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Disharmony of the Soul: A Philosophical Analysis of Psychological Trauma and Flourishing

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Disharmony of the Soul: A Philosophical Analysis of Psychological Trauma and Flourishing

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by

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Abstract

In this dissertation I argue that psychological trauma hinders human flourishing by disrupting psychic harmony and hindering virtuous relationships. Given the negative symptomology of posttraumatic stress related disorders (i.e., PTSD) this conclusion may seem a bit obvious to some. However, making the case for trauma as a hindrance to human flourishing is more complicated than it may first appear.

First, in the extant literature, trauma as a concept tends to be unclear. In much of the empirical and philosophical literature, trauma can include a certain kind of event, experience, effect, or a combination of all three. Furthermore, because of practical and ethical reasons, most of the empirical observation of trauma has been a study of posttraumatic symptoms and not necessarily trauma itself. For this reason, I will attempt to formulate a definition for understanding trauma itself, distinct from its effects.

Second, the exact causal mechanism for psychological trauma remains somewhat unclear. To understand exactly how trauma hinders flourishing, I propose a hypothesis to explain why trauma occurs. I ground this hypothesis in the most popular family of trauma theories known as worldview or cognitive theories. I propose that trauma occurs when one's experience presents one with evidence that conflicts with one's established identity.

Next, I turn toward proposing a model of flourishing that is relevant to thinking about trauma. I develop a model of flourishing inspired by the work of Plato and Aristotle. In short, I argue that psychic harmony and relating well to others are necessary conditions for human flourishing. Psychic harmony is a state in which one's reasoning and emotional processes function in a symbiotic, complementary way. In addition, relating well to others requires psychic

harmony in part because relating well to others requires one to empathize well. Empathizing well requires one to maintain a state of psychic harmony.

Lastly, I argue that trauma is a response in which one's identity is dissociated from one's experience. This dissociation hinders the ability of one to harmonize one's reasoning and emotional processes. In other words, trauma inhibits the proper functioning of one's reasoning and emotions. Furthermore, trauma presents one with an experience that deeply conflicts with one's identity resulting in lowered Self-Concept Clarity (SCC). Lower SCC makes it more difficult for persons to form excellent relationships. Therefore, trauma hinders functioning well as a human by hindering the forming of excellent relationships.

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Contents

Chapter 1: Introduction

This dissertation is about psychological trauma. More specifically this dissertation will argue that psychological trauma inhibits human flourishing. As such I will be discussing events and responses that some who have been traumatized might find triggering. To provide an adequate foundation for understanding trauma, I will be discussing a lot of psychological and neurological data. Yet, I find it insufficient to discuss trauma without including testimony of trauma survivors[1] and philosophers who have reflected on traumatic experiences. This is because trauma is both a puzzle worth examining and an existential phenomenon that profoundly affects many people. Consider the following autobiographical testimonies. Michelle was molested by family members when she was four or five years old. Recounting how her experience affected her she writes,

> The incest especially by my eldest brother made me choose to stay deep within my own world for decades. I hated relationships within my family. I was also pessimistic about seeking any consultation around me to get out of the trap. My most despairing experience of sexual abuse by my own eldest brother made me vulnerable for so long in relationships with others. I could not trust anybody, and I was always so nervous and uncomfortable having people around me. I easily lost my focus during the conversations with them and lost track of where we were going in those conversations. I became extremely reserved and offensive or defensive. (Michelle's story, 2022)

In another example, Ryan Kaono is a war veteran who was subject to at least two deadly attacks while deployed. Speaking about his experience after coming home, Kaono talks of

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[1] Throughout this project, I will generally use the term survivor to denote one who has lived through being traumatized. The use of survivor follows a generally accepted convention in trauma literature. The use of this word is controversial, however. For instance, see (Harding, 2020) for an example of a discussion about whether to use "survivor" or "victim." I have chosen to use "survivor" instead of "victim" in most cases to highlight the psychological resilience traumatized persons must exhibit to live with traumatic effects. In a few contexts I have used the term "victim" where the context is particularly centered on the unjust harm someone experienced that caused their trauma.

traumatic flashbacks and nightmares. Eventually, Kaono's symptoms made him suicidal. In addition, Kaono's posttraumatic stress interfered with his social interactions. He confesses,

> PTSD and living with it is a daily struggle…We're always cognizant of it. Those who are around us may see us and see absolutely nothing's wrong. We don't typically have external signs of our disability but emotionally and mentally, we still have to deal with it… [Going to work where people thought there was nothing wrong with him] just reinforced the issue that I had…To me, one of the main issues of dealing with PTSD is that people don't (realize) … they don't see you missing a limb, they don't see you scarred, they don't see you burned and so to the outside world you look like you're no different -- you're not special, you have no issue, no disability to really claim. (Aragon, 2022)

> Lastly, consider Pulitzer Prize winning author Junot Diaz's description of his childhood

trauma and its effects,

> That violación. Not enough pages in the world to describe what it did to me. The whole planet could be my inkstand and it still wouldn't be enough. That shit cracked the planet of me in half, threw me completely out of orbit, into the lightless regions of space where life is not possible…Not only the rapes but all the sequelae: the agony, the bitterness, the self-recrimination, the asco, the desperate need to keep it hidden and silent. It fucked up my childhood. It fucked up my adolescence. It fucked up my whole life. More than being Dominican, more than being an immigrant, more, even, than being of African descent, my rape defined me. I spent more energy running from it than I did living…The rape excluded me from manhood, from love, from everything. (Diaz, 2018)

