-enhanced constructivist to conclude that Moral Constructivism is the appropriate view to take of moral facts. Here I have shown that Moral Constructivists – insofar as they prefer to give an account of everyday morality that does not require a revolution in our ordinary moral behaviors – should adopt a Dispositional account of the construction of moral facts. I have shown that Bio-Enhanced Constructivism offers this sort of account, and that the account it offers has the further advantage of reflecting the facts about Moral Human Behavior.

¹³⁸ For instance, it seems that the traditional "left/right" political divide in the United States depends to some degree on attending to different fundamental moral inclinations. See Graham, Haidt, and Nosek (2009). From their abstract: "The authors developed several ways to measure people's use of 5 sets of moral intuitions: Harm/care, Fairness/reciprocity, Ingroup/loyalty, Authority/ respect, and Purity/sanctity. Across 4 studies using multiple methods, liberals consistently showed greater endorsement and use of the Harm/care and Fairness/reciprocity foundations compared to the other 3 foundations, whereas conservatives endorsed and used the 5 foundations more equally."

Chapter 4: Objections and Replies

Many moral philosophers have misgivings about Bio-Enhanced Constructivism, or would if they were aware of the view. As I mentioned in the introduction, these misgivings can be loosely grouped into three categories. One category involves the claim that Bio-Enhanced Constructivism lacks some key feature of morality. Another involves a healthy skepticism about whether the proposed moral desires add up to a potent enough element of human behavior to generate the sort of importance we tend to think morality possesses. And the last concerns misgivings from normative ethics, insisting that the satisfaction of our moral desires diverges from the known moral facts. The purpose of this chapter is to address these misgivings by considering a series of objections and explaining how the bio-enhanced constructivist can reply.

As I noted in the introduction, the aim of the bio-enhanced constructivist is only concerned to show that bio-enhanced moral facts exist, that they capture the vast majority of concerns at play in Moral Human Behavior, and that they deserve to be taken as seriously as we ordinarily think morality should be taken. So the bio-enhanced constructivist does not always care to show that her objector's core proposal – the proposal that bio-enhanced morality lacks some feature, involves a weak human element, or conflicts with some traditional normative belief – is false. Rather, she feels pressed to show that whatever its shortcomings in the minds of dissenting philosophers, Bio-Enhanced Constructivism stands up as an account of morality that captures the deep importance it has for us and justifies our according this importance.

4.1 Key Feature Objections

A key feature objection claims that a successful account of the moral facts must supply some key feature, and that Bio-Enhanced Constructivism, because it lacks this feature, is not a successful or adequate account. Part of what is thought to make these features necessary is their ability to explain why moral facts deserve to be taken seriously. The objections I consider here are the claim that Bio-Enhanced Constructivism omits altruism in favor of selfish hedonism, that it is objectionably relativistic rather than universal, that it is escapable rather than inescapable, and that it provides explanatory reasons but not justifying reasons.

Morality is Altruistic, But Bio-Enhanced Morality is Driven By Selfish Pleasures

The first objection begins with a common enough thought about morality, one that even Kant might have had: we cannot act morally by doing things simply because they please us.¹³⁹ A morally serious philosopher might be tempted to press further and say that an action, even a beneficent one, that is done because of pleasure cannot be moral because it is selfish rather than altruistic. This objector will go on to say that Bio-Enhanced Constructivism does not capture morality because Bio-Enhanced Constructivism implies that we only perform moral actions because they pleases us – that is, because they cause positive affect or eliminate negative affect.

Part of what is at issue here is whether morality is necessarily altruistic. Without entering the debate surrounding the definition of altruism, let me note that some people will doubt an action can be altruistic if it is taken because it pleases the agent and he would not perform it

¹³⁹ Kant makes a point like this in the *Groundwork* where he insists that a person who performs beneficent actions merely from inclination does not exhibit true moral worth while a curmudgeon, affectively indifferent to the needs of others, would exhibit such worth if he performed the same actions as a result of recognizing a duty to perform them.

otherwise.¹⁴⁰ The bio-enhanced constructivist does not care to avoid the claim that behaviors rooted in moral desires fail to seem altruistic under any conception of altruism that implies precisely this doubt. She does think behaviors that please an agent and that would not be performed otherwise can be moral.

To be clear, she thinks behaviors performed from peculiarly moral desires, including the actions prescribed by the moral facts as identified by her view, fail to be altruistic under this conception. Bio-Enhanced moral desires are motivational pushes and products of physiological mechanisms. The inquiry into Moral Human Behavior indicates that the relevant mechanisms involve affect, that they operate by way of pleasures and pains.¹⁴¹ Bio-enhanced moral actions just are actions that satisfy moral desires. The role of affect in hardwired moral desires is thus such that moral actions produce pleasure and failing to satisfy them causes pain.

I am not convinced that this warrants any intuitive black mark against Bio-Enhanced Constructivism, and certainly not against Bio-Enhanced Constructivism in particular. For one thing, it is less intuitive to think moral actions must be taken dispassionately than to think a morally good person must be the kind of person who feels good about acting morally. On the former view, the moral person does not care for being moral, but nevertheless is for some other mysteriously efficacious reason. On the latter view, the moral person is emotionally invested in doing what is right and her own emotional well-being is entangled in it.¹⁴² Furthermore, it is plausible to think action requires motivation and that motivation requires some expectation of positive affect. If this is right, moral action must have an upstream affect-related cause. If it is false, it is not clear, from the standpoint of descriptive behavioral psychology, why moral actions

¹⁴⁰ For a discussion of 'altruism', and its meaning in philosophical and biological contexts, see Batson (1991), Wilson and Dugatkin (1992), and Sober and Wilson (1998).

¹⁴¹ See above, chapter two.

¹⁴² This seems to be the reason Plato ultimately offers in the Republic to the 'why be moral' (or just) question.

occur, and the objector owes us a story about this.

It is also important to note here the difference between the roles in moral activity that the bio-enhanced constructivist ascribes to pleasure and those she ascribes to another's welfare. Pleasure – or, more properly speaking, prospective pleasure – is an upstream motivational cause of action. Another's well-being, on the other hand, is the concern of a moral desire.

When the bio-enhanced constructivist grants that a morally good agent is acting because of pleasure, she is *not* saying either of the following two things. First, she is not saying the agent thereby acts for his own benefit rather than for another's. The evidence for HNT indicates that our affect systems have come to respond directly to the well-being of others. An action can thus promote the well-being of another, undermine the well-being of the agent, and yet please the agent. Many pleasant actions harm one's well-being, and many painful ones benefit us. A momentary pleasure felt in response to performing some costly action does not render it beneficial for the performer. The hero might feel a warm burst of pride as she gathers up a stranger's child from the path of an oncoming train, but now she too is in imminent mortal danger, and to go from not being in this sort of danger to being in it is to experience a stark decrease in well-being, however nice it might feel. The bio-enhanced constructivist *does* think moral desires often prompt us to help others at a cost to our own well-being. This sort of behavior could be called altruistic without drawing stares.

Second, to say an agent is acting because of pleasure is not to say that the agent's considered reason for acting is pleasure. The fact that taking an action would be pleasing might alert an agent to the possibility of performing the action and motivate her to perform it. But that does not mean she does not adduce other reasons than pleasure under which she takes the action.

In many cases the agent does not even recognize the motivating role prospective pleasure plays in her deliberations. The psychologically normal agent will associate a certain amount of gratification with moral activity, and this itself will direct normal agents to believe that moral activity is "good" or even "good in itself." When an agent contemplates, say, driving her aged neighbor to church, she can simply direct her mind to doing the thing thus conceived, helping the elderly, and see it as something good, or to-be-done, without performing the kind of hedonic calculation that might give a morally serious philosopher pause.

Bio-Enhanced Constructivism is Objectionably Relativistic

Moral Constructivism claims the advantage over Moral Realism that it can better and more readily explain how we know the moral facts and how they motivate us. It has this explanatory power in virtue of holding that the moral facts depend on judgments we do make, or would in certain conditions, since our judgments are supposed to have motivational potency and knowability. A great worry for Traditional Moral Constructivism is that this explanatory advantage must be purchased at the steep price of accepting moral relativism: different people, especially those reared in different cultures, make different judgments about moral matters, so Moral Constructivism seems to imply that they are governed by different moral facts.

The bio-enhanced constructivist claims to avoid relativism because on her view a judgment determines a moral fact only when it correctly identifies what will satisfy some hardwired moral desire possessed by psychologically normal human beings. Her view thus retains the explanatory advantages of constructivism while apparently avoiding moral relativism because it anchors moral facts in fixed points of human nature and of human psychology in

particular.

A certain objection, however, contends that Bio-Enhanced Constructivism cannot avoid a problematic sort of cultural relativism that emerges in a peculiar way. For certain cultures might be thought to use such different ways of thinking to engage the world that they can arrive at different correct judgments – judgments that are mutually incompatible and yet equally correct – about how to satisfy the same hardwired moral desire.¹⁴³ If this is true, the objection runs, the bio-enhanced constructivist must admit that each group is governed by its own moral facts and that a problematic sort of cultural relativism persists. Since true morality is not objectionably relativistic, the objector contends, Bio-Enhanced Constructivism fails as an account of morality.

In order to offer a clearer picture of what the objection is, I should note a couple of things it is not. First, it is not the untroublesome proposal that Bio-Enhanced Constructivism allows certain actions to be right for some people or cultures and wrong for others because differences of external circumstance require different actions for the satisfaction of a particular moral desire. For instance, there may be a moral desire whose central concern is to keep the family stable over time. As I discuss above, it appears that in one sort of circumstance polyandrous family structures are more stable while in another monogamous structures are. If so, an informed and reasonable person in the first sort of circumstance could agree that it is right for her to have nine husbands while it is also right for another woman to be limited to one in that woman's circumstance. This reasonable person would also recognize that if she were to change location, morality may well require her to give up her dreams of many handsome husbands and settle instead for a measly one. Here there are not different moral facts for different people in the sense

¹⁴³ I owe the pleasure of considering this objection Cameron Evans. His worry is that people embedded in different 'forms of life' – in Wittgenstein's sense – could arrive thereby at different, incompatible, and true judgments about what satisfies a moral desire. See Wittgenstein (2009), §§ 23, 206, and 241-242.

that wherever they go, their own set of facts will follow them. On this proposal, which the Bio-Enhanced Constructivist welcomes, there is only one set of proper-object moral facts for all people, and these facts dictate that people behave one way in one circumstance, another way in another. If it is right to call this moral relativism, it is not a form of moral relativism that anyone should find problematic.

The present objection is also not the claim that Bio-Enhanced Constructivism is objectionably relativistic simply because some cultures have certain entrenched beliefs that force them to make judgments about how to satisfy a moral desire that differ from the judgments made by cultures that have different beliefs. Consider the difference between my judgment about throwing a spear at some innocent person's head, and the judgment of the same activity that is made by a Sumbanese man during the Pasola.

