# Authenticity and Enhancement

by

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I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

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# Abstract

Wanting to change ourselves is nothing new; the means with which we are able to do so are. With our ever-advancing technology, the physical and mental aspects of ourselves that we can target and change are continually increasing. However, enhancement technologies are met with some hesitation: just because we can do something, it does not mean that we should. This dissertation will focus on one such reason that these technologies ought to be rejected: in certain circumstances these enhanced changes are incompatible with authenticity. There are various types of enhancements, but the ones I will focus on in this project are psychological enhancements that are aimed at improving one's personality or character traits. These types of enhancements often pose a more difficult challenge to authenticity than those that do not target fundamental aspects of the self. I will focus on the effects the selective serotonin reuptake inhibitor Prozac (fluoxetine) can have on people who are not clinically depressed and take Prozac for enhancement purposes. On Prozac, the habitually timid are given social confidence, the sensitive become brash, and the drug seems to "lend the introvert the social skills of a salesman" (Kramer 1997, xii). Prozac appears to transform some individuals and profoundly challenge their notions of the self and as such gives rise to authenticity-related worries. While Prozac will serve as the main example, I will show that these worries apply to a range of other psychological interventions as well. I argue that in many cases psychological enhancements that are aimed at improving one's character or personality traits are incompatible with authenticity and this incompatibility is a reason to reject these types of enhancements. This does not mean that we are not able to change, just that we must do so through authentic methods that reveal and bring us closer to our true selves, such as introspection, meditation, journaling, and therapy. The difference between authentic and inauthentic change is that the former is the result of the exertion of the will, while the latter bypasses the will and the change is brought about via the enhancement itself thus rendering the user inauthentic. The sacrifice a person makes by forfeiting her authenticity by enhancing herself is real loss to her in important ways, and this is an independent reason not to enhance even when the enhancement may have other benefits, or other costs.

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# Dedication

To my father for igniting my love of philosophy and for making all things possible.

and

To Thomas for always being there.

# Table of Contents

# Introduction:

Wanting to change ourselves is nothing new; the means with which we are able to do so are. With our ever-advancing technology, the physical and mental aspects of ourselves that we can target and change are continually increasing. However, these technological advancements are met with some hesitation: just because we can do something, it does not mean that we should. This project will focus on one such reason that these changes ought to be rejected: in certain circumstances these enhanced changes are incompatible with authenticity.

Authenticity is commonly thought of as an individual moral standard that is an important component of a fulfilling life. As Charles Taylor succinctly articulates:

> There is a certain way of being human that is *my* way. I am called upon to live my life this way, and not in imitation of anyone else's. But this gives a new importance to being true to myself. If I am not, I miss the point of my life, I miss what being human is for *me*. (1991, 28-29)

To put it in the most basic terms, an authentic individual is one who is true to herself. Her actions and intentions align well with who she is and are a true reflection of her inner self. She is not intentionally or unintentionally fake, misleading, or disingenuous about her thoughts or feelings and there is a coherence between her values, beliefs, and feelings and how she acts. The assumption the ideal of authenticity makes is that "it is only by expressing our true selves that we can achieve self-realization and self-fulfillment as authentic human beings" (Guignon 2004, 6). If we fail to do so we run the risk of living a life with less meaning that falls short of its potential (Elliot 1998, 182). What makes a life fulfilling, according to this ideal, is being true to yourself. For example, a person may have a passion for philosophy and deeply value a career as a

philosophy professor that would allow her be surrounded by stimulating literature and like-minded individuals, but she has a family who expected her to carry on the family tradition of being a medical doctor. While pursuing a career in the medical profession is important to her family, she has no interest in following in their footsteps but cannot bring herself to tell them so she enrolls in medical school and leaves behind her own aspirations. In doing so she faces a life that is inauthentic because it is not reflective of who she truly is and what she values most. Authenticity is about being who you are and acting accordingly to contribute to a fulfilling and meaningful life.

In this dissertation I argue that a range of enhancements raise an ethical worry, since they undermine the value of authenticity. Enhancements are "interventions designed to improve human form or functioning beyond what is necessary to sustain or restore good health" (Juengst 1998, 29). Enhancements are interventions used by a healthy individual who is at a baseline level of health to boost her to a higher level of health. Enhancements can be contrasted with treatments, which are interventions that restore an unhealthy person to a baseline level of health. For example, someone with a muscular disorder who uses anabolic steroids to restore his weakened muscles to a baseline level of health uses steroids as a treatment, while a body builder who uses the steroids to make his already large muscles even bigger and stronger uses them as an enhancement. This comparison is referred to as the treatment/enhancement distinction. I will not argue, nor do I think, that treatments undermine authenticity in a way that is worrisome.

There are various types of enhancements, but the ones I will focus on in this project are psychological enhancements that are aimed at improving one's personality or character traits. These types of enhancements often pose a more difficult challenge to authenticity than those that do not target fundamental aspects of the self. I will focus on the use of the selective serotonin

reuptake inhibitor Prozac (fluoxetine) by individuals who are not depressed as the main example, both because of its effects and it as receives a great deal of attention in the debate. Prozac seems to transform some individuals and profoundly challenges their notions of the self and as such gives rise to authenticity-related worries. I will argue that in many cases psychological enhancements that are aimed at improving one's character or personality traits are incompatible with authenticity and this incompatibility is a reason to reject enhancements that are directed at one's personality or character. I argue that there are costs to the person who uses the enhancement that are an independent reason not to use an enhancement, even when the enhancement has other benefits. While Prozac will serve as the main example, I will show that the argument applies to a range of other psychological interventions as well. I leave open the possibility that some physical enhancements have the potential to threaten authenticity as well; however, in order to maintain a manageable scope for this project, I will limit my discussion to enhancements that change your personality and have the potential to be authenticity-undermining.

The self is a central concept to this dissertation for it is the center of the authentic experience. There are two main conceptions of the self as it relates to authenticity: the self-discovery and the self-creation views. According to the self-discovery view, within each of us is a true self—a stable set of values, preferences, beliefs, and characteristics that makes each of us the person we are—and in order to be authentic we that we need to discover the nature of that true self and align our actions with it. The self-creation view, in contrast, disagrees with the concept of a stable, deep self. Instead, it sees authenticity as engaging in the process of creating yourself into the person you want to be. I argue the self-discovery view of authenticity is the more plausible view, for it is able to capture much of what is appealing about the self-creation

view while avoiding its drawbacks, and it is the view I will be endorsing in my dissertation. I will be exclusively discussing a Western notion of the self in this project, as this concept alone is very rich and contested, so exploring other conceptions of the self is the subject for a whole other thesis.

While enhancements aimed at changing an individual's personality or character traits are often incompatible with the self-discovery view's notion of authenticity, this does not mean that we are not able to change. The only stipulation this view places on change is that it must reflect your true self, so even radical changes are permissible in so long as they are authentic. Methods that bring about authentic self-change are those that result from the exertion of the will such as introspection, meditation, journaling, therapy, diet, and exercise. These methods and interventions can help reveal your true self and bring about authentic change compared to an enhancement like Prozac which predominately works by bypassing the will and brings about changes on its own. Taking Prozac does require *some* act of will as you have to will yourself to take it, but it is not the same amount of willpower that is required to bring about the end goal yourself and thus the latter requires more exertion of the will than taking an enhancement does.

## Outline of Chapters

This dissertation is comprised of four chapters, which will be outlined below.

### Chapter One: What is Enhancement?

The first chapter explores the treatment/enhancement distinction in detail to articulate precisely what an enhancement is so we have a proper notion of the concept to use throughout the project. In order to do this, treatment must be distinguished from enhancement, a distinction that requires an account of the baseline level of health. This in turn requires an account of both

health and disease. Simply defining health as the absence of disease is not specific enough to determine whether an individual requires treatment for a condition. Thus, an account of health itself is required to establish a proper baseline to determine whether a technological intervention is better classified as a treatment or an enhancement.

The organization of this chapter reflects this multi-step process. Section one discusses the treatment/enhancement distinction. Section two examines three accounts of health and disease: naturalism, normativism, and a hybrid theory. I will argue that a modified version of Wakefield's hybrid theory is the best account to distinguish health from disease. However, defining health as the absence of disease, while accurate, is too imprecise to use as a baseline level of health for the purpose of grounding the treatment/enhancement distinction. A more specific account of health is needed and section three carries out this task and presents two accounts of the term 'normal' which lay at the center of the concept of health: normal as 'average' and normal as an 'ideal.' I argue that the best account of health does not consider normal as an ideal, but as a species-typical level of average functioning. If a biological mechanism functions atypically, however, (below a species-typical level of functioning) it does not necessarily mean that it is harmful to the individual or that she is unhealthy. Health is best determined by a judgment of harm made regarding this variation. Health is therefore a hybrid concept: it includes both a normative, value-judgment dimension and an empirical, biological one. This account of health gives us a clear way of understanding the treatment/enhancement distinction: if a variation from the norm is causing an individual clinically significant harm in her daily life, then she would be considered unhealthy and an intervention would be a treatment. If there is no such harm, then she is healthy and an intervention would be an enhancement.

## Chapter Two: Types of Enhancements

The aim of this second chapter is to expand on Chapter One by broadening the focus from enhancement in general to covering a survey of the types of enhancements to provide the background for the rest of my project. This second chapter is composed of two main sections: the first discusses enhancements with a treatment counterpart, while the second discusses enhancements that lack a corresponding treatment. The first section comprises the bulk of the chapter and has two main subsections, the first of which focuses on physical and mental enhancements followed by two unique type of enhancements. These are enhanced treatments and diminishment as enhancement; the former are cases where a treatment actually pushes an individual *above* the baseline level of good health, and the latter are when instead of a trait being improved it is *diminished* to enhance an individual. The second section discusses two main types of enhancements that do not have a treatment counterpart, romantic love and moral enhancements. This section is intended to show that the possibilities for enhancement extend beyond the physical and mental traits of an individual as there is the potential to enhance our relationships with others as well. Whether or not an enhancement has a treatment counterpart, it is defined as a technological intervention used by a healthy individual to boost her above and beyond a baseline level of health.

## Chapter Three: Authenticity

The third chapter's focus shifts from the discussion of enhancement to the notion of authenticity. While this is a term that can be applied to anything from works of art to food to people, it has a special use as an ethical ideal. In Chapter Four I argue that authenticity is an important personal value that gives us reason to reject some forms of enhancement. In order to

make this argument, however, it is first necessary to give a proper account of the metaphysical concept of authenticity. It is only once we have such an account in hand that we can establish what, if anything, is ethically valuable about authenticity. That is the purpose of the third chapter – to explore what exactly authenticity is. This chapter explores the philosophical debates about the nature and value of authenticity, and defends a conception of authenticity that will be applied to the issue of enhancement. As mentioned above, there are two main accounts of authenticity: the self-discovery and the self-creation views. I make the argument in this chapter that the self-discovery view of authenticity is the more plausible view and I endorse this view for the duration of the project.

## Chapter 4: Authenticity and Enhancement

The task in this final chapter is twofold. First, I set out to determine if psychological enhancements that aim at improving one's character or personality traits are compatible with authenticity. I argue that in many cases the two are incompatible. Secondly, I argue that this incompatibility is a reason to reject enhancements that are directed at one's personality or character. The first section discusses how the self-discovery and the self-creation views respond to the question of whether you can authentically enhance your personality with Prozac. Whether or not enhancements are compatible with authenticity depends on which view of the self you accept. As I argued in the previous chapter, the self-discovery view of authenticity is the better account, and I build on this account to argue that enhancements and authenticity are incompatible. The second section takes a different approach and asks whether you can "find" or discover your true self on Prozac. I argue that such an assertion is just a preference for enhanced personality traits that one does not actually possess, and are thus inauthentic. The third section explores the interesting question of whether psychological enhancement technologies can be a

*means* to authenticity. I argue that while it is possible in at least one specific case, the outcome is variable and as such an individual risks her authenticity if she proceeds with the enhancement. In the fourth section I argue why the incompatibility, and potential incompatibility, is a reason to reject these types of enhancements. In the fifth section I discuss the literature on self-ignorance and why it reinforces the reasons to be skeptical about using enhancements in an attempt to increase one's authenticity. Finally, the sixth section extends my argument beyond Prozac and discusses other psychological enhancements that pose a threat to authenticity.

# Chapter 1: What is Enhancement?

Answering the question "what is enhancement?" requires multiple steps to unpack several embedded concepts. First, treatment must be distinguished from enhancement: this requires an account of the baseline level of health needs on which to ground the distinction. This in turn requires an account of both health and disease. Simply defining health as the absence of disease is not specific enough to determine whether an individual requires treatment for a condition. Thus, an account of health itself is required to establish a proper baseline to determine whether a technological intervention is better classified as a treatment or an enhancement.

The organization of this chapter will reflect this multi-step process. Section one will discuss the treatment/enhancement distinction. Section two will examine three accounts of health and disease – naturalism, normativism, and a hybrid theory – to determine which one best grounds the treatment/enhancement distinction. I will argue that a modified version of Wakefield's hybrid theory is the best account to distinguish health from disease. However, defining health as the absence of disease, while accurate, is too imprecise to use as a baseline level of health for the purpose of grounding the treatment/enhancement distinction. A more specific account of health is needed and section three will carry out this task and present two accounts of the term 'normal' which lay at the center of the concept of health: normal as 'average' and normal as an 'ideal.' I will argue that the best account of health does not consider normal as an ideal, but as a species-typical level of average functioning. If a biological mechanism functions atypically, however, (below a species-typical level of functioning) it does not necessarily mean that it is harmful to the individual or that she is unhealthy. Health is best determined by a judgment of harm made regarding

this variation. Health is therefore a hybrid concept: it includes both a normative, value-judgment dimension and an empirical, biological one. This account of health gives us a clear way of understanding the treatment/enhancement distinction: if a variation from the norm is causing an individual clinically significant harm in her daily life, then she would be considered unhealthy and an intervention would be a treatment.[1] If there is no such harm, then she is healthy and an intervention would be an enhancement.

## I. What is Enhancement?

'Enhancement' is the term for the things we use to augment or improve our physical or mental traits. Some are so 'low tech' or common we may not even think of them as enhancements as they are part of our daily lives. Consider a cup of coffee. This popular hot beverage is actually an enhancement in every cup, because when you drink it you feel more awake and alert and thus are boosting your mental function. Enhancements can be as simple as your morning coffee or require more complicated technologies such as surgery or psychotropic medication. One of the most influential accounts of enhancement is Eric Juengst's, who defines enhancements as "interventions designed to improve human form or functioning beyond what is necessary to sustain or restore good health" (1998, 29). This is the definition of enhancement that I will be using in the account I defend. Defining enhancement therefore involves the normative

[1] There may be a worry that my use of "clinically significant" implies the most important value judgment is made by medical professionals. However, my use of the term assumes that both the clinician(s) and the individual agree that harm is present. While there will certainly be cases of disagreement, I am focused on situations where a collective agreement is reached regarding harm being present. Since the 'clinically significant' criterion is the American Psychiatric Association's and is used in the Diagnostic and Statistical Manual of Mental Disorders Fifth Edition, it is worthwhile to note it is used in the same way in the manual as I use it here. The authors state that this criterion may be helpful to determine a patient's need for treatment and that the "[u]se of information from family members and other third parties (in addition to the individual) regarding the individual's performance is recommended when necessary" (APA 2013, 21). Thus, harm is intended to be determined as a collective assessment based on the input of the individual, her doctor(s), and any relevant family members or others (friends, coworkers, etc.) who may be in a position to give relevant information to contribute to the assessment of harm in a clinical context to determine whether treatment is necessary.

concept of ‘good health’ which is the center of considerable philosophical debate. Due to this normative dimension, the concept of health is not merely biological or scientific as these do not provide an evaluation of what kinds of functioning is sufficiently good enough to count as ‘healthy’. Determining whether a particular intervention qualifies as a treatment or an enhancement therefore depends in part on what constitutes ‘good health’. Agreeing on what counts as the baseline of health is therefore necessary to determine whether a technology or intervention is an enhancement, since anything over and above the baseline of health qualifies as enhancement. Health is something you can have more or less of, for two people can both be healthy but one may be healthier than the other. There is, however, a threshold between health and disease and this is the baseline level of health.

The treatment/enhancement distinction, then, is grounded in a baseline of good health. A treatment is intended to restore a patient from below the level of health to a baseline level of health, whereas an enhancement is used to raise a person who is already above the baseline to a higher level of health. This comparison is referred to as the treatment/enhancement distinction. Whether a technology is a treatment or an enhancement depends on the level of health it brings about in the person receiving it. Consider some examples: someone with a muscular disorder who uses anabolic steroids to restore his weakened muscles to a baseline level of health uses steroids as a treatment, while a body builder who uses the steroids to make his already large muscles even bigger and stronger uses them as an enhancement. Or compare the use of Ritalin by an individual with an attention-deficit hyperactivity disorder (ADHD) to restore her attention to a normal level so that she may focus and complete every-day tasks to the student without attention problems who left studying for an exam to the last minute and uses Ritalin as an aid to improve his focus so he can cram for the exam. Again, the first is a treatment and the second is

an enhancement. While the technology is the same in each example – steroids in the first and Ritalin in the second – it is the baseline level of health that determines whether the use of the technology is a treatment or an enhancement (treatments for the individuals with the muscular disorder and ADHD, enhancements for the bodybuilder and the student). While these examples make the distinction between treatment and enhancement relatively easy to distinguish, not all situations are quite this straightforward. As we shall see, the distinction is particularly murky in cases of psychoactive technologies, especially in cases of psychological enhancements.

To illustrate the difficulty of distinguishing treatment from enhancement, consider a case from Peter Kramer's Listening to Prozac (1997). Tess was a woman in her early thirties who was referred to Kramer because she was clinically depressed. After being put on Prozac Tess' life was transformed; she felt rested and hopeful, more relaxed yet energetic, she laughed more frequently, and a new social life bloomed as a result. "She was astonished at the sensation of being free of depression" recalls Kramer (1997, 7). All aspects of her life were changed as a result, and for the better, it seemed. After about nine months Tess went off Prozac and continued to do well. However, after about eight months off medication Tess told Kramer she was slipping and claimed "I am not myself" (1997, 10). Tess was no longer depressed, but wished to take Prozac again to feel as good as she had when she was on it. When Tess first started seeing Kramer she met many of the signs and symptoms of depression such as "tears and sadness, absence of hope, inability to experience pleasure, feelings of worthlessness, [and a] loss of sleep and appetite" (1997, 3). It was clear she was not well and Kramer used Prozac as a means to restore her to health, thus the Prozac was used as a treatment. But what of her request to take it again when she no longer exhibited symptoms of depression: would this qualify as a treatment or an enhancement? Tess asserted Prozac "had lent her surety of judgment; she no longer tortured

herself over whether she was being too demanding or too lenient" (Kramer 1997, 9). "It makes me confident" she told Kramer (1997, 9), and it was for these reasons Tess wanted another prescription, not because she was hopeless and not sleeping or eating as she was before. It is more difficult to determine whether Tess' request for a second prescription for Prozac qualifies as a treatment or an enhancement than it is in the steroids and Ritalin examples above. This is because a baseline level of health is not an easy concept to define and will vary depending upon which account of health one is using. This is particularly the case with mental health, which is a feature of this example. Thus, an account of health (and disease) is required in order to establish the threshold between treatment and enhancement. The next section will discuss the three main views of health in the philosophical literature for this purpose.

## II. Accounts of Health and Disease

To review, the distinction between treatment and enhancement depends on a clear definition of health, as anything below a standard baseline level of health can be considered a disease in potential need of treatment and anything above a standard of health would be considered exceptionally healthy and an intervention would be regarded as an enhancement. There is, however, little consensus on what exactly "health" entails. It can be regarded as simply as being free from disease or as broadly as the World Health Organization's notion of "a state of complete physical, mental, and social well-being" (Parens 1998, 3). This section will focus on three main views of health in the philosophical literature: naturalism, normativism, and a hybrid theory that aims to combine the insights of both views. Naturalism argues that disease is an objective malfunctioning biological process, whereas normativism asserts that disease is an evaluative concept, as "there is no natural, objectively definable set of human malfunctions that cause disease" (Murphy 2015, s. 2). Hybrid theories blend the two and assert that the most

accurate account of disease is a bodily dysfunction that is disvalued. I will discuss each view and argue that a hybrid view of health best establishes a baseline level of health upon which we can distinguish health from disease, and in turn determine whether an intervention is better classified as a treatment or an enhancement.

## Naturalism:

Naturalists pursue definitions of health based on the ideal of science (including medicine) as a value-free scientific enterprise, and attempt to highlight that which is biologically normal for a species (Ereshefsky 2009, 221). The focus of this approach is on physiological and psychological states to determine if an organ or bodily system is normal or functioning properly (Ereshefsky 2009, 221). Naturalism is the most prominent view in the philosophical literature on health (Ereshefsky 2009, 222) (for examples see Kendell 1975, Scadding 1990, Wachbroit 1994). Within this literature, Christopher Boorse's work is particularly influential. Boorse argues that health is the absence of disease, where "disease" refers to an internal state "that depress a functional ability below species-typical levels" (1969, 542). He states, "[h]ealth as freedom from disease is … statistical normality of function, i.e., the ability to perform all typical physiological functions with at least typical efficiency" (Boorse 1969, 542). Thus, for Boorse, health and disease are objective states that have biological explanations. If a biological function is operating normally then one can be said to be healthy. If there is a malfunction of a biological process, then one is considered diseased. For example, cancer occurs when cells in the body change from functioning normally to functioning abnormally due to the uncontrolled growth of abnormal cells. Cancerous cells behave differently from normal healthy cells because they do not stop dividing, the cells don't obey signals from other normal cells, they don't stick together well and can spread to other parts of the body, and the cells stay immature instead of specializing into

mature cells (Canadian Cancer Society, 2016). Each of these cancerous cell behaviours are different from those of normal healthy cells and naturalism would argue these behaviours are objective malfunctions of the cells and are thus indications of disease. Boorse argues the benefit of naturalism is that by basing an account of disease on objective facts about biological functions it removes any subjectivism from the assessment of disease (1969, 543).

However, an objection to Boorse's argument is that as a result of removing values from the assessment, naturalism does not properly reflect our use of the terms 'health' and 'disease' (Ereshefsky 2009, 222). Critics argue it is simply impossible to define health or disease without taking values into account.[2] While the cancer example appears straightforward, a normativist would argue that cells are known to behave in a variety of ways. This is something cells do qua cells, exhibit a variety of behaviours and dysfunctional cells are not necessarily diseased cells in virtue of simply being dysfunctional. It is our value judgements about the dysfunction that determine whether or not a disease is present. This is the launch point for the normativist position I will discuss in the next section.

## **Normativism:**

Normativists argue that biological processes alone cannot determine whether or not someone is healthy or diseased, as we use our human values to help us make this decision (Murphy 2015, s. 2). Unlike the naturalist view which argues that if a system is objectively malfunctioning it is a clear indication a disease is present, normativism asserts there are no objective malfunctions that are independent of value judgements. The system or process is considered to be unusual or abnormal "because they depart from some shared, usually culturally

[2] This objection applies more widely than just medicine – the idea that science itself is value-free is a highly controversial issue. For a sustained argument against the value-free ideal of science see Douglas (2009).

specific, conception of human nature" (Murphy 2015, s. 2). The physiological or psychological states we desire we label as 'healthy' and the ones we do not wish to have are called 'diseased' (Ereshefsky 2009, 223). Biological systems themselves are neutral, it is the value we attribute to them that determines whether we find them good or bad (Margolis 1976, Goosens 1980, Sedgwick 1982). Engelhardt explains this well in the following passage:

> Disease does not reflect a natural standard or norm, because nature does nothing – nature does not care for excellence, nor is it concerned for the fate of individuals qua individuals. Health, insofar as it is to indicate anything more than the usual functions or abilities of the members of the species, must involve judgements as to what members of that species should be able to do – that is, must involve our esteeming a particular type of function. (1976, 266)

Engelhardt is clear that by emphasizing the role value judgements play in our conceptions of health and disease he is not denying "that there are real causes of disease or real empirical factors important in maintaining health or causing disease" (1976, 267). We do, however, need to acknowledge that any discussion of health and disease "presupposes evaluations of ourselves and our ambience," he argues (1976, 267).