Considering survivors' testimonies, to say that trauma inhibits flourishing seems to be an uninteresting observation at best or a callous and tone-deaf understatement at worst. The charged language with which many survivors describe their experience indicates the intrinsically intense emotional nature of psychological trauma. Yet, trauma is not characterized by just an intense emotion. Trauma profoundly changed people in significant ways. This change is marked by an event that many survivors find difficult to describe or understand. In this way, survivors' stories begin to hint at the complex nature of trauma.

The complexity of trauma begins to emerge when one begins to think about what it means to say that trauma inhibits flourishing. To begin, we must consider what we know about trauma to date. To this end, chapter two will briefly survey empirical literature on common types of trauma. This survey will include statistics, symptoms, and a summary of the most common treatments that have been developed to treat posttraumatic stress. This chapter will serve as a background and starting point for the rest of the project. Any explanation of trauma and its effects must make sense of the empirical data. This does not mean, however, that everyone who attempts to observe trauma, or more accurately, traumatic effects, is observing the same thing.

In fact, as one reads through the empirical and philosophical literature on trauma, it become apparent that "trauma" is not always used in the same way. In some instances, it is used to describe a particular kind of event, in some cases it is used to describe an experience, and in some cases, it is used to describe the after-effects of a significant event. This conceptual shift makes it difficult to discuss trauma consistently and clearly. To this end, in chapter four, I will propose a definition for trauma that I will assume for the rest of the dissertation. I will propose a definition that meets three criteria: it will provide a way to distinguish between traumatic events and non-traumatic events, it will provide an explanation for how a traumatic event can lead to traumatic effects, and it will broadly cohere with the empirical research on posttraumatic stress. In short, I will argue that trauma is "a negative emotional response to a perceived horrifying event which includes the judgment that the event will cause an emotional experience which is too overwhelming to bear and where such a response is characterized by a disruption in the

relationship between one's cognitive faculties responsible for integrating and assigning meaning[2] to an experience and one's emotional experience of an event."

After narrowing the conceptual landscape to focus on trauma as an emotional response, I will propose what I believe to be a somewhat novel causal mechanism for trauma. In chapter four I will examine psychological literature exploring the concepts of worldview and identity. I will argue that some identity beliefs form a core part of someone's worldview and that trauma is intrinsically related to one's self concept. More specifically, I will argue that one's traumatic experience presents evidence that conflicts with one's self concept in such a way that one dissociates oneself from their experience. This dissociation serves a protective function in that it enables one's psychological framework to remain somewhat stable.

Changing pace somewhat in chapter five, I will focus more heavily on philosophical literature to survey resources traditionally associated with the virtue ethics tradition. In particular, I will explore and develop Plato's just soul framework. Plato proposes that the soul is composed of three primary elements: reason, spirit, and desire. I will evaluate Plato's arguments for these distinctions and develop a notion of "psychic harmony" that I believe will be fruitful in evaluating trauma. In addition, I will examine and critique Aristotle's proper function arguments, particularly as he discusses human proper function. From Aristotle's work, I hope to develop a workable understanding of proper human function and flourishing. Importantly, I will argue that relating well to others is a necessary condition for proper human function and therefore flourishing.

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[2] Later, in section **6.6 Meaning-making**, I will more fully describe the kind of meaning I have in mind. For now, I understand one to make meaning of an event when one evaluates an experience in light of one's worldview.

I believe it will be helpful to note that I will not be attempting to argue for or develop the correct interpretation of Plato's or Aristotle's work. Many others have attempted to do this and whether Plato and Aristotle really meant one thing or another is not central to this project. Instead, I will use my understanding of Plato and Aristotle as a place to begin developing a framework for evaluating trauma and its impact on human flourishing.

In chapter six, I will attempt to synthesize and build upon my arguments from the previous chapters. I will attempt to demonstrate that trauma inhibits human flourishing by disrupting psychic harmony and diminishing one's ability to relate well to others in specific ways. I will do this by discussing the relationship between one's emotions and reasoning processes and argue that trauma, and not just traumatic effects, disrupts this relationship. Moreover, I will argue that trauma diminishes one's self-concept clarity which makes it increasingly difficult to relate well to other people. Because psychic harmony and relating well to other people are necessary conditions for flourishing, trauma inhibits flourishing because trauma is an impediment to psychic harmony and relating well to others.

Lastly, in chapter seven I will summarize the arguments in each section and provide a few suggestions for future research. It is my hope that my analysis of trauma will help to clarify and add to our general understanding of this phenomenon so that we might be able to better support those who have been traumatized and become more aware of the kind of impact trauma has on persons. In particular, I hope to help elucidate some of the ways in which traumatized persons have been harmed. I do not claim to have provided a definitive account of trauma, but I hope to contribute in some small way to advancing our understanding of the subject and our understanding of the people who have been traumatized.