The Pasola is an annual ritual whereby Sumbanese tribes attempt to increase agricultural yields by spilling blood onto the earth, believing the spillage to appease ancestral spirits whom they believe control the success of their harvests. One requisite method of spilling blood is for two clans who bear each other no especial ill-will to send trained ritual warriors riding against each other on horseback, hurtling spears. Tradition dictates the spears be blunt, perhaps as a measure to limit their danger. But while it is typical for someone to be hit and not killed, the blunt spears are on occasion still deadly. And while death is foreseen as a possible consequence – most Pasolas produce a death or three – the intended consequence of a spear throw might be charitably regarded as only to spill a few spoonfuls blood. I say "charitably" because the Sumbanese tend to think Pasola deaths portend a good harvest, and more deaths a better one than fewer. And enjoying as they do the prospect of famine averted, Pasola deaths are not something

Sumbanese warriors are entirely keen to avoid.¹⁴⁴

Bio-Enhanced Constructivism assumes that the Sumbanese man who believes it permissible to throw a potentially deadly spear at someone's head during the Pasola and I who believe it is not share the same hardwired moral desires. Presumably among them are desires whose satisfaction depends on actions that ensure, or at least don't interfere with, the ability of people's agricultural projects to provide sustenance. But the Sumbanese man has culturally entrenched beliefs, ones he perhaps cannot forgo, leading him to think of a certain kind of spear throwing as such an action, while I have other beliefs, and perhaps cannot forgo them, leading me to think this is false. Our disagreement, even if it is inescapable, does not give rise to any problematic sort of relativism under the assumption of Bio-Enhanced Constructivism. One of us is simply wrong about the impact of Pasola bloodletting on the Sumbanese people's harvest. We are not both able to perform an evaluation that determines a moral fact here because one of us is prevented by his false beliefs from identifying the action that satisfies his desire. This does not qualify as relativism; one of us is simply barred from knowing a particular moral fact because certain false beliefs are culturally entrenched in him.

If the present objection is not trying to say that the bio-enhanced constructivist's moral facts require different actions in different external circumstances nor that different ones arise from a mere difference of culturally entrenched beliefs, what is it trying to say? This: different ways of thinking – as opposed to mere differences of belief – can lead to different and incompatible but nevertheless correct judgments about how to satisfy a moral desire.

It can be difficult to get a handle on what the objector means by 'different ways of thinking'. However, there are a couple of helpful things to note about how the objector arrives at $\overline{144 \text{ Vice (2013).}}$

his proposal. First, he believes, contentiously, that different cultures can have incommensurate ways of conceiving of the world and that it need not be the case when their conceptions diverge that either of them is getting it wrong. Rather, these conceptions might simply be different but equally successful approaches to the same thing: representing the world with concepts. Here an analogy can be made to pictorial representation. One artist might depict a grasshopper by making brush strokes on canvas while another might do this by taking a snapshot with her camera-phone. Just as both artists could have accurate but very different representations of the grasshopper, so too, the objector believes, two different cultures can have radically different ways of thinking about the world that are equally good at capturing it.

Second, the objector believes that these different conceptions could have different implications for what satisfies a particular moral desire. That is, he thinks a moral judgment in favor of some action could be correct according to reasoning applied from within one culture's world conception while it could be incorrect according to reasoning applied from within the other's conception. Furthermore, one culture's conception of the world would prevent its members from seeing how, say, a particular action satisfies a moral desire for the other culture, so they could not recognize how the relevant moral fact governs the other culture. This is in contrast to differences of correct judgment that merely depend on differences of external circumstance, which are not in principle incomprehensible across circumstances. Of course, there will not be a straightforward case of disagreement of the sort where individuals of the two cultures rationally assess and reject one another's reasoning. It is assumed that they do not and cannot really understand each others' judgments. By assumption, neither is in any position to understand, nor therefore to reasonably reject, the other's reasoning. What disagreement there is amounts to this: a correct judgment by the lights of one culture prescribes an action the performance of which amounts, by the lights of the other, to an action that is judged to be prohibited or not prescribed. If both judgments really are correct, as the objector proposes, some moral facts would seem to differ, then, for the two cultures.

Nevertheless, this proposed relativism should not trouble the bio-enhanced constructivist. For one thing, the bio-enhanced constructivist has every right to deny there is sufficient evidence to conclude that any two cultures could have such intractably different conceptions of the world that they could not reconcile them and understand each others' moral judgments. If that is so, there cannot be two cultures whose moral judgments are mutually incompatible and simultaneously true by their own lights. Philosophically unexciting though it may be, there is nothing much implausible in this denial. Human beings show a great facility for eventually making sense of one another. We are able to learn each others' languages and customs, just as representational artists often learn each others' modes of depiction, even though they embody different conventions about how to represent the world. Furthermore, it seems unlikely that the objector could point to any uncontroversial case where two cultures both have conceptions of the world that represent it with equal success, that imply that different actions are required by a particular moral desire, and for which these implications are both based on true beliefs.

Imagine, though, that the sort of case the objector raises does exist, or somehow could. The bio-enhanced constructivist does not have to deny this in order to dispose of the objection. The "relativism" that the objector poses is no more problematic than the case of differences based on external circumstance discussed above; it is simply another case of circumstantial differences in the application of a proper-object moral fact. What is important for the present worry about cultural moral relativism is whether cultural incommensurability and Bio-Enhanced Constructivism together imply that there are culturally contingent moral facts that are not simply facts about how to achieve the prescriptions of more general moral facts in culture-specific circumstances. If there are such facts, there are culture-relative moral facts that do not specify the culture-specific achievement of some state of affairs required for everyone. This is problematic relativism: it implies that there are unrelated sets of moral facts for different cultures. On the other hand, if there are no such facts, then any moral facts relative to cultural features amount to nothing more than further instructions for culture-specific achievements of states of affairs that are morally required for everyone. This is unproblematic relativism: it implies that one set of moral facts governs in all circumstances but that circumstantial differences, including cultural ones, make a difference to what is required for abiding by those moral facts.

Bio-enhanced Constructivism proposes a single group of general moral facts that governs all human beings in all circumstances. These are the proper-object moral facts discussed above. They prescribe the realization of multiply realizable states of affairs that psychologically normal human beings seek to realize regardless of circumstance. In addition to these, the view also proposes realizing-object moral facts, contingent moral facts about how proper objects are realized in the various circumstances that affect their realization.

On the objector's proposal, two cultures produce different but true judgments about how to satisfy the same moral desire. Their judgments thus correspond to the same proper-object moral fact. The best way to understand these judgments is as two judgments about how to bring about the same proper object under different culturally contingent conditions. In this case, the relevant contingencies are the cultures' conceptions of the world. If both judgments really are true, incommensurable, and in the service of the same moral desire, they must be judgments about how to realize the proper object given that one has one culture's conception of the world or the other's. This is no more problematic than the case where external circumstances differ. What makes it different is that it proposes a difference of *internal* circumstance, one we suppose people of the two cultures cannot help but carry around with them. This makes the relativism more peculiar to individuals than relativism of external circumstance, which is more peculiar to surroundings in which individuals find themselves. But this does not mean the individuals are ultimately governed by unrelated moral facts. Rather, they are governed by the same general moral facts, and they carry around with them a difference of internal circumstance that requires them to respond to the same moral fact in different ways, even when they find themselves in the same place or external situation. No doubt their finding themselves together could lead to moral confusion and even acrimony, but it would not be an instance of any problematic sort of moral relativism.

Bio-Enhanced Morality Is Escapable and Not Universal

Morally serious philosophers often agree that morality is universal: whatever class of agents it governs, it governs them all without exception. They also tend to agree that morality is not escapable: one cannot opt out of morality the way one might fold a hand of poker and mosey off to the bar. Or as Joyce says, moral facts "legitimately [apply] to a person irrespective of her ends."¹⁴⁵ The second and third objections to Bio-Enhanced Constructivism hold that bio-enhanced morality cannot be what most people mean by 'morality' because bio-enhanced

¹⁴⁵ Joyce (2007), p. 62.

morality is, on the one hand, not universal and, on the other, escapable. Because I diagnose both objections as proceeding from a single error, I treat them here together.

The objections are inspired by two of the elements that make up Bio-Enhanced Constructivism. One is its Humean view of moral reasons. There are many accounts of Humeanism about reasons, and different bio-enhanced constructivists are likely to disagree about which is right or best.¹⁴⁶ What they all must agree, though, is that insofar as one has a moral reason to do something, it is somehow because, or in virtue of the fact that, one has a desire whose satisfaction could be promoted by doing that. In describing our Humean moral reasons, the bio-enhanced constructivist implicates our moral desires: we have reasons to abide by the moral facts because we have moral desires whose satisfaction our abiding as such promotes. As discussed above, this view of morality yields a great advantage to Bio-Enhanced Constructivism, the ability to offer a relatively straightforward explanation of how the moral facts get a practical grip on us.

The second impetus for the objections is the bio-enhanced constructivist's belief that moral desires are present in only a subset of human beings, the psychologically normal ones. This is a proper subset: the kind of psychological normalcy at issue in morality is a kind that includes the possession of moral desires and sociopaths, at least, are not thus normal. Furthermore, just as physical health can become temporarily or even permanently compromised in those who have it, so too can psychological normalcy – which resides in a way in our physiology – become compromised. Consider, for instance, the lack of regard for others that is sometimes exhibited by people who have become emotionally hardened by poverty, drug

¹⁴⁶ For the devil-housing details of Humean views of reasons, see Schroeder (2007). Schroeder distinguishes his own Humeanism from many related views, including Brandt (1979), Smith (1994), and Williams (1981).

addiction, active military service, or the rigors of academia.

Now it should be easy to see how the objections arise. The universality objection charges that bio-enhanced morality is not really morality because morality governs, at bare minimum, all relatively intelligent adult human beings. It supports its charge as follows. Some of the not normal, such as the charming Ted Bundy, clearly lack moral desires, so they cannot have bioenhanced moral reasons. Lacking these reasons, they are not governed by bio-enhanced morality. Since they fall beyond its pale, it is not universal.

The escapability objection requires a bit more motivation. It holds that Bio-Enhanced Constructivism allows that people could opt out of or escape morality, if they wanted to, by affecting their own brains in a way that eliminates the influence of their moral desires.

The scenario this objector envisions is plausible for three reasons. First, there is good reason to suspect that moral desires can be "turned off." Empirical evidence suggests that women under the influence of heroin lose their peculiarly moral maternal desires: they stop caring about the well-being of their own children.¹⁴⁷ The same neurophysiology that regulates maternal desires is likely to regulate hardwired moral desires more generally. There is also plenty of anecdotal evidence, if anecdotes are ever evidence, of a more general lack of moral concern among heroin addicts, which further suggests that a drug like heroin could be used to undermine the motivational power of moral desires in general.