Consider the interesting example of "gourmand syndrome" that can occur in individuals with focal lesions in the brain (Regard and Landis 1997). "Gourmand" is a French word that is used to describe someone "who is heartily interested in fine food and drink, or simply describes a food lover" (1997, 1185). Prior to their injuries these individuals were not particularly interested in fine dining but turned into passionate gourmets as a result of their brain lesions. When describing the syndrome Regard and Landis state "[a]t most, it could be classified as a benign,

non-disabling form of hyperphagia, but with a specific preference for fine food" (1997, 1188).[3] Gourmand syndrome presents a challenging case for the naturalist who argues disease is an objective state caused by biological dysfunction. The biological dysfunctions in this syndrome are clear – the people in the study had significant focal brain lesions such as tumors, seizures, trauma, and hemorrhages – but the normativist argues that it does not follow that gourmand syndrome is a disease. In fact, many of the participants in the study believed this syndrome was a "positive consequence" of their brain injury (Regard and Landis 1997, 1187).[4] Therefore, disease cannot be discerned via an abnormal biological function, since the abnormality itself is neutral. It is our value judgement about the abnormality that determines whether it counts as a dysfunction or disease.

One potential objection to normativism is that it doesn't have a safeguard against socially constructed diseases. Social and cultural values are subject to change over time and from place to place, and a lack of consistency is a potential problem when grounding a concept of disease in social and cultural ideology. For example, some American doctors in the nineteenth century thought that slaves who attempted to escape suffered from a disease called "drapetomania" (Ereshefsky 2009, Wakefield 1992). The nineteenth century concept of disease was shaped by the social and cultural values at the time and the value judgments towards slaves who wanted to be free reflected these values. Since then our view on slavery has changed and along with it the corresponding social and cultural practices, and as such our contemporary perspective disagrees with the nineteenth century assessment of slaves desiring freedom being an indicator of disease.

[3] Hyperphagia is an abnormally increased appetite for consumption of food frequently associated with injury to the hypothalamus (http://www.merriam-webster.com).
[4] For additional discussion about gourmand syndrome in this context see Ereshefsky 2009 and Murphy 2006.

It’s not just that we have a different view now than they did then: it’s that we think they were wrong.

However, a normativist, claims Ereshefsky, cannot say these nineteenth century physicians were objectively wrong. All Engelhardt and other normativists can argue is that we merely have different values or ideologies than those doctors (Ereshefsky 2009, 224). Ereshefsky is wrong about this, for we can indeed say these nineteenth century doctors were mistaken about what was actually valuable. But while they were mistaken, we should think about why they were wrong. It was partly (if not mostly) because they had bad values. But it's also because they had ideas of diseases that weren't actually connected in any way to dysfunction or harm to individual bodies. There is nothing unhealthy or harmful or dysfunctional about a desire to be free – in fact it is quite the opposite. So it's only if we take into consideration both values and harmful dysfunction that we can understand the nature of disease.

Thus, while value judgments are an important part of distinguishing health from disease they cannot be the sole basis of the concept of disease. Wakefield raises another worry that by basing the concept of disease on social values, these values may be used to “control or stigmatize socially undesirable behavior that is not really disordered” (1992, 373). Consider, for example, homosexuality. There is a long history of homosexuality being considered a disease or disorder as a way to stigmatize certain individuals.[5] Homosexuality is not a disease, but was incorrectly classified as such when social values were the sole determining criterion in the assessment. A biological dysfunction criterion would have prevented it from being classified as a disease as homosexuality is not a biological dysfunction. As such, another criterion is required to safeguard

[5] For more detail and examples see Wakefield (1992).

against this issue and give a more reliable means of diagnosis that is more consistent over time and place.

## Hybrid Theories:

There are combinations of naturalist and normativist views called 'hybrid theories' that attempt to use the best features of each view. A main motivation for these theories is to fix the problems with normativism, specifically that normativism allows any undesirable state to be considered a diseased state (Ereshefsky 2009, 224). The hybrid solution is to argue 'disease' is best defined as "disvalued states with the proper biological etiology" (Ereshefsky 2009, 224). A well-known hybrid account is Jerome Wakefield's who argues:

> A condition is a disorder [disease] if and only if (a) the condition causes some harm or deprivation of benefit to the person as judged by the standards of the person's culture (the value criterion), and (b) the condition results from the inability of some internal mechanism to perform its natural function, wherein a natural function is an effect that is part of the evolutionary explanation of the existence and structure of the mechanism (the explanatory criterion). (1992, 384)

Thus the hybrid account has two criteria for disease: a state must be both disvalued and biologically dysfunctional. This sets hybrid accounts apart from both naturalism and normativism, each of which endorse a single criterion (for another hybrid example see Reznek 1987). As a result, hybrid theories narrow the range of cases that qualify as a 'disease' and avoid the counterexamples that render naturalism and normativism problematic (Ereshefsky 2009, 224).

For example, the function of the pancreas is to release insulin when blood sugar levels get too high in the body so the body can use this excess sugar as an energy source or store as fat (Canadian Diabetes Association, 2016). If there is a dysfunction with this process then sugar

builds up in the blood and high blood sugar levels can damage organs, blood vessels, and nerves, and can be fatal (Canadian Diabetes Association, 2016). Naturalism would consider diabetes a disease because of the objective biological dysfunction in the reduction of blood sugar levels. Normativism would consider diabetes a disease because we disvalue the symptoms it produces such as extreme fatigue or lack of energy, blurred vision, and tingling or numbness in the hands or feet (Canadian Diabetes Association, 2016). Wakefield's hybrid theory classifies diabetes as a disease for both reasons. The value criterion is met because diabetes causes some harm or deprivation of benefit to the person as judged by the standards of the person's culture (extreme fatigue or lack of energy, blurred vision, etc.). The explanatory criterion is also met because diabetes results from the inability of some internal mechanism to perform its natural function (to reduce high blood sugar), wherein a natural function is an effect that is part of the evolutionary explanation of the existence and structure of the mechanism (the role of the pancreas).

The hybrid theory can also handle the cases that naturalism and normativism were not able to. The hybrid theory can explain why gourmand syndrome is not a disease, because while it meets the explanatory criterion for being an objective biological dysfunction, it does not meet the value criterion as many individuals who had the syndrome considered it to be a positive affliction and did not disvalue it. The hybrid theory can also tell us why drapetomania is not a disease. While the slaves' desire for freedom was disvalued by their owners, it was not the result of a biological dysfunction and thus it was not a disease. When something meets both the value and the explanatory criterion, like diabetes, then we can call it a disease.

This view is not exempt from its own problems, however. A common criticism of Wakefield's view concerns the way he roots biological dysfunction in evolutionary theory (Bergner 1997, Lilienfeld and Marino 1995, Sadler and Agich 1995). Wakefield defines a

'natural function' as "an effect of the organ or mechanism that enters into an explanation of the existence, structure, or activity of the organ or mechanism" (1992, 382). Wakefield admits that discovering what is natural "may be extraordinarily difficult and may be subject to scientific controversy, especially with respect to mental mechanisms, about which we are still in a state of great ignorance" (1992, 383). Raymond Bergner highlights this passage from Wakefield and argues that if we accept Wakefield's evolutionary criterion then "we are not at present justified in regarding virtually anything in DSM-IV as a mental disorder" (1997, 246).[6] Bergner argues that establishing what is and what is not a mental disorder, and thus the entire field of psychopathology in this regard, would be put on hold until we accumulate "massive amounts of evolutionary knowledge" (1997, 246). If we accept Wakefield's evolutionary criterion, Bergner argues, then we are placed in the paradoxical position that we currently know "almost nothing" about what we can characterize as a mental disorder (1997, 246).

Wakefield's evolutionary criterion causes problems with identifying physical mechanisms and determining their natural evolutionary function as well. An example of a mechanism that is subject to considerable scientific controversy is the evolution of the female orgasm. There are a wide number of evolutionary accounts that have been proposed to explain the trait of the female orgasm including, but not limited to: pair-bond accounts that assert female orgasm aids in strengthening the male-female pair-bond; 'sperm-competition' accounts which argue the female orgasm plays a role in moving sperm through the reproductive tract; and byproduct accounts that propose the female orgasm is a byproduct of the selection for the male orgasm (for a detailed discussion of these accounts see Lloyd 2005). Recall that Wakefield stipulates in his second criterion that "the condition results from the inability of some internal

[6] DSM-IV is the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition.

mechanism to perform its natural function, wherein a natural function is an effect that is part of the evolutionary explanation of the existence and structure of the mechanism" (1992, 384). If there is disagreement on what the natural function of a mechanism is then we cannot determine whether it is functioning properly or not and the second criterion will not be useful in classifying disease.

Furthermore, even if we can agree on the function of a physical or mental mechanism, there may be cases where the evolutionary criterion precludes some cases we might want to treat as diseases (Ereshefsky 2009, 224). Returning to the orgasm example, Elisabeth Lloyd asserts that the best explanation for female orgasm is that it is a developmental byproduct of selection for male orgasm (2005, 111). While this is a controversial claim, if Lloyd is correct, then if a woman is unable to have an orgasm, since it is not an evolutionary dysfunction, it would fail Wakefield's second criterion and cannot be considered a disease (Ereshefsky 2009, 224). Ereshefsky writes: "[b]ecause Wakefield equates health with no disease, controversial cases fall on the health side of the health-disease dichotomy. A woman's inability to have an orgasm is [therefore, according to Wakefield] a healthy state (no dysfunction)" (2009, 224). As this example demonstrates, Wakefield's version of a hybrid theory can result in a situation where a biological dysfunction that is disvalued cannot be classified as a disease (and thus receive treatment) because the function does not have the right evolutionary basis. While Lloyd's argument is a controversial claim, regardless of whether or not one accepts her argument there are issues with Wakefield's use of an evolutionary criterion. However, there is a straightforward way of recasting the hybrid view that doesn't depend on a narrow evolutionary function criterion and thus will avoid the pitfalls of Wakefield's view.

Wakefield's inclusion of the evolutionary basis of the biological dysfunction is to ensure we are looking at the right sort of dysfunctions (ones that are objectively dysfunctional), and not ones that fail to function "in a socially preferred manner" (based on values alone) (Wakefield 1992, 381). By limiting the concept of dysfunction to natural functions that have been selected via evolution but that have gone awry, Wakefield attempts to "distinguish dysfunction from other disvalued conditions" (Sadler and Agich 1995, 222). However, I do not think his restrictive evolutionary basis is required to achieve the same outcome. To illustrate this I will use Wakefield's example of the nose and heart. The nose functions to hold up one's glasses and the heart to pump blood throughout the body (Wakefield 1992, 381). If someone has a nose that is shaped in a way that does not allow it to hold up his eyeglasses it can be said his nose is failing to perform that function, and if his heart fails to pump his blood properly it too would be failing to function. Wakefield argues, however, that we cannot say the oddly-shaped nose that fails to hold up eyeglasses is a nasal disorder, while we would say the heart failing to pump blood is a dysfunctional heart. The difference between the two cases is that holding up eyeglasses is not the natural function of the nose (it is merely a way we use it in addition to its actual purpose to breathe and smell); whereas the natural function of the heart is to pump blood, so when the natural function fails it is said to be disordered (Wakefield 1992, 381-382).[7] In sum, for Wakefield, "[o]nly natural functions are relevant to disorder attributions" (1999, 375). I agree with his distinction here but I think it can be enforced without referring to evolutionary theory and natural functions. This can be achieved by using his two criteria definition of disorder and removing the evolutionary and natural functions constraints to look like the following:

[7] Wakefield refers to the way we use our nose to hold up our glasses as an "intentional use" because it is a way we use it in addition to its natural function (Wakefield 1999, 375).

(a) the condition causes some harm or deprivation of benefit to the person as judged by the standards of the person's culture (the value criterion), and

(b) the condition results from the inability of some internal mechanism to perform its biological function.

Notice "natural function" has been changed to "biological function" in the second criterion. While 'biological function' may seem less informative, it allows us to distinguish things that are bad for us but are not diseases from those that are bad for us and are diseases. For example, consider poverty. Poverty meets the first criterion as we consider it to be very harmful to an individual. However, poverty is not a biological dysfunction and as such it does not meet the second criterion and thus is not a disease. Another example is grieving a lost spouse which involves considerable suffering, but it too is not a disease for it fails the second criterion (Wakefield 1992, 374). While both poverty and losing a spouse cause considerable harm, neither are diseases like cancer and diabetes are. Cancer and diabetes are both harmful and a biological dysfunction, whereas poverty and losing a spouse are harmful but not a biological dysfunction.

In conclusion, the combination of the naturalist and normativist criteria gives us the most cohesive and practical account of heath to base the treatment/enhancement distinction on. My modified version of Wakefield's two criteria can be used to distinguish disease. These criteria are:

(a) the condition causes some harm or deprivation of benefit to the person as judged by the standards of the person's culture (the value criterion), and

(b) the condition results from the inability of some internal mechanism to perform its biological function (the explanatory criterion).

If a case meets both of these criteria, then it can be properly classified as a disease and if it does not then we can say the individual is healthy.

## Using the Hybrid Theory to Distinguish Health from Disease:

Recall from the first section that, depending on the circumstances, the same technological intervention can be used to either treat or enhance. We can distinguish between the two by establishing a baseline level of health above which any intervention is an enhancement, as it would be making an already healthy individual even healthier or more capable, and below which an intervention is a treatment that could restore the individual to a baseline level of health. Disease is best determined by using a modified version of Wakefield's hybrid theory. Disease occurs when the condition causes some harm or deprivation of benefit to the person and is the result of the inability of some biological mechanism to perform its natural function. Applying this formula to the example of the use of anabolic steroids in two different individuals can explain why the use of steroids by the person with a muscular disorder is best classified as a treatment but the body builder's use of the same technology is an enhancement. The muscular disorder causes the first individual harm and deprives him of the benefit of properly functioning muscles (the value criterion) and his weak muscles are caused by the failure of his bodily mechanisms to perform their biological function (the explanatory criterion). As a result of meeting both these criteria the individual can be considered diseased and the anabolic steroids can be used as a treatment to help restore his weakened muscles to a baseline level of health (a state that fails to meet both criteria). The body builder, in contrast, is unable to meet both of the criteria. His large and fully functioning muscles do not cause him harm as valued by society in general. Perhaps the case could be made (particularly within the body

building community) that his muscles failing to grow beyond their already above-average size could be considered a harm in virtue of his body-building ambitions. Even if we accept this claim, however, the body builder would be unable to meet the second criterion, as his muscles failing to grow as big as he wants them to is not the result of a biological dysfunction. His muscles are functioning just fine, significantly above average in fact. As the body builder is unable to meet both criteria for disease he is therefore healthy, and as such if he used steroids to further increase the size of his muscles it would be an enhancement.

This is a fairly straightforward case, but how effective is the hybrid theory for more complicated ones? Recall the Tess case from the first section. Tess had two main complaints that led to the consideration of prescribing her Prozac by her doctor. She was initially referred to him because she met many of the signs and symptoms of depression – she wasn't sleeping or eating well, she felt hopeless, sad, worthless, and was no longer able to experience pleasure. These symptoms meet both criteria for disease. First, it is clear that her symptoms were causing Tess harm for they severely hindered her quality of life from how well she slept and ate to how she felt. Secondly, depression has a biological basis for it involves impaired neural function in the brain. Therefore, I argue that the reason for Tess' first visit to her doctor met both criteria for disease and thus her prescription for Prozac is best classified as a treatment.

After her depression had been treated and she had been off Prozac for about eight months Tess complained she no longer felt like herself and wanted to feel as good as she had when she was taking the medication. Feeling "good" for Tess was the self-confidence she felt when on Prozac, she felt better about herself and the decisions she made. Tess

seemed to be unable to feel the level of self-confidence she did when she was medicated. She still had confidence in herself, it just was not as much as she had when she was *really* confident while taking Prozac. She still had a healthy amount, it was just lower than she would have liked. Should a lower level of self-confidence than one desires be considered a disease? It could be argued that a lower level of self-confidence could meet the first criterion for disease, as self-confidence is something our society values. We tend to respect those who are self-assured and have more confidence in the decisions made by someone who is sure of herself than in someone who is not. However, a lower level of self-confidence is not the result of a biological dysfunction and thus it fails the second criterion. When Tess was depressed there was a clear biological dysfunction, but not in this case of lower self-confidence. Lots of people have low self-confidence but are still perfectly healthy as they are above the threshold of health. Simply because our society values self-confidence does not mean that an absence of it is a disease. That is the purpose of the second criterion for disease – to ensure not everything that society disvalues counts as disease. Tess' lower level of self-confidence is unable to pass both the value and the explanatory criterion for disease and therefore she is healthy. Since Tess is healthy her second request for Prozac is best classified as an enhancement.

While the hybrid account gives us a solid method to distinguish disease, defining health as the negation of disease leaves us with a less concrete definition to work with and the question of what exactly health entails. The next section focuses on answering this question by examining the concept of "normal" and its various uses in medicine.

## III. What is "Normal"?

What exactly does health entail? We need something more concrete than just the negation of disease to properly define the concept of health. The term 'normal' is used frequently when discussing health, for if a bodily function is "normal" we usually consider it to be healthy, and if it is "abnormal" it may be unhealthy or diseased. Working out a cohesive distinction between treatment and enhancement requires us to have an appropriate definition of 'normal'. There are a wide variety of ways that 'normal' can be interpreted and each can have a vastly different impact on the treatment/enhancement distinction. The definitions of normal can be divided into two main interpretations, normal meaning "average" or "typical" and normal meaning "ideal." I will discuss each interpretation in this section and argue the former is the better interpretation as it leads to a better account of health.

### Normal as Average:

The concept of "normal" is at the very core of the goals of medicine, however there isn't one standard definition as it can refer to "a "defined standard," such as normal blood pressure; a "naturally occurring state," such as normal immunity; or simply mean "free from disease," as in a normal pap smear. It can mean "balanced" as in a normal diet, "acceptable" as in normal behavior, or it can be used to describe a "stable physical state" (Davis and Bradley 1996, 69). These uses of the term "normal" describe an ordinary finding or an expected state (Davis and Bradley 1996, 69) and are a standard interpretation of normal as it applies to health. If an individual's biological mechanisms are operating at an average level of function then the individual is healthy.

However, not all cases are quite this straightforward as they don't always divide up easily into normal or abnormal function as most human capacities tend to fall on a continuum or a normal distribution curve (President's Council on Bioethics 2003, 18). As the President's Council on Bioethics articulate:

> [I]ndividuals who find themselves near the lower end of the normal distribution may be considered disadvantaged and therefore unhealthy in comparison with others. But the average may equally regard themselves as disadvantaged with regard to the above average. If one is responding in both cases to perceived disadvantage, on what principle can we call helping someone at the lower end "therapy" and helping someone who is merely average "enhancement?" (2003, 18)

It is difficult to determine in a normal distribution of traits as such as height, IQ, or cheerfulness whether or not the average is able to function as the norm or if "the norm itself [is] appropriately subject to alteration" (President's Council on Bioethics 2003, 18). The difficulty lies in the normal variation of human function and traits. Consider the following case by Allen and Frost:

> Johnny is a short 11-year-old boy with documented GH [growth hormone] deficiency resulting from a brain tumor. His parents are of average height. His predicted adult height without GH treatment is approximately 160 cm (5 feet 3 inches).
>
> Billy is a short 11-year-old boy with normal GH secretion according to current testing methods. However, his parents are extremely short, and he has a predicted adult height of 160 cm (5 feet 3 inches). (1990, 18)

If we equate "normal" with "healthy" then since 5'3 is below average for an adult male neither Johnny nor Billy will grow to a "normal" height and thus are "unhealthy." This, obviously, seems dubious as an adult male can be shorter (or taller) than average and still be in perfect physical health. Thus, it can be problematic to define health via an average if we use an account

of normalcy that does not allow for natural and healthy variation. Furthermore, we also need to be able to account for natural (and sometimes quite dramatic) changes in the same person over time that deviate from their own personal average and are disruptions in normal functioning, yet these changes and disruptions are not unhealthy. For example, aspects of a woman's biological life can be quite varied over her lifetime as she experiences menstruation, pregnancy, and menopause so we need to ensure that these biological processes do not become medicalized or treated as diseases simply because they are disruptions of normal functioning (Sherwin 1992, 179).

## Normal as an Ideal:

Further complicating matters, there is another use of the term "normal" in medicine that also leads to issues with the treatment/enhancement distinction. Instead of regarding 'normal' as merely what is ordinary, medicine sometimes defines 'normal' as "a description of the ideal" (Davis and Bradley 1996, 69). Davis and Bradley argue that "[t]he "norm" represents not what is common, typical, or customary, but instead what we believe normal "ought to be"" such as perfect, desirable, or healthiest (1996, 69). When the ideal is considered to be the norm, they explain, "variation becomes defined as disease" (1996, 70). While variation in biological functions and traits is common, when the ideal is taken to be the norm it raises the question of how uncommon something must be in order to be considered abnormal (Davis and Bradley 1996, 70). It also makes us less willing to tolerate substantial variations from this ideal (Davis and Bradley 1996, 70). Returning to the case of Johnny and Billy, if one takes an ideal level of height to be the norm then both boys

require treatment to enable them to reach a healthier (taller) adult height.[8] For Tess, if the possession of an ideal level of self-confidence is considered to be the norm, then her lack of this trait could be considered abnormal and treatment could reasonably be recommended. If Davis and Bradley are correct about the tendency of medicine to take an ideal to be the norm, then this opens the door to an incredibly vast array of variations from the ideal to count as disease. The implications of this are highly problematic for two main reasons. One, it will completely skew the standard of health and reduce otherwise healthy individuals who are probably the majority to a state of disease or dysfunction. For Johnny, Billy, and Tess, if we are using an ideal level of height and an ideal level of self-confidence then all three could be considered to fall short of the ideal and therefore be deemed unhealthy. Secondly, as a direct result from this, it would suggest that treatment would be appropriate in their cases and technological interventions will be made more frequently in an attempt to level the normal variation in traits humans possess. Davis and Bradley make a very good point when they argue that we need to accept that variability is normal rather than consider it a deviation from perfection (1996, 76). What then is the best account of normal to use to distinguish health from disease and when is an intervention better classified as a treatment or an enhancement?

## How to Define "Normal" and When to Intervene:

### Defining Normal

The best account of normal is one that will allow us to use it in a meaningful way to help us distinguish whether someone is healthy. Norman Daniels' normal function model provides such

[8] Davis and Bradley also use a similar example of the use of growth hormone in children to increase their height (see page 70).

an account. Daniels points out that there is a natural inequality in the distribution of capabilities amongst humans, a "natural lottery" of sorts (2000, 316). "Normal" for Daniels is the baseline that occurs in the natural distribution of talents and skills and interventions ought to only occur in instances that restore an unwell individual to a "species-typical" level of normal functioning. [9] The normal function model sees the goals of medicine to aim at helping people "become normal competitors, free from disadvantages caused by disease or disability" (Sabin and Daniels 1994, 10). Successful healthcare, for Daniels, "restores people to the range of capabilities they would have had without the pathological condition or prevents further deterioration" (Sabin and Daniels 1994, 10). Daniels is a proponent of a relatively modest and limited level of intervention. He endorses interventions aimed at "keeping people functioning as close to normally as possible" with the goal being to produce "normal competitors" in society, but makes it clear that "normal" does not mean "equal" (2000, 316). He argues "equal opportunity does not require assuring truly equal opportunity, which could result only if we eliminated this inequality in distribution of capacities" (2000, 316). Thus, for Daniels, it would be more appropriate to give someone suffering from muscle weakness and atrophy anabolic steroids to help restore them to the baseline level of strength that is typical for humans of his age and gender rather than give them to an already strong individual who wishes to become even stronger.