Chapter 2: A Brief Survey of Trauma in Empirical Psychology

My project's central focus is an analysis of trauma itself. However, most of the empirical literature on psychological trauma studies the effects of trauma, most commonly PTSD. There is an important conceptual distinction between psychological trauma and the effects of trauma. I will explore this distinction in depth in the next chapter. For now, it is enough to note the difference. Most empirical studies observe the effects of trauma instead of trauma as it happens for two primary reasons. First, the research environment is fundamentally different from traumatic environments. Environments that contribute to trauma evoke extreme emotion, most notably terror or horror. Often, when someone is traumatized, they experience a felt lack of control over the situation. When being a research participant, there is a sense of control that does not exist in the initial environment. Research environments do not replicate these emotions. This leads to the second reason why empirical research must rely on observation of trauma effects: recreating trauma in the lab poses serious ethical challenges. Intentionally exposing persons to stimuli intended to evoke trauma is intentionally attempting to cause someone significant harm.[3] Thus, researchers must rely on observations of persons who have already survived trauma. Even then, there is serious discussion as to whether research that "re-traumatizes" someone is ethically permissible.[4,5]

However, studying traumatic effects holds much promise in understanding trauma. Importantly, disorders like PTSD lend insight into what happens during a traumatic experience

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[3] I will argue that trauma results in certain specific harm, namely diminishing one's flourishing. By the end of this project, I will argue that trauma hinders the ability of one to develop and maintain psychic harmony and to relate well to others.

[4] It is unclear whether the term "re-traumatize" indicates a new traumatic experience, or whether it is an emotionally intense reminder of the initial trauma. Later in this chapter I will argue that when one is "re-traumatized" they experience a new distinct trauma that is psychologically grounded in their initial trauma.

[5] For examples of ethical discussions surrounding trauma research see (Newman, 2008) (Jefferson, et al., 2021) (Stein, et al., 2000).

because PTSD symptoms appear to be similar to one's initial trauma. In this chapter I will briefly survey empirical psychological research aimed at understanding trauma. This research will serve as a background for the rest of this project. In the last 20 years, trauma research has exploded yielding a vast trove of literature. Therefore, I have attempted to summarize a representative sample in what follows.

2.1 Trauma and Stressor-Related Disorders[6]

According to both the American Psychiatric Association and the World Health Organization (WHO) stress related disorders must be able to be linked to a "traumatic or stressful event" (American Psychiatric Association, 2013, p. 265). That is, symptoms by themselves are not enough to classify such disorders. Such stressors can be common like divorce or socio-economic hardship. "With all disorders in this grouping, it is the nature, pattern, and duration of the symptoms that arise in response to the stressful events—together with associated functional impairment—that distinguishes the disorders" (World Health Organization, 2018, ch. 6). Within stress related disorders, the 11th edition of the International Classification of Diseases (ICD-11) identifies six primary manifestations: Post-Traumatic Stress Disorder (PTSD), Complex Post-Traumatic Stress Disorder (Complex PTSD), Prolonged grief disorder, Adjustment disorder, Reactive attachment disorder, and Disinhibited social engagement disorder. The Diagnostic and Statistical Manual of Mental Disorders 5th edition (DSM-5) recognizes these disorders with the

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[6] The DSM-5 states, "Trauma and stressor related disorders include disorders in which exposure to a traumatic or stressful event is listed explicitly as a diagnostic criterion" (American Psychiatric Association, 2013, p. 265). However, it is unclear what distinguishes a traumatic event from a merely stressful one nor what constitutes trauma itself. Ostensibly PTSD results from trauma but it is less obvious whether other conditions like acute stress disorder are caused by trauma, a stressful event, or either. For these reasons and others, I will seek to develop a more precise definition of trauma in the next chapter.

exception of Complex PTSD and it adds acute stress disorder. Each of these conditions helps to distinguish different kinds of traumatic experience and its effects.

PTSD is perhaps the most well-known of the diagnoses. This condition is characterized by vivid traumatic flashbacks or intrusive memories, avoidance of memories or triggers associated with the traumatic event/events, and/or hypervigilance. DSM-5 also includes dissociative effects. Persons with PTSD may have "persistent or recurrent experiences of unreality of self or body or of time moving slowly" (American Psychiatric Association, 2013, p. 272). Also, persons may have "persistent or recurrent experiences of unreality of surroundings." It is estimated that the lifetime risk of developing PTSD is 8.7% (*Ibid*). "Highest rates…are found among survivors of rape, military combat and captivity, and ethnically or politically motivated internment and genocide." DSM-5's "acute distress disorder" follows many of the symptoms of PTSD but is limited to a shorter period of time. "The essential feature of acute stress disorder is the development of characteristic symptoms lasting from 3 days to 1 month following exposure to one or more traumatic events" (*Ibid*, p. 281).