So, it is reasonable to think someone could use heroin or a similar drug to turn off his moral desires.

Second, it is plausible to think certain people would like to be fugitives from their moral desires. To have moral desires is, among other things, to feel bad when they are not satisfied.

¹⁴⁷ Keverne (2004), mentioned in Churchland (2011), p. 34.

Sometimes bad feelings, such as guilt or pity, prevent us from enjoying, say, the riches we have gained through violence or exploitation. It is not hard – for the more imaginative among us, at any rate – to imagine a captain of agro-business who would like to be more ruthless and selfish, so that he can accumulate even more wealth and power, but who is persistently troubled by the pesky influence of moral concerns that prick him whenever he remembers he's endangering the world's food supply.

Finally, it seems possible that some drug or cocktail of drugs could be concocted, or some surgery designed, that silences moral desires at least as well as heroin does without having its less attractive effects, such as drowsiness. So, the objector can press, Bio-Enhanced Constructivism is open to the possibility of people escaping their moral desires and their moral reasons thereby. Since morality is not something one can opt out of, and surely not in order to facilitate one's violent activities or selfish plans, Bio-Enhanced Constructivism must be false.

Both objections fail because the bio-enhanced constructivist is not committed to the view that a person must have a Humean moral reason in order to be governed by the moral facts.

The bio-enhanced constructivist does not think moral desires are always active – that is, motivationally efficacious – even in psychologically normal people. She believes that when moral desires are active they are active because physiological systems cause them to be. It is conceivable that these systems could maintain certain of our moral desires in a state of constant activity, but experience suggests that many of them are active only in response to particular stimuli and fail to be when the stimuli go absent, unnoticed, or forgotten. For it is evident that we occasionally experience a softly murmuring want to help distant victims of famine as a result of seeing, say, a starving child on television, but we do not spend every moment of life worried

by the desire to help everyone in imminent danger everywhere.

While the bio-enhanced constructivist need not think that even a psychologically normal person, if the normal one has momentarily forgotten the victims of distant famine, has an active desire nor a Humean reason to help them, it might make sense to say the desire is latent in him. For sometimes we have but to show the picture of the toddler with distended belly and flies on face in order to stimulate the desire. Nevertheless, latent desires don't motivate, so the bio-enhanced constructivist does not think the forgetful person really has an active moral desire or a present Humean moral reason. Still, she does not think he is momentarily beyond the governance of the moral fact that he should help. For she thinks moral governance can be in place even though its subject lacks the sort of reason she thinks it most proper to call 'moral'. And in the same way that moral governance will rule over the forgetful normal person, so too will it rule over the moral fugitive and the psychopath.

Being governed by morality does not require the person so governed to be at the same time motivated by a corresponding desire nor even to have at the same time a properly moral reason to do what the governance requires. The bio-enhanced constructivist uses the fact that psychologically normal people have moral desires to explain why moral facts tend to get a grip on us when we deliberate and discuss what to do. The fact that psychologically normal people have moral desires explains why moral facts have motivational efficacy when they do. And indeed, present motivation from active desires is one way the moral facts govern us. But this does not mean that all moral governance must be explained by the moral desires of those who are governed.

Keeping to her naturalistic approach to moral inquiry, the bio-enhanced constructivist can

view moral governance in very concrete terms, and in a way that reflects actual political governance. Being actually governed does not require that the governed party wish to do whatever the governing party demands. What it does require is a governing power with means to press its will on the governed, whether this power is internal or external to the governed party. In actual political governance some laws bid us do things that many of us usually prefer to do, such as wear our seat-belts or abstain from driving in states of drunkenness. In many cases, what keeps us in line is our own self-regarding desire for safety. In such cases our very desires belong to the enforcement arm of the governing power. The state might even actively seek to co-opt our desires through information campaigns that makes us fear driving drunk or unbelted. But sometimes, as when we are extremely drunk and have places to go, we can lose our desire for safety or fail to appreciate the danger. And some people are incorrigibly resistant to the law or, indeed, to sobriety. Outside pressures nevertheless try to make everyone tow the line: friends ask for the driver's keys, the local PD sets up a roadblock. In such cases we are governed by external forces. The bio-enhanced constructivist is free to insist, and this is plausible, that a naturalistic morality likewise uses external forces to govern its subjects.

It is important to keep in mind that Bio-Enhanced Constructivism does not attach to the moral facts any special normativity through which the moral facts govern us regardless of whether we are capable of caring about the moral facts or not.¹⁴⁸ Rather, the bio-enhanced constructivist holds that moral facts govern us by natural causal forces. When the agent has a proper Humean moral reason to do what the moral facts require, it is because her active moral desire pushes her toward doing that. When she has no such reason, and no motivation to bring it

¹⁴⁸ The reader who worries that the absence of this special normativity is grounds for another objection need not be patient; that is the next topic of discussion.

about, she can only be governed by the moral facts if some external force pushes her toward them.

What might these forces be? What properly *moral* power could press its will on the selfish person who turns off his moral desires? It would be natural for the bio-enhanced constructivist to say that this power consists of the moral desires of human beings in general. When some of us act up, morally speaking, others remain under the influence of their own active moral desires and therefore are motivated to pressure us to behave in ways that satisfy those desires. If normal people have a moral desire to prevent human suffering, it is reasonable to expect them to both exhibit patterns of behavior and create institutions that make it difficult for others to cause human suffering. In this way morality quite literally – in a robust and often physically forceful way, in a police-like way – *governs* everyone, including the normal person who forgets and the psychopath who has no interest. When this external force governs us and our own internal pro-moral forces do not, the bio-enhanced constructivist can accept that we do not *have* reasons of the most moral sort. However, she need not say that we are thereby not *governed* by moral reasons, for we are governed by the moral reasons of others.

Bio-Enhanced Constructivism Provides Explanatory But Not Justifying Reasons

There is a lot of description in the bio-enhanced constructivist's discussion of morality and one of her most pressing aims is to save the phenomena of moral behavior. Accordingly, she has something to say about what causes our interest in the concerns we call 'moral', and something to say about what causes us to sometimes pursue the course of action mapped out by the moral facts. But, contends the eighth objector, her view only *explains* why we behave morally; it does not also *justify* our caring about moral considerations or our pursuit of the moral course. And this is born out, the objector says, by something that is noted above: bio-enhanced morality is not normative in the sense that it would governs us whether we cared about its moral facts or not.

This objection might depend on an intractable disagreement between the bio-enhanced constructivist and the objector about what can constitute moral justification. As a Humean about moral reasons, the bio-enhanced constructivist believes we are justified in taking whatever actions satisfy our moral desires. On her view, if an act satisfies a desire, we have reason to perform it, and because we have that reason, performing it is to some degree justified.

The objector might deny Humeanism about moral reasons, or deny that Humean reasons can justify anything. If he offers an alternative picture of justification on which reasons have prescriptive force without our being able to be aware of them, or on which we can see them as reasons without being motivated by them, the bio-enhanced constructivist is likely to reject this picture as a useful for understanding actual moral practice. As I point out in chapter three, she has no use for moral reasons whose normativity is spooky, or lacking in deliberative salience. So, if the objector accuses the bio-enhanced constructivist of not providing such reasons, she will agree; she neither provides them nor intends to, and she argues nobody is likely to do so in a way that advances the naturally serious moral project. Should the objector somehow convince her that such reasons are nevertheless required for rational justification, she will concede that her view offers no rational justification for moral actions but also claim that rational justification so understood is probably not a part of ordinary moral behavior, or any of our actions, after all.

If the objector denies Humeanism about reasons, he and the bio-enhanced constructivist

will remain in stalemate until the debate about reasons can be settled once and for all. But the objector might grant that Humean reasons can justify action and press a different justification challenge, that the bio-enhanced constructivist cannot on her own terms justify being generally moral rather than amoral or immoral. For it might seem an open question whether we should do what our moral desires incline us to do.

The challenge here is: why be moral, if bio-enhanced constructivism is true? Famously, not everyone thinks 'why be moral?' is a meaningful question.¹⁴⁹ If not, the bio-enhanced constructivist need not answer it and this version of the objection is nonsense. I have trouble seeing how it could fail to be meaningful, and how it could fail to be important. Fortunately for me, the bio-enhanced constructivist does have something to say. In fact, she can argue that bio-enhanced morality is self-justifying, which perhaps explains both why it seems unjustified to some and why the request for justification seems meaningless to others. For the conjunction of Humeanism about reasons with the claim that certain desires are hardwired hardens into a rational foundation, a bedrock of indefeasible reasons.

The claim is that on Bio-Enhanced Constructivism the project of morality is selfjustifying. To see how a project can justify itself, it helps to consider one that does not. If a project involves Humean reasons that do not proceed from hardwired desires, it is not selfjustifying. We can criticize and reject such a project because it is psychologically possible for us to reject the desires it aims to satisfy.

Consider the project of eating trans fats. In the 1980s one might have cultivated a desire to eat margarine rather than butter because one had learned that margarine did not contain the saturated fats then considered the most dangerous lipid enemies of the heart. One would thus

¹⁴⁹ Melden (1984) insists "the question is, appearances to the contrary notwithstanding, impossible" (p. 449).

have had a reason – given what one then knew and one's desire for health – to eat margarine rather than butter. Of course, in observance of the mysterious natural law that thwarts all human attempts to improve our wellbeing through science, our best evidence now indicates that trans fats are worse for our hearts than saturated fats.¹⁵⁰ In considering whether one should eat trans fats, one can nowadays rightly question the desire for trans fats itself – it was in the service of a desire for health, after all – and recognize it should be abandoned. Once one recognizes this, one meets no recalcitrant lingering desire to eat trans fats. One can thus completely undermine one's reasons for eating trans fats because the acquired desire it responds to – the desire to eat trans fats – can be rationally defeated by updated beliefs about cardiac health along with one's desire to be healthy.

Contrast this with the project of eating fats at all, which is, on the present account, selfjustifying. The desire for fatty foods is surely hardwired, so gustatorily normal people have Humean reasons to consume lipids. Now, one is entirely free to *question* the general project of eating fats, and the desire for fats. Indeed, if one were to conclude that eating fats is somehow generally bad, one could even cultivate a desire to avoid eating any fats, generating a corresponding Humean reason not to eat them. But one would not thereby lose one's desire to eat fats. Insofar as it is hardwired, it is recalcitrant and immune to criticism; it does not bow to mere reason. We can try to ignore or fight it, or strive to avoid the sizzling smells that deliciously stimulate it, but we are stuck with this desire and it continues to provide us with a reason to eat bacon even when we recognize contrary reasons. To say that a project is selfjustifying, then, is to say that it enjoys support from a desire that will never go away.

¹⁵⁰ The regularity that thwarts scientific self-improvement is most fully discussed in Flaubert (1881). Some of the peculiarly modern difficulties that the medical side of this project faces are highlighted by Ioannidis (2005).