To conclude, we need a more concrete definition of health than just the negation of disease in order to properly determine whether a case requires a technological intervention. The best way to define health is by using the concept "normal" as average which denotes an ordinary finding or expected state. This is determined by a species-typical level of normal functioning as the standard upon which to measure the condition in question. This concept of normal allows for the

[9] Note the naturalistic language and Boorse's influence in Daniels' model.

variation across members of a species that results from the natural distribution of talents, skills, capabilities, and traits. This concept also accounts for the variation that occurs across various points in an individual's life. This includes the changes and variations in function an individual experiences as she passes through the various biological stages of life (infancy, childhood, adolescence, adulthood, old age). Thus, normal is a species-typical level of functioning which falls within the average of the normal variation of the members of that species. Species-typical function is the baseline level of health and the threshold between health and disease is set at 'typical' or 'average' conception of normal instead of 'ideal'.

### When to Intervene

Now that a clear definition of health has been determined via a normal level of functioning, if a trait, symptom, or bodily function is abnormal do we then try to treat it? If so, on what grounds? Boorse notes that in medical practice, departures from the norm are thought to warrant intervention if they cause death, disability, discomfort, or deformity (1987, 368). However, Anita Silvers argues that (unlike death) disability, discomfort, and deformity are not necessarily incapacitating so dysfunction should not always require an intervention (1998, 105). She states it is "far from clear" that a deviation from normal functioning means an individual will experience lowered productivity or a decreased quality of life (1998, 108). This person just might do things differently from the majority of us which is not a good enough reason to convince Silvers that we ought to try and impose "treatment" on her in an attempt to assimilate her to the rest of the majority. I wholeheartedly agree with Silvers and think we need to be cautious about attempting to "normalize" individuals who function differently than the majority but are nevertheless successfully functional. For example, consider deafness. Normally, people communicate verbally. Those who are deaf, however, are unable to hear the speaker so they use alternative

methods to understand what the speaker is saying, such as reading lips or having the speaker use sign language. While these two methods are not how the average person receives information in conversation, they are nonetheless effective, and in some contexts are actually more effective than speaking. So effective in fact, that there is considerable debate in the Deaf community about whether children who are born deaf should receive cochlear implants that will allow them to hear and thus treat their deafness. Many deaf individuals do not consider their condition a disability and thus object to being labeled as "disabled" or encouraged to conform to the way the majority of society engages in conversation.

I think the solution to determining whether or not one ought to receive treatment lies in Silvers' statement that "any measure used to sanction intervention should distinguish what is not normal and thereby harmful from what is not normal but merely unusual or anomalous" (1998, 105). Harm seems to be the key to determining when to intervene and it is a value judgment made about the situation. Similar to the two criteria for disease, this requirement has both a biological and a value basis. The concept of "normal" is grounded in a species-typical biological level of function and harm is assessed via a value judgment about this level of function.

This talk of 'species-typical biological function' might make it sound as if I am defending a strictly medical model of disease and disability, according to which disease is to be understood entirely in terms of biological impairments in individual bodies. This model has been widely criticized for paying insufficient attention to the social conditions of disability, and such criticism led to the development of the influential 'social model of disability.' There are two main variations of the social model. Proponents of the more restrictive view, most notably Michael Oliver (1990, 1996), disagree with the medical model and argue that disability is the result of social conditions that are unfavorable or discriminatory for some members of the population. The

second variation combines the medical model's emphasis on individual biological dysfunction with the interaction between those dysfunctions and the social conditions that make it more difficult to live with those dysfunctions (Shakespeare 2006, Altman 2001, Bickenbach 1993). For example, consider someone with a biological dysfunction that renders her unable to walk so she uses a wheelchair to be mobile. Since our social environment is structured for and caters to those who get around by foot, it is an unfavorable environment to use a wheelchair in. This second variation of the model would argue the individual's disability is the result of both a biological dysfunction and an environment ill-suited for wheelchair use.

The hybrid model I have defended above, however, is potentially consistent with the second type of the social model of disability. On the hybrid model, disease involves both a biological and an evaluative component. So on the hybrid view, it is evaluative judgments about certain biological conditions that make those conditions genuine diseases. But those judgments include, for example, judgments about what social conditions are normal and what ones are not, and about what kinds of inabilities are to be catered as a matter of course to and what ones are not. For example, no one is able to jump twenty feet, which is why the doors to buildings aren't on the second floor without there being stairs leading up to it. This is an inability that is catered to based on expectations about 'normal' that are value-laden.

To summarize, the best account of health is one that defines "normal" as average which is determined by a species-typical level of functioning as the standard upon which to measure the condition in question. A species-typical level of functioning accounts for natural variation that occurs across the species as a group and within the span of a particular individual's life. A biological function is abnormal if it falls outside this normal range of function. However, if a biological mechanism functions atypically (below a

species-typical level of functioning) it does not necessarily mean that it is harmful to the individual. Variation is normal and can still be healthy thus differences do not always indicate harm. Health is best determined by the judgment of harm made regarding this variation. This matches the hybrid account I defended above, for it has both naturalist and normative elements. For a deaf person who does not consider his lack of hearing a disability and is able to comfortably function in his daily life, there would be no harm from his deafness and as such he could be considered perfectly healthy despite his hearing functioning below average (in fact, not even functioning at all). Therefore, in this case no intervention is needed as he can be considered healthy. If the variation from the norm is causing an individual impairment in his daily life then he would be considered unhealthy and an intervention is justified, but if he is not then he is healthy and no intervention is needed.

We now have a solution to the tougher case of Johnny and Billy. Under this account of health, both boys would be considered healthy and thus an intervention would be an enhancement. While Johnny and Billy will grow up to be shorter than the average adult male, 5'3 is still within the normal distribution of height for adult males as dwarfism is considered 4'10 and below (Little People of America, 2013). As such, the harm criterion does not come into consideration as being 5'3 is within the species-typical level of functioning.

This leaves us with the final consideration of whether or not Tess' case warrants a treatment. In psychiatry, harm is assessed via the clinical significance criterion which is defined as "the disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning" (APA 2013, 21). While imprecise it

can be an effective way to establish whether or not an abnormal function is worrisome and requires a treatment. For Tess, her lack of confidence is not a biological impairment as human traits exist on a continuum and there is a wide range of levels of self-confidence that fall within a species-typical level of functioning. Furthermore, her lack of self-confidence does not meet the criteria for clinical depression. Recall Daniels' observation that there is a natural inequality in the distribution of capabilities amongst humans and that while the goal of health is to produce normal competitors in society, this does not mean equal competitors. As such, in Tess' case an intervention would be an enhancement, not a treatment.

It is worthwhile to take a moment here and address the concept of mental health that Tess' case raises. When trying to identify mental illness it can be quite difficult to discern normal from abnormal function due to the "absence of clear biological markers or clinically useful measurements of severity" (APA 2013, 21). Further complicating identification, abnormal symptoms (usually mild) that are not inherently pathological can appear in an individual who it would be inappropriate to diagnose as having a mental disorder (APA 2013, 21). The solution the American Psychiatric Association (APA) devised was to include a general diagnostic criterion in the Diagnostic and Statistical Manual of Mental Disorders (DSM) that required distress or disability in addition to the patient's other symptoms. This is the 'clinically significant' criterion that was detailed above, and is usually worded in the manual as "the disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning" (2013, 21). The authors note this criterion may be "especially helpful" when a clinician is determining a patient's need for treatment. Thus, for the APA, a simple identification of normal versus abnormal mental function does not provide the clinician

with enough information to diagnose a mental disorder, as abnormal function can occur but an individual still may be regarded as free from mental illness. Theoretically, if a patient is not distressed or does not consider an abnormal symptom to be debilitating to her level of functioning (and neither does her family or doctor) then it may be regarded as a benign "quirk" or personality trait and not require treatment. Thus, the DSM's use of the clinically significant criterion to interpret abnormal biological dysfunction is very similar to the hybrid theory I am endorsing. Psychiatry uses both a biological basis and a value judgment in distinguishing mental health from disease. This is more successful than if it attempted to use either consideration alone as neither give enough information to discern health from disease. Sole focus on mental biological function fails for the same reason naturalism does: mental dysfunction alone cannot give us enough information about whether a disease is present, for this determination requires a value judgment about the dysfunction in question. And relying on value judgments alone are also insufficient to classify mental illness, as disease needs a biological foundation to guard against mental illness being determined by social and cultural preferences. Recall Wakefield's objection in the second section regarding normativism and the worry that by basing the concept of disease on social values, these values may be used to "control or stigmatize socially undesirable behavior that is not really disordered" (Wakefield 1992, 373). Wakefield's concern is especially salient with regards to mental illness, for homosexuality was once, not too long ago, considered to be a mental illness.

## IV. Conclusion

This chapter was composed of three main sections. Second one answered the question "what is enhancement?" and examined the treatment/enhancement distinction. Enhancements are "interventions designed to improve human form or functioning beyond

what is necessary to sustain or restore good health" (Juengst 1998, 29). In order to distinguish a treatment from an enhancement a baseline level of health is required as a treatment is intended to restore a patient from below the level of health to a baseline level of health, whereas an enhancement is used to bring a patient to a higher level of health than the baseline. How this baseline level of health was established was the task of section two as it discussed three main accounts of health and disease. I discussed naturalism, normativism, and a hybrid theory that combined the insights of both, and I argued that a modified version of Wakefield's hybrid theory is the best account to distinguish health from disease. These two criteria are:

(a) the condition causes some harm or deprivation of benefit to the person as judged by the standards of the person's culture (the value criterion), and

(b) the condition results from the inability of some internal mechanism to perform its biological function (the explanatory criterion).

If a case meets both of these criteria then it can be properly classified as a disease and if it does not then we can say the individual is healthy. Thus, health can be classified as absence from disease.

However, while these two criteria were successful in establishing disease, defining health as the absence of disease was too imprecise and we needed a more specific account of health to properly handle cases where someone is not diseased but we still think she ought to receive an intervention for a condition, and this intervention is better classified as a treatment than an enhancement. Properly defining health was the purpose of the third section and it explored two accounts of the term 'normal' which lay at the center of the concept of health. I argued that the best account of normal is not as an ideal, but as a species-typical level of average function. This

concept of normal allows for the variation across members of a species that results from the natural distribution of talents, skills, capabilities, and traits. This concept also accounts for the variation that occurs across various points in an individual's life. This includes the changes and variations in function an individual experiences as she passes through the various biological stages of life (infancy, childhood, adolescence, adulthood, old age). Thus, normal is a species-typical level of functioning which falls within the average of the normal variation of the members of that species.

If a biological mechanism functions atypically (below a species-typical level of functioning), however, it does not necessarily mean that it is harmful to the individual. I agree with Silvers that we need to be cautious about attempting to "normalize" individuals who function differently than the majority but are nevertheless successfully functional. I thus argued that variation is normal and can still be healthy therefore differences do not always indicate harm. Health is best determined by the judgment of harm made regarding this variation. This can be done via a clinical significance criteria similar to the one used in psychiatry which is "the disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning" (APA 2013, 21). While imprecise it can be an effective way to establish whether or not an abnormal function is worrisome and requires an intervention. If the variation from the norm is causing an individual clinically significant impairment in her daily life then she would be considered unhealthy and an intervention is justified, but if there is no such impairment then she is healthy and no intervention is needed as it would be an enhancement.

# Chapter 2: Types of Enhancements

As discussed in the previous chapter, enhancement is often contrasted with treatment. Treatments are interventions which are used to restore an individual to a baseline level of health, whereas enhancements boost an already healthy individual above and beyond this baseline. An example is a student without attention-deficit hyperactivity disorder (ADHD) using Ritalin to aid his focus when he is cramming for an exam. Ritalin is a treatment when used by someone with ADHD to improve attention and focus, but is an enhancement when used by someone without ADHD to increase focus above an already healthy baseline. All enhancements have the same purpose, to boost an already healthy individual above a baseline level of health, but they may or may not have a treatment counterpart.

The aim of this chapter is to expand on Chapter One by broadening the focus from enhancement in general to covering a survey of the types of enhancements to provide the background for the rest of my project. This second chapter will be composed of two main sections consisting of enhancements with a treatment counterpart and those without. The first section comprises the bulk of the chapter and has two main subsections, the first of which focuses on physical and mental enhancements followed by two unique type of enhancements. These are enhanced treatments and diminishment as enhancement; the former are cases where a treatment actually pushes an individual above the baseline level of good health, and the latter are when instead of a trait being improved it is diminished to enhance an individual. The second section discusses two main types of enhancements that do not have a treatment counterpart, romantic love and moral enhancements. This section is intended to show that the possibilities for enhancement extend beyond the physical and mental traits of an individual as there is the

potential to enhance our relationships with others as well. Whether or not an enhancement has a treatment counterpart it is defined as a technological intervention used by a healthy individual to boost her above and beyond a baseline level of health.

# I. Enhancements With a Treatment Counterpart

## Physical and Mental Enhancements:

Recall from the previous chapter that often the technology is the same in both treatment and enhancement cases. For example, anabolic steroids can be used by someone with a muscular disorder as a treatment to strengthen her weakened muscles or by a body builder who uses the steroids to further increase the size of his already above-average muscles. What makes the technological interventions such as steroids used by body-builders enhancements, as opposed to treatments, is that they are used by healthy individuals in absence of disease. Enhancement is a broad category and there are many different kinds of enhancements. One natural distinction is between enhancements - such as steroids - that have mainly physical effects, and those - such as memory or attention enhancements - that have mainly mental effects. Some enhancement technologies have both effects, since mental effects have a biological basis. For example, some stimulants can have the physical effect of increasing heart rate and opening breathing passages, while also having mental effects, including increased focus and attention.

This section lays the groundwork for my argument later on in this project as my focus will be on personality and character trait enhancements (‘mental’ enhancements) as I argue these pose a distinct threat to one’s authenticity. I begin with a discussion of primarily physical enhancements, in order to clarify the general concept of enhancements. I will then turn to

enhancements that have a significant mental effect which are the type that will be the focus in later chapters.

### Physical Enhancements

Physical enhancements are technological interventions aimed at the body to improve its function beyond a baseline level of good health. For example, Viagra, which treats erectile dysfunction, can be used by men without erectile dysfunction to enhance their sexual performance and stamina. A brand new technology that has been developed is a bionic lens implant that has the potential to reportedly enhance an individual's ability to see "three times better than 20/20 vision" by replacing her natural lens with a bionic one (Bains 2015). Both of these technologies have treatment applications, but can be used by healthy individuals to enhance their sexual performance or eyesight.

A great place to find examples of physical enhancements is to look at the technological interventions involved in sports. This is where the literature on enhancement technologies originally began, with debates about the increasing use of drugs to enhance athletic performances in the 1980s and the expanding use of human growth hormone to increase the height of short children that was occurring around the same time (Hogle 2005, 699). Sports is rife with examples of physical enhancements used to boost the performance or function of the body. Some general examples include the aforementioned example of using anabolic steroids to build muscle, human growth hormone to enhance strength, and erythropoietin (EPO) to increase endurance (Murray 2008, 154). [10] Some enhancements, such as diuretics, work quite quickly. Diuretics are a treatment for hypertension that "increase the rate of urine flow and sodium excretion to adjust

[10] An athlete can boost her muscular endurance by increasing the oxygen-carrying capacity in her blood which is referred to as 'blood doping' (The President's Council on Bioethics 2003, 137).

the volume and composition of body fluids" (Cadwallader et al. 2010, 1). As such they can be used to enhance performance by allowing an athlete in a weight-category sport like boxing to lose weight rapidly by excreting water (Cadwallader et al. 2010, 1).[11] Depending on the particular sport an athlete is involved in, she may want to enhance specific physical traits. For example, beta blockers, which treat high blood pressure by causing your heart to beat more slowly and with less force (Mayo Clinic 2016), can be used by archers to increase the interval between heartbeats so they have a longer time to aim and release an arrow (Murray 2009, 2) but this wouldn't offer a competitive advantage to an athlete, such as a sprinter, whose sport does not reply on fine motor skills. Nutritional supplements can sometimes offer a competitive advantage as well. Researchers found that the nitrate in beetroot juice "increases nitric oxide levels in the body, allowing muscles to use oxygen more efficiently" (Thompson 2012, 288). When taken by divers it gives them the ability to hold their breath for 11% longer than normal (Engan et al. 2012, 55) and could help swimmers minimize the number of breaths they have to take in short distance events (Thompson 2012, 288). The possibilities for physical enhancements are seemingly endless with new technologies and applications continuing to be developed. If there is a way you want to improve your body, it is likely there is a technology that can help you achieve your goal.

### Mental Enhancements

Another type of enhancements are "mental" in nature. These target cognitive or psychological traits. Mental enhancements are technological interventions aimed at boosting a healthy individual's cognitive or psychological functions and/or abilities above the baseline level

[11] This is one of the reasons why the World Anti-Doping Agency has banned diuretics (also because they can mask the use of other banned substances) (Cadwallader et al. 2010, 1).

of health. Some enhancements focus on cognition which is a term in psychology used to designate "a combination of skills, including attention, learning, memory, language, praxis (skilled motor behaviors), and so-called executive functions, such as decision making, goal setting, planning, and judgment" (Whitehouse et al. 1997, 14). Psychological enhancements are interventions that aim to augment one's emotions, moods, character traits, and the like. Similar to how it is extremely difficult to differentiate the physical from the mental, it is an equally difficult task to separate cognitive from psychological mental processes. As Whitehouse et al. note, "the clinical and conceptual distinctions between cognition and emotion are difficult to make and the neural systems for these behaviors overlap with each other" (1997, 14). As such, I will discuss both cognitive and psychological enhancements in this section with the understanding that "mental enhancements" are technological interventions aimed at boosting a healthy individual's cognitive or psychological functions, traits, or abilities above and beyond the baseline level of good health.

When medications are used as enhancements in the absence of impaired cognitive functions they are often referred to as "smart drugs." Examples include the use of Alzheimer's medication in absence of the disease to improve an already normal level of memory, the use of Ritalin by an individual without ADHD to improve his concentration for difficult and time consuming tasks such as studying for exams, and the use of narcolepsy medication in order to stay awake all night, which could enhance the ability of surgeons to perform surgeries in the middle of the night.[12] Other examples of using medications as cognitive enhancements include using modafinil and glucose to improve attention, amphetamine and methylphenidate to improve learning (implicit, verbal, and numerical), and methylphenidate to enhance planning capabilities

[12] This last example comes from Greely et al. (2008).

(Earp et al. 2014, 3). As these examples show, one must choose a specific cognitive function one wishes to enhance. Due to the complexity of the human brain it is not possible to take one single "smart pill" and enhance one's entire cognition.

While these technological enhancements aim at improving the working aspects of the brain that allow us to think, process, plan, and remember, they are hard to completely separate from the emotions, mood, and personality functions of the brain that I classify as "psychological" aspects of the brain. Not only are they conceptually difficult to separate, but they may affect each other as well. As Whitehouse et al. argue, it is likely that "as individuals' cognitive abilities increase, their personalities will also change. Increased memory, new insights and better reasoning could all lead to new values, new perspectives on one's relationships, and new sources of pleasure and irritation" (1997, 16). Thus, it is important to recognize that when dealing with mental enhancements it may be difficult to change only one aspect in isolation. I will now turn to psychological enhancements, which are the focus of this dissertation.

Psychological enhancements are nothing new, as we have used drugs to enhance our psychological functioning since our ancestors discovered the mind-altering effects of various plants (Hall 2003, 1105). However, with the continual advancement of new technologies these psychological enhancements are getting more sophisticated and the range of psychological traits that can be enhanced is growing. One example of a psychological enhancement is the enhancement of an individual's mood. Mood, as de Ridder defines it, is "a relatively lasting emotional or affective state" (2007, 11). Mood can be distinguished from emotion as moods last longer, are less specific, and often less intense or less likely to be triggered by a particular event or stimulus (de Ridder 2007, 11). For example, you can experience a variety of emotions during the course of an eventful day – panic when you sleep through your alarm, frustration when

you're stuck in traffic, annoyance when you spill coffee on your pants, surprise when a friend pops by to say hello at work, and happiness when you get home and finally get to relax. Despite a roller-coaster of emotions, you can have a fairly steady mood, such as contentment, that persists throughout. Mood disorders, in contrast, are "disabling disturbances of mood or emotion" (de Ridder 2007, 11) and are most likely the result of a failure to regulate mood (Johnstone et al. 2007, 8877). Examples of mood disorders include bipolar and depressive disorders. Treatments target the abnormal activations and deactivations of the mood circuit in the brain or abnormal neurotransmitter release (de Ridder 2007, 12). However, some of the same technologies that are used to treat mood disorders could be used to brighten the mood of an individual who does not suffer from a mood disorder. Enhancing mood can be achieved in a variety of ways ranging from prescription medication to applying magnetic or electrical current to the brain (de Ridder 2007, 11). The most common way to do so, either for treatment or enhancement purposes, is the use of prescription medication or illegal drugs. Medications that are known to improve mood include barbiturates, benzodiazepines, central stimulants (amphetamines), and anti-depression medication such as selective serotonin reuptake inhibitors (SSRIs) like Prozac (de Ridder 2007, 13). Anti-depressants also have the potential to boost one's happiness, or rather one's sense of contentment or complacency with the unsatisfactory life circumstances one may find oneself in. Consider Carl Elliot's example of the Alienated Accountant who lives in suburbia and one day stops and says "Jesus Christ; is this it? A Snapper lawn mower and a house in the suburbs?" (1998, 180). According to Elliot, the accountant is overcome with an immense feeling of alienation and uncertainty that many of us experience, which leads us to ponder questions such as "Is this all there is? What is the sense of life? How does it all fit together?" "Who am I supposed to be, and what am I supposed to do next?" (1998,

179). The Alienated Accountant could seek a prescription for Prozac to quiet these questions if he preferred "drug-induced complacency over active struggle to change the social conditions that contribute to [his] discontent, leaving these problems untouched" (DeGrazia 2005, 217).

Another example of a psychological enhancement is one which enhances an individual's personality or character traits. These are the types of enhancements that will be the focus of my dissertation as they number among some of the most interesting and challenging cases for authenticity. Recall Tess' case from the previous chapter. After being successfully treated for depression with Prozac, Tess later requests to be put back on it as she no longer feels "herself" when she is not taking it. She is no longer depressed, but is not as confident, outgoing, or decisive as she was when she was on Prozac. Tess prefers her personality when she is on Prozac and the transformation she experiences when she is medicated. In the absence of depression Tess' use of Prozac is best described as a personality enhancer, rather than a treatment.

A desire for a similar personality transformation is found in David DeGrazia's description of Marina's case. As Marina approaches thirty, by most people's view she leads a successful life. She has a good job, close friends, and hobbies she enjoys but she "finds herself brooding and pensive, wondering about her life and its direction" (DeGrazia 2004, 34). DeGrazia says:

> [a]t work she feels overly tentative, unsure, and too prone to worrying about possible errors. In her social life she hates how she endlessly interprets the latest transactions with friends, and she dislikes the way she is attracted to men who are bad for her but is too afraid to pursue those of more promising character. (2004, 34)

She visits a psychiatrist and is told she has no diagnosable disorder but that psychotherapy may be helpful to her. She refuses as she would have to pay for the sessions out of pocket. However, Marina still wants to change. Instead of feeling socially excluded, slighted, and unworthy of a

good partner, Marina wants to be more outgoing, confident, and decisive at work (DeGrazia 2004, 34). As she has heard that Prozac sometimes has the ability to produce transformations like the one she seeks - and more quickly and less expensively than she could expect from psychotherapy – she requests a prescription from a psychiatrist (DeGrazia 2004, 34). Marina specifically seeks out a prescription for Prozac because she "wants to use a medication to change her personality and become a different sort of person" (DeGrazia 2004, 34).