One major difference between the DSM-5 and the ICD-11 is that the WHO distinguishes between PTSD and Complex PTSD[7]. Both conditions are caused by a significant life-threatening or horrific event. This event may be a one time experience, but it may also be repetitive. Complex PTSD most often results from "prolonged or repetitive events from which escape is difficult or impossible" (World Health Organization, 2018). Symptomatically, diagnosing Complex PTSD meets all of the requirements of PTSD with the addition of problems regulating

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[7] There was significant disagreement as to whether Complex PTSD should have been included in the DSM-5. For a case for excluding Complex PTSD from the DSM-5 see (Resick, et al., 2012). For a case for including Complex PTSD see (Sar, 2011).

emotions, negative beliefs about oneself (particularly beliefs of diminished worth or guilt), and difficulty maintaining relationships.

Prolonged grief disorder is when someone grieves for an atypically long time after losing someone close to them. This grieving period is defined as being no less than six months and longer than what is culturally typical.

> [Adjustment disorder] is characterised by preoccupation with the stressor or its consequences, including excessive worry, recurrent and distressing thoughts about the stressor, or constant rumination about its implications, as well as by failure to adapt to the stressor that causes significant impairment in personal, family, social, educational, occupational or other important areas of functioning. (World Health Organization, 2018, 6B43)

Reactive attachment disorder is only diagnosed in children from ages 1-5. This disorder is related to cases of "grossly inadequate child care." Children with this diagnosis do not turn to their care-giver, even when a new adequate caregiver is provided, for comfort and/or security. Disinhibited social engagement disorder results from the same kind of stressor as reactive attachment disorder but its symptoms are different. Children do not display normal behavior toward unfamiliar adults by exhibiting overly familiar behavior toward them.

These kinds of diagnoses help to demonstrate that traumatic events, and thus traumatic experience, can vary widely. Trauma may be a one-time extreme event or it may be repetitive extreme events or repetive less-extreme events whose impact on the victim accumulates over time. Traumatic events may be common place, or they may be uncommon. Anyone at any stage of life can have traumatic experience and it is not clear how someone will respond to traumatic events. Some never develop lasting symptoms and others develop debilitating symptoms.

2.2 War Trauma

Some of the earliest research on psychological trauma in the 20th century revolved around military veterans. During World War I British officials recognized the term "shell-shock" to describe a condition they were observing in many servicemen. "Symptoms included fatigue, tremor, confusion, nightmares and impaired sight and hearing. It was often diagnosed when a soldier was unable to function and no obvious cause could be identified" (Jones, 2012). Charles Myers was eventually assigned a post where he was able to investigate shell-shocked soldiers. He believed that the problem these soldiers were having was primarily psychological and was manifesting with physical and psychological symptoms. His opinion was that the root cause of symptoms was repressed trauma. His treatment plan was to revive repressed memories so these memories could be retrieved and integrated. In addition, Abram Kardiner was an important figure in early trauma research. In 1948 he coauthored a book with Herbert Spiegel Kardiner, *War Stress and Neurotic Illness* where they "described a chronic traumatic war neurosis that involved preoccupation with the traumatic stressor, nightmares, irritability, increased startle responsiveness, a tendency to angry outbursts, and general impairment of functioning" (Friedman, Schnurr, & McDonagh-Coyle, 1994, p. 265). Earlier in 1941 Kardiner published *The Traumatic Neuroses of War* where he recounted his experience with World War I veterans. Summarizing Kardiner's findings, van der Kolk writes, "Kardiner noted that sufferers from traumatic neuroses develop a chronic vigilance for and sensitivity to threat…[Kardiner argued that] posttraumatic stress isn't 'all in one's head'" (2014, p. 11). Unfortunately, the early work on shell shock received tremendous pushback. In 1922, the British Government published the Southborough Report which investigated shell-shock and its treatment among soldiers. In the end the report recommended "The term shell-shock should be removed from official nomenclature"

and instead those with symptoms were to be classified by already recognized diagnoses (Report of the War Office Committee of Enquiry into "Shell-Shock", 1922, p. 190). Any mention of "mental" or "nervous" in the clinical diagnosis was discouraged. The document then went on to prescribe training in "morale" and "character" as ways of preventing what was being diagnosed as shell-shock.

A more recent study investigated the "oldest old" (>79 years) and the prolonged effects of World War II related trauma. It is important to note that this study included the general population and not only military veterans. The researchers found that 46% of the oldest old in Germany still experience effects from WWII. Most of the effects observed were physiological like "congestive heart failure, respiratory or lung diseases, back pain, blood diseases, bladder problems, and sleeping disorders" (Habuer & Zank, 2021, p. 5). They also found that exposure to WWII events did not affect the number of people seeking treatment for mental illness. However, they did find a significant increase in the number of people seeking treatment for sleeping disorders which is a common comorbidity of mental health problems. "The results can partly be explained by the finding that many traumatised older adults express their mental illness through somatization…and older adults are often neglected regarding treatment for mental illnesses" (p. 6).

The National Vietnam Veterans Readjustment Study, the most comprehensive study of Vietnam veterans and PTSD found that 15% of male veterans and 8.5% of female veterans could be currently diagnosed with PTSD (Kulka, et al., 1988, p. 2). Researchers also observed that the rate of PTSD rose in tandem with the amount of war-zone exposure. "[T]hose who were most heavily involved in the war are those for whom readjustment was, and continues to be, most difficult" (p. 3). Overall, they estimated that over their lifetime 30.9% of male and 26.9% of

female Vietnam veterans would develop PTSD at some time. Perhaps most significantly, "the lives of Vietnam veterans with PTSD are profoundly disrupted, in that they experience problems in virtually every domain of their lives" (p. 2). The negative effects from war trauma were profoundly impactful on the veterans' most significant relationships. "PTSD has a substantial negative impact not only on the veterans' own lives, but also on the lives of spouses, children, and others living with such veterans" (p. 3).