One might wonder why the cultivated desire to not eat fats, and its corresponding reason, can't simply defeat the hardwired desire for fats, and its reason, once and for all. There is a sense in which they can. A person might give more weight to acquired reasons and choose to do what they, rather than what reasons issuing from the hardwired desire, prescribe. But what the cultivated reason cannot do is eliminate the reason-giving force provided by the hardwired desire. The acquisition of a new desire does not make the hardwired desire go away. Nor is there any meaningful sense in which the former silences the latter, which raises its voice wherever meats are roasting.

Now back to the objector. The Humean regards projects such as morality, which serve recalcitrant hardwired desires, as self-justifying. Moral desires abide, so does a degree of justification, thus the moral project remains justified. If the objector's claim is that the bio-enhanced constructivist must offer a story about our justification for being moral, the story has now been offered: bio-enhanced morality is self-justifying.

Of course, the objector may well continue to press his point. He might grant that desires give us reason to perform moral actions, and that the hardwired nature of moral desires makes morality self-justifying such that we always have some reason to be moral. Even so, he can insist that bio-enhanced morality lacks the overriding sort of justification philosophers have traditionally believed morality to have. To bolster his case, the objector can point out that in addition to moral desires, the bio-enhanced constructivist ought to think we have equally hardwired selfish desires and, accordingly, a self-justifying project of self-centered behaviors. The two projects often conflict and the bio-enhanced constructivist has said nothing to show that reasons issuing from our moral desires must outweigh reasons issuing from our selfish desires.

The bio-enhanced constructivist is not interested in answering this form of the objection. She is happy to establish the existence of moral facts that broadly correspond to our intuitions. She is happy to show that we have moral reasons to abide by these facts, and that we are governed by them in a non-trivial way. But she does not aspire to establish that an individual person's moral reasons must defeat his selfish or non-moral reasons.

This might be thought a rather damning concession. However, from the claim that a particular individual might have stronger selfish reasons to not act morally than he has moral reasons to act morally, it does not follow that he has stronger reasons in sum to not act morally. Recall the picture of moral governance I provide above. Its upshot is that while moral reasons do not have any special trumping power of their own – they exist alongside whatever other reasons we have, whether these derive from selfish hardwired desires or from acquired desires – it is usually the case that the full package of reasons for acting morally outweighs the reasons for acting immorally. For we usually have selfish reasons to act morally, in order to maintain the goodwill of others. Of course, there will be cases where a person knows with nearly Cartesian certainty that he can get away with some selfish immoral act, and in these cases the bio-enhanced constructivist grants that he could have greater reason to act selfishly than morally. But, she maintains, such cases are relatively rare and, she sadly admits, morality is not the normative panacea we morally serious philosophers wish it were.

4.2 Inadequate Power Objections

The second sort of objection to Bio-Enhanced Constructivism directly targets its ability to justify moral seriousness. The bio-enhanced constructivist believes we should take morality

seriously because our hardwired moral desires supply us with reasons to care about the moral facts. These desires proceed from physiological mechanisms that motivate us, or make us care. However, these are not the only causes of our caring about things, nor are moral facts the only things we care about. As noted, we have similarly hardwired selfish desires and socially inculcated desires for things for which we lack hardwired desires. Inadequate power objections argue that the mechanisms for moral care described by Bio-Enhanced Constructivism are inadequate to make us take morality as seriously as we are supposed to take it. The objections I consider here hold that the mechanisms of moral desire are simply too weak to account for morality's supposed importance and that our hardwired desires are likely to be overridden or overwritten by socially inculcated moral desires.

Peculiarly Moral Desires Are Too Weak or Too Rarely Active to Explain Morality

In *La Comédie Humaine*, Balzac takes great pains to capture the starkly self-serving and downright abusive nature of ordinary human behavior. He makes his point as plainly in the following passage as anywhere:

Any sufferer in mind or body, any helpless or poor man, is a pariah. He had better remain in his solitude; if he crosses the boundary-line, he will find winter everywhere; he will find freezing cold in other men's looks, manners, words, and hearts; and lucky indeed is he if he does not receive an insult where he expected that sympathy would be expended upon him. Let the dying keep to their bed of of neglect, and age sit lonely by its fireside. Portionless maids, freeze and burn in your solitary attics. If the world tolerates misery of any kind, it is to turn it to account for its own purposes, to make some use of it, saddle and bridle it, put a bit in its mouth, ride it about, and get some fun out of it.¹⁵¹

Balzac is exaggerating for effect, a little, but everyone is familiar with scenes like the ones he paints. Indeed, the indifference of human beings to the suffering of their fellows is so common that one of psychology's classic cases – the cases discussed so often they can't be characterized without controversy – is the murder of Kitty Genovese who was stabbed to death, screaming while 38 witnesses failed to intervene.¹⁵² There are other far more disturbing facts about human beings, such as the several known instances where large groups of people from one country or ethnic group have attempted genocide or perpetrated mass-murder and other queasy acts of violence against people from another country or another ethnic group. There is video footage from the Rwandan genocide, for instance, where men walk corpse-littered streets nonchalantly fondling machetes, searching for barely living human beings, and intending to eliminate them exactly as one might survey the kitchen floor for a fugitive half-stomped cockroach.¹⁵³

Other more ordinary human behaviors are less disturbing, but still demonstrate a massive lack of mutual human concern. For instance, many people prefer forms of government that protect and foster the wealth of those who have it over forms of government that ensure a minimally decent standard of well-being for those who do not. And people who live in cities seem in general more likely to keep the stray coins littering our pockets than to hand them to the panhandler who, whatever else seems true of him, obviously needs them more.

It would be silly to think most of these instances of human beings doing violence to one

¹⁵¹ Balzac (1967).

¹⁵² The case is presented in Rosenthal (2012). The traditional interpretation of events – exhibited here in my statement of the case – is disputed in Manning, et al (2007).

¹⁵³ The footage can be seen in *Rising from Ashes*, a documentary about the development of professional cycling in Rwanda (Johnstone, 2012).

another, or being petty and selfish when they could easily help each other, are perpetrated by people who are not psychologically normal. What is far more plausible is that normal people are often intentionally and actively petty and selfish, and that if you rear a human being the "right" way or put him in the "right" circumstance, he will enthusiastically participate in the next round of ethnic cleansing.

There are several things an objector attuned to human-nature facts of these sorts might wish to say about how they undermine the power of the bio-enhanced constructivist's account of our hardwired moral desires for explaining morality. One is that if people are so terrible, we have good reason to doubt that human beings have hardwired moral desires at all. Of course, the bio-enhanced constructivist believes we do have such desires because she accepts the evidence discussed in chapter two, which displays physiological mechanisms that cause us to have moral desires. She can explain how these desires plausibly fit with the hideous facts of human behavior by appeal to the further fact that we are psychologically messy products of unintelligent "design."¹⁵⁴ A popular metaphor for thinking about the "design capabilities" of natural selection imaginatively reifies it as a sort of bricoleur, an unskilled but not entirely feckless handyman who pieces together as best he can a structure to do some job, using whatever parts happen to lie in reach.¹⁵⁵ Accordingly, our total suite of hardwired desires, the moral and the rest, are seen as put in place by a process, natural selection, that is not directly sensitive to their mutual satisfiability, but is simply tuning and reconfiguring the parts available to it - oxytocin and the affect system, say – to increase fitness a bit. The bio-enhanced constructivist can thus agree that normal human beings often act in ways that are petty, selfish, or violent, even though such

¹⁵⁴ Whether this fact itself – that we are not psychologically well designed – undermines Bio-Enhanced Constructivism is discussed in the following section.

¹⁵⁵ The evolution as bricoleur metaphor appears to originate with Jacob (1977).

actions conflict with their hardwired moral desires. The fact that we act this way does not mean we lack moral desires but only that our selfish desires are often more potent, that we are often too preoccupied with other things to attend to our moral desires, and that when we do attend to them we are often confused about what it takes to satisfy them.

A second thing the objector might be saying is that we might have some hardwired moral desires but not the extensive suite that relatively ambitious Bio-Enhanced Constructivism requires. The fact that normal people are usually petty and selfish and in some instances monstrous might be thought to show that we lack hardwired desires concerning other human beings in general, even if we do have such desires concerning, say, our families. Certainly the bio-enhanced constructivist's evidence for desires of the former kind is weaker than her evidence for the latter.¹⁵⁶ However, the present objector does not have much of a case for this claim. For one thing, experience shows that when we behave terribly toward non-relatives, we often encounter moral motivations. We sometimes feel a twinge of guilt as we walk unhelpfully away from the panhandler, recognizing his desperation and suffering for what it is. The guards from the concentration camp and the machete fondlers, after their wars are over and the throes of ideology have subsided, often have nightmares about their crimes.¹⁵⁷ On the other hand, it seems that human terribleness stings family members as readily as anyone. Parents and children, spouses and spouses, are petty and selfish toward each other on a regular basis. 'Domestic violence', 'child abuse', and 'elder neglect' do not, unfortunately, refer to phenomena that are rare

¹⁵⁶ See chapter two above.

¹⁵⁷ A particularly chilling instance of the effects of postwar guilt shows up in David Finkel's book recounting the after-effects of the Iraq War on U.S. soldiers. The following passages comes from the *post* war journals of U.S. infantryman Nic DeNinno, who took various actions that resulted in civilian deaths: "What the fuck is going on in my mind? Last night I was sitting in bed and looked across the room to a chair in my room and there was a young girl covered in blood. What happened after that I don't re-member [sic]. I was told a full scale panic attack. This is not the first time I have seen dead bodies. For awhile [sic] I used to find dead Iraqis floating in my bathtub. Why they were in the bathtub I will never know." Finkel (2013).

or even very unusual.

So human terribleness is not evidence against hardwired moral desires that concern human beings in general. There is yet a third thing the objector might be saying. It is that Bio-Enhanced Constructivism's plausibility is severely undermined because it holds that morality flows from certain psychological headwaters, a suite of moral desires, that the facts about human terribleness show to be such an insignificant trickle that they couldn't possibly cause us to care enough about morality to justify moral seriousness.

There are two things the bio-enhanced constructivist can say in response. First, this way of pressing the objection is prone to make the mistake of thinking that the bio-enhanced constructivist must find the totality of the force that makes morality matter to someone in the motivational potency of active moral desires typically "circulating" in that person. The bioenhanced constructivist recognizes that an individual's moral desires will often be too weak to explain why he takes morality seriously. But as I point out above, she has a further resource to explain morality's sway over us: the moral desires of others.¹⁵⁸ When we act too selfishly, our friends look askance at us. During genocides the world looks on with horror and although effective political intervention is unheard of, there is always a long history of shaming and condemnation. People go to jail after the fact, or someone executes or assassinates them. So even though any particular individual might not have any particularly strong feeling of moral motivation in a given moment, there will often be a great many others watching his actions or poised to learn about them. Some of these others will be spurred to stimulate the actor and other people to realize that there is a moral problem needing remediation, and to make the actor take seriously the matter of complying with the moral desires of society at large.