Psychological enhancements that focus on improving one's personality or character traits, like the ones Tess and Marina seek, often pose a more difficult challenge to authenticity than those that do not target fundamental aspects of her self. Researchers have found that people are more reluctant to enhance psychological traits in themselves that they believe to be more fundamental to self-identity (e.g. social comfort) than those that are not (e.g. concentration) (Riis, Simmons, and Goodwin 2008, 500). For example, consider Tess drinking a cup of coffee to give her an energy boost, thus targeting her mental alertness, and her taking Prozac to make her more confident and outgoing by targeting her personality traits. The enhancement the cup of coffee offers is a more superficial change than the one Prozac can bring about and therefore is not a threat to her authenticity in the same way that the Prozac may be. Some mental enhancements are more of a threat to an individual's authenticity than others and this may be the case for physical enhancements as well. I leave open the possibility that some physical enhancements have the potential to threaten authenticity in a way that, for example, taking a beta blocker to improve your precision at target shooting, does not. However, in order to maintain a manageable scope for this project, I will limit my discussion in later chapters to enhancements which change your personality and have the potential to be authenticity-undermining. These types of character trait enhancement cases will be discussed in further detail in Chapter Four

which explores enhancement and authenticity. At present they are intended to serve as examples of the possibility of enhancing personality and character traits via the use of medication outside its intended purpose of treating mood disorders.

## Unique Cases:

Within the types of enhancements that have a treatment counterpart, there are some special cases that arise. Two such classes of cases cover, first, instances in which a treatment for a condition also qualifies as an enhancement, and second, those where enhancement requires diminishing, rather than boosting or improving an individual's characteristic or ability. In some rare cases, diminishment can actually enhance one's quality of life. Both of these cases will be discussed below.

### Enhanced Treatments

Some enhancements with treatment counterparts are not quite as straight forward as the ones I have been discussing so far. While the treatment/enhancement distinction can still be used, in some unique cases an intervention is intended as a treatment, or begins as a treatment, but can result in boosting a person above the baseline level of health. Consider the case of Oscar Pistorius, a former sprinter from South Africa who is missing his lower legs.[13] Prosthetic legs would restore him to a baseline level of health by restoring his mobility. However, Pistorius did not just have 'regular' prosthetic legs, he had Cheetahs – carbon fiber blades which may be more efficient than natural human legs (Murray 2008, 156). In a race these carbon blades may have given him a competitive advantage over the other sprinters he raced against (Murray 2008, 156). If these Cheetahs were more efficient at sprinting than natural legs they were more than just a

[13] Pistorius has been convicted of the murder of his girlfriend and no longer races.

treatment for his missing limbs - they are even better than typical human legs. There was a need for a treatment for Pistorius' condition (his lack of mobility) but if the treatment technology was superior to the biological material it was replacing then it was more than just a treatment. It was not merely restoring his mobility to a baseline level of health, it pushed the function above and beyond the baseline. As such Pistorius' Cheetahs could be classified as an enhanced treatment when he used them in races. [14]

Another example of an enhanced treatment would be Tess when she was on her first prescription of Prozac. She was suffering from depression and thus was unhealthy and in need of treatment. However, while the Prozac treated her depression it also enhanced some of her psychological traits– she became more self-confident, assured, and outgoing than she was prior to becoming depressed. Thus for Tess Prozac was an enhanced treatment as it made her feel "better than well." Not only was the antidepressant treating her depression, it was mentally enhancing some of her psychological traits as well. Therefore, enhanced treatments are a more distinct type of enhancement than the more straight forward enhancements discussed earlier on in this section.

### Diminishment as Enhancement

Earp et al. have a broader conception of enhancement than the "improve some capacity or function" view I have focused on thus far in the chapter. They argue, instead, that enhancement ought to be defined as "any change in the biology or psychology of a person which increases the chances of leading a good life in a given set of circumstances" (2014, 2). The reason for this

[14] Note that the Cheetahs were only enhanced treatments in this particular circumstance. They may enhance speed, but they were not enhancements in other situations for they made it difficult to change directions and slow down easily. As such, Pistorius would have only worn them to race. For these reasons, the Cheetahs only qualified as an enhanced treatment when used for races. In other situations, they would have been just a regular treatment, and an inferior one to standard prosthetic legs that make it easier to change directions etc.

broader definition is that they argue not all enhancements are aimed at the augmentation of a trait, as diminishing a trait in a "subtractive" intervention could plausibly contribute to an increase in an individual's well-being (2014, 2). Consider the example of the diminishment of one's emotional memory. While improving one's traits and capacities normally improves one's quality of life, this is an interesting example of how dulling a cognitive function can have the potential to enhance one's quality of life. Memory diminishment could be used for both treatment and enhancement purposes. Studies have indicated that when the drug propranolol (a beta blocker) is taken immediately before or after a traumatic event, it can prevent an individual from developing post-traumatic stress disorder (PTSD) by diminishing the emotional memory associated with the event (Henry et al. 2007, 13). The potential treatment applications for propranolol are vast. It could be taken prior to an event by firefighters, police officers, soldiers, and emergency responders before they go into a situation that is likely to be highly traumatic (Henry et al. 2007, 14). It can also be administered to patients in an emergency room after they have been victim to a traumatic event such as a horrible accident, assault, rape, or attack (Henry et al. 2007, 14). However, propranolol could theoretically be taken by an individual in an enhancement capacity as well, either prior to or after an event that he may just prefer not to have strong emotional memories of. For example, we've all been involved in uncomfortable situations we would prefer not to recall so vividly – the guilt over ending a relationship, the humiliation from a presentation that went poorly, the embarrassment caused by a social blunder, and so on. While these situations are often not cause for severe emotional trauma, there are often residual emotions that we re-experience when we recall these memories and it may enhance our lives to be able to take the emotional "sting" out of these memories.[15] While unpleasant, the guilt,

[15] The "sting" of these emotions is a term from Henry et al. (2007).

humiliation, and embarrassment in these cases are not a form of ill-health or diminish our functioning, like PTSD does, for example. As such, the use of propranolol to diminish the emotive connection to uncomfortable memories we would prefer not to re-experience could be considered an enhancement. The memories are still there, but we would care less about them as the emotive connection to them would be diminished.

But what if we could do more than just reduce the emotional connection to a bad memory and erase the memory all together? Dr. Scott Haig, an orthopedic surgeon, discusses a case of memory diminishment in which a patient's memory was actually erased by an anesthesiologist during a bone biopsy. A young mother went to Haig for the procedure and opted for a local anesthetic instead of general as she was adamant she did not want to be put fully under, but agreed to "some sedation" if the doctors thought it was necessary (Haig 2007). As such, the patient agreed to have an anesthesiologist in the room "just in case" (Haig 2007). Haig removed the bone sample and sent it to a pathologist who was working in another part of the hospital, stitched up the incision, and waited for confirmation from the pathologist that he had removed a large enough sample before they left the operating room. The pathologist, assuming the patient was under general anesthetic, contacted the surgeon through an intercom system and began to discuss the severity of the sample before Haig was able to inform him the patient was awake, as the intercom was only working in one direction (Haig 2007). Before anyone could turn it off, the pathologist revealed the patient had a very grave form of cancer in a manner he would not have used had he known the patient was able to hear. The patient become distressed and began shrieking and the anesthesiologist decided to inject the patient with propofol. Propofol is an anesthetic, but it also erases the last few minutes prior to injection from one's memory - "[t]hink of the "neuralyzer" from the Men in Black movies" Haig explains (2007). Ten minutes later the

patient woke up, “happy and even-keeled, not even knowing she’d been asleep” and was out of recovery in time to make it home for dinner (Haig 2007). Haig told the patient the grim news at a later date, once he had a proper diagnosis, oncology contacts lined up, and the patient in a situation where she was more “emotionally prepared” for such news (Haig 2007).

Obviously a significant ethical issue with this case is the patient's lack of consent. Whether the anesthesiologist did the right thing is up for debate, as is whether his motive was to alleviate the suffering and distress of the patient or to avoid a lawsuit. However, these issues, while important, are not the purpose of this example here.[16] Unlike the Men in Black movies, this is a real-life example of memory erasure instead of it being merely the work of science fiction. Propofol can be used to erase one’s memory and it is plausible it can have both treatment and enhancement purposes. If used immediately following a traumatic situation that is likely to lead to an individual experiencing PTSD, such as after being attacked, raped, or in a horrible accident, then propofol could be a used as a treatment. It could also be used in absence of trauma to erase memories we would simply rather remove from our personal narrative. Consider the examples I gave above of ending a relationship, the presentation that went poorly, and a social blunder. What if instead of reducing the emotive connection to these memories you preferred to just erase them entirely? An erasure of your selective memory to enhance your quality of life or well-being (you decide you be happier if you don’t remember these events) would be an enhancement.

While the enhancements that we have discussed thus far vary greatly, they all have one thing in common - they all had a (at least potential) treatment counterpart. The technological interventions could be used either in a treatment capacity to restore an individual to a baseline level of health, or as an enhancement to boost an already healthy individual above the baseline.

[16] For a discussion of these issues see Kolber (2008).

While the enhancements that I will discuss in the next section have the same function as the ones discussed here – to boost an already healthy individual above a baseline level of health – they do not have a treatment counterpart.

## II. Enhancements Without a Treatment Counterpart

Enhancements usually have a treatment counterpart where the same technological intervention can be used either in a treatment or enhancement capacity. However, some types of enhancements are 'stand alone enhancements' meaning they may not have a treatment counterpart but are still best defined as enhancements. Two types of stand alone enhancements will be discussed in this section: those that are intended to enhance a romantic relationship and strengthen the pair-bond between two people, and the so-called "moral" enhancements that aim to make people better moral agents. This section is intended to show that the possibilities for enhancement extend beyond the physical and mental traits of an individual as there is the potential to enhance our relationships with others as well. Furthermore, the possibilities expand beyond understanding enhancement merely as one half of the treatment/enhancement distinction as enhancements can also be stand alone concepts.

### Neuroenhancement of Love

Julian Savulescu and Anders Sandberg argue that what constitutes love is a set of underlying brain systems for lust, romantic attraction, and attachment. As they explain it, "[l]ust promotes mating with any appropriate partner, attraction makes us choose and prefer a particular partner, and attachment allows pairs to cooperate and stay together until their parental duties have been completed" (2008, 35). These systems have evolved over time and form the basic foundation upon which our individual and cultural variants of love are built upon (2008, 35). As these brain

systems are chemically-driven, it seems plausible that we may be able to modify or enhance these systems with chemical stimuli. As a failure to develop a bond with a partner is not by itself a health problem and thus cannot be treated (though it may be caused by other health problems, depression for example), any interventions aimed at the neuroenhancement of love would be enhancements that do not have a corresponding treatment.[17]

Lust (sexual desire for any appropriate partner) seems to be mediated by the hypothalamus and sex hormones, and could potentially be enhanced or modified via pheromones or testosterone (Savulescu and Sandberg 2008, 35). Attraction (the choice and preference for a particular partner) is thought to involve dopamine, lowered serotonin, and epinephrine, and could potentially be enhanced or modified via pheromones, stimulants, or oxytocin (Savulescu and Sandberg 2008, 35). Attachment (the desire to stay together with a particular partner) occurs on a "deeper" emotional level than lust and attraction which is likely due to attachment being based on different neurochemical systems (Savulescu and Sandberg 2008, 35). Neuroimaging studies of romantic love show activation in regions linked to the oxytocin and vasopressin systems which are two of the most discussed hormones related to pair bonding (Savulescu and Sandberg 2008, 36). The neurotransmitter dopamine also seems to be important, for neuroimaging shows activation in the reward systems of the brain (Savulescu and Sandberg 2008, 35-36).

Debra Zeifman and Cindy Hazan argue that attachments take time to form and given the high rates of divorce in the early years of marriage, these separations are likely not the result of severed attachment bonds, but rather the pair bond did not have time to develop before the marriage dissolved (1997, 252-253).[18] As such, they argue, enhancement of long-term

[17] "Neuroenhancement of love" is Savulescu and Sandberg's term (2008).
[18] The assumption here is that these couples married before attachment bonds were formed, and not, for example, after dating for a number of years and the marrying when the bond was well established.

attachment may strengthen pair bonds and could potentially be achieved via changes in oxytocin and vasopressin levels (Savulescu and Sandberg 2008, 35). Oxytocin is a "pro-social" hormone that is released during bodily contact and facilitates bonding (Savulescu and Sandberg 2008, 36). Savulescu and Sandberg note that '[t]he strong dopamine and oxytocin signals elicited during the early romantic phase of a relationship and during sexual interaction are likely to act as learning signals: they help imprint details of the partner, positive emotional associations and relationship-related habits" (2008, 36). Savulescu and Sandberg assert that enhancing one's oxytocin levels would "at the very least" promote one's "trusting pro-social behaviors" which may reduce the negative feedback in a relationship and help strengthen positive ties (2008, 36). Entactogen drugs offer another possibility to reinforce pair bonds "by giving the right drugs to subjects while they are in close contact with their partner" (Savulescu and Sandberg 2008, 36). Entactogen drugs such as methylenedioxymethamphetamine (MDMA, ecstasy) are known to make one more social, emotionally open, and connected with others (Savulescu and Sandberg 2008, 36). These effects may be the result of the release of oxytocin (Thompson et al. 2007, 19) and these drugs could be used to deepen a pair bond (Savulescu and Sandberg 2008, 36). MDMA is also being explored as a treatment option for disorders such as PTSD (Meyer 2013, 95). What makes the use of MDMA here an enhancement without a treatment counterpart is not that the drug has no treatment applications whatsoever, as many drugs are prescribed for a variety of uses. The defining feature is that you can only enhance pair bonds, not treat them, for the failure to bond with your partner is not a health issue. It may be caused by a separate health problem or lead to one as a result, but a weak pair bond is not one in and of itself.

Our increasing knowledge of the link between neurochemicals and lust, attraction, and attachment means there are "current and imminent possibilities of biological manipulation" of

these various stages of love (Savulescu and Sandberg 2008, 31). If we want to make the object of our affection lust after us, be more attracted to us, and desire to stay with us, and we use "love drugs" to fulfil these aims, then using these interventions to improve the love in a relationship is an enhancement. The question remains whether we should "make love more probable by manipulating its biological determinants" (Savulescu and Sandberg 2008, 38). Further questions arise regarding the use of enhancements to create love versus maintaining an already existing but fizzling relationship. As these questions are outside the scope of my project, I will not attempt to answer them. What is relevant here is that the neuroenhancement of love is a unique type of enhancement that has no treatment counterpart and the application of enhancements can be applied to relationships as well. I will now turn to one more example that is rapidly gaining attention in the enhancement literature – how we can make an individual a better moral agent.

## Moral Enhancements

While the literature about enhancements has been growing the past few decades, there is an increased focus on enhancements of the moral variety. Moral enhancements can be defined as "an enhancement that will expectably leave the enhanced person with morally better motives than she had previously" (Douglas 2008, 228). However, what qualifies as a moral enhancement can range from feeling increased empathy or personal responsibility to a heightened respect for fairness globally (Shook 2012, 3). Similar to the point I made in the cognition section, it is just as unlikely that a catch-all "morality" pill is possible as it is we can develop an "intelligence pill" (Shook 2012, 3). Instead, as with cognitive enhancements, there may be different types of interventions designed to target specific moral traits (Shook 2012, 3). A major difficulty that is unique to moral enhancements is that they must take into account social and cultural contexts (Shook 2012, 3). As Shook argues, "[m]oral intuitions, virtues, and rules are not identical around

the world; changing the social context can switch a classification of a moral enhancement into a moral deficit" (2012, 3-4). To illustrate his point, Shook asks us to "try to conceive of an "etiquette pill" and wonder how it could work the same in Bombay, Baghdad, and Boston" (2012, 4). With these considerations in mind, how could moral enhancement be achieved?

Karim Jebari argues moral bioenhancement could be carried out in three different ways via behavioural, emotional, and dispositional enhancements. Behavioural enhancement would allow the individual to retain his personality but be unable to perform certain acts (Jebari 2014, 255). An example of this can be seen in the movie A Clockwork Orange when the protagonist is injected with a substance that causes intense nausea when he watches violent images on a screen (Jebari 2014, 255). As a result of the 'treatment', whenever the character's aggression is roused he feels nauseous, thus preventing him from performing undesirable actions (Jebari 2014, 255). Emotional enhancement, in contrast, directly changes the way an individual feels about certain behaviours. For example, this enhancement would change his disposition to act violently by taking the emotional wind out of his sails, so to speak, instead of restricting the act itself as in behavioural enhancement (Jebari 2014, 255). Finally, dispositional enhancement does more than just remove the emotion that would incline one to act in a morally problematic way, it would change the disposition itself. Explains Jebari, "[a] disposition in this context differs from an emotion in that a disposition is not necessarily associated with a specific affect, but rather with varying affective responses in different situations" (2014, 256). An enhancement aimed at increasing one's empathetic disposition would achieve this goal. By this Jebari does not mean empathy as an emotion, "but rather an ability to identify emotions and a disposition to respond to emotions" (2014, 256).

While technology has yet to catch up to the ideas of how moral enhancement can be achieved, it is probable that it is only a matter of time before these ideas become reality. Enhancement possibilities stretch further than those with a treatment counterpart and beyond the possibilities limited to just the individual. The technological advancements today have far surpassed those available when interest in enhancement technologies began just a few decades ago, and will likely be eclipsed by the technologies developed in the near future.

## III. Conclusion

This concludes the survey of the types of enhancements that will provide the background for the rest of my project. I argued that enhancements with a treatment counterpart can be divided into two main categories, physical and mental enhancements, with the understanding that the distinction between the two is in no way discrete. There are also some unique cases that are worth noting, such as interventions that qualify as both a treatment and an enhancement and when an intervention increases one's well-being by diminishing or reducing the targeted function. Additionally, some types of enhancements, such as romantic love and moral enhancement, may not have a treatment counterpart. Whether or not an enhancement has a treatment counterpart it is defined as an intervention used by a healthy individual to boost her above a baseline level of health, and the possibilities are seemingly endless.

Going forward, the type of enhancements that will be discussed in the rest of this project will be narrowed down to psychological enhancements like the ones Tess and Marina desired. These personality and character trait enhancements are among some of the most interesting and challenging cases for authenticity because they threaten one's concept of self. This self-concept will be explored in the next chapter with a discussion of the self-discovery and the self-creation

view and how each perceives authenticity. I will return to the discussion of enhancements in Chapter Four on authenticity and enhancement.

# Chapter 3: Authenticity

This chapter's focus will shift from the discussion of enhancement to the notion of authenticity. While this is a term that can be applied to anything from objects to champagne, it also has a special use as an ethical ideal. In Chapter Four I will argue that authenticity is an important personal value that gives us reason to reject some forms of enhancement. In order to make this argument, however, it is first necessary to give a proper account of the metaphysical concept of authenticity. It is only once we have such an account in hand that we can establish what, if anything, is ethically valuable about authenticity. That is the purpose of this chapter – to explore what exactly authenticity is. This chapter explores the philosophical debates about the nature and value of authenticity, and defends a conception of authenticity that will be applied to the issue of enhancement. There are two main accounts of authenticity: the self-discovery and the self-creation views. The self-discovery view argues within each of us is a true self that we need to align our actions with in order to be authentic. The self-creation view, in contrast, disagrees with the concept of a stable, deep self. Instead, it sees authenticity as engaging in the process of creating yourself into the person you want to be. I argue the self-discovery view of authenticity is the more plausible view, for it is able to capture much of what is appealing about the self-creation view while avoiding its drawbacks.

Section one sets out the core concept of authenticity. Section two briefly explores the history of how authenticity came to rise as an ethical notion to provide some historical context within which to understand this ideal. Section three and four explain two competing views of the self, the self-discovery and self-creation views, in order to detail the different ways in which authenticity can be interpreted. Finally, section five argues that the self-creation view fails, and

that the self-discovery view of authenticity is a more accurate account of authenticity as an ethical ideal. I will now turn to the first task and discuss what authenticity entails.

## I. What is Authenticity?

Authenticity is an important and contested concept in the philosophical literature. Before looking at the differences in what authenticity is thought to entail, it will be helpful to first examine the general notion of the idea. To begin, consider authenticity in terms of an object, such as a painting or an antique (Sayers 1999, 2). We say these items are 'authentic' when they are genuine – "when it really is what it appears or purports to be" – and 'not authentic' when the item is an imitation or a fake (Sayers 1999, 2). Thus a painting is an authentic Monet when it was painted by Claude Monet and an antique can be said to be an authentic Edwardian piece when it was made between the years of 1901 and 1910. If the painting was painted so as to appear to be by Monet, but was painted by someone other than Monet, or the antique was made after 1910 but purported to be Edwardian, then they would not be authentic. It is often assumed that authentic pieces are "inherently superior to imitations, simulacra, counterfeits, and other items that might be passed off as originals" (Guignon 2008, 278). Jewelry and handbags are other every day examples of this. There is a large difference in the price and prestige of an authentic Rolex watch and a Chanel purse compared to their cheaper non-authentic knockoffs. Even food or drinks may be regarded as authentic or non-authentic. Consider, for example, champagne. Only carbonated wines made in the Champagne region of northeastern France that used grapes from regions recognized as the Champagne Appellation of Controlled Origin can authentically be called champagne (Mikulak, 2011). Any other sparkling wines that are made or use grapes from outside this region that claim to be champagne are not authentic champagnes. One thing these examples have in common is that many people express a preference for the

original item, object, or beverage over a fake or replica of the original. Originals are often accorded more prestige, for example, genuine champagne is much more expensive than a generic sparkling wine and original paintings are more valuable than their reproductions. Even if it is an exact replica, learning that a painting is a forgery will eliminate its value. A fake, even a good one, is often perceived as less valuable simply because it is not the real thing.

This preference for the original can be extended to authenticity in people as well. It is often thought that there is something better about an original than a replica, fake, or forgery, and this notion is carried over into our evaluation of authenticity in an individual. Authenticity in individuals revolves around a person's sense of self and how well her actions and behaviours cohere with that sense of self. For example, people who are authentic are 'true to themselves', they aren't 'fake', their outward behaviour and actions reflects their true feelings, they don't pretend to be someone that they're not to impress others, etc. The self differs from person to person and is comprised of "the constellation of feelings, needs, desires, capacities, aptitudes, dispositions, and creative abilities that make the person a unique individual" (Guignon 2004, 6). Many people think of themselves as originals, not merely numerically distinct from other people, but as having a unique history and combination of thoughts, preferences, and behaviours that make them qualitatively distinct from those around them. Not only are these qualities different from other people, but they have a relational property as well – these properties are yours and yours alone. For example, while several individuals, including yourself, may be funny, or clever, or studious, it is the unique combination of traits such as these that differentiate you from other funny or clever or studious people and the relational property of this unique combination of traits is what makes you *you*. Like the Rolex and the knockoff version of the watch, there is something that differentiates the 'real' person from a 'fake' version of himself, and this is

authenticity. People who are authentic are not trying to be something they are not, and are not representing themselves as having qualities they do not have. When an individual conducts his life in accordance with his own beliefs and values he can be said to be authentic, and when he does not remain true to himself he is often considered inauthentic. And just as we tend to hold an item or object to a higher regard if it is authentic, we often consider authenticity to be an admirable quality in people as well and tend to criticize people we perceive as inauthentic or phoney. For example, a musician who stops playing her own unique type of music and starts to play more mainstream popular music that she doesn't enjoy or find fulfilling so she can get more gigs and make more money can be considered inauthentic. Her fans would likely criticize her for "selling out" by betraying who she is and what she is passionate about in order to earn a higher paycheque. For her fans, the money is not worth being inauthentic - even if she earns less money, they would argue, it is better to be true to who you are instead of a phoney. Perhaps, for the inauthentic musician, money is more valuable to her than her authenticity. However, many people think being authentic is deeply important. Consider a trans woman who endures considerable hardship to be who she really is. For her, being authentic is of such great value that she would rather live a potentially more difficult life than to live a lie and pretend to be someone that she is not.

Whether we are talking about paintings, antiques, jewelry and accessories, champagne, or people, the term "authenticity" can be similarly used to distinguish the original from the replication and the genuine from the fake. The reason why we care about whether or not an item or individual is authentic is because we find value in the authentic. Authentic paintings, antiques, jewellery, and accessories are more valuable when they are originals, bubbly wines made with particular grapes are held to a higher regard than their non-authentic imitations, and people who

are authentically themselves we find more praiseworthy than those who live their life pretending to be someone that they are not. Authenticity as it applies to an individual is valuable because it is an ethical ideal. It is thought to be a good characteristic to have, similar to how being just or honest or scrupulous are thought to be good traits for an individual to possess. It is connected to virtues such as honesty and courage: the authentic person is true to herself and does not misrepresent herself to others, and she is willing to do so even in the face of adversity. This connection to virtue can be taken to suggest that authenticity is a central component in a good life. It is the notion of authenticity as it applies to an individual that will be the focus of this project. This chapter will explore the notion of authenticity as a metaphysical concept as well as how we can determine which parts of an individual are authentically hers. Before getting into specifics, a brief history of authenticity as an ethical ideal will be detailed to explain how this ideal came to fruition.