The effects of traumatic war experience can even be observed as far back as the American Civil War. In one recent study researchers investigated the effects of war on Civil War veterans through an archival study. Because the Civil War occurred well before the designation for PTSD, researchers had to trace the post-war histories of veterans and compare these histories to a control group of non-combatants. Thus, the researchers were often not able to point to specific mental symptoms. Still, they found, "While war trauma was moderately associated with developing signs of GI, cardiac, or nervous disease alone, it was strongly associated with developing signs of nervous and physical disease in combination" (Pizarro, Silver, & Prause, 2006, pp. 197-198). Pizarro et. al. hypothesized that because people were medically screened before being accepted for military service, combat is the most likely candidate to account for the negative health effects experienced by Civil War veterans.

2.3 Sexual Trauma

Sexual violence is another prevalent cause of trauma, especially among women. In the year 2000 it was estimated that 18% of all women in the United States had experienced a completed or attempted rape (Yuan, Koss, & Stone, 2006). Sexual trauma survivors tend to have quite varied post-traumatic responses. Some experience long-term severe symptoms, others do not. The National Resource Center on Domestic Violence reports that women who were abused

as children are five times more likely to develop PTSD and that the lifetime rate of PTSD among these same survivors is three times greater than nonvictimized women (*Ibid*, p. 2). Childhood sexual trauma is associated with personality disorders, social inhibition and feelings of inadequacy, and submissive or clinging behavior. Furthermore, "Childhood sexual trauma may also affect certain developmental processes, such as the ability to develop and maintain relationships" (*Ibid*, p. 3). Some survivors experience changes in consciousness and memory. "When these experiences are severe, abilities to work, socialize, or engage in other activities sometimes become impaired" (*Ibid*). Women who were victimized as adults report immediate distress and many experience PTSD symptoms shortly after the attack. Though, "Many survivors experience a reduction in psychological symptoms within the first few months" (*Ibid*, p. 5). Symptoms of survivors improved over time although they remained elevated after two years.

Interestingly, a significant amount of research indicates there are interventions that can have a positive impact on restoring survivors. For childhood survivors, "[m]aternal responses that are supportive and protective have been associated with improved mental health and functioning…Supportive responses from partners also have positive influences on women's health and predict fewer symptoms" (p. 4). For adult survivors, "Women who most strongly perceived that they had control over their recovery process were the least distressed" (p. 6).

Kristen Reindhart et. al. argue that sexual trauma reorients the survivors' relationship with their own body (Reinhardt, et al., 2020, p. 2). This happens in two primary ways, it affects emotions which are embodied and the body itself can be a reminder, and thus a trigger, for the sexual trauma. Given this, the researchers studied a cohort of sexually traumatized women and observed the accuracy of their interoceptive accuracy and their interoceptive sensitivity. That is, they observed the accuracy and sensitivity of women's awareness of their own bodies. They

found that women who suffered less from PTSD were more aware of what was going on in their bodies. These results support the hypothesis that lasting dissociation associated with PTSD negatively impacts one's ability to be in tune with their own body. In this study internal accuracy was tracked by having participants pay attention to their heartbeat. Because the heartbeat is associated with a range of emotions, this dissociation may be linked to conditions like emotional numbing. They conclude, "Awareness of emotions depends, in part, on awareness of internal body sensation" (p. 6).

2.4 Childhood Trauma

The watershed study of Adverse Childhood Experiences (ACEs) was published jointly by the Kaiser Permanente hospital and the CDC (Felitti, et al., 1998).[8] This study stunned researchers and indicated that ACEs were much more common than previously thought and they played a much larger role in public health than anyone had expected. The study compared the medical history of 8,056 adults to their responses on an ACE survey which they voluntarily completed. The questions on the survey all began with "While you were growing up during your first 18 years of life…" The respondents were then asked to indicate whether they had experienced specific events related to psychological, physical, or sexual abuse as well as substance abuse, familial mental illness, mother's abuse or household criminal behavior. For instance, one question read, "While you were growing up during your first 18 years of life did a parent or other adult in the household often or very often swear at, insult, or put you down?"

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[8] For the duration of this project, I assume that all cases of PTSD necessarily include trauma, as I will describe it, as as a causal mechanism. That is, I will maintain the assumption present in the DSM that all forms of PTSD are at least partially caused by a phenomenon that I will attempt to more precisely describe at the end of this chapter. However, not all ACEs are traumas, though some are. I include ACE literature here because childhood trauma is a distinct form of trauma and has symptomology that is distinct from both war-induced trauma and sexual violence trauma. Moreover, sometimes a single ACE is not traumatic, but the accumulation of ACEs over time can result in trauma. What exactly constitutes trauma will be discussed in the next chapter.