¹⁵⁸ I am referring to the discussion of moral governance.

The second thing that the bio-enhanced constructivist can say is that morality clearly is not and never has been the overriding force in human life that we morally serious philosophers hope to see it one day become. Morality does not exercise complete and stable control over us, not even over those who are especially conscientious. For one thing, it is based in just one suite of motivating factors among the many that animate human life. For another, our moral failures often escape the notice of ourselves and others such that we manage to victimize our fellows not only with relative impunity, but with a clear conscience. And sometimes there are striking and far-reaching breakdowns in morality. Often these are based in a deep and widespread misunderstanding about factors that are relevant to the satisfaction of our moral desires, such as the belief that some ethnic group is responsible for the downfall of the whole society. Mistakes such as these are almost always relatively local and temporary, and that should give nobody comfort.

Acquired Moral Desires Overshadow Hardwired Moral Desires

PMD says a desire is peculiarly moral just in case its central concern is to affect the welfare of a welfare-bearing entity other than and rather than the entity who possesses the desire. This is perfectly compatible with the possibility of human beings having acquired various moral desires through, say, social inculcation, which raises a worry. The bio-enhanced constructivist believes hardwired desires are the key protagonists in morality. But if some moral desires are hardwired and others socialized, then morality – qua project of satisfying moral desires – deals with a hodge-podge of competing, perhaps even intractably dissonant forces. And so hardwired moral desires might amount to only a few players among many, or even to an obsolete tract of

weedy nature that Society long ago paved over and now patrols lest some recalcitrant vine sneak through.¹⁵⁹

Before explaining why this worry poses no great danger to Bio-Enhanced Constructivism, there are two things to note. First, the bio-enhanced constructivist welcomes some acquired desires, and second, she is open to the possibility that mutually and completely satisfying even our hardwired moral desires is not entirely achievable.

On the first point, the bio-enhanced constructivist can welcome certain sorts of acquired moral desire because they are subordinate to hardwired desires. One sort comprises desires we have picked up in the process of satisfying hardwired desires. For instance, imagine we have a hardwired desire for our children to live long lives. Now, it would be extremely unlikely for us also to have a hardwired desire for them to be literate, since literacy is a relatively new development in evolutionary time. However, literacy appears to make a striking contribution to longevity.¹⁶⁰ So, we might develop a taste for cultivating literacy in our children, an acquired desire for them to be literate, since desire for them to live long and we recognize how literacy promotes this. This sort of acquired desire does not in any way overshadow or conflict with hardwired moral desires; it supplements them.

The bio-enhanced constructivist can also appreciate a second sort of acquired desire, one consisting of desires acquired by certain abnormal people, such as sociopaths, that mimic the hardwired moral desires of the psychologically normal. For instance, normals have a hardwired desire that sociopaths lack, to avoid causing pain to kittens. Through education and training it may be possible to make even the sociopath wish to avoid this. If there are acquired desires of

¹⁵⁹ It is certainly not implausible to suspect this is the case with some of our more violent desires. 160 Saha (2006).

this sort, the bio-enhanced constructivist profits on two counts. First, she gains something to say about the similarities and differences between the interior moral lives of sociopaths and those of normals. To wit, she can argue that morality operates through conative mechanisms in both cases, but in the normal case the mechanism is deep-seated, internal, and hard to alter, whereas in the sociopath case the mechanism is cultural, external, and extremely plastic. Second, the bio-enhanced constructivist could enrich her explanation of how morality governs those who never develop the hardwired mechanisms for moral desire: in many cases societies build technologies that install desires into the un-self-governed that mimic the moral desires hardwired into the rest of us.

Acquired desires thus pose no problem for Bio-Enhanced Constructivism merely on account of being acquired. Indeed, some of them kit the view out nicely. Simply pointing out that some moral desires are acquisitions does not raise a problem; the objector must further establish that they are not mere slaves to hardwired moral passions.

The second preliminary point is that the bio-enhanced constructivist is comfortable with the possibility of conflict among the concerns of our moral desires. We have seen that she is a biologically informed person who thinks we are psychologically messy beings metaphorically constructed by a metaphorical bricoleur from actual materials that are literally not ideal for the metaphorical job. This thought already suggests the possibility of conflict among our hardwired moral desires, a possibility that does not seem remote. We experience conflicts between moral desires that seem as likely as any to be hardwired. For instance, we desire for others not to experience pain and we desire to cause others pain in certain circumstances as a form of punishment. We also experience desires concerning the well-being of our mates and others concerning the well-being of our friends. These desires often conflict because mates and friends both might need all of the limited support we can share.

If hardwired moral desires were so convoluted that we could but rarely find a course of action that mutually satisfies them, this would be a mark against Bio-Enhanced Constructivism. The conflicts we do experience often make moral deliberation extremely confusing and difficult. Indeed, during deliberation we sometimes find each available action to be less than completely satisfying and, occasionally, we predict that each will leave a memento of regret. But such difficulties do not prevent us from leading broadly moral lives. Experience also indicates that we can strive to act in a way that respects our moral desires, even in difficult circumstances where we might find it necessary to favor some moral concerns at the expense of others. Finally, the bio-enhanced constructivist's view that moral life is at the service of competing desires is no more problematic than any deontological picture on which multiple independent moral principles rule our behavior, or any consequentialist picture on which we are beholden to competing claims for well-being from many different individuals at once.

In fact, there is reason to think conflicts between hardwired moral desires are limited in a way that the conflicts suggested by deontologists and consequentialists are not. Even if evolution "is" some bricoleur cobbling together what messy beings it can, if a particular hominin design does not "work out," if it is too messy, evolution will not "make" more of that model.¹⁶¹ Selective pressure places a hard limit on how much conflict there can be within individual human psychology. If the mental life of a person is so ridden by internal strife that she must spend a great deal of time and other resources fighting moral battles within, this will have a great fitness disadvantage. If morality is dependent on a set of biological factors, it is more plausible

¹⁶¹ Hominins are a group within the hominids that includes only species that are very closely related to us.

to suspect evolution has left us with a suite of desires commensurable enough to allow moral life to proceed somewhat smoothly than it is to suspect it has left us with a madding crowd of incompatible desires.

So the conflicts that the bio-enhanced constructivist expects to arise among hardwired moral desires do not endanger her view because we have every reason to suspect that these are conflicts we can literally live with. If all an objector has to offer against the bio-enhanced constructivist is that some acquired desires conflict with some hardwired desires, the objector will not have done enough to endanger the plausibility of the view. With that in mind, I can now isolate the proper objection: what would undermine Bio-Enhanced Constructivism is the identification of acquired moral desires that conflict in some especially deep way with our hardwired moral desires.

The depth of the conflict would have to be great enough to make Relatively Ambitious Bio-Enhanced Constructivism seem implausibly ambitious. Recall: it says reasoning about how to satisfy hardwired moral desires determines the great majority of both the moral facts that common moral intuitions track and those that motivate us. There are two conflict scenarios the present objector might try to establish in order to make this seem overambitious. I call one 'swamping'. Swamping would obtain if we had so many acquired moral desires that are not subordinate to hardwired ones, and if their agglomeration made such strong demands of our attention, that the acquired ones should swamp our attentional resources and leave our hardwired desires only a minor role in determining the moral facts. I call the other scenario 'totalizing'. It would obtain if we possessed acquired moral desires so contrary to our hardwired moral desires, and so much stronger than them, that these totalitarian desires drive us to beat a great many of our old-fashioned biological desires into submission.

With the real threat isolated, there are a couple of plausible things the bio-enhanced constructivist can say in her defense. First, insofar as we have reason to believe some parts of morality trace back to hardwired moral desires, we do not find these parts of morality swamped or totalized. Rather, much of our life is devoted to honoring them. Among the best candidates for being biologically hardwired are the moral desires we have to protect our friends and family, to avoid harming others, to punish wrongdoers, and to feed the hungry. These desires do not seem to be lost in a wilderness of other moral desires, and they do not seem greatly suppressed by the pursuit of any socially acquired desires.

The other thing the bio-enhanced constructivist can say in her defense is that it is far less likely our deep-seated animal nature is overridden by a social sphere somehow independent from it than it is that "the social" and "the socially inculcated" are simply offshoots, branches whose nectar is supplied by a thoroughly biological trunk. "Social things exist," she will say, briefly channeling Aristotle, "because in the first place we are social animals." The moral desires we have socially acquired are those that vary between social groups. Social groups differ in the sorts of family arrangements they enter, in how they educate their children, in what religion people should practice, and other such things. It is easy to regard these desires as forces that hold particular communities together and thereby make stable other goods of the sort we we have been hardwired to care about. So, it seems likely that our socially acquired desires are themselves realizing-object moral desires.

And what if Relatively Ambitious Bio-Enhanced Constructivism were defeated after all? The bio-enhanced constructivist's responses to the current objection relies on perhaps unstable assumptions about our hardwired moral desires. Perhaps as we get a better grasp of human psychology, if we do, we shall come to see that some of these seemingly hardwired desires are instead the results of social inculcation. Even so, some less ambitious version of Bio-Enhanced Constructivism is likely to remain at table. In that case, the Bio-Enhanced Constructivist still has something important to tell us about whatever ancient wisps of morality remain under the influence of human biology, even if she fails to succeed in capturing Moral Human Behavior more generally.

4.3 Normative Conflicts

The final sort of objection challenges bio-enhanced constructivism on normative grounds. Objections of this sort hold that bio-enhanced constructivism is in conflict with some moral claim or class of moral claim whose truth is so little in doubt that we cannot take bio-enhanced constructivism seriously as an account of morality. And if that is true, we cannot take bioenhanced morality itself seriously, so the bio-enhanced constructivist has failed in her attempt to justify our moral seriousness. The first objection of this sort holds that Bio-Enhanced Constructivism conflicts with self-regarding moral facts such as the prohibition on suicide. The second holds that it conflicts with the moral claim that forms of discrimination such as racism or sexism are morally wrong. The third holds that Bio-Enhanced Constructivism gets the moral facts wrong in a somewhat general way because the objects of our moral desires are rather too shallow for the pursuit of them to count as moral.

Morality Is Not Entirely Other-Regarding

The bio-enhanced constructivist claims that morality depends on judgments about satisfying desires that concern the well-being of entities other than the one desiring. This implies that morality concerns how we treat others, but not necessarily how we treat ourselves. And that conflicts with a common supposition that certain actions have moral import for entirely self-regarding reasons.¹⁶² For instance, one might think I have just as strong and just as moral a reason to avoid harming or killing myself as I have to avoid harming or killing anyone else.