## II. The Historical Origins of Authenticity

Authenticity arose as an ethical ideal as the result of cultural changes in Western Europe that spanned the sixteenth to the eighteenth century (Guignon 2004, 27). These changes lead to the formation of what Charles Guignon refers to as "the modern worldview" and it was this new worldview that lay the foundation for the ideal of authenticity to be built upon. The following account in this section will describe the Western historical roots of this idea. This view arose as the result of three major events, according to Guignon. First, the Christian reformation in Europe shifted emphasis from external acts in the world, such as buying indulgences or engaging in religious rituals, to focus on the inner conditions of the soul in relation to God (Guignon 2004, 28). Early Protestants (and Luther in particular) broke with the Catholic Church in emphasizing that salvation was achieved by faith alone, and not by 'works' like indulgences, going to church,

or following the moral law more generally. As a result of this shift in focus, people in the West became increasingly interested in their feelings, intentions, desires, and motives. This led to a sharp distinction to develop between one's inner self and the external world around them (Guignon 2004, 29).

The second major event that contributed to the modern worldview was the rise of modern science. Again, there was a shifting of views from things following a divine plan to seeing the universe from a scientific perspective that was the result of rational laws and principles (Guignon 2004, 31). People stopped seeing themselves as a cog in the wheel, or as Taylor explains, part of a larger order in "the great chain of Being" (1991, 3). A new conception of the self began to emerge as a result, one that is seen as a subject and thus the center of experience and action (Guignon 2004, 32). No longer bound by God's plan for them, people began to explore their new-found freedom and decide for themselves who they wanted to be (Guignon 2004, 33).

The third major event was a new view of the sources and nature of political authority (Guignon 2004, 33). For example, Locke, Rousseau, Kant, and Hobbes, each in their own way, argue that legitimate political authority comes from the consent of autonomous individuals rather than from divine command. This new social view reinforced the emerging individualism in the religious sphere and a large contrast was now seen between one's public and private self (Guignon 2004, 34-35). As Guignon explains, "[t]his newly defined self naturally makes a sharp distinction between the features that are part of its worldly existence and what it really is deep within" (2004, 35). The result of these three major events was that by the end of the eighteenth century a new outlook was in place, one that emphasized one's inner, private self that was separate from the rest of the world. However, this new modern world view also ushered in a wealth of fresh problems as well, for while this new-found freedom was exhilarating, it also left

people wondering what to do with all of this freedom (Guignon 2004, 44). No longer bound by constraints, people now found themselves "freed to choose and then having no choice worth making" (Rieff 1966, 93). Thus, a new ideal was needed to provide individuals with some direction for their newly discovered freedom. The concept of authenticity, which emerged during the Romantic period, was a response to this need.

The development of the notion of authenticity is rooted in the eighteenth century notion that humans have a moral sense, or what Charles Taylor describes as "an intuitive feeling for what is right and wrong" (1991, 26). This intuition is your inner voice which tells you the right thing to do (1991, 26). Your inner voice is important on this view because it tells you how to act rightly, thus being in touch with this voice and your moral feelings are a means to the end of right action (Taylor 1991, 26). However, a shift began to occur, a "displacement of the moral accent" of sorts, when the focus moved from the end to the means and being in tune with oneself began to take on independent and important moral significance (Taylor 1991, 26). No longer is your moral voice a means to the end of right action, it now becomes the center point and "something we have to attain to be true and full human beings" (Taylor 1991, 26). As a result, one no longer looks outward for guidance, but turns inward to connect with the source deep within one's self (Taylor 1991, 26). Jean-Jacques Rousseau is a key figure in the development of this ideal as he is considered to be one of the most influential writers who advanced the idea that moral salvation could be achieved by "recovering authentic moral contact with ourselves" (Taylor 1991, 27). This "intimate contact" (Taylor 1991, 27) with oneself Rousseau refers to as the 'sentiment of existence'. This is a particular state that comprises genuine happiness, not merely the fleeting happiness based on transitory pleasures that come and go (Rousseau 1979, 68). In this state:

> the soul finds a solid enough base to rest itself on entirely and to gather its whole being into, without needing to recall the past or encroach upon the future; in which time is nothing for it; in which the present lasts forever without, however, making its duration noticed and without any trace of time's passage; without any other sentiment of deprivation or of enjoyment, pleasure or pain, desire or fear, except that of our existence. (Rousseau 1979, 68)

Rousseau argues that while this state lasts "we are sufficient unto ourselves, like God" (1979, 69). It is from turning inward that we can achieve happiness, and this happiness can be achieved independently from the world and others around us. We alone are sufficient for this state; we are the source of our own happiness. All that is required, according to Rousseau, is to be in touch with your inner self.

Building on this, a further development, which Taylor attributes to Johann Gottfried Herder, was the notion that we each have our own original way of being human, our own "measure" as Herder refers to it (Taylor 1991, 28). While this idea is commonplace today, Taylor stresses that before the late eighteenth century "no one thought that the differences between human beings had this kind of moral significance" (1991, 28). Being in touch with your inner, true self and acting in accordance with your unique inner self had become of great importance. As Taylor explains, "[b]eing true to myself means being true to my own originality, and that is something only I can articulate and discover. In articulating it, I am also defining myself. I am realizing a potentiality that is properly my own" (Taylor 1991, 29). It was with this idea in the late eighteenth century that the beginnings of the modern ideal of authenticity were formed and some of these features can still be seen in the modern articulations of authenticity today. While an inner self has always present in each of us, it wasn't until these cultural changes in Europe

that the West began to pay attention to its importance and to place value on authenticity and consider it an ethical ideal.

The modern articulation of authenticity used today is as an individual moral standard that is an important component of a fulfilling life. As Taylor succinctly articulates:

> There is a certain way of being human that is my way. I am called upon to live my life this way, and not in imitation of anyone else's. But this gives a new importance to being true to myself. If I am not, I miss the point of my life, I miss what being human is for me. (1991, 28-29)

To put it in the most basic terms, an authentic individual is one who is true to herself. Her actions and intentions align well with who she is and are a true reflection of her inner self. She is not intentionally or unintentionally fake, misleading, or disingenuous about her thoughts or feelings and there is a coherence between her values, beliefs, and feelings and how she acts. The assumption the ideal of authenticity makes is that "it is only by expressing our true selves that we can achieve self-realization and self-fulfillment as authentic human beings" (Guignon 2004, 6). If we fail to do so we run the risk of living a life with less meaning that falls short of the potential it had to be great which may be considered a failure or a wasted life (Elliot 1998, 182). What makes a life fulfilling according to this ideal is being true to yourself by being genuine to who you are and "owning it." For example, someone may be a boring and unaccomplished person but lies about his experiences and accomplishments to others to make it seem like he has a much more interesting life than he really does. Because these experiences and accomplishments are lies he is a fraud and thus faces a life that is ultimately meaningless because it is inauthentic. Authenticity is about being who you are and acting accordingly to contribute to a fulfilling and meaningful life.

There is no universal way of living a meaningful life, so how to do so will differ from person to person, each having to discover the answer for herself. "Each "self" is different and unique," Elliot argues, "for a life to be a good life, a meaningful life, a life properly oriented toward the good, we have to get in touch with ourselves" by finding our own way and being true to ourselves (1998, 182). This is the general understanding of authenticity as an ethical ideal, however, what is meant by "self" differs depending on which view of authenticity one is using. There are various understandings of what authenticity involves, but most can be divided into two main interpretations via the self-discovery and self-creation views. The next two sections will elaborate on these concepts and discuss these two views in detail.

## III. Self-Discovery View

According to the self-discovery view, within each of us lies a "true" self that is comprised of your characteristics, preferences, values, beliefs, and the like. This self may not be immediately obvious to us and may require some work to discover who you truly are. Being authentic for the self-discovery view requires you to be in touch with your true self, and the level of self-awareness may differ from person to person. Some people are more self-aware and in-tune with their inner self while others are more self-alienated. Those who are more self-aware may have an easier time acting in accordance with their inner self, while those who are self-alienated may need to put in some work to get in touch with theirs. This can be achieved by looking inwards and examining the self through activities such as introspection, self-reflection, or meditation (Guignon 2004, 6). Life experiences and challenges can also help reveal who a person really is and help her find her true self.[19] It is only after you can "candidly appraise"

[19] Interaction with others may also help an individual discover her true self by challenging her notions about her self. Self-discovery need not be a completely isolated activity.

yourself and possess genuine self-knowledge that can you act in accordance with your inner self's wishes and desires and thus live an authentic life (Guignon 2004, 6). This means "to actually be what we are in our ways of being present in our relationships, careers, and practical activities" (Guignon 2004, 6). Thus, to be authentic for the self-discovery view requires an individual to know his deep, inner self and to act in ways which cohere with his true self.

While we may change and grow, seek new opportunities and set new goals, the self is the relatively stable core entity in each of us that makes us who we are. Change is accommodated by the self-discovery view, but there may be limits to the extent of the changes a person can undergo and still be considered the same person. An individual can potentially undergo radical changes such as religious conversion, recovering from addiction, moving to a new continent and acquiring a new job, friends, and language, and still be considered the same person on this view. For example, recall the trans woman example from the first section. She is a great example of how even substantial change can be fully authentic, for any transformations she may undergo are oriented towards bringing her closer to her true, deep self. These changes would be authentic because they are reflective of who she really is and align with her true self. This is the key difference between authentic and inauthentic change. Change that does not reflect the true self renders one inauthentic.

The notion of a true self is a powerful one in philosophy and is a compelling concept that appears in contexts wider than just authenticity. An influential view in the literature on agency and responsibility is that the core of our agency lies in a real, deep, and true self. For example, Harry Frankfurt's early work on responsible agency draws on the notion of a deep self when he discusses an individual's first and second-order desires. An individual's first-order desires are what he wants, and his second-order desires *about* his first order-desires are what he *wants* to

want. Frankfurt identifies an agent's true or deep self with his second - or higher-order desires. An agent's first and second-order desires may or may not line up, and Frankfurt uses the example of an unwilling addict to illustrate the distinction. Imagine a drug addict who has a first-order desire for the drug of his choice, and he has this desire all the time, but he wishes he wasn't addicted (Frankfurt 1971, 12). He doesn't *want* to want the drug, and so there is an inconsistency between his first-order desire for the drug and the second-order desire of him not wanting to desire the drug, which Frankfurt refers to as a volition of the second order. It is the desire to refrain from taking the drug that the unwilling addict wants to constitute his will (1971, 12). The unwilling addict identifies himself through the formation of this second-order volition with the desire not to take the drug (1971, 13). In doing so, he makes this desire not to take the drug "more truly his own" because he identifies with it (1971, 13). A desire is in the 'fullest sense' his, meaning it constitutes what he *really* wants, when the unwilling addict identifies himself with it (1987, 170). Frankfurt argues that the decision which first-order desire to identify with plays an important role in the discovery and maintenance of the self (1987, 172). What the addict wants to want (his second-order volitions) can be viewed as his true self, and if his first-order desires do not align with his second-order volitions then he can be seen as inauthentic. On the other hand, if an individual's first and second-order desires do align then he would be authentic because "[i]t is in securing the conformity of his will to his second-order volitions, then, that a person exercises freedom of the will" (Frankfurt 1971, 15).

Accounts of agency based on the true self have been influential in the literature on moral responsibility (see Wolf 1987 and 2010 for another version of this view). Such accounts of agency can, however, be adapted to explain the self-discovery view of authenticity. Common to such views is the notion of a true self that lies deep within us, that can be in conflict with our

first-order attitudes, and that we have to sometimes struggle to discover and express. When our actions and behaviour align with this true self we are authentic, and when there is a disconnect or discrepancy between our self and our actions we are inauthentic.

## IV. Self-Creation View

In contrast to the self-discovery view, the self-creation view argues the self is not a stable entity that is waiting to be discovered, but is instead something we create. Defenders of this view differ on the extent to which we are able to create ourselves, with some allowing for radical self-creation and others confining the possible range of self-creation more narrowly. Jonathan Glover defends a moderate account of self-creation that serves as a good model example of the view. Put most simply, self-creation occurs when we are "[c]onsciously shaping our own characteristics" (Glover 1988, 131). Instead of discovering our pre-existing preferences and characteristics as the self-discovery view suggests, we are actively creating them. This can occur in a multitude of ways. For example, you may decide you want to be someone with a healthier lifestyle and work out several times a week to change your physique, or that you would like to change your career and go back to school to train for a new job. Furthermore, a project of self-creation does not need to be the most important thing in an individual's life. Glover explains, "[i]t is possible to care about what sort of person you are becoming, but to think other things matter more. ('This job is deadening my imagination, but the alternative is unemployment')" (1988, 135). One does not need to have a 'life-plan' in order to engage in a project of self-creation, for as Glover argues, few people actually have such plans (1988, 135). Instead, for most of us, "self-creation is a matter of a fairly disorganized cluster of smaller aims: more like building a medieval town than a planned garden city" (1988, 135). Glover also cautions against 'overrating our powers of self-creation' as there are "logical limits to what we can do. It is self-defeating to aim directly at

being more spontaneous or less self-conscious. These aims can be realized, if at all, only by oblique strategies" (1988, 135).

While proponents of the self-discovery view argue we are able to make changes that reflect with our true self and thus form our characteristics and preferences to align with the self, those who side with the self-creation view would argue something stronger. They would argue that we are able to shape or create new characteristics and preferences to suit our ideal self and there is no true self that needs to be accommodated or respected in these changes. A more moderate view like Glover's doesn't think the possibilities are endless, for there may be some limits to our ability to self-create, but pharmacological advancements have increased our ability to create ourselves. For example, one's spontaneity or self-confidence is more directly modifiable via psychological enhancements than when Glover made this argument in 1988. This issue will be discussed in greater length in the next chapter on authenticity and enhancement technologies, but for now I will focus only on the types of changes an individual is able to do himself, without the aid of pharmaceuticals. With such limitations it is understandable why Glover reassures the reader about pursuing projects of self-creation. He writes:

> Self-creation may not need either strenuous effort or the instant malleability of our whole character. It is a platitude that, for most people, some traits are virtually unalterable, and that some others can be altered only by drastic changes in way of life, or by effort over time. Self-creation is not like the instantaneous transformations of magic, but more like sculpting a piece of wood, respecting the constraints of natural shape and grain. (1988, 136)

However, self-creation can be viewed as permitting more radical change than what Glover argues is plausible. Perhaps the most extreme expression of the self-creation view arises in the existentialist tradition. The existentialist denies the existence of "discoverable inner

dispositions" (Meyerson 1998, 454). Jean-Paul Sartre argues this is because existence precedes essence – first we exist and then we define who we are (1948, 28). There is no human nature for Sartre, a person "simply is" because a person "is nothing else but that which he makes of himself" (1948, 28). We do not have a true self inside us to discover and form our actions to as we have no "essence" on this view - you decide who you are and who you want to be. As such, we are also not "locked into roles and patterns of behaviour" that others may think are appropriate for us (Meyerson 1998, 454). Consider Sartre's example of a waiter in a café: his movement is "a little too precise, a little too rapid" and when he takes orders he "bends forward a little too eagerly; his voice, his eyes express an interest a little too solicitous for the order of the customer" (1943, 101). Everything the waiter does - how he walks, his interactions with customers, how he carries his tray - is overdone like he is playing a game: he is playing at being a waiter in a café (Sartre 1943, 102). In doing so, Sartre argues, the waiter is in bad faith.

Bad faith in existentialism is when you are being inauthentic. Because our existence precedes our essence, the waiter is responsible for what he is and "the entire responsibility for his existence [is placed] squarely upon his own shoulders" (Sartre 1948, 29). Because there is no human nature, there is no determinism and thus the waiter is free. More specifically, he is "condemned to be free," argues Sartre, "because he did not create himself, yet is nevertheless at liberty, and from the moment that he is thrown into this world he is responsible for everything he does" (1948, 34). However, the waiter is assuming the role of a waiter, and in doing so is adopting his understanding of the world from other people. He is acting upon the social expectations of what the role of a waiter entails instead of defining who he is himself. Sartre states that "it is necessary that we make ourselves what we are" (1943, 101) but this is not what the waiter is doing. He is denying his freedom and responsibility to define himself and is letting

others do so instead. Therefore, he is inauthentic, or as the existentialist would argue, in bad faith. The mark of true authenticity in this tradition occurs when an individual lives his life fully aware of the fact that there is no good reason why he should be one way rather than another, as his identity is completely his own invention (Meyerson 1998, 453).

As is evident from this discussion of existentialism, inauthenticity is slightly different in the self-creation view than it is in the self-discovery. In the self-discovery view, you are inauthentic when you do not act or behave in ways that reflect your true self. In contrast, inauthenticity in the self-creation view arises when you fail to attempt to create yourself in ways you want to and are not exercising your freedom of choice. An altered version of the musician example can help illustrate this point: imagine an individual who wants to be a musician, that is to utilize her freedom of self-creation and become who she wants to be, but she fails to attempt to become a musician because she allows the views of those around her to influence her decision. She allows other people's ideas of who she should be to dictate the kind of person she is (much like Sartre's waiter) and thus she is in bad faith or is being inauthentic. Inauthenticity in the self-creation view arises from failing to engage in the attempt to create yourself into who you want to be.

While there is variation in the interpretation in the self-creation view, all versions center around the concept of a dynamic sense of self that can be created at will. Glover endorses a modest interpretation of this concept while Sartre argues for a more dramatic one. Glover thinks we have a more limited power with regards to our self-creation, whereas Sartre thinks we have the freedom to define ourselves. In either case, as long as you are utilizing your ability to create yourself, rather than simply working to reveal qualities and characteristics that were there all along, you can be said to be authentic in the self-creation view.

## V. Authenticity and the Two Views

To summarize: according to the self-discovery view, there is a true self inside each of us that remains relatively stable over time. In order to be authentic you need to discover this true, deep self and align your actions accordingly so they cohere with your inner self. In the self-discovery view, you are inauthentic when you do not act or behave in ways that reflect your true self. This does not mean that the self-discovery view makes authentic change impossible. Rather, while you may grow up, change jobs, partners, cities, or even values, the center of the subject that experiences or makes these changes remains stable. Change for the self-discovery view, I would argue, is more internally focused. That is, authentic changes are those that align with one's true self. Change is authentic when it coheres with your inner self, and inauthentic when it does not reflect your values, preferences, or characteristics.

According to the self-creation view, by contrast, the self need not be a stable core that one's actions must align with in order to be authentic. Instead the self is more transient and fluid – you are able to create yourself into who you want to be. Thus, the self in the self-discovery view is (ideally) stable while the self in the self-creation view is (ideally) dynamic. In contrast to the self-discovery view, change for the self-creation view is not internally focused as you can be who you want to be rather than who you already are. Inauthenticity in the self-creation view arises when you fail to attempt to create yourself in ways you want to and are not exercising your freedom of choice. Thus, to be authentic on this view you need to exercise your freedom of choice and engage in the attempt to create yourself according to your own ideals for yourself.

The appeal of existentialism is obvious, for the ability to define who you are by not being constrained by your internal nature or others expectations of you does sound enticing for those with self-creation aspirations. However, existentialism makes authenticity depend on an

extremely metaphysically ambitious position on radical freedom. I think authenticity can be grounded in a plausible way without having to accept such radical metaphysical commitments. The self-discovery view is able to accommodate much of what is appealing about the self-creation view in that we still have the freedom and ability to change, these changes are just more modest than those suggested by the self-creation view.

The self-discovery view does not prohibit change, for how can one get in touch with one's true self without any change involved? Presumably the more in touch you are with your inner self, the more you begin to align your actions with these inner beliefs. The self emerges through growth into adulthood, and while it is a developmental process, it is not a creation process. Part of childhood and adolescence is exploring and figuring out who you are thus some change must be required as you gain self-knowledge as you grow and shift your actions accordingly. As Glover eloquently puts it, "[w]hen a way of life does not fit with what you think you are really like, you can feel like a plant away from the light, distorted by having to twist and grope towards the sun" (Glover 1988, 137). For an example of this we can return to the trans identity case. Proponents of the self-discovery view would argue that the transformations she may undergo are oriented towards bringing her closer to her true self and are reflective of who she really is. These changes would be aimed at making her body match who she deep down inside knows herself to be. The self-creation view, however, would have a very different way of conceptualizing her case. The self-creation view would see her transformation as her creating herself into who she decides she wants to be, not reflecting who she truly is.

This case presents a problem for the self-creation view for it does not accurately capture transgender identities. These individuals do not speak of wanting to create themselves anew by exercising their freedom to define themselves by deciding they want to be a different gender

from which they were assigned at birth to recreate themselves into another gender with a different identity. Instead they want to be who they *truly are* and any changes they make to their bodies, their clothing, their names, and the like, are reflective of their true self, who they are deep down. For the self-discovery view, these changes are increasing the trans woman's authenticity because they bring her closer to who she really is. This example shows the superiority of the self-discovery view as it is better able to capture the trans woman's experience and trans identities more generally.[20] As we can see from this example, sometimes change is required for one to be authentic and the self-discovery view is able to capture these types of changes. You still have the freedom and ability to change on this view, and this growth would be encouraged or even required in some cases. The only caveat for these changes is that they must align with your true self. In so long as your actions reflect your deep self, you are free to form your characteristics and preferences to align with the self.[21]

Some readers may think that this sounds similar to my discussion of Glover's view in the fourth section. What is so interesting about Glover's view is that he endorses the self-creation view, yet I read his work as being very close to what proponents of the self-discovery view hold. Recall how Glover uses the word "shaping" to articulate the types of change possible with self-creation to make it clear that an individual cannot literally recreate himself anew. Instead she can only make more modest changes that accommodate her traits that are unalterable, similar to how one must respect the constraints of the shape and grain of the wood when sculpting. As such,

[20] It ought to be noted here that what I have in mind with this argument is the familiar binary trans narrative, but matters may be different for non-binary trans people.

[21] I will continue this discussion of bringing about changes in the next chapter when I compare authentic and inauthentic methods of invoking change and how therapy, diet, and exercise are authentic interventions because they require the exertion of the will, whereas Prozac and other psychopharmacological interventions are inauthentic because they bypass the will in an objectionable way.

Glover's view is not as in much conflict with the self-discovery view as one might first think, but there are a couple important differences that render his view problematic. His use of "shaping" is very similar to my use of "forming" in that he explains the process occurs when an individual is 'consciously shaping her characteristics'. The difference would be that Glover argues there are limits to the changes we can bring about because some characteristics just cannot be changed because they are fixed, while I argue they cannot be changed because they need to reflect our true self. The second difference is that Glover argues that, despite these limitations, you have the ability to shape your characteristics towards the person you want to be. I argue that, because of these limitations, the changes we make will align with our true self. Thus, Glover argues there are limitations to what we can change, but we can shape those we can into who we want to be and these types of changes aimed at the ideal self would be authentic. I argue that there are limits to the changes we can bring about, but this is because they need to reflect who we are in order for these changes to be authentic. The self-discovery view is able to capture the appeal of the self-creation view with its allowance on the freedom to change, but it avoids the radical metaphysical commitments of existentialism and the problems the self-creation view more generally encounters when it attempts to explain changes such as trans identities. As such, the self-discovery account of authenticity is the superior account and will be the one I use for the rest of the project.