Both medical records and the results of the survey were then compared against "10 risk factors that contribute to the leading causes of morbidity and mortality in the United States" (Felitti, et al., 1998, p. 248). The researchers found a strong connection between ACEs and negative adult health outcomes. "The findings suggest that the impact of these adverse childhood experiences on adult health status is strong and cumulative" (*Ibid*, p. 251). Another important finding from this study was that many ACEs were not found in isolation. Often, children experienced at least two kinds of ACEs. This is important for two reasons. First, it shows that childhood trauma is often the result of a combination of experiences and influences. Second, as children experience more kinds of ACEs, the probability of future mental, social, and medical negative outcomes increases.

> The original CDC-Kaiser ACE study found 12.5% of respondents had experienced 4+ ACEs and 64% had experienced at least one ACE. In 2015 a survey of 2028 adults in Wales found that 47% had experienced at least one ACE and 14% 4+. The prevalence reported in other studies in the UK ranges from 9 to 14% for 4+ ACEs. (Boullier & Blair, 2018, p. 132)

More recently, research has suggested that childhood abuse causes neurobiological changes, but associating the effects of abuse by simply referencing the number of ACEs a child experienced may skew the data. Martin Teicher and Jacqueline Samson conducted a meta-study reviewing a large body of neurobiological studies of how childhood trauma affects neurodevelopment (2016). Teicher and Samson agree that recent research indicates a causal connection between trauma and neurological development, but that some kinds of maltreatment have distinct effects. For instance, they admit that in some cases similar effects are seen in individuals who have been neglected and those who have been actively abused. However, changes in amygdala and hippocampal volume appear to be different in neglected and actively abused children. Many studies found differences between boy's and girls' neurological

development. "Hippocampal volume also appears to be more strongly affected by exposure to stress in males than females. On the other hand, differences in resting-state functional connectivity between anterior cingulate and hippocampus or amygdala may be more reliably observed in females" (p. 257). Across all studies, however, childhood maltreatment is associated with increases in the parts of the brain responsible for assessing and responding to threats.

> Mary Boullier and Mitch Blair have made similar observations.

> There is growing evidence of how toxic stress or repeated adverse experiences can cause permanent damage to the developing brain and also alter the functioning of the immune, neurological and endocrine systems in an individual, predisposing them to high risk of chronic diseases and early death. (Boullier & Blair, 2018, p. 132)

Furthermore, "In the Welsh ACE study those with four or more ACE were 2 times as likely to develop a chronic disease before the age of 69. For type 2 diabetes they were 4 times as likely and 3 times as likely to develop heart disease or respiratory disease" (p. 135). In addition to medical and mental health problems directly related to trauma, children may experience indirect problems as well.

> Due to the high level of stress in their environment, children who experience more adverse events are more likely to develop behaviours that are harmful to health such as smoking, drinking alcohol or antisocial behaviour. This then puts the individual on a pathway to poor adult health with higher risk of many diseases including cancer, cardiovascular, liver, and lung diseases. (p. 133)

Not only are ACEs associated with negative health outcomes in adulthood, but they also have more immediate effects on children. ACEs are associated with diminished allostasis (the process of adjusting to changing environment), neurological problems, disruption in circadian rhythm, raised immune inflammatory markers, negative changes in epigenetic material, and mental health. The CDC's Robert Anda,

calculated that [child abuse's] overall costs exceeded those of cancer or heart disease and that eradicating child abuse in America would reduce the overall rate of depression by more than half, alcoholism by two-thirds, and suicide, IV drug use, and domestic violence by three-quarters. (van der Kolk, 2014, p. 149)

While it may be the case that we can observe neurobiological changes associated with childhood maltreatment, these changes do not translate consistently into specific psychopathologies. In other words, a child's response to a given stressor may result in a range of psychopathological diagnoses or none at all. Wade et. al did find a connection between stressful early life events and sensitivity to stress later in life (Wade, et al., 2020). Specifically, "On aggregate, these results suggest that a history of prolonged childhood neglect increases vulnerability to the effects of later stressful events proximal to externalizing problems" (p. 4). Yet, social enrichment was demonstrated to have the opposite effect.

Perhaps more compelling, we provide experimental evidence that early social fortification afforded by family care buffers the sensitizing effects of childhood neglect to later stressful life events on psychopathology. These effects held after controlling for child sex, covariance with other mental health problems, and prior levels of externalizing problems, strongly supporting the stress-sensitizing effect of early neglect, and the stress-buffering effect of enriched caregiving, on externalizing problems in adolescence. (*Ibid*).

2.5 Refugee Trauma

Recognizing a moral imperative to allow the flourishing of persecuted individuals, Article 14 of the UN Declaration of Human rights states, "Everyone has the right to seek and to enjoy in other countries asylum from persecution" (United Nations, 1948). The persecution refugees receive is often associated with trauma (e.g., warfare, sexual violence, forced labor).

Among refugees, traumatic exposure prior to and during migration is strongly linked to mental health problems and psychological distress, and evidence indicates these challenges among first generation refugees can persist years after resettlement. Accordingly, there is increased recognition that war-related post-traumatic stress extends beyond the individual to affect families with potential long-terms effects on the health

and psychosocial well-being of individuals in subsequent generations" (Sangalang & Vang, 2017, p. 1).