The bio-enhanced constructivist has three things to say in response. First, we do not always distinguish between a self and an other in such a strong way that we cannot have other-regarding desires that in fact concern no one but ourselves. A person can treat himself as an other by taking an objectifying mental stance toward himself that is the same as the stance he takes toward other people.¹⁶³ That is, I can put aside my idiosyncratic subjective preferences and ask, "what is good for him?" where 'him' refers me.

The most obvious way of doing this is to distinguish one's present self from the person one will be in the future. Someone might, for instance, choose to forgo some present delight, an extra finger of whiskey, say, out of concern for the well-being of the elderly man he envisions becoming. People also seem occasionally to take other-regarding attitudes toward their present selves. One can worry about harming one's present self, about ruining one's present self's life, and so on. And this need not be the worry that *I* will ruin *my* life. It can be the worry that *I* will ruin the life of *that person* whom I happen to be. To put it another way, I might worry about how I treat myself not because I am worried about treating myself in particular but because I am

¹⁶² Kant, for instance, claims we have a moral duty to keep ourselves alive (Kant, 1785), and Plato has Socrates suggest the same early in the *Phaedo*.

¹⁶³ Parfit expresses a similar thought. He calls "nonidentification" the attitude of not identifying oneself with some part of one's life (Parfit 1971, p. 684).

worried about treating a human being properly and I happen to be such a thing.

Now, the mere fact that we can take what might be called an other-regarding stance toward ourselves does not establish that we can have moral desires that are satisfied by actions that only affect ourselves. It is further required that a person's other-regarding view of herself be the sort of thing that can stimulate the same hardwired moral desires that her experiences of others stimulate. It is not silly to suspect that this condition is often met. I seem to have moral desires that can be stimulated by stories I read in magazines about distant famines. Why should they not likewise be stimulated by stepping outside of myself and feeling pity for the person whose mind and body could be ravaged by the risky course I now contemplate?

Perhaps things are not so. At any rate, Bio-Enhanced Constructivism has two further ways to account for the apparent moral import of self-regarding actions. For one thing, many actions a person takes directly affect her own well-being in a way that affects others' well-being in turn. Imagine a woman who plays a critical role in a medical team that is close to developing a cure for diabetes. If she were to leave the team, the cure could be delayed for months or even years, with the result that those who suffer from diabetes would suffer longer, and some would die who could have been saved. The bio-enhanced constructivist believes this woman has a moral reason not to kill herself because her suicide would delay the cure, harming others. A great many suicides will have moral reasons of this sort counting against them. People generally have families and friends and coworkers who rely on them for various important things. We have friends and relatives who would be deeply saddened and hurt by the very fact of our death and by our having been driven to seek refuge through death. For most people, the bio-enhanced constructivist can argue, these social connections provide moral reasons against suicide. She can provide similar moral reasons for people to maintain their own well-being. If we do not maintain a basic level of health and wealth, we are likely to become burdens to our friends, family, or society. So, although morality is ultimately other-regarding, the bio-enhanced constructivist may be able to fully explain our intuition that morality is also self-regarding by explaining how selfregarding actions often have implications for the well-being of others.

Many philosophers will insist that even if the effects of my self-regarding actions do not touch the well-being of others, I still have strong reasons to treat myself with the same regard that I treat others. If the objector insists that these must be called moral reasons, the bioenhanced constructivist has nothing much to say. They cannot be moral reasons as she defines them. However, at this point the disagreement is only conceptual, and the bio-enhanced constructivist has one last thing to say that is entirely in harmony with those who insist that there are strong self-regarding reasons, even though she does not call these reasons moral.

The bio-enhanced constructivist does not deny that we have non-moral reasons for taking care of ourselves, nor does she insist that our motivation to abide by them is of a phenomenologically different or even weaker character than our motivation to abide by moral reasons. Indeed, she thinks hardwired self-regarding desires are as much a part of human nature as moral desires are.¹⁶⁴ The difference between reasons of self-concern and moral reasons is simply that the former concern the self and the latter concern others, and that both the evolutionary history and the parts of the physiological systems that cause the desires that provide these different sorts of reason are somewhat different. But for all Bio-Enhanced Constructivism has to say, we may well experience a basic concern for our own well-being that is

¹⁶⁴ Recall the discussion at chapter two; Churchland explains the primary function of any nervous system as selfcare.

phenomenologically very much like the basic concern we experience for the well-being of others. This concern is even likely to proceed from physiological systems that physically overlap the systems that cause moral desires – both surely involve affect, for instance. When we are deliberating about how to act or how to conduct our lives, there is no reason to suspect that we won't feel as strongly about our own welfare as we do that of others, or be equally or more motivated to care for ourselves than for them. Bio-Enhanced Constructivism is fully compatible with the view that self-regarding desires are very strong, and that they play very much the same kind of role in our deliberative life that peculiarly moral desires play.

Hardwired Moral Desires Favor In-group Bias But Morality Is Not Thus Biased

Human beings exhibit in-group bias. The breadwinner feeds her own children, not the neighbors'. When war breaks out between two countries, their citizens do not weigh the relative merits of each side's position and join the righteous; they fight for the homeland. Racism, sexism, and intolerance of different religious or sexual practices persist to such a degree in spite of any persuasive rational justification – persisting implicitly even in many who explicitly reject these biases – that it's hard to deny we, as a species, are stuck with them.¹⁶⁵ Perhaps each sort of bias, even the breadwinner's, is unfair. Many of them are hateful, and lead to terror or violence. But it is perfectly plausible to think they somehow reflect a hardwired desire of the kind specified above as peculiarly moral: a desire to especially benefit members of one's own group.¹⁶⁶ So, the objector says, Bio-Enhanced Constructivism must be false; it implies that the moral facts favor the malicious phenomenon we call 'in-group bias'.

¹⁶⁵ See, for instance, Nosek, Smyth, et. al. (2007).

¹⁶⁶ For instance, Scherf and Scott report that even infants as young as nine months show a marked preference for the faces of members of more familiar groups. Scherf and Scott (2012).

The bio-enhanced constructivist can respond with a limited apologetics in favor of ingroup bias, one that does not defend any sort of bigotry. She can argue that in-group bias comes with morality, and that as a component of morality it is to be accepted, but only in its friendlier guises. Think of this response as a descendant of theodicy. It explains why in-group bias is not evil in itself, and how the evil consequences sometimes resulting from it are not certified as morally good by bio-enhanced morality, even if they are made possible by hardwired moral mechanisms.

The response begins with a premise about the effects of hardwired moral mechanisms that is tolerably plausible from both a biological and a moral perspective. As we see in chapter two, moral naturalists as far back as Darwin tend to think morality amounts to a sort of social glue.¹⁶⁷ Some want to go further, calling this cohesive effect somehow good. These latter might say social coordination has fitness value, or even that it's morally good.

The next step of the apologetics is to stipulate a definition of 'in-group' that accurately captures the objector's meaning. The bio-enhanced constructivist can define an in-group as any group whose members give special consideration to those they recognize as fellow members, while they do not typically extend the same consideration to nonmembers. This does not imply that members of every in-group give their fellows full moral consideration, that they give the same special consideration to all fellow members of a single in-group, or that a member of some in-group might not extend even greater consideration to some individual outside the group. However, what bonds in-groups is a concern for the well-being of fellow members in some particular respect or respects. In-group members extend what can be called, in line with PMD, a degree of moral concern to each other that they may not or do not extend to nonmembers.

¹⁶⁷ See the chapter two discussion of Richards above, who claims to represent Darwin.

The question of what makes a group an in-group is closely tied to questions about The Moral Community. Moral philosophers are interested in the makeup of The Moral Community. We want to know its membership, both who are the full members or agents, and who are the patients or targets of moral consideration. In her apologetics for in-group bias, the bio-enhanced constructivist can note that various groups – families, religions, nation-states, ex-pat communities, ethnic groups, the Freemasons, etc. – constitute restricted moral communities in the sense that their members give each other extensive and weighty moral consideration. Obviously none of these restricted groups is what we mean by 'The Moral Community'. But, if there is a single species-wide in-group whose members extend a recognizably full set of moral considerations to each other, the bio-enhanced constructivist could maintain that this concrete group does capture quite well what philosophical lore has labeled 'The Moral Community'.

The third step of the apologetics, then, is to argue that the human species does in fact constitute such a group. Human beings typically regard conspecifics as fellow members of a single group who deserve greater and different consideration than do, say, cows, Hondas, or redwoods. This is not to say human beings in general give a great deal of consideration to all other human beings, but we tend to give more and different consideration to the welfare of other human beings than to entities of other sorts. And even when there is some other human being whom we do not particularly like or respect, we are generally willing to grant that a far more demanding set of rules applies to our treatment of him than applies to our treatment of, say, a dog or a large chunk of gravel.

The bio-enhanced constructivist can now explain why in-group bias is not only not necessarily evil, but a necessary accompaniment to morality. For a human being to have moral

consideration for other human beings as human beings just is for him to exhibit an in-group bias that favors conspecifics.¹⁶⁸ Indeed, because a moral community just is a group of beings who share full moral consideration, and because an in-group just is a group of human beings who show each other moral consideration, there can be no morality without in-group bias.

Of course, this leaves some explaining to do. The various forms of bigotry are also instances of in-group bias. They are cases where in-group members show concern for the wellbeing of fellow members but disdain for the wellbeing of certain nonmembers. Since this is just an expression of the hardwired mechanism that makes us desire the wellbeing of our group, the worry arises that bio-enhanced morality makes a virtue of bigotry.

Two facts explain why it does not. First, in-group members do not always have a say over who counts as a member of their group or over whether the group contains them. Bigotry involves a disdain for the wellbeing of nonmembers of a narrow group, a refusal to extend moral consideration to them. Bigots typically justify this disdain by convincing themselves of something that is obviously false concerning the membership of their victims in a larger group – they come to think of their victims as less than human.¹⁶⁹ But of course, who counts as human is not up to the bigot; it's a matter of biology. Since by assumption there is some hardwired desire that supports in-group and especially pro-human bias, there is a corresponding moral fact that prescribes extending consideration to all members of this group. Insofar as the bigot and the target of his disdain are both human, they owe each other special consideration. When the bigot fails to show proper consideration to a fellow human being, he fails to satisfy the moral desire that concerns fellow group members, and he contravenes the bio-enhanced moral facts.

¹⁶⁸ I am glossing over the fact that we may well regard other species as belonging to some broader in-group as well, a fact which a bio-enhanced constructivist might wish to relate to our tendency to treat kittens, bonobos, and dolphins as moral patients.

¹⁶⁹ See Dalal (2006) for a discussion of the supposed relationship between racism and dehumanization.

Second, even if it were not true that the human species constitutes an in-group, and even if furthermore smaller groups do constitute in-groups, the fact that we are hardwired for in-group bias does not justify the maltreatment of nonmembers. Our biased concern for in-group members, hardwired by assumption, does not imply that we can cause suffering or harm to nonmembers.