## VI. Conclusion

The purpose of this chapter was to prepare the groundwork to shift focus from exploring the conceptual issues with enhancement to the ethical ones that will be explored in the next chapter. The ethical ideal of authenticity provides us with the means with which to measure the moral permissibility of the use of enhancement technologies. There are two main accounts of

authenticity: the self-discovery and the self-creation views. The self-discovery view argues within each of us is a true self that we need to align our actions with in order to be authentic. The self-creation view, in contrast, disagrees with the concept of a stable, deep self. Instead, it sees authenticity as engaging in the process of creating yourself into the person you want to be. I have argued in this chapter that the self-discovery view of authenticity is the better of the two views. Accordingly, the view of authenticity this project will utilize is that in order to be authentic your actions must reflect the characteristics, preferences, values, etc. that comprise your true self – the deep, unique, inner part of you that makes you you.

# Chapter 4: Authenticity and Enhancement

Wanting to change ourselves is nothing new; the means with which we are able to do so are. With our ever-advancing technology the characteristics that can be targeted are continually increasing. We can enhance our memory, our moral characteristics, and even our character traits. However, these technological advancements are met with some hesitation: just because we can do something, it does not mean that we should. There is an interesting tension between being true to who we are and being adaptable and changing ourselves as we want or need to. Elliot captures this tension well:

> An ethic of authenticity teaches us that in order to live a meaningful life we must live a fulfilled life, and fulfillment means discovering and ultimately pursuing the values, ideals, and talents that are unique to us as individuals. Yet this moral vocabulary has been built against a social background that encourages us to adopt a flexible, adaptable identity. […] [There is] a tension between the values of self-improvement and personal achievement, on one hand, and, on the other, the values of stability, loyalty to your roots, and remembering where you came from. (2004, 8-9)

This tension gives rise to the question of whether or not enhancement technologies are compatible with authenticity. This is one of the questions this chapter will set out to answer. I will be focusing exclusively on psychological enhancements that target one's personality or character in this chapter as these types of mental enhancements are the most interesting and challenging cases for authenticity. As I argued in Chapter Two with the example of Tess drinking a cup of coffee versus taking Prozac, some mental enhancements pose less of a threat to a person's authenticity than others do. Tess having a cup of coffee to boost her alertness and feel more awake is not aimed at altering fundamental aspects of her true self in the same way that her

taking Prozac to make her more confident and outgoing is. The enhancement the cup of coffee offers is more of a superficial change than the one Prozac can bring about, and thus it is not a threat to her authenticity in the same way that the Prozac may be. It is the types of enhancements that *do* have the potential to be authenticity-undermining that will be the focus of this chapter. I will be mainly focusing on the effects that Prozac (fluoxetine) can have on people who are not clinically depressed as my main example. The reason for this is that on Prozac the habitually timid were given social confidence, the sensitive became brash, and the drug seemed to "lend the introvert the social skills of a salesman" (Kramer 1997, xii). Prozac seemed to have transformed these patients and profoundly challenged their notions of the self and as such gives rise to authenticity-related worries. While Prozac will serve as the main example, I will show that the argument applies to a range of other psychological interventions as well.

The task in this chapter is twofold. First, I set out to determine if psychological enhancements that aim at improving one's character or personality traits are compatible with authenticity. I argue that in many cases the two are incompatible. Secondly, I argue that this incompatibility is a reason to reject enhancements that are directed at one's personality or character. The first section discusses how the self-discovery and the self-creation views respond to the question of whether you can authentically enhance your personality with Prozac. Whether or not enhancements are compatible with authenticity depends on which view of the self you accept. As I argued in the previous chapter, the self-discovery view of authenticity is the better account, and I build on this account to argue that enhancements and authenticity are incompatible. The second section takes a different approach and asks whether you can "find" your true self on Prozac, as Tess claimed she did. I argue that such an assertion is just a preference for enhanced personality traits that one does not actually possess, and are thus

inauthentic. The third section explores the interesting question of whether psychological enhancement technologies can be a *means* to authenticity. I argue that while it is possible in at least one specific case, the outcome is variable and as such an individual risks her authenticity if she proceeds with the enhancement. In the fourth section I argue why the incompatibility, and potential incompatibility, is a reason to reject these types of enhancements. In the fifth section I discuss self-ignorance and how our self-assessment is often mistaken and why this enforces reasons to be skeptical about enhancements chosen to help increase authenticity. Finally, the sixth section extends my argument beyond Prozac and discusses other psychological enhancements that pose a threat to authenticity.

## I. Enhancing Yourself on Prozac

Recall Tess' case from Chapter One and Two: after being successfully treated for depression with Prozac, Tess later requests to be put back on it as she no longer feels "herself" when she is not taking it. She is no longer depressed, but is not as confident, outgoing, or decisive as she was when she was on Prozac. Tess prefers her personality when she is on Prozac and the transformation she experiences when she is medicated. As Edwards articulates, "Prozac had, so to speak, reset her baseline of what counted (to her) as normal functioning" (Edwards 2004, 60). Now that "[h]er depression, clinically defined, is gone; what she is feeling now is not symptom, it is (her) reality. And she wants to change that reality with a drug" (Edwards 2004, 60). Tess no longer wants to be the Tess she has been for her entire life with low self-worth, poor inter-personal skills, and self-doubting; she wants to be the Tess with the new personality on Prozac - confident, decisive, and assertive. The question is, are these new personality changes authentic? There are two different approaches to answering this question.

According to the self-discovery view, deep within each of us is a true self, and our actions and behaviours are authentic when they are in line with this true self. If an action or behaviour does not reflect our true selves, then we are inauthentic. As Tess came to possess certain traits after taking Prozac that she did not have prior to taking the drug (self-confidence, assuredness, decisive, etc.) the charge from the self-discovery view is that these personality enhancements are inauthentic: they do not reflect the person she truly is. And, as I will argue later, because they are inauthentic, the changes should be avoided – they would be harmful, or unethical, even if they improved the recipient's quality of life in some way.

Proponents of the self-creation view, however, are not persuaded by this worry. As DeGrazia articulates, self-creation "refers to the conscious, deliberate shaping of one's own personality, character, [and] other significant traits (e.g., musical competence, athletic prowess), or life direction" (2005, 89-90).[22] "[O]ne doesn't just watch one's life story being written or look elsewhere as the chapters fly by" he argues, "it occurs when an individual takes an active role in authoring the biography, making it a *lived* autobiography" (2005, 107). From this view Tess would be actively shaping her personality and character with the help of Prozac to become who she wants to be - her ideal self. As such, the personality or character changes she makes that transform her into who she wants to be are perfectly authentic. In fact, on this view, taking Prozac to allow her to be who she wants to be may be a *more* authentic choice, one more revealing of her authentically created self, than the choice not to take Prozac.

[22] DeGrazia (2005) cites Glover (1988) here, page 131.

## The 'New Person' Objection

One objection from proponents of the self-discovery view is that the personality changes Tess underwent on Prozac are so substantial she is literally a new and different person. Not only had her personality changed in various dramatic ways, but so had her group of friends, the type of men she dated, her relationship with her family, and her management style at work. Tess was a "new" woman with a new personality and a new life to match. Elliot notes "[i]f Prozac really does alter a person's personality in important ways, the notion of being a "new person" on Prozac would take on a more literal truth" (Elliot 1999, 29). While Tess considered these to be positive changes, Kramer acknowledged that "[i]t makes a psychiatrist uneasy to watch a medicated patient change her circle of friends, her demeanor at work, her relationship to her family" (1997, 12). His initial worry was that he had seen depressed patients turn manic and make decisions they later regretted, but over time Tess never showed signs of mania so his worry in that regard was assuaged, yet his concern did not disappear and he found it hard to articulate why, as the personality changes were not causing her harm (Kramer 1997, 12). The self-discovery view proponent would argue it was because Tess' new personality, and life, were inauthentic, and that this is a problem that is distinct from the potential for harm. While Tess was happy, she did have some reservations about her newfound self on Prozac, for she "found her transformation, marvelous though it was, somewhat unsettling" and spoke of "a mild, persistent sense of wonder and dislocation" (Kramer 1997, 13). The self-discovery view would see this as evidence that these weren't changes that reflected her true, deep self; rather, they were changes that stood in stark contrast to her true self. Instead of respecting who she really was, she had become a new person. Recall from Chapter Three that change is permitted by

the self-discovery view, but there may be limits to the extent of the changes a person can undergo and still be the same person. An individual can potentially undergo radical changes such as religious conversion, recovering from addiction, moving to a new continent and acquiring a new job, friends, and language, and still be considered the same person. The key for the self-discovery view is that these changes must be reflective of who she really is and align with her true self. Change that does not reflect the true self renders one inauthentic. Note that the worry for this view is not that the changes were *harmful* to Tess, for she may be considered better off than she was before in certain respects. The authenticity worry is a distinct one that applies even when there is no (other) harm.

The self-creation view, however, does not find this objection convincing, and rejects the idea that the enhanced Tess is literally a different person. DeGrazia argues that it is important to clarify that the relevant sense of identity at issue here is narrative, as opposed to numerical, identity (2005, 232). The distinction between the two is the same as John Locke's distinction between "person" and "human being." Narrative identity is what makes a particular individual the same *person* over time – those elements of personhood that connect him to who he was yesterday to who he is today, and will be tomorrow - his psychological continuity (Locke 1961, 286). Numerical identity, in contrast, is what makes him the same *human being* over time (Locke 1961, 287). DeGrazia explains the distinction: "If taking an SSRI changes Carl's personality in important ways, *he* will change; it's not the case that one person would literally be destroyed and replaced with another, as would occur if numerical identity were disrupted" (2005, 232). As such, DeGrazia argues that the 'new person' objection is the result of conflating narrative and numerical identity in the following line of reasoning:

(1) Enhancement technology *E* alters a person's identity.
(2) Altering a person's identity is highly problematic. Therefore
(3) Enhancement technology *E* is highly problematic.

DeGrazia asserts that premise (1) is true only if it appeals to *narrative* identity, while (2) is safely assumed only if it appeals to *numerical* identity. Equivocation on the term "identity," he argues, invalidates the inference to the conclusion (3) (2005, 232).

This is not the only interpretation, however, of the self-discovery view's objection. A proponent need not assert that Tess on Prozac is a numerically different person from the original Tess. The self-discovery view would more reasonably be interested in Tess' narrative identity and how considerably different it is on and off Prozac: the claim is that some changes to a person's narrative identity are sufficiently dramatic enough that they undermine the authenticity of that identity.

DeGrazia's reply is that even if the reasoning above is interpreted with narrative identity in mind, we have no reason to accept premise (2). He sees no problem with someone changing her narrative identity or self conception, as long as it was her choice (2005, 232-233). This is the real source of the dispute: whether there is anything wrong with altering your identity. The self-discovery view theorists think it is highly problematic, while those who adhere to the self-creation view remain unconvinced.

In defending the practice of enhancement, its proponents argue that the term "new person" can be misleading. DeGrazia is careful to point out that we do not have an unlimited capacity to make changes to ourselves or have unlimited control over our destiny. There "are limits to what we can accomplish," he argues, "in changing our behaviors and characters, just as there are obvious limits to what our bodies can achieve in sports" (2005, 91). So while self-

creation is possible, argues DeGrazia, the range of possibilities available to an individual are limited by other major factors and processes that shape her and her life (2005, 92). He states in a footnote that "[t]he term *self-shaping* would have the advantage of not implying that your own efforts can literally bring you into existence, but *self-creation* is commonly used (and I like the way it sounds)" (2005, 90).[23] Thus, the self-creation view, at least in DeGrazia's interpretation, does not claim we can literally create ourselves anew (become a "new person"). Instead, we have the ability to shape ourselves into who we want to be, within the limitations upon us. Therefore, the 'new person' objection does not accurately capture the self-discovery view's worry about enhancements and authenticity. The worry is not that enhancement creates a numerically distinct person. The real worry is that it alters an individual's fundamental character and personality traits to such an extent that she can no longer be authentic to her true self, and that she is therefore inauthentic or fake in an ethically troubling way.

### The 'Core Characteristics' Objection

A related objection the self-discovery view makes is that there are traits and characteristics that are fundamental to each of us, and it is this unique combination of traits and characteristics that make us who we are. Thus, to change these via enhancement technologies is worrisome because you are altering capabilities that are fundamental to your identity (Elliot 1999, 28). If Tess is timid and indecisive even when she is not depressed, then these are qualities that define the type of person she is (for better or worse). If these core traits are altered, then she is no longer authentic to the true Tess. This is ethically problematic because, as Elliot argues, "[i]t is a kind of bad faith to pretend to be

[23] Note how similar this sounds to Glover's view of self-creation discussed in the last chapter. DeGrazia's work was influenced by Glover and DeGrazia cites Glover numerous times in his (2005) discussion on self-creation.

something that you're not, to try to forget your roots - to discard your Jewishness, for example, or to move to the city and forget the folks back on the farm" (1999, 33). If you alter your core characteristics you are no longer authentic to your true self, and this inauthenticity amounts to an objectionable way of living.

DeGrazia does not find it problematic for someone to change her core characteristics if she autonomously consented to their alteration (2005, 233). He refers to this objection as 'the charge of violating inviolable core characteristics' and argues that "[i]t is one thing to claim that some trait lies within one's narrative core, another to claim that it is impermissible to *alter* that trait – that the trait is *inviolable*" and asserts that the characteristics that are likely to be altered via enhancements (such as personality and 'internal psychological style') "are not plausibly regarded as inviolable" (2005, 234).[24] This is because there is "no good reason," according to DeGrazia, to think that "a particular psychological style is obligatory for a particular person" (2005, 235).

For example, recall the case of Marina from Chapter Two. As Marina approaches thirty, by most people's view she leads a successful life. She has a good job, close friends, and hobbies she enjoys, but she "finds herself brooding and pensive, wondering about her life and its direction" (DeGrazia 2004, 34). She feels overly unsure and tentative at work, she overanalyzes her social interactions with friends, and dates men who are bad for her. She visits a psychiatrist and is told she has no diagnosable disorder. However, Marina is tired of her shortcomings and wants to change. Instead of feeling socially excluded, slighted, and unworthy of a good partner, Marina wants to be more outgoing, confident, and decisive at work (DeGrazia 2004, 34). As she has

[24] The full list of potential candidates for core traits DeGrazia considers are internal psychological style, personality, general intelligence (including memory), the need to sleep a certain amount of time, normal aging, and gender (2005, 235).

heard that Prozac sometimes has the ability to produce transformations like the one she seeks - and more quickly and less expensively than she could expect from psychotherapy – she requests a prescription from a psychiatrist (DeGrazia 2004, 34). Marina specifically seeks out a prescription for Prozac because she "wants to use a medication to change her personality and become a different sort of person" (DeGrazia 2004, 34). [25]

While the self-discovery view would argue that if Marina changes her core personality traits the change would be so great that she would no longer be the same Marina, DeGrazia argues this is "profoundly mistaken." Identity for DeGrazia is not about a static self, but rather an individual's self-conception – what she considers is the most important about who she is in her self-narrative (2004, 39). "[I]t is ultimately up to Marina to determine what counts as Marina and what counts as not-Marina," DeGrazia argues, for she has the freedom (within reason) to acquire the traits she covets and to omit the ones she does not feel align with her self-conception (2004, 39). "[W]hether certain personality traits are definitive of someone depends on whether that individual identifies with them," whether she "owns" them, so to speak (DeGrazia 2004, 40). It is up to her to determine which personality traits the "real Marina" has because it is her identity.

The self-discovery view, however, would still not be convinced. As Elliot articulates, "[i]t would be worrying if Prozac altered my personality, even if it gave me a better personality, simply because it isn't *my* personality. This kind of personality change seems to defy an ethic of authenticity" (Elliot 1998, 182). The proponent of this view would wonder how you can be authentic if you are changing fundamental aspects of your

[25] The Marina case is very similar to Tess', but with one important distinction - while Tess has a history of depression, Marina does not have a diagnosable disorder. This removes the objection some may have to Tess' case being an example of an enhancement and not a treatment. I do not agree with this objection, for when Tess requested to be put back on Prozac she was no longer clinically depressed. She was not seeking to treat an illness, but to enhance her personality with traits she found more desirable. However, Marina's case solves this potential worry and the question of authenticity still stands.

personality, for whether or not you like certain aspects of your personality, they are yours regardless. Not identifying with your shy nature, for example, does not mean you are not a shy person - it just means you are refusing to accept an aspect of yourself. This may be problematic for a number of reasons, but the relevant one here is that it renders you inauthentic.

DeGrazia disagrees and asserts "[t]he idea that some of our traits are inviolable strikes me as beholden to the rather implausible romantic notion of a "true" self whose defining traits are independent of the individual's choice" (2005, 233-234). He argues that the notion of a true self seems the most plausible if it is understood as a person's *essence*. However, the concept of essence is connected with a person's numerical identity, DeGrazia claims, and that is not the type of identity that is relevant to enhancement technologies (2005, 234).

Elliot, in contrast, doesn't think the authentic self is implausible at all. He argues that "[y]ou can buy into the idea of an authentic self without buying into the idea of an essentialist self" (Elliot 2003, 49). Neil Levy doesn't land on either side of the debate as he remains neutral as to which view is the superior one. However, he correctly points out that "we can emphasize self-discovery without holding the empirically implausible notion that the self has a fixed essence" (2011, 312). We each have particular dispositions, talents, and personalities which make us better suited for certain activities than others, and which makes some ways of life more fulfilling for us than others. While we can develop these dispositions and talents in different ways, the dispositions constrain what is possible. We can acknowledge this fact without being committed to the claim that our personalities are fixed or having to deny that genuinely profound change is possible (Levy 2011, 312).

The stipulation the self-discovery view would put on "profound change" would be that this change must align with one's true self in order to be authentic. In order for such a dramatic change brought on by enhancement to be authentic, an individual would have to have been disconnected from her true self, such that substantial adjustments in her life better reflected who she really was all along. Thus, significant personality changes are not a threat to authenticity when - and only when - the person who makes them is alienated or estranged from her true self. Otherwise, major personality changes do risk undermining authenticity.

DeGrazia finds this to be very unpersuasive and states that he sees "no good reason to object to self-change just because it involves major change" (DeGrazia 2005, 113), since he thinks that authenticity has little or nothing to do with the degree of self-change that is sought or achieved (DeGrazia 2005, 241). Furthermore, he thinks it is disrespectful to the autonomy of those interested in self-creation to assert that one cannot be authentic if one engages in such projects, for the choice to self-create is up to no one but the individual self-creating (DeGrazia 2005, 113).

Elliot, by contrast, argues that without the notion of a true self it would be hard to make sense of our contemporary Western moral vocabulary because a deep self is so predominant in our language and way of seeing the world. This is the concept of a self that has "unity and integrity over time and circumstance" and one which "we ought to be morally committed to maintaining that unity" (Elliot 2004, 8). It is this concept of the self, he argues, that is necessary to understand the distinction between concepts like moral integrity and self-betrayal and sincerity and duplicity (Elliot 2004, 8). If there is no self to betray then the notion of self-betrayal collapses: being true to your ideals would not make

sense if those ideals are in a constant state of flux (Elliot 2003, 50). Furthermore, he asserts that the notion of self-fulfillment also has the concept of an authentic self at its core because it cannot be achieved without there being a true self to be fulfilled (Elliot 2004, 8). "True happiness cannot be attained without fulfillment," Elliot argues, "and fulfillment requires being true to that inner voice" (Elliot 2003, 33).

As you can see, both views have a different answer as to whether or not enhancements are compatible with authenticity. The self-discovery view proponent argues that they are not compatible, while someone who holds the self-creation view thinks that they are. I have argued in the previous chapter that the self-discovery view is the better account of authenticity, and as such, enhancements are incompatible with authenticity. There are, however, other ways of conceptualizing the question of compatibility to potentially find other ways to two may be compatible.

## II. Finding Your True Self on Prozac

Another possibility is that enhancement is a way to discover parts of the self that are buried in some way. Like Tess, Kramer's other patients didn't report that they felt like who they wanted to be (created self) on Prozac, but rather "it made them feel like *themselves*" (Elliot 2003, 51) which sounds more like a true, deep self. When Tess told Kramer "I am not myself" after being taken off Prozac it was an interesting self-assessment because, as Elliot explains, she had returned to the state in which she had been for the past thirty years. She had returned to the same state she had been in her entire life, except for the brief period she was on Prozac, yet she said she did not feel like herself; she claims she felt like herself when she was on Prozac (2003, 51). Elliot wonders when trying to explain this phenomenon, "is the appropriate language to use a transformation to a *new* self, or a

restoration to a *true* self?" (1999, 29). If the answer is the former then Prozac is incompatible with authenticity, but if it is the latter then the two are compatible. Can you "find" your true, deep self on Prozac?

Elliot states that Kramer "seems to hint that at least in some cases Prozac restores a true or authentic self, a self that has been masked by pathology" (1999, 29). Kramer asserts that "Prozac redefined Tess's understanding of what was essential to her and what was intrusive and pathological" (1997, 19). However, if there is an illness involved then the use of Prozac would be a treatment and not an enhancement, as was intended with Tess' first prescription of the drug. Sometimes interventions like Prozac can be a means to finding yourself, but this happens in treatment contexts and the type of case we are looking at here is whether it is possible for a healthy individual to use Prozac as an enhancement to find their real, true self.[26] I argue that it is not possible because it is a misuse of terms – Tess didn't "find herself," she just liked her enhanced personality better than her real one. For those who still find Tess' history of depression a sticking point in accepting her case as a clear example of enhancement, Alexandre Erler has an example that will help make my point with a clear-cut case.[27] He writes:

> Consider for instance an introverted person who takes Prozac with a view to becoming more extroverted, because he thereby expects to become more popular with his peers and therefore happier. Suppose it is not the case that this person (call him the *unhappy introvert*) already harbours extroverted tendencies that, for some reason, he is unable to express, or is not even aware of. He behaves like an introvert, scores like one on personality tests, and finds much more pleasure in activities such as reading a book, or engaging in conversation with one or two close friends, than in

[26] I will return to this distinction between authenticity and treatment versus enhancement in the next section.
[27] See footnote 24.

> going out partying. Yet because his personality style results in him being left out by his peers at school, he *wishes* he enjoyed wild partying more and were more outgoing, and he hopes that the drug will change his preferences and behaviour accordingly. (2012, 260-261)

The unhappy introvert wants a different, outgoing personality. Tess' personality changes were the unexpected side effect of her treatment, but when the personality changes ceased after she stopped taking Prozac, she wanted to go back on it for the same reason as the unhappy introvert – to enhance her personality with traits she did not possess. Erler states that "[t]he self-discovery model does not seem to make room for the idea that the unhappy introvert has in fact always been an extrovert, and that his 'true' personality just required the ingestion of a pill to be made manifest" (Erler 2012, 261). The Prozac isn't revealing anything about his true self other than he wishes he had a different personality. If after being put on Prozac the unhappy introvert eventually asserted, like Tess, that he now felt like 'himself', Erler agrees with my assessment above and states "[i]t would seem more plausible to explain his claim by assuming that he liked his new personality better than the old one, given the various social benefits he derived from it" (2012, 262). Thus, there is no "finding yourself" on Prozac, any claims to the contrary are just preferences for enhanced personality traits that one does not possess, and are thus inauthentic. There is, however, one more possibility to consider.

## III. Enhancement as a Means to Authenticity

Neil Levy makes a thought-provoking argument that enhancement technologies can be a *means* to authenticity (2011, 308). If he is right, then this is a significant problem for my own argument, since on my view enhancement frequently *undermines* authenticity. He offers this as a

way that the self-discovery view can agree that an individual can authentically enhance her personality. Levy attempts to show that Prozac can be a means to authenticity – regardless of whether one holds the self-discovery or the self-creation view of authenticity (2011, 313). For the self-creation view, he argues, authenticity lies in "striving to mould ourselves as we would like to be," and using an enhancement can be a means to achieving authenticity rather than a threat or obstacle (2011, 312). This is a standard explanation regarding the self-creation's view of authenticity and enhancement. Where his argument gets interesting is when he makes the move to extend this compatibility between authenticity and enhancement to the self-discovery view as well. Levy does this by arguing that "[s]elf-discovery might *require* change from us, and to that extent it is entirely compatible with the use of various enhancements" (2011, 316). He uses the examples of two individuals to make his point, one with gender identity disorder and another with depression. [28]

Levy argues, "[j]ust as the person suffering from Gender Identity Disorder might come to be who they are [sic] *really* are by means of an intervention, so the depressed person might become who they are by means of Prozac" (2011, 316). Thus, Levy argues, sometimes we may need to change in order to be our true selves, and perhaps, in some instances, even a dramatic change may be required. In cases where we are not able to make these changes on our own – altering our hormone levels or external genitalia to match our true gender or correcting depression caused by a chemical imbalance, for example – we require an intervention to help us be who we really are. In this sense, enhancement technologies are perfectly compatible with authenticity, Levy argues.