Thus, many refugees experience the same kinds of trauma as have already been described but the effects of these traumas tend to be transferred intergenerationally. That is, the trauma refugee parents experience affects them in ways that negatively impact their children, often resulting in childhood trauma. This appears to be because parents who are traumatized have a much more difficult time providing space to relate to their children.

> Parents who are traumatized following exposure to torture or organized violence can have difficulties in living up to their children's demands for empathy sensitivity and presence. Secure attachment and children's trust in their parents' ability to protect them against danger are important prerequisites for healthy development. (Montgomery, 2011, p. 33)

Such intergenerational trauma is not unique to refugee families. In fact, this cycle can be observed among many non-refugee traumatized individuals. Studying refugees, however, emphasizes the transmission of trauma because it is unlikely that a family who is in the process of resettling, or has resettled in a foreign land, has the same kind of social opportunities and networks that native residents have. These social networks help to mitigate or reverse the effects of pre-arrival trauma. The National Child Traumatic Stress Network highlights these social opportunity difficulties by categorizing additional refugee stress into resettlement, acculturation, and isolation stress (About Refugees, n.d.). These kinds of stressors tend to be a better predictor of refugee future mental health than pre-arrival trauma histories. Studies of refugees arriving in Denmark show a high prevalence of pre-arrival mental health problems (Montgomery, 2011). "A high prevalence of psychological problems was identified among the children at arrival; thus, 77% suffered from at least one of three conditions at arrival: anxiety, sleep disturbance, and/or sad and depressed mood" (*Ibid*, p. 39). However,

The children's traumatic background at arrival seemed only to a limited extent to determine their long-term mental health, while the amount of life stressors in exile, including the experience of discrimination, seemed to be of prime importance. Refugee children with traumatic experience prior to arrival are vulnerable, but the long-term effects of such experience depend on further exposure to individual, family or society-related risk factors. (*Ibid*, p. 31)

Refugees, then, tend to have multiple experiences of trauma and experience multiple kinds of trauma. This is important because with each traumatic experience, refugees are left with fewer resources to deal with the next trauma. For instance, if one experiences torture pre-arrival, they must devote mental and emotional resources to coping with that trauma. Yet, the stressors of resettlement requires above average emotional mental resources to cope with new challenges. In addition, parents of refugee children are responsible for helping their children with pre-arrival trauma and resettlement stressors. This requires more emotional and mental resources. If one has difficulty coping with one of these levels of trauma, one can expect a cascade of effects because the inability to cope with one trauma means that one will struggle to cope with additional traumas.

2.6 Child Soldiers

In many ways child soldiers present another synthesis of trauma types. Obviously, child soldiers are children who are often in the prime years of their psychological, social, and physical development. They experience all the atrocities of war and, if they survive, must navigate the difficulties of reintegrating into a society distinctly different from the one they have been conditioned to be a part of. In addition, child soldiers may simultaneously suffer trauma from systemic and repeated abuse by their captors and inflict trauma on others. It is no surprise then that "witnessing, experiencing and perpetrating violence, younger age of involvement, and longer engagement with an armed group all have negative consequences for the mental health

and social reintegration of young people" (Betancourt, Brennan, Rubin-Smith, Fitzmaurice, & Gilman, 2010, p. 607). Betancourt and colleagues studied former child soldiers in Sierra Leone. They discovered different war experiences yielded different outcomes. For instance, children who injured or killed others reported more instances of externalizing anti-social behavior while children who were raped reported more instances of internalizing problems like depression. Echoing prior research, Betancourt et. al. found that war exposure did not account for all the mental health problems former child soldiers experienced. They found that the more robust and positive a child's post-war social network the better their outcome. "[I]n the presence of increasing community acceptance, youth demonstrated significant improvements in all outcomes investigated" (p. 612). Similarly, the more ostracized a child was, the more negative outcomes were experienced.

Kohrt et. al. studied the impact of war trauma on children in Nepal. They compared the experience of children who were conscripted as child soldiers and those who were not conscripted but lived through the war. All the children, both former soldiers and civilians, reported at least one traumatic event with the most frequent events listed as beatings, bombings, and torture. The researchers found "Child soldiers had worse mental health outcomes (symptoms of depression, PTSD, general psychological difficulties, and function impairment) than the comparison groups, with the exception of anxiety symptoms" (Kohrt, et al., 2008, p. 700). The non-distinction in anxiety symptoms may be due to these symptoms being a generalized childhood response to trauma. They conclude that there are additional psychological aspects to being a child soldier which contribute to negative mental health outcomes. One possibility they mention is sexual violence which was excluded from the study due to cultural concerns. Another

proposal was reintegration difficulties because communities were less welcoming of former child soldiers.

2.7 Trauma Therapies

The previous survey is not an exhaustive list of trauma types but is meant as a representative sample of empirical research on trauma. Much of this research suggests a group of symptoms that will help us to investigate the nature of trauma. In this next section I would like to explore the most common contemporary treatments for PTSD because these treatments will help shed light on the neurology and mental processes involved in and affected by trauma. I will provide brief sketches of therapeutic approaches to give the reader a general sense of treatment approaches. Later in this project, I will explore some of these approaches more in depth.