What is tricky is that in-group bias is always bias: it favors members over nonmembers and this favoring often leads or amounts to mistreatment. However, some in-group favoritism is noble. In sports, we don't expect members of one team to help the other win; we think they are doing something wrong if they do. Similarly, if an ethnic group is oppressed, we think those of its members who band together against their oppressors behave nobly while we view those who side with the oppressors as cowardly traitors. It is primarily when members of one group use some group-based advantage to damage or exploit nonmembers that we think they do something bad. But what is bad here is not in-group bias, the expression of special concern for those to whom one feels especially close. Rather, it is using the in-group to hurt other people, people with whom one constitutes the single group humanity or people who, at any rate, inspire various moral desires.

The Proper Objects of Our Moral Desires are Morally Shallow

Grant this: normal human beings possess a hardwired mechanism that causes negative affect in response to the typical outward signs of human suffering. The bio-enhanced constructivist would like to say this mechanism generates a hardwired moral desire for others not to suffer, and that a corresponding moral fact prescribes the elimination and prevention of others' suffering. But, an objector will counter, these characterizations of desire and fact are surely wrong. What the mechanism actually motivates us to eliminate is not others' suffering, but only whatever stimulates our negative affect. We could achieve this by obstructing and assuaging the suffering of others, but we could also achieve it by eliminating or avoiding circumstances in which we might detect others suffering. Indeed, the latter course of action might better satisfy the desire than the former, since we may well "detect" more suffering than there is. If so, the moral facts prescribe not so much the elimination of others' suffering as blinding ourselves to it.¹⁷⁰

The problem can be made more upsetting if we imagine the following possibility, a simple society consisting of two status classes: citizens and slaves. The citizens live in such extreme comfort that they suffer but little and the principal factor permitting their comfort, though analgesics too play a role, is that slaves are forced to carry out all physically onerous activities. Now, the citizens are not naturally more monstrous than privileged people everywhere. Sometimes they are bothered by a certain moral desire, a guilty or nauseous feeling stimulated by their perceptions of their slaves' suffering. It even keeps some of them awake at night, until the sleeping pills kick in. But perhaps they are in luck: as a means of satisfying this desire a surgeon has devised a procedure of lesions that will eliminate all capacity for producing outward signs of suffering from his patients. Once the surgery has been completed, the patient can be branded without shrieking and without rapidly or automatically jerking back. He can shovel sand to fill the bunkers of golf courses until his hands are blistered, raw, and bleeding without either moaning or grimacing. His stomach can knot in hunger and not audibly groan, while he no longer has the wherewithal to complain. However, the procedure will not make

¹⁷⁰ An objection of this sort was suggested to me by Carl Craver.

these experiences any less aversive for the patient; he will *feel* exactly the same. All that is changed is that he can no longer respond to his pains in any way, through active behavior or automatic convulsion, that might signal their presence to others. A moral desire to not experience others suffering would be utterly satisfied by this procedure, so the worry is that bioenhanced morality prescribes the citizens of the simple society to force their slaves to undergo it. The simple society will never again see suffering. "But surely," the objector says in a raised, tremulous voice, "this is no great moral triumph!"

The bio-enhanced constructivist has two options here. First, she might grant that while our moral *desires* might be somewhat shallow, they are not as shallow as all that and, at any rate, the moral *facts* are not shallow: they require us to actually eliminate suffering and otherwise behave in ways that are not shallow.

Part of what lends potency to the present objection is the thought that we have an inelegant hardwired mechanism that responds to the outward signs of suffering in others but is not stimulated by the mere belief that others are suffering. The bio-enhanced constructivist herself thinks evolution is a "bricoleur" and that the mechanisms of moral desire are inelegant and frankly stupid in various ways. So perhaps natural selection has made others' suffering aversive for us by installing a mechanism that upsets us when the outward signs of such suffering are present, but which is not otherwise sensitive to – and thus does not make us care about – whether suffering is actually happening. But experience shows it implausible to think we have a mechanism that responds only to direct perceptions of suffering and not also to mere cognitions of suffering. For we are regularly bothered by the mere belief that others suffer. We simply hear tell of, say, atrocities committed in Chechnya, and merely knowing about them stimulates in us a

little urge, albeit one which almost always falls fallow, to do something. It seems all we need is to learn of suffering, without seeing so much as a photograph, in order for a moral desire to be stimulated.

Of course, our moral desires could still be shallow, in that one of them could be described as, say, a desire to not perceive *or even believe in* the suffering of others. But in the case of the simple society, the very fact that lesioning would be carried out in order to eliminate signs of suffering would make it difficult for people not to realize suffering occurs, and this means the lesioning procedure would be a less effective means of satisfying their moral desire than the actual elimination of suffering. To put this in the language of dispositions to evaluate, the moral desire would ultimately dispose us to evaluate the actual elimination of suffering as to-be-done because if we merely suppressed our direct experience of it, we still might discover it, and so the desire would not be well and truly satisfied. So, even if our moral desires are shallow, they are not so shallow that they drive us only toward a world of *appearances*. Rather, they drive us toward a world that can be *understood* in a certain way.

If knowing about suffering is enough to stimulate moral desires, it proves difficult to find a course of action that will satisfy them better than eliminating suffering. It must bring about the circumstance that we neither know about nor perceive suffering. In this way the moral facts may yet require something not shallow, the actual elimination and reduction of suffering.

The bio-enhanced constructivist's other option is to accept the consequence that not only are our moral desires shallow, but so too *could* be the moral facts, and then to explain why this consequence is acceptable. Here the bio-enhanced constructivist makes the unpalatable but philosophically interesting claim that the forces internal to morality could someday push us in a direction that is in deep, troubling conflict with what we have come to think about morality. She could contend that we don't presently feel the alternate course, such as the lesioning procedure, is right because it is not presently an effective way to satisfy any moral desire. But, she might say, if we were to find ourselves in the circumstance of the simple society, we should pursue the elimination of signs of suffering, even if here and now we should eliminate suffering itself.

The reader will note that this is a troubling concession. However, two considerations might make it more comfortable to entertain.

First, the simple society has already gone morally awry insofar as slavery already conflicts with our moral desires. The proposed surgical procedure will allow it to occupy a local minimum on the ominous graph of moral evil, a position upon which it is difficult for the simple society to improve, but this happens because other evils are entrenched by assumption, such as slavery. Whether the simple society morally ought to avail itself of the procedure is not the question whether, in general, morality prescribes that we should become the simple society and adopt lesioning. Rather, it is about whether morality prescribes that the simple society itself use the procedure or not. If we hold fixed that a society practices slavery and that it pushes whatever pain and toil it can onto the weary shoulders of slaves, it appears better to use the procedure than not. Using it brings a morally important benefit: citizens feel less anxiety about the suffering they cause. They will be less unhappy. If we squint properly into this ugly imaginary distance, we might see this as a morally better course, one involving less psychological pain, in spite of the fact that the simple society is in any case a hideous moral monstrosity. So, even if the moral facts are shallow, we need not be bound to live in a way that is deeply contrary to our intuitions, nor does it mean that where the shallowness of moral facts combines with circumstances to

require such living, we cannot recognize some good in following the moral facts even so. Of course, this sort of consideration can only but slightly increase our comfort with the shallowness of moral facts, especially since our own society has, one must suspect, itself gone morally awry, and perhaps irreversibly so, in various ways.

Second, if we became trapped in a situation where the surgical procedure would be the morally right course of action, this course may well be a wrong turn with respect to evolution. If selective forces have steered us away from conspecific suffering, but used the appearance of suffering to track this, there is room for slight hope that these same selective forces might eventually steer us back on course. The suggestion – really it is only a suspicion – here is that selective forces have led us to be bothered by outward signs of suffering because, from a fitness perspective, allowing other human beings to suffer is bad and, thus far, outward signs of suffering the evolutionary mechanism that has driven us to reduce others' suffering should make us less fit, perhaps in time evolution would bring us back to the point, causing us to recognize others' suffering through some other means than by its typical outward signs. This too can only but slightly increase our comfort with the shallowness of moral facts, since in the meantime shallow facts will rule.

4.4 Conclusion

It might be thought that Bio-Enhanced Constructivism gives up too much. The picture it paints is one of morality as human activity we are naturally dedicated to, and to which we only pay so much attention as life and circumstances allow, while pressing external factors and our own selfish desires often get in the way and prevent our being moral. It does not defend the claim that morality watches over us from above, and governs our actions with an all-seeing eye and a total controlling power. Instead, it only rules us insofar as we personally care about being moral and insofar as the others around us care enough about our being moral to ensure that it happens.

But Bio-Enhanced Constructivism also locates morality deep within us, within our psychology and our nature and our evolutionary history. We cannot do without it and continue being ourselves. It is endemic to our cares and to how we behave. It is constitutive of the medium that holds societies and communities together, and so we always move within its sphere. It is not all of us, but it is inside us, and it is everywhere around us. There is an extent to which we have no choice but to care about it – and we are happy, I think, to do so. But even when we do not, even when we care about something else or prefer to help ourselves rather than those around us, we still have good reason to heed it, since it lubricates our course in life, and protects from some, just some, of the ire of others.

Works Cited

- Aristotle, (1984) Nichomachean Ethics trans. B. Jowett in J. Barnes (ed.) The Complete Works of Aristotle (vol. 2). Princeton: Princeton University Press.
 - (1984) *Politics* trans. W. D. Ross, rev. J. O. Urmson in J. Barnes (ed.) *The Complete Works of Aristotle* (vol. 2). Princeton: Princeton University Press.
- Anscombe, G.E.M. (1958) "Modern Moral Philosophy." Philosophy 33, No. 124
- Balzac, H. (1967) The Wild Ass's Skin. J.M. Dent & Sons Ltd. London. Trans. Marcel Girard.p. 209
- Batson, D. (1991) The Altruism Question. Hillsdale, NJ: Lawrence Erlbaum Associates

Blackburn, S. (1993) Essays in Quasi-Realism, New York: Oxford University Press.

- Boorse, C. (1977). "Health as a Theoretical Concept." *Philosophy of Science* 44 (4):542-573.(1997) "Defining Disease" in *What is Disease?*, Humber, J. M. and Almeder, R. F., eds., Humana Press, New Jersey, pp. 3-134
- Bouwens, et al. (2011) "A candidate redshift $z \approx 10$ galaxy and rapid changes in that population at an age of 500 Myr." *Nature*. 469, pp. 504–507
- Boyd, R. (1988) "How to be a Moral Realist." in G. Sayre-Mccord (ed.), *Essays on Moral Realism*. Ithaca, NY: Cornell University Press.
- Bouvier, J. (1856) A Law Dictionary Adapted to the Customs and Laws of the United States of America and of the Several States of the American Union with References to the Civil and Other Systems of Foreign Law. Philadelphia: T. & J.W. Johnson Law Booksellers
- Brandt, R. (1979) Theory of the Good and the Right. Oxford: Oxford University Press.
- Brink, D. (1986) "Externalist Moral Realism," Southern Journal of Philosophy, 24

(Supplement): 23-40.