[28] Gender Identity Disorder is now referred to as Gender Dysphoria, a marked incongruence between one's experienced or expressed gender and the gender one has been assigned to at birth (APA 2013, 452-453).

If Levy is right, then there may be many radical interventions and changes that are not only consistent with authenticity, but are in fact required in the quest for authenticity. And in fact, Levy is right, with respect to his own examples. Very often, treatments that involve potentially dramatic physical or personality changes can help promote a patient's authentic self. The problem with Levy's argument is that it does not extend to enhancement, since his examples are treatments and not enhancements. An intervention for an individual with gender dysphoria would treat the dysphoria, and Prozac is used to treat the depression. Since both treat an underlying medical condition in order to bring the patient to health, neither is an enhancement, and so the specific threat to authenticity represented by *enhancement* is not present in either example. Because in both cases it is a *disorder* that is preventing the person's authentic self from being expressed, in both cases it is plausible to suppose that the intervention is a means to authenticity. However, because cases of enhancement lack a disorder that interferes with authenticity, Levy's argument does not extend to enhancement in the way that he claims.

Nevertheless, Levy's assertion that self-discovery might require change is true if there are aspects of an individual's life that are inauthentic. In such a case, change would be encouraged in order for the individual to become authentic. Recall the discussion regarding change and the self-discovery view in Chapter Three. I argued that in order to be authentic you may need to discover your true self and align your actions accordingly so they cohere with that true self. Change is authentic when it reflects your inner self, and inauthentic when it does not. So change is certainly compatible with the self-discovery view, and Levy is correct that it may even be required for one to be authentic. However, the additional step to assert that *enhancement technologies* facilitate authentic change has yet to be demonstrated. Levy asserts "[f]or those who advocate self-discovery, enhancements can be tools whereby we bring our outer selves into line with who we

most deeply are" (2011, 317). But Levy used examples of *treatments*, not enhancements, to argue for his conclusion, and by conflating the two he has failed to make a convincing argument.

Erler was able to strengthen Levy's argument by suggesting a plausible example where an enhancement technology can facilitate authentic change. Consider the case of the shy extrovert, a shy woman with an extroverted personality:

> Suppose her shyness, rooted in negative beliefs about herself, prevents her from expressing her true personality in public: as a result of having been brought up by harsh parents who repeatedly criticized her for minor mistakes, she feels unworthy of other people's company and (mistakenly) assumes that they would find her boring and unlikable if they got to know her. This person starts taking Prozac and soon becomes much more confident and assertive. Her self-esteem experiences a dramatic boost, so that she now feels free to express her extroverted nature, initiates conversations with strangers and publicly shares the jokes she used to keep to herself. As a result, she makes a number of new friends. (Erler 2012, 263)

I agree with Erler that it seems plausible in this case that Prozac has allowed the shy extrovert to become who she really is, a sociable extrovert. Erler perfectly articulates why - "the idea that authenticity has been enhanced in such a case is supported by the fact that *prior* to taking the drug, the shy extrovert already possesses certain behavioural dispositions that are just not activated, because of her inhibitions" (2012, 263). This is precisely the problem with both Tess and Marina's cases. Their use of Prozac is to give them completely new personality traits that they did not already possess. Tess wasn't decisive or had excellent interpersonal skills that were just hidden, she didn't have these qualities at all. Similarly, Marina wasn't secure or extroverted, she just *wanted* to be. The use of Prozac by shy extrovert, on the other hand, (we are assuming) "does not give her *new* preferences and dispositions, but only allows already existing ones to be expressed"

(Erler 2012, 263-26).[29] Thus, the shy extrovert case makes a plausible argument for the possibility that in some specific cases, enhancement technologies are compatible with authenticity.

However, what if the shy extrovert loses her ability to express her extroverted nature if she stops taking Prozac (Erler 2012, 264)? Would this be any different from the new personality traits Tess lost when she was taken off Prozac? Can the shy extrovert's use of Prozac really be authentic if the changes it brings about are not enduring? It doesn't seem plausible if she is not able to internalize these changes and learn to express her true, extroverted nature in absence of the drug. Erler suggests the change in her self-image did not go "deep enough," for "even though Prozac did cause that person to hold more positive self-beliefs, the volatile nature of those beliefs might suggest that they did not result from genuine insight – and because of this, that they were not authentic" (2012, 264). This seems to be a problem with using Prozac to enhance the personality – the changes may not be permanent. Kramer acknowledged the potential for Tess' "lifelong relationship to medication" due to her "having located a self that feels true, normal, and whole, and of understanding medication to be an occasionally necessary adjunct to the maintenance of that self" (1997, 19-20). This seems highly problematic. How can you be authentic if the only way you can be the real you is to be in a constantly enhanced state? To say that the "real" you requires a daily pill that drastically changes your personality traits from those you have without the pill seems very different from taking Prozac daily to treat depression, for example. [30] And while Kramer refers to Prozac as being "occasionally necessary," Tess

[29] The difference between the shy extrovert and the person who is not an extrovert but wants to be will be detailed in a moment.

[30] My argument here is strictly with regards to enhancements only. I do not extend this argument to those taking medication for treatment purposes. I will discuss this distinction in more detail below.

complained she was no longer feeling her preferred personality traits after just eight months off Prozac, leading one to assume she would need relatively frequent prescriptions in order to maintain her desired personality. The assertion that an individual needs to be enhanced in order to be her true self relies on a mistaken understanding of authenticity. A modified version of the Tess case could be raised here: Jess is an outgoing and happy individual and has been since she was a little girl. After a difficult period in her life she suffers an episode of clinical depression and her doctor gives her a prescription for Prozac to treat her illness. In time she feels better and her prescription is discontinued but she no longer feels outgoing and happy as she used to; instead she feels melancholic. Melancholy is a new experience for Jess and she does not feel like herself. If she goes back on Prozac to restore her to her pre-illness self (happy and outgoing) is this not an example of an enhancement being used to reveal her true self? This is a complicated example but I argue that Prozac in this instance is a treatment, not an enhancement, despite Jess being at or above the baseline level of health. While Jess is not below the baseline (she is not depressed she is melancholic which is not an illness) she is not her true self and thus requires further treatment to restore her to her pre-illness self. Jess' case is different from Tess' as Tess never was outgoing but Jess was. As such, when Tess takes Prozac she is *creating* new personality traits in herself with an enhancement but Jess is *restoring* personality characteristics that are part of her true self with a treatment.

Returning to the shy extrovert case, there is another possible outcome. Erler speculates:

> suppose instead that after Prozac has boosted her confidence, she truly realizes that she is in fact likeable and that most people, far from rejecting her, enjoy her company. This new evidence persuades her that her parents' past criticisms do not

> show her to be worthless. Accordingly, her positive self-beliefs persist even after she discontinues the drug, as do the confident behaviour and associated social benefits that these beliefs produce. (2012, 264)

This outcome makes it seem much more plausible that the shy extrovert is truly authentic and marks the difference between the shy introvert with the extrovert personality traits and the actual introvert who just wanted to be an extrovert. Recall that the self-discovery view permits change, potentially even dramatic change, if it brings an individual's actions and behaviours in line with her true self (dramatic change would be the result of an individual being disconnected from her true self and needing to make substantial changes to get back to who she really is). It could be argued that the shy extrovert ended up with a distorted view of herself due to years of criticism from her parents and the resulting negative self-beliefs clouded her ability to see her true self. Like introspection or meditation, Prozac provided a means for her to discover her self and helped her come out of her shell, and therefore, be authentic. The fact that these changes were enduring and lasted (potentially) long after she stopped taking Prozac gives credence to them being more "real" than the other outcome where she was only able to experience the changes while she was medicated. As Erler states, "[n]ot only would the extrovert's eventual personality really be 'her' personality, it would also be a richer and fuller expression of it than the way she was before Prozac" (2012, 264). Thus, this outcome of the shy extrovert case makes it quite possible that, at least in this specific circumstance, Prozac is compatible with authenticity.

Therefore, the answer to the question as to whether enhancement technologies can be seen as a means to authenticity is that it is possible in only a select few cases, and as such, psychological enhancements aimed at improving one's character or personality traits

are incompatible with authenticity in most circumstances. One problem, however, is that in many cases we can't tell from the outside which case will end up being authentic. Choosing to take an enhancement in these cases would be risky as some would be compatible with authenticity and some would not. Will the changes only last when the shy extrovert is medicated or will they endure even after she stops taking Prozac? There is no way to know until she takes the drug. And if she does, it would take a significant period of time to determine which outcome an individual would experience, first for the personality enhancement to occur and the individual to settle in and get used to the changes, and then to discontinue the use of Prozac and wait to see if the enhanced personality changes were permanent. It is true there is the potential for this process to be authentic and for the changes to be real and enduring, but it is also possible that the process will be inauthentic if the changes do not last because they are not really part of who she truly is.

It is worth emphasizing my argument here is with regards to enhancements only. I do not extend this argument to those receiving medication for treatment purposes. The treatment/enhancement distinction matters here because treatments do not usually pose the same threat to authenticity as enhancements do. In most cases treatments will either be a means to authenticity, as Levy's examples suggest, or they do not affect one's character or personality in a way that poses a challenge to authenticity. For the former, we can return to Levy's examples of gender dysphoria and clinical depression. An intervention for an individual with gender dysphoria would treat the dysphoria and thus help her become her true self by giving her the body to match who she really is. Using Prozac to treat depression can be a means to authenticity by curing an individual's mental illness that hindered his daily life and his true self. In both cases these treatments remove the barrier

that blocks the individuals from being their true self and as such are a means to them being authentic.

Alternatively, treatments may not pose a challenge to authenticity if they don't affect one's character or deep self. For example, taking insulin to treat your diabetes or iron pills for your anemia does not fundamentally change who you are as a person, or render you unrecognizable to your loved ones in the same way that acquiring brand new character traits via Prozac does. I leave open the possibility that some treatments may be so drastic they could undermine instead of promote authenticity, but in general treatments do not usually pose the same challenges to authenticity that enhancements do. Note that some enhancements do not pose a threat to authenticity either. Recall the examples of Tess drinking a cup of coffee and an individual using a beta blocker to improve his aim when target shooting. Like the insulin and iron pills, the coffee and beta blockers do not target the user's personality or character traits and, therefore, are not a challenge to their authenticity. It is also important to note that it is a different type of trade-off if your health will be severely compromised if you forgo a treatment due to worries about your ability to remain authentic than if you decide you rather be enhanced than authentic. For an intervention to qualify as a treatment you must be below a baseline level of health (so you are unhealthy in this case), but you are already at the baseline - and thus healthy - when you use an enhancement. As such, different considerations are present in treatment versus enhancement situations.

So far, I have argued that a range of psychological enhancements ae incompatible with authenticity, and so to pursue those enhancements would be to undermine one's authentic self. But why should this matter? When confronted with the prospect of

authenticity-undermining enhancement, what weight, if any, should someone give to the value of authenticity and to the concern that enhancement might render them inauthentic? That is the question the next section will attempt to answer. In order to answer this question, the value of authenticity must be understood. This was touched on in the first section of this chapter with the discussion of Elliot's view on the true self and self-fulfillment but I will give it the full attention it deserves in the next section.

## IV. The Value of Authenticity

Let's return to Elliot's articulation of what the ethic of authenticity entails that was discussed in the introduction of this chapter. He states that this ethic teaches us that a fulfilled life is required to lead a meaningful life, and for our life to be fulfilled we need to discover and pursue "the values, ideals, and talents that are unique to us as individuals" as the self-discovery view espouses (2004, 8). Fulfillment is required for true happiness, he argues. Recall the example from Chapter Two of the Alienated Accountant who lives in suburbia and one day stops and says "Jesus Christ; is this it? A Snapper lawn mower and a house in the suburbs?" (Elliot 1998, 180). The accountant is overcome with an immense feeling of alienation and uncertainty many of us experience which makes us ponder questions such as "Is this all there is? What is the sense of life? How does it all fit together?" "Who am I supposed to be, and what am I supposed to do next?" (Elliot 1998, 179). The reason the accountant feels alienated, I would argue, is because he is not in touch with his true self. There is a mismatch between his true self and his present way of living. Being an accountant who lives in suburbia is somehow ill-reflective of who he really is, for the life he is living does not align with his values, ideals, and preferences that compose his true self. The alienation is a result of this detachment from his self which is why he feels so

underwhelmed with his suburban life. He does not feel fulfilled and he is not happy, as authenticity is a precondition to genuine happiness and it's hard to be happy when you're alienated.

Therefore, being in touch with your true self is vitally important for living a fulfilling life. The appeal of enhancements is alluring, why be your timid old self when you could be charismatic by popping a pill? The temptation is understandable but an inauthentic life is ultimately devoid of any real sense of accomplishment or achievement. The self-discovery view doesn't preclude you from changing or becoming the best version of yourself, it just requires that these changes are done authentically. And this means that the *means* of change matter. The person who transforms himself without enhancement does so through the exertion of his will, so even if he undergoes a radical change it can be argued that the ability to make the effort and thus the change was part of his character all along (even if it was previously an under-developed part). For example, think of a former couch potato who becomes a marathon runner. If he made this change through hard work and determination this change, while dramatic, can be authentic because it comes from his own motivation and will. In contrast, consider the same transformation is the result of popping a "motivation pill." Taking an enhancement results in achieving transformations such as this one in an artificial way that partially bypasses the will or undercuts the required effort in an objectionable way. There is a value that lies in certain means, "over and above the value found in the end considered by itself" and therefore the means do matter (Cole-Turner 1998, 155). Consider mountain climbing: there is a value in the climb, in the physical and mental discipline that is required, the sense of personal accomplishment in the task, etc., that is distinct from the value of reaching the summit (Cole-Turner 1998,

155). While the end is valued too, the means can be just as valuable and separate from the value placed on the end. If the only value that mattered was reaching the summit of a mountain, then it would not matter if you got there by climbing it or by helicopter. However, we *do* think there is an important difference between climbing a mountain and flying to the top of one, and the former is given more praise and admiration than the latter because it a true accomplishment and triumph of the will and therefore more valuable. Flying to the summit or popping a motivation pill removes the value that lies in the means of climbing to the top of the mountain or becoming a marathon runner. While the enhancement certainly does have benefits – it may be faster, easier, cheaper, or even bring about changes that other methods cannot achieve – it is almost always done in such a way that cheats the user of the value in the means.

Another interesting thing to consider is that when you engage in self-directed change there are multiple possible routes you can take to discovering your true self that are not available to you with a psychological enhancement because there is one set outcome. If you engage in introspection, meditation, journaling, or psychotherapy, you have the freedom to explore your deep self and could plausibly uncover a truer path of discovery to reveal something you value more than what you originally aimed for with your goal of enhancement.[31] For example, you may initially think being outgoing is a value you admire and want to cultivate in yourself and so you consider taking Prozac to make yourself more outgoing. However, if you decided to engage in introspection and psychotherapy instead, you may discover that what you *actually* value more than being outgoing is deep, meaningful conversations with close friends rather than idle small talk with strangers.

[31] I am indebted to Thomas Van Dewark for this suggestion.

Thus, if you took Prozac to be outgoing you would have stopped short on the full path to self-discovery. As Fredrik Svenaeus argues, "there is more to the process of self-change than the goal" (2009, 176). The path *is* the goal in some sense, for when we choose a means that requires hard work and determination it develops you as a person and makes you wiser (Svenaeus 2009, 176).

Additionally, with an inauthentic enhancement an individual loses out on the skills she could have acquired in the process of bringing about the change herself. For example, consider working for many years to earn your doctorate degree versus being awarded an honorary doctoral degree. While the end is in many ways similar – a doctorate degree – the individual who earned the degree would have acquired and honed certain skills that the individual who was awarded the degree did not. The degree earner would have learned how to think critically, write skillfully, effectively manage her time and large quantities of information, convey her ideas in a clear and precise manner, and so on, while the individual awarded the degree would have acquired none of these skills in the process because the degree was awarded without him having to learn these skills to complete the degree. This is very much like what you lose out on when you take Prozac to change your personality instead of bringing about changes that better align with your true self via other, authentic, methods.

Finally, an individual loses out on the sense of accomplishment in doing the process herself. While a doctorate degree is an onerous undertaking, there would be a tremendous sense of pride and accomplishment upon its completion. While it would save a lot of time, effort, and energy to just be given the degree without having to work for it, it would not have nearly the same sense of accomplishment as when it was earned. The

accomplishment in being given an honorary degree would be hollow as it does not involve genuine achievement. Gwen Bradford argues that achievements are valuable in virtue of their difficulty, for something needs to be sufficiently difficult in order to be considered an achievement (2013, 204-205). For example, "if running a marathon and writing a novel were easy," she argues, "we wouldn't be inclined to call them achievements" (2013, 205). She also uses the mountain climbing example and asserts that reaching the top of a mountain is only valuable if it is attained in a difficult manner, and this explains why we think there is an important difference between climbing a mountain and flying to the top of one (2013, 210). Difficulty, Bradford argues, "is a matter of exerting the will," and our will is "so fundamental it underwrites our abilities to deploy all other capacities" (2013, 221). As such, it is intrinsically valuable for us to exercise our will and to do so excellently – that is, to be able to will ourselves to do difficult things so that we may earn the achievement of having accomplished them (2013, 221). [32]

Bradford identifies an important component that determines whether a change is authentic or not when she discusses the exertion of the will. Improvements, changes, or achievements that are the result of the exertion of the will are better and more authentic because they bring about personality changes that emerge from and require sustained engagement of the will. Personality or character trait enhancements that are the result of psychopharmacological enhancements, in contrast, do not require the exercise of the will in the same way as they bypass the will too much and the outcome is the result of the intervention rather than the will. The will is the critical component for it is the structure of an individual's will – what she desires, values, intends, and exerts effort to actually *do* –

[32] To be clear, Bradford did not argue that difficulty was the only relevant feature of achievements. She merely claimed that difficulty accounted for "at least some of the value of all achievements" (2013, 204).

that is connected to her authentic, deep self. If you bypass the will you bypass the true self and the changes are not made authentically.

Methods that bring about self-change that result from the exertion of the will include introspection, meditation, and journaling. These methods can help you reveal your true self and allow you to develop important skills and feel a real sense of accomplishment in the process. However, some interventions such as therapy, diet, and exercise may also bring about authentic changes as well. At first glance these last three examples may appear to be more similar to Prozac than introspection, meditation, or journaling due to them being "external" to an individual and requiring more than just will power to bring about the desired change. In general methods that are "internal" like the first three examples are usually authentic means of self-change because they work by turning inward to discover the true self and rely on the exertion of the will alone. That being said, "external" interventions that are used in addition to or instead of these internal methods do not necessarily evoke inauthentic change in virtue of being external interventions. What distinguishes authentic changes from inauthentic changes is the exertion of the will – if the change is the result of the exertion of the will then it is authentic, but if the change is achieved by bypassing the will then the change is the result of the intervention itself. Therapy, diet, and exercise are external interventions but they only work if the individual exerts her will and sticks to them which is not an easy task, hence why willpower is required to bring about changes via these methods. Prozac, on the other hand, predominately works by bypassing the individual's will and brings about changes on its own. Taking Prozac does require *some* act of will as you have to will yourself to take it, but it is not the same amount of willpower that is required to bring about the end goal

yourself and thus the latter requires more exertion of the will than taking an enhancement does.

Recall from Chapter Three that it is your second-order desires about your first-order desires – what you want to want - that constitute your will because these are the desires you identify with. The decision which first-order desire to identify with plays an important role in the discovery and maintenance of the self (Frankfurt 1987, 172). Your second-order volitions are your true self, as long as they are a reflection of who you are (your deep self) and not who wish you were. It is possible, however, to be wrong or deceived about who you are. In fact, there is a large body of psychological literature that argues our self-assessment or self-knowledge is often mistaken. In the next section I will discuss some of this literature and argue that the fact that we are not always good about knowing ourselves is another reason to be suspicious of enhancements that target our personality and character traits as they can easily render us inauthentic if we are mistaken about our true selves.

## V. Self-Ignorance

Stanley Schachter and Jerome Singer found that when an individual is in a state of physiological arousal but the reason for this state is unknown, he will label the state and feelings based on the cognitions that are available to him at the time (1962, 395). This finding means that researchers can manipulate the scenario to evoke different cognitions in an individual and thus lead him to attribute different emotions and conclusions for the physiological arousal. For example, when someone is injected with epinephrine (adrenalin) it mimics a discharge of the sympathetic nervous system and induces symptoms such as heart palpitations, tremors, flushing, and accelerated breathing (Schachter and Singer 1962, 382). When subjects are injected with

epinephrine but are told the injection would have no side effects (or not informed that the injection was epinephrine) they are left without an appropriate explanation of their physiological state and symptoms. Schachter and Singer found that by manipulating the scenario in which the subject is experiencing physiological arousal they could evoke cognitive factors to lead the subject to describe his feelings as euphoria or anger, depending on the testing condition he was placed in. This phenomenon of "misattribution of arousal" has been replicated in other studies as well. Donald Dutton and Arthur Aron found that the anxiety of heterosexual male subjects placed in a fear-inducing scenario could be misattributed to sexual attraction to an attractive female confederate rather than the anxiety or fear of the scenario itself (1974). Despite the physiological arousal due to being on a wobbly bridge that tilted and swayed high above rocks and shallow rapids in one testing scenario, or faced with painful electric shocks in another, male subjects misattributed their physiological arousal as sexual attraction (Dutton and Aron 1974). Robert Sinclair et al. explain the misattribution of arousal phenomenon as follows: when someone experiences unexplained physiological arousal she seeks readily available explanations for her arousal. When such explanations are not found in the external environment - she does not know the side effects of epinephrine, for example - she will turn inward and "access the most easily retrieved cognitions" which are usually the ones that have been recently activated (1994, 18). As a result, we can be mistaken about our interpretation of our emotional states.

There is another way we can misattribute a primed situation and this is with regards to our behaviour. Yoav Bar-Anan et al. found that a primed goal can automatically influence an individual's behaviour, but when the individual is unaware of this influence she will misattribute her behaviour to some other internal state (2010, 884). For example, when subjects were primed with the goal to help others and then had the option to play one of two available word games, one

which involved helping and another which involved competing, they demonstrated a preference for the game which involved helping. However, when asked why they selected the game they did the reason they gave was not that they wanted to help, but rather they over-attributed their choice to the type of game that was played (Bar-Anan et al. 2010, 889). Regardless of which game was associated with helping (the pairing of helping or competing was assigned to each game at random), participants would select the one that was associated with helping the researchers and stated a preference for that particular game relative to the participants in the no prime control condition (2010, 889). Thus, while the participants were influenced by a primed goal to help, they misattributed their choice to a preference in the type of game, not that they wanted to help the researchers, and were therefore mistaken about the cause of their behaviour.

There is also evidence to suggest we can be mistaken about our former predictions, intentions and opinions and remember them incorrectly. Rik Pieters, Hans Baumgartner, and Richard Bagozzi conducted a longitudinal study which recorded participants' predictions and intentions regarding the millennium bug Y2K prior to the millennium change and then recorded the participants' behaviour and remembered intentions after the millennium change took place (2006). The researchers found that a participant's memory of her prediction about the Y2K bug and her prior behavioural intentions to prepare for such an outcome was often biased and informed by the actual outcome of the event and her subsequent behaviour when it was apparent nothing significant was going to happen with the millennial change (2006, 45). Accordingly, the participants recalled incorrectly that they "knew all along" that much of the worry was unfounded and they also incorrectly remembered that they did not take steps to prepare for the possible harm of the millennial change (2006, p. 45). We seem to have a hard time recalling prior predictions and intentions after we already know the outcome to the event in question as the

outcome “colours” our recollection and makes the recall biased. We can also have a similar distortion in recall regarding our prior opinions on a subject. George Goethals and Richard Reckman found that subjects distort their original attitudes in recall in order to makes these original attitudes consistent with new opinions once their mind has been changed on the matter (1973, 498). This distortion leads an individual to feel as though the positon she holds now is the one she has always held on the matter (498). Accordingly, if you cannot recall your original opinion after you have changed your mind, you may not be aware of that fact that your mind has been changed at all (1973, 498).