Copp, D. (2003) "Why Naturalism." Ethical Theory and Moral Practice 6, 179-200(2007) *Morality in a Natural World*. Cambridge: Cambridge University Press.

Churchland, P. (2011) Braintrust. Princeton University Press

- Cummins, R. (1975) "Functional Analysis." The Journal of Philosophy 72. pp. 741-765.
- Dalal, F. (2006) "Racism: Processes of Detachment, Dehumanization, and Hatred." *The Psychoanalytic Quarterly* Vol LXXV (1) pp. 131-161
- Darwin (1871) Descent of Man.
- Dawkins (1976) The Selfish Gene. Oxford: Oxford University Press.
- Dennett, D. C. (1991) "Lovely and Suspect Qualities." In Enrique Villanueva (ed.), *Consciousness*. Atascadero, CA: Ridgeview. pp. 37-43.
- Descartes, R. (1641/1993) *Meditations on First Philosophy*, trans. D. Cress (3rd edition). Indianapolis: Hackett
- Doris, J. (2009) "Skepticism About Persons." Philosophical Issues, 19:1, pp. 57-91
- Enoch, D. (2011) *Taking Morality Seriously: A Defense of Robust Realism*. Oxford University Press.
- Dijksterhuis, A., Bos, M. W., Nordgren, L. F., and van Baaren, R. B. (2006) "On Making the Right Choice: The Deliberation-Without-Attention Effect." *Science* 311: 1005–7.
- Ereshefsky, M. (1998) "Species Pluralism and Anti-Realism", *Philosophy of Science*, 65. pp. 103–120.
- Finkel, D. (2013) Thank You For Your Service. Sarah Chrichton Books.

Finucane, M.L., Alhakami, A., Slovic, P., and Johnson, S.M. (2000). "The affect heuristic in

judgments of risks and benefits." Journal of Behavioral Decision Making, 13, 1-17.

Firth, Roderick (1952) "Ethical Absolutism and the Ideal Observer." *Philosophy and Phenomenological Research*, Vol. 12, No. 3 pp. 317-345.

Flaubert, G. (1881/2005) Bouvard et Pecuchet. M. Polizzotti (trans.) Dalkey Archive Press

Foot (2001) Natural Goodness, Oxford: Clarendon Press.

Gibbard, A., (1990) Wise Choices, Apt Feelings, Cambridge: Harvard University Press.

- Gould, S. and Lewontin, R. (1994). "The Spandrels of San Marco and the Panglossian Paradigm:
 A Critique of the Adaptationist Programme." In E. Sober (ed.), *Conceptual Issues in Evolutionary Biology*. The MIT Press. Bradford Books. 73-90.
- Graham, J., Haidt, J., Nosek, B. (2009) "Liberals and Conservatives Rely on Different Sets of Moral Foundations." *Journal of Personality and Social Psychology*. Vol. 96 No. 5, pp. 1029-1046.
- Hagan, J. and Dinovitzer, R. (1999) "Collateral Consequences of Imprisonment for Children, Communities, and Prisoners." *Crime and Justice* vol. 26. pp. 121-162.
- Hamer, D. (2004) *The God Gene: How Faith is Hardwired Into Our Genes*. New York: Doubleday.
- Hamilton, W. D. (1964) "The genetical evolution of social behaviour.", *Journal of Theoretical Biology*, 7(1): 1–16.
- Hare, R. (1963) "A Moral Argument," in *Freedom and Reason* Oxford: Oxford University Press. pp. 89-98.
- Harman, G. (1986) "Moral explanations of natural facts: Can moral claims be tested against moral reality?" In N. Gillespie (ed.), *Spindel Conference: Moral Realism. The Southern*

Journal of Philosophy, suppl. vol. 24: 57-68.

- Hume, David. (1777/1975) An Enquiry Concerning the Principles of Morals. Clarendon Press. Oxford.
- Hursthouse, R. (1999) On Virtue Ethics, Oxford: Clarendon Press.
- Ioannidis, J. (2005) "Why Most Published Research Findings Are False," PloS Med 2(8) e124
- Isen, A.M. (2000). "Positive affect and decision making." In M. Lewis and J. Javiland-Jones (Eds) *Handbook of emotion*. New York: Guilford.

Jacob, F. (1977) "Evolution and tinkering." Science 196 pp. 1161-1166

Johnstone, T.C. (director) (2012) Rising from Ashes. United States: First Run Features

Joyce, R. (2001) *The Myth of Morality*. Cambridge: Cambridge University Press (2007) *The Evolution of Morality*. Cambridge, Mass: The MIT Press.

- Kant (1785/1996) "Groundwork for The Metaphysics of Morals" in M. Gregor (ed. and trans.)*Practical Philosophy.* Cambridge: Cambridge University Press
- Keverne, E. (2004) "Understanding Well-Being in the Evolutionary Context of Brain Development," *Philosophical Transactions of the Royal Society of London B: Biological Sciences* 359, no. 1449. pp. 1349-58
- Kitcher, P. (1984) "Species", *Philosophy of Science*, 51. pp. 308–333.(2011) *The Ethical Project*. Harvard University Press.

Korsgaard, C. (1996) The Sources of Normativity Cambridge: Cambridge University Press

Kosfeld, M.; Heinrich, M.; Zak, P.; Fischbacher, U.; and Fehr, E. (2005) "Oxytocin Increases Trust in Humans." *Nature* 435, no. 7042 pp. 673-76

Leiter, B. (2001) "Objectivity, Morality, and Adjudication." In B. Leiter (ed.), Objectivity in Law

and Morals. Cambridge: Cambridge University Press.

Mackie, J. L. (1977) Ethics: Inventing Right and Wrong. Penguin.

- Manning, R., Levine, M., Collins, A. (2007) "The Kitty Genovese Murder and the Social Psychology of Helping: The Parable of the 38 Witnesses." *American Psychologist*. Vol 62(6). pp. 555-562
- Maynard Smith, J. (1976), "Group selection", *Quarterly Review of Biology*. Vol 51. pp. 277–283.
- Melden, A.I. (1984) "Why Be Moral?" The Journal of Philosophy. Vol. 45, No. 17.
- Nagel, T. (1986) The View from Nowhere. Oxford: Oxford University Press.
- Neander, K. (1991). "Functions as selected effects: the conceptual analyst's defense." *Philosophy of Science*, 58. pp. 168–184.
- Nietzsche, F. (1886/2002) *Beyond Good and Evil*, R. Horstmann and J. Norman (eds.), trans. J. Norman. Cambridge: Cambridge University Press.

(1887/2006) *On the Genealogy of Morality*, K. Ansell-Pearson (ed.), trans. C. Diethe. Cambridge: Cambridge University Press.

- Nosek, Smyth, et. al. (2007) "Pervasiveness and correlates of implicit attitudes and stereotypes." *European Review of Social Psychology*. 18: 36-88
- Parfit, D. (1971) "On 'The Importance of Self-Identity'." *The Journal of Philosophy*. Vol. 68, No 20. pp. 683-690.
 - (2011) On What Matters. Oxford University Press

Plato, *Republic*

Phaedo

Prinz, J. (2007) The Emotional Construction of Morals. Oxford: Oxford University Press.

Rawls, J. (1980) "Kantian Constructivism in Moral Theory." *The Journal of Philosophy*. Vol 77 No 9 pp. 515-572.

(1993) Political Liberalism. New York: Columbia University Press

- Richards, R. (1986) "A Defense of Evolutionary Ethics." Biology and Philosophy I, pp. 265-293
- Rosenthal, A. M. (2012). Thirty-eight witnesses: The Kitty Genovese Case. Melville House.
- Saha, S. (2006) "Improving Literacy as a Means to Reducing Health Disparities" Journal of General Internal Medicine. Vol 21 (8). pp. 893-895

Shafer-Landau, R. (2005) Moral Realism: A Defence Oxford University Press

Scherf, S. & Scott, L.S. (2012) "Connecting developmental trajectories: Biases in face processing from infancy to adulthood." *Developmental Psychobiology*, 54(6), 643-663.

Schroeder, M. (2007) Slaves of the Passions. New York: Oxford University Press.

Sellars, W. (1991) "Empiricism and The Philosophy of Mind." in Science, Perception, and Reality. Atascadero, CA: Ridgeview Publishing Company

Smith, M. (1994) The Moral Problem. Oxford: Blackwell.

- Sober, E. and Wilson D.S. (1998) Unto Others: The Evolution and Psychology of Unselfish Behavior, Cambridge MA: Harvard University Press.
- Sterelny, K. and Griffiths, P. (1999) Sex and Death: An Introduction to Philosophy of Biology.Chicago: University of Chicago Press.
- Stevenson, C. (1937) "The Emotive Meaning of Ethical Terms," Mind, 46. pp. 14-31.
- Street, Sharon (2006) "A Darwinian Dilemma for Realist Theories of Value," *Philosophical Studies* 127, no. 1, pp. 109-166

(2008) "Constructivism about Reasons," *Oxford Studies in Metaethics*, vol. 3, ed. Russ Shafer-Landau Clarendon Press. Oxford. pp. 207-245.

- (2010) "What is Constructivism in Ethics and Metaethics?", *Philosophy Compass* 5. pp. 363-384.
- (2011) "Evolution and the Normativity of Epistemic Reasons," Canadian Journal of

Philosophy vol. 35, supplemental volume on Belief and Agency, ed. David Hunter. pp. 213-248.

- Väyrynen, P., (2009) "Normative Appeals to the Natural." *Philosophy and Phenomenological Research*, Vol. LXXXIX No. 2, 279-314
- *Vice* "Blood Sacrifice in Indonesia." Online video clip. YouTube. YouTube, posted 18 July 2013. Web. Retrieved 30 August 2013.
- Williams, B. (1981) "Internal and External Reasons." Reprinted in *Moral Luck*. Cambridge:Cambridge University Press. pp. 100-110

Williams, G. C. (1966), Adaptation and Natural Selection, Princeton: Princeton University Press.

- Wilson, D. S. and Dugatkin, L. A. (1992) "Altruism: Contemporary Debates," in *Keywords in Evolutionary Biology*, E. F. Keller and E. A. Lloyd (eds.), Cambridge MA: Harvard University Press.
- Wittgenstein, L. (2009) *Philosophical Investigations*. 4th edition, P.M.S. Hacker and Joachim Schulte (eds. and trans.), Oxford: Wiley-Blackwell.
- Wright, S. (1980), "Genic and organismic selection", Evolution, 34: 825–843.
- Zhu, J. and Thagard, P. (2002), "Emotion and Action." *Philosophical Psychology* vol 15:1. pp. 19-36.

Zimmer, C. (2004) "Faith-boosting genes: a search for the genetic basis of spirituality." *Scientific American.* 291 pp. 110–111.