Psychological literature has demonstrated that we tend to fall prey to the “above-average-effect” which is the tendency of the average person to believe she is above average (Kruger and Dunning 1999, 1122). For example, many studies have found that the majority of drivers think their driving ability is better than average, which is of course statistically impossible. One study asked 909 American drivers to rate their driving skills and 57% thought their overall skills were better than average (Williams 2003, 492). When these drivers were asked to rate their skills with handling a vehicle in normal situations on a scale of 1 to 10 with 10 being the most skilled, 86% rated themselves as either 8, 9, or 10, and 73% used these ratings to define their skills in emergency situations (Williams 2003, 492). Regardless of age, driving experience, or prior car accidents, the majority of drivers think they’re more skilled than other drivers. It appears that we don’t do a great job when appraising our abilities for we think we possess skills that we do not, and even worse, when we lack certain skills in a domain we don’t have the ability to realize it because we lack the metacognitive skills necessary for accurate self-assessment (Kruger and Dunning 1999, 1122).

The above-average-effect and inaccurate self-assessment appears to apply to our evaluations of our personality characteristics as well. Researcher Mark Alicke found that when conducting self-evaluations, participants tended to perceive themselves as possessing more desirable traits than their peers and less undesirable ones (1985, 1626). Interestingly, this tendency can be found even when the subject has evidence to the contrary. Constantine Sedikides et al. asked convicted offenders in prison to assess their pro-social characteristics in relation to the average prisoner and the average member of the community (2014). There were nine traits included in the questionnaire: moral, kind to others, trustworthy, honest, dependable, compassionate, generous, law abiding, and self-control (2014, 399). The participants rated themselves as significantly better than the average prisoner for all traits, and even more interestingly, as better than the average community member on eight of the nine traits. The only trait they did not evaluate themselves as better than average was for law abidingness, but they didn't rate themselves as worse than the average community member either. Instead the prisoners rated themselves as *equally* law abiding as people who were not incarcerated (2014, 400).

So what does this literature on self-ignorance mean for the self-discovery view and authenticity? It shows us that we often get it wrong when we attempt to gain self-knowledge as we can misattribute the cause of our emotions or behaviour, we can be mistaken about our former predictions, intentions and opinions and remember them incorrectly, and we tend to think we are better than the average person in terms of our assessment of our skills and personality characteristics. However, the fact that we are often mistaken in our self-assessment does not mean that we can't ever get it right and properly assess our deep selves via introspection and similar methods, it just means that it is difficult to do and we often get it wrong. It also does not mean that there is no true self for us to discover, for the epistemic challenge we have in getting

access to true facts about the self is entirely distinct from the claim that there is no such thing as the true self. The fact that we are often bad at self-assessment and knowing ourselves reinforces the reasons to be suspicious of enhancements that bring about changes in our personality and character traits as they can easily render us inauthentic if we are wrong about our true selves.

## VI. Beyond Prozac

The psychological enhancement that was predominately focused on in this chapter was the selective serotonin reuptake inhibitor Prozac (fluoxetine) due to its ability to target and improve a person's personality or character traits. However, my argument applies to a range of other psychological enhancements that target aspects of one's character, preferences, values, and other components that are considered fundamental to the self and one's self-conception and therefore pose a potential threat to one's authenticity. One example is memory enhancement via diminishing one's memory. Recall Locke's concept of a person that was briefly discussed in Section I regarding the difference between narrative and numerical identity. Locke argues that the determining factor in what makes an individual the same person at time A as time B is her psychological continuity. Locke asserts this continuity consisted of one's consciousness via one's memory. Consciousness, he writes, "as far as ever it can be extended, should it be to ages past, unites existences and actions very remote in time into the same person, as well as it does the existence and actions of the immediately preceding moment, so that whatever has the consciousness of present and past actions is the same person to whom they both belong" (1961, 286). Consciousness is the criterion for identity for Locke, but since we are not always conscious (we do sleep, after all) the criterion cannot be uninterrupted consciousness. Instead, our memory is what links our current consciousness to past states of consciousness. Your memory is what links you at age 20 to you at age 70. While you may look, act, and think very differently at 70

than you did at 20, you are linked by your autobiographical memory as you have the same flow of psychological continuity that persists throughout the various other changes you undergo over the course of your life. This is why memory enhancement via diminishment may pose a threat to one's authenticity. Recall the discussion in Chapter Two of selectively diminishing or erasing a memory you would rather not have such as ending a relationship, a presentation that went poorly, or a social blunder. An erasure of your selective memory to forget these painful memories may enhance your quality of life or well-being if you will be happier if you don't remember these events. However, if an individual can no longer remember a piece of the narrative in her autobiographical memory she may be missing a component of her self-identity. The impact will vary depending on whether this was a small or substantial part of her lived experience, but its omission may undermine her authenticity. [33]

Another type of enhancement that may affect one's authenticity are moral enhancements. These are enhancements that target a person's moral traits like her kindness, honesty, or empathy. Nina Strohminger and Shaun Nichols (2014) did a series of interesting experiments and concluded that moral traits such as these are an essential part of the folk conception of personal identity. In fact, they assert that their study participants considered moral traits to be the most important aspect to personal identity. When these participants considered the fate of someone who suffered a brain trauma, took a psychoactive drug, moved from one body to another, was reincarnated after death, or underwent age-related cognitive changes, morality was revealed to be the primary factor in determining whether or not the agent was still the same person (Strohminger and Nichols

[33] See Erler (2011) for a more detailed discussion of memory modification and authenticity.

2014, 168). Someone who moved from one body to another but who kept the same moral beliefs was more likely to be seen as 'the same person' than someone who stayed in the same body but underwent a radical change in moral beliefs. These results indicate that like memory - or perhaps even more than memory - morality is considered to be a strong component of our personal identity. As such, moral enhancements may undermine the authenticity of an individual by altering a fundamental aspect of herself. A specific example may help explain why. Strohminger, a psychologist, had a conversation with her friend who was troubled about new changes in his wife of many years. "Once mousy, she was now poised and assertive. Her career had been important to her, now her interests turned inward, domestic" (Strohminger 2014). These changes were not so dramatic that they fundamentally altered the woman her friend had fallen in love with, however, he was worried about the possibility. This reply prompted Strohminger to ask him what kind of change would render his wife unrecognizable, to which he replied "if she stopped being kind" (Strohminger 2014). For this man, one of the fundamental components of his wife that made her who she was – her true self – was that she was kind. While anecdotal, kindness is a great example of a moral attribute that is a defining characteristic of one's personality and values. Unlike the wife getting laser surgery to give her better than 20/20 vision, kindness defines her in a way her eyesight does not. Accordingly, it is reasonable to worry that the enhancement of moral attributes poses a threat to one's authenticity.

Moral enhancements are interesting in part because they would have a direct benefit to society. Having more morally-minded members of society seems like a good use of enhancement technologies, one could argue. However, it is important to note that any benefit to society would be achieved at a potential cost to the authenticity of the individual

who is enhanced. For example, imagine there is an enhancement that makes the user less violent. If this enhancement was taken by an individual who has a tendency to act in violent ways towards others it would promote the safety of those around him which is undoubtedly a positive outcome of the enhancement. However, if the individual is authentically violent – his true self is aggressive and forceful – then taking an enhancement that removes these personality traits would render him inauthentic. Thus, such an enhancement would be beneficial to society but a cost to the individual who takes it. Thus, moral enhancements end up being a case where what is good for society conflicts with what is good for an individual and the trade-off of these benefits and costs must be considered with these types of enhancements.

As was mentioned in Chapter Two, researchers have found that people are more reluctant to enhance psychological traits in themselves that they believe to be more fundamental to self-identity (e.g. social comfort) than those that are not (e.g. concentration) (Riis, Simmons, and Goodwin 2008, 500). There are a wide range of psychological enhancements available and undoubtedly the possibilities will continue to expand as our technology continues to develop. When these enhancements alter fundamental aspects of personal identity the user loses something of real importance – her authenticity. This incompatibility of enhancement and authenticity is a very compelling reason to reject enhancements of this nature.

## VII. Conclusion

The task in this chapter was twofold. First, I set out to determine if psychological enhancements that are aimed at improving one's character or personality traits are compatible with authenticity. I argued that in many cases the two end up being

incompatible. I then argued that this (possible) incompatibility was a reason to reject enhancements that are directed at one's personality or character. When an individual engages in an inauthentic process of change via enhancement she misses out on the value in the means of the process. She will not gain the skills she would acquire during the process and she loses out on the sense of accomplishment in bringing about the change herself. Furthermore, if you engage in other methods of self-change such as introspection, meditation, journaling, or psychotherapy you have the freedom to explore your deep self and could plausibly uncover a truer path of discovery to reveal something you value more than what you originally aimed for with your goal of enhancement. Therefore, the sacrifice a person makes by forfeiting her authenticity by enhancing herself is real loss to her in important ways.

# Conclusion:

## Summary

I have argued that psychological enhancements aimed at changing a person's personality or character traits are incompatible with authenticity. In order to reach this conclusion, my argument proceeded through four main parts that corresponded with each chapter in this dissertation. Chapter One was tasked with defining enhancement and how it can be contrasted with treatment in the treatment/enhancement distinction. Enhancements are "interventions designed to improve human form or functioning beyond what is necessary to sustain or restore good health" (Juengst 1998, 29). In order to distinguish a treatment from an enhancement a baseline level of health is required as a treatment is intended to restore a patient from below the level of health to a baseline level of health, whereas an enhancement is used to bring a patient to a higher level of health than the baseline. How this baseline level of health was established was with a modified version of Wakefield's hybrid theory as it is the best account to distinguish health from disease. The two criteria for disease are:

(a) the condition causes some harm or deprivation of benefit to the person as judged by the standards of the person's culture (the value criterion), and

(b) the condition results from the inability of some internal mechanism to perform its biological function (the explanatory criterion).

If a case meets both of these criteria then it can be properly classified as a disease and if it does not then we can say the individual is healthy. Thus, health can be classified as absence from disease.

However, while these two criteria were successful in establishing disease, defining health as the absence of disease was too imprecise and we needed a more specific account of health to properly handle cases where someone is not diseased but we still think she ought to receive an intervention for a condition, and this intervention is better classified as a treatment than an enhancement. Properly defining health was the next required step which required an account of the term 'normal' which is at the center of the concept of health. I argued that the best account of normal is not as an ideal, but as a species-typical level of average function. This concept of normal allows for the variation across members of a species that results from the natural distribution of talents, skills, capabilities, and traits. This concept also accounts for the variation that occurs across various points in an individual's life. This includes the changes and variations in function an individual experiences as she passes through the various biological stages of life (infancy, childhood, adolescence, adulthood, old age). Thus, normal is a species-typical level of functioning that falls within the average of the normal variation of the members of the species.

If a biological mechanism functions atypically (below a species-typical level of functioning), however, it does not necessarily mean that it is harmful to the individual. I agree with Silvers that we need to be cautious about attempting to "normalize" individuals who function differently than the majority but are nevertheless successfully functional. I thus argued that variation is normal and can still be healthy therefore differences do not always indicate harm. Health is best determined by the judgment of harm made regarding this variation. This can be done via a clinical significance criteria similar to the one used in

psychiatry which is “the disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning” (APA 2013, 21). While imprecise it can be an effective way to establish whether or not an abnormal function is worrisome and requires an intervention. If the variation from the norm is causing an individual clinically significant impairment in her daily life then she would be considered unhealthy and an intervention is justified, but if there is no such impairment then she is healthy and no intervention is needed as it would be an enhancement.

With accounts of health and disease firmly established upon which to contrast treatments and enhancements, I then moved on to a survey of the various types of enhancements in Chapter Two. Of the various types of enhancements available, I argued that psychological enhancements that focus on improving one’s personality or character traits, like the ones Tess and Marina sought, often pose a more difficult challenge to authenticity than those that do not target fundamental aspects of her self. For example, consider Tess drinking a cup of coffee to give her an energy boost, thus targeting her mental alertness, and her taking Prozac to make her more confident and outgoing by targeting her personality traits. The enhancement the cup of coffee offers is a more superficial change than the one Prozac can bring about and therefore is not a threat to her authenticity in the same way that the Prozac may be. Some mental enhancements are more of a threat to an individual’s authenticity than others, and this may be the case for physical enhancements as well. I left open the possibility that some physical enhancements have the potential to threaten authenticity in a way that, for example, taking a beta blocker to improve your precision at target shooting, does not. However, in order to maintain a manageable scope for this project, I limited my discussion in later chapters to

enhancements which change your personality, since these are the enhancements that pose the most direct and obvious potential threat to authenticity.

After establishing which types of enhancements posed the biggest threat to a person's authenticity, the discussion then shifted from enhancement to the notion of authenticity. The task of Chapter Three was to give a proper account of the metaphysical concept of authenticity. I discussed two main accounts of authenticity in detail: the self-discovery and the self-creation views. The self-discovery view argues within each of us is a true self that we need to align our actions with in order to be authentic. The self-creation view, in contrast, disagrees with the concept of a stable, deep self. Instead, it sees authenticity as engaging in the process of creating yourself into the person you want to be. I argued that the self-discovery view of authenticity is the more plausible view, for it is able to capture much of what is appealing about the self-creation view while avoiding its drawbacks.

Accordingly, the view of authenticity I utilized in Chapter Four was the self-discovery view. I argued that in order to be authentic your actions must reflect the characteristics, preferences, and values that comprise your true self – the deep, unique, inner part of you that makes you *you*. I then set out to determine whether authenticity could be compatible with enhancement technologies that targeted a person's personality and character traits. I argued that in many cases the two end up being incompatible. I then argued that this (possible) incompatibility was a reason to reject enhancements that are directed at one's personality or character. When an individual engages in an inauthentic process of change via enhancement she misses out on the value in the means of the process. She will not gain the value in the difficulty of the task, the skills she would acquire during the process, and she loses out on the sense of accomplishment in bringing about the change herself.

Furthermore, if you engage in other methods of self-change such as introspection, meditation, journaling, or psychotherapy you have the freedom to explore your deep self and could plausibly uncover a truer path of discovery to reveal something you value more than what you originally aimed for with your goal of enhancement. Therefore, the sacrifice a person makes by forfeiting her authenticity by enhancing herself is real loss to her in important ways.

## Limitations

Enhancements carry costs that need to be taken seriously, but note that not all enhancements are problematic in the sense in which I have been focusing on in this dissertation. I have only made my argument with regards to enhancements that are aimed at improving one's character or personality traits, for those are the ones that pose the biggest challenge to one's authenticity. I left open the possibility that some physical enhancements may pose a similar challenge to authenticity, but for the sake of a manageable scope I limited my discussion to only psychological enhancements that threatened the user's authenticity. I also noted that not all psychological enhancements may pose this threat. Furthermore, my argument regarding incompatibility was with regards to enhancements only. I did not extend this argument to those receiving medication for treatment purposes. The treatment/enhancement distinction mattered here because treatments do not usually pose the same threat to authenticity as enhancements do. In most cases treatments will either be a means to authenticity, or they do not affect one's character or personality in a way that poses a challenge to authenticity. Recall Levy's examples of gender dysphoria and clinical depression. An intervention for an individual with gender dysphoria would treat the dysphoria and thus help her become her true self by giving her the body to match who she really is. Using Prozac to treat depression can be a means to authenticity

by curing an individual's mental illness that hindered his daily life and his true self. In both cases these treatments remove the barrier that blocks the individuals from being their true self and as such are a means to them being authentic.

Alternatively, treatments may not pose a challenge to authenticity if they do not affect one's character or deep self. For example, taking insulin to treat your diabetes or iron pills for your anemia does not fundamentally change who you are as a person, or render you unrecognizable to your loved ones in the same way that acquiring brand new character traits via Prozac does. I left open the possibility that some treatments may be so drastic they could undermine instead of promote authenticity, but in general treatments do not usually pose the same challenges to authenticity that enhancements do. I noted that some enhancements do not pose a threat to authenticity either. Recall the examples of Tess drinking a cup of coffee and an individual using a beta blocker to improve his aim when target shooting. Like the insulin and iron pills, the coffee and beta blockers do not target the user's personality or character traits and, therefore, are not a challenge to their authenticity. It is also important to note that it is a different type of trade-off if your health will be severely compromised if you forgo a treatment due to worries about your ability to remain authentic than if you decide you rather be enhanced than authentic. For an intervention to qualify as a treatment you must be below a baseline level of health (so you are unhealthy in this case), but you are already at the baseline - and thus healthy - when you use an enhancement. The trade-off is different if the treatment alters your personality in fundamental ways because you are below the baseline of health so the cost of inauthenticity may be worth paying to avoid the harms of an untreated disease so you can be restored to health. For example, treatments for some diseases may alter an individual's

personality by diminishing it. Consider the effects of strong pain medications or chemotherapy on a patient's cognition and energy levels. These side effects may significantly alter the patient's personality, but are often worth enduring for the benefits of the treatment. However, the trade-offs are not the same once a person is at the threshold of good health and as such, different considerations are present in treatment versus enhancement situations.

While enhancements may have other benefits, they may have other costs as well, in addition to authenticity-related concerns. Feldman and Hazlett argue that the problem with inauthenticity is that it is bad in virtue of how it affects, or has the potential to affect, those around you (2010, 68). "[T]he inauthentic person always runs the risk of misleading or deceiving other people" because one is "acting in a way not representative of one's actual beliefs, desires, and other attitudes" (Feldman and Hazlett 2010, 68). This is because of the disconnect between how one really feels or thinks and how they act. We generally assume that what one says or does is an accurate reflection of how they feel, and thus consider the action to be a genuine indicator of the individual's inner state. When there is a disconnect and someone's actions do not properly cohere with his inner self it can be seen as misleading or deceptive. It is for this reason Feldman and Hazlett find inauthenticity to be morally problematic and the inauthentic individual culpable for his actions (for more detail see Feldman and Hazlett 2010).

There are also social justice concerns with enhancement. As it is, only a small percentage of the world's population is able to afford and have access to healthcare and medicine. The use of enhancements by healthy individuals will further widen the divide between the 'haves' and 'have-nots' by having some people be beyond the baseline level of health with the use of

enhancements, while the vast majority fall below the baseline and unable to afford basic treatments. Furthermore, it become an issue of resource distribution as well. Recall that often treatments and enhancements are often the same technology, it is the context that determines whether the intervention is a treatment or an enhancement. For example, anabolic steroids can be used by someone with a muscular disorder as a treatment to strengthen her weakened muscles or by a body builder to further increase the size of his already above-average muscles. If there is a situation of limited medical resources, which is often the case in many countries, it is problematic to use a limited resource to enhance one person who is already at the baseline level of health instead of using the intervention as a medicine to treat the person who is below the baseline to return her to a baseline level of health.

The concepts contained in this dissertation are limited to ethical arguments and do not focus on policy. While I have argued that some enhancements are ethically problematic when they are aimed at changing personality or character traits due of the risks they pose to an individual's authenticity, I have not taken a stand on the question of whether such enhancements should be legally permitted, regulated by the state, or covered by public health insurance. These are different topics for different projects. Still, any policy governing the use of enhancements should take seriously the risk that some enhancements undermine the user's authenticity. So while this dissertation does not directly address policy questions, it is clearly relevant to future work on considering such policy questions.

Finally, while concerns about cheating, deception, social justice, and the fair distribution of scarce health resource are clearly important considerations that need to be taken into account with the use of enhancements, I did not focus on them in my dissertation. Instead, I focused on a distinct ethical concern about enhancements that is independent of such policy and fairness

concerns: are some forms of enhancement bad *for the people who receive them?* I argued that many are, since they undermine individual authenticity, and this is a reason to object even to enhancements that are, for example, fairly and equitably distributed.

## Why We Should Care About Authenticity

The ethic of authenticity teaches us that a fulfilled life is a meaningful life, and for our life to be fulfilled we need to discover and pursue "the values, ideals, and talents that are unique to us as individuals" as the self-discovery view espouses (Elliot 2004, 8). Therefore, being in touch with your true self is vitally important for living a fulfilling life, as an inauthentic life is ultimately devoid of any real sense of accomplishment or achievement. This self-discovery view of authenticity doesn't preclude you from changing or becoming the best version of yourself, it just requires that these changes are done authentically. And, as I have argued, this means that the *means* of change matter. Taking an authenticity-undermining enhancement results in achieving transformations in an artificial way that bypasses the will or undercuts the required effort in an objectionable way. There is a value that lies in certain means, "over and above the value found in the end considered by itself" and therefore the means do matter (Cole-Turner 1998, 155). Recall the mountain climber example from the last chapter which illustrated that there is a value in the means. There is a value in the climb, in the physical and mental discipline that is required, the sense of personal accomplishment in the task, etc., that is distinct from the value of reaching the summit (Cole-Turner 1998, 155). While the end is valued too, the means can be just as valuable and separate from the value placed on the end. If the only value that mattered was reaching the summit of a mountain, then it would not matter if you got there by climbing it or by helicopter. However, we *do* think there is an important difference between climbing a mountain and flying to the top of one, and the former is given more praise and admiration than the latter because it a

true accomplishment and triumph of the will and therefore more valuable. Flying to the summit removes the value that lies in the means of climbing to the top of the mountain. While the enhancement certainly does have benefits – it may be faster, easier, cheaper, or even bring about changes that other methods cannot achieve – it is almost always done in such a way that cheats the user of the value in the means.

Furthermore, when you engage in self-directed change there are multiple possible routes you can take to discovering your true self that are not available to you with a psychological enhancement because there is one set outcome. If you engage in introspection, meditation, journaling, or psychotherapy, you have the freedom to explore your deep self and could potentially uncover a truer path of discovery to reveal something you value more than what you originally aimed for with your goal of enhancement. Additionally, with an inauthentic enhancement an individual loses out on the skills she could have acquired in the process of bringing about the change herself. Recall the example of the doctorate versus an honorary degree. The degree earner would have learned how to think critically, write skillfully, effectively manage her time and large quantities of information, and convey her ideas in a clear and precise manner, while the individual awarded the degree would have acquired none of these skills in the process because the degree was awarded without him having to learn the necessary skills to complete the degree. I argued that this is very much like what you lose out on when you take Prozac to change your personality instead of bringing about changes that better align with your true self via other, authentic, methods. Finally, an individual loses out on the sense of accomplishment in doing the process herself. While it would save a lot of time, effort, and energy to use an inauthentic enhancement to achieve your goal, it would not have nearly

the same sense of accomplishment as when you did it authentically. The accomplishment reached via enhancement would be hollow as it does not involve genuine achievement.

Bradford identified an important component that determines whether a change is authentic or not when she discussed the exertion of the will. Improvements, changes, or achievements that are the result of the exertion of the will are better and more authentic because they bring about personality changes that emerge from and require sustained engagement of the will. Personality or character trait enhancements that are the result of psychopharmacological enhancements, in contrast, do not require the exercise of the will in the same way as they bypass the will too much and the outcome is the result of the intervention rather than the will. The will is the critical component for it is the structure of an individual's will – what she desires, values, intends, and exerts effort to actually *do* – that is connected to her authentic, deep self. If you bypass the will you bypass the true self and the changes are not made authentically.

The sacrifice a person makes by forfeiting her authenticity by enhancing herself is real loss to her in important ways, and this is an independent reason not to enhance even when the enhancement may have other benefits, or other costs. Authenticity can easily be overlooked in the decision whether to use an enhancement, especially if one is focused on the benefits of the enhancement. The appeal of enhancement may seem to overwhelm the costs in an "all things considered" evaluation when authenticity is disregarded, but my contribution to the literature is to show that authenticity is too important to be overlooked.

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