Most of the literature on trauma therapy focuses on treatment of PTSD. This is because treatment requires a diagnosis and PTSD is the most common diagnosis of trauma-related problems. According to the American Psychological Association's (APA)[9] guidelines for treatment, "the most favorable outcome occurs when posttraumatic reactions are naturalistically processed to a degree of resolution and do not subsequently develop into onerous or ongoing symptoms" (American Psychological Association, 2017, p. 90). Thus, it is better to intervene on behalf of persons with PTSD earlier than later to prevent symptoms from increasing in severity or becoming more deeply rooted. The APA recommends "cognitive behavioral therapy, cognitive processing therapy, cognitive therapy and prolonged exposure therapy" as well as pharmaceutical interventions when necessary (p. 91).

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[9] Both the American Psychological Association and the American Psychiatric Association can be abbreviated "APA." Thus, I will use "APA" to refer to the American Psychological Association and I will not abbreviate the American Psychiatric Association.

The most popular therapy for treating PTSD is trauma focused Cognitive Behavioral Therapy (CBT-t). This approach recognizes emotional processing theory which states that persons can develop negative emotions toward ordinarily mundane things (American Psychological Association, 2017). It also recognizes the complex system of beliefs a traumatized person might have. This is important because trying to guide someone to simply integrate their traumatic experience into their established beliefs can be problematic. For instance, one might have the belief that only disobedient children get beaten. Thus, if one gets beaten, it must have meant they were disobedient. CBT-t seeks to help people identify problematic patterns of thought "to help the person reconceptualize their understanding of traumatic experiences, as well as their understanding of themselves and their ability to cope" (*Ibid*). This is often coupled with controlled exposure to traumatic triggers meant to help a person overcome avoidance and escape behaviors.

Another therapy which has shown promise in treating PTSD is Eye Movement Desensitization and Reprocessing (EMDR). EMDR was originally developed to treat traumatic memories (What is EMDR?). In this therapy persons are asked to think about one aspect of their trauma while following an object (e.g., the clinician's finger) with their eyes as she moves it through their field of vision. This process is supposed to mimic biological process at work during REM sleep. It is thought that "that EMDR therapy facilitates the accessing of the traumatic memory network, so that information processing is enhanced, with new associations forged between the traumatic memory and more adaptive memories or information" (*Ibid*). A recent meta-study affirmed the efficacy of CBT-t and EMDR as treatments for trauma related symptoms. "We believe that this evidence is now sufficiently strong to recommend the provision of CBT-T, cognitive therapy or brief EMDR to individuals who are symptomatic following

exposure to a traumatic event" (Roberts, Kitchiner, Kenardy, Lewis, & Bisson, 2019, p. 20).

These researchers also found that trauma therapy must be tailored to the individual taking into

account specific symptoms. Thus, trauma therapy must be individualized because different

people experience different post-traumatic stress symptoms and respond to therapy differently as

well.

Both CBT-t and EMDR require clinicians to expose their patients to their traumatic

memories and sensations. Because of this, a significant number of patients tend to drop out of

such therapies before completion and of those who continue therapy, almost half do not respond

(Chiba, et al., 2019, p. 2). In an attempt to find a way of treating patients without this conscious

exposure, another method of treatment, neurofeedback, is being developed. The origins of this

therapy go back to the 1950s though it is not as established a practice as CBT-t. There are

different forms of neurofeedback (i.e., EEG, fMRI). The general practice of neurofeedback

focuses on the electrical connectivity of the brain and brain wave frequencies that are active

during certain brain states. Patients train to produce beneficial brain waves and receive a neural

stimulation reward for doing so. "Neurofeedback nudges the brain to make more of some

frequencies and less of others, creating new patterns that enhance its natural complexity and its

bias toward self-regulation" (van der Kolk, 2014, p. 315). Neurofeedback shows promise in early

research but is still being evaluated for its efficacy. "Despite promising results…derived from

both EEG and fMRI neurofeedback…the efficacies of these approaches have not yet been

warranted" (Chiba, et al., 2019, p. 10).

2.8 Summary

Trauma often occurs when someone is in a situation where they fear for their life or

expect significant injury and their capacity to mentally endure such a situation is impaired. Other

instances of trauma occur when one feels intense horror when taking part in or directly witnessing a disturbing event. Most often traumatized persons experience significant levels of dissociation as a coping mechanism. While dissociation can be beneficial during a traumatic event, it can be highly detrimental to one's well-being when it happens in non-threatening situations. Lasting dissociation is linked to conditions like emotional numbing and erratic behavior.

There is not one completely uniform response to traumatic events. According to researchers, people often experience a traumatic event without developing enduring systems. However, in a significant number of cases people develop negative symptoms, the most prominent of which is PTSD. PTSD is associated with sudden involuntary flashbacks, difficulty sleeping, avoidance of traumatic triggers, and other symptoms. PTSD dramatically alters the way one goes about living their life with many PTSD sufferers reporting substantial difficulty making and maintaining significant relationships, difficulty in being aware of one's own body, and frequent emotional outbursts. However, not all persons diagnosed with PTSD experience the same symptoms.

The most common causes of trauma include war and sexual abuse. The most extensive study of PTSD comes from studies of soldiers though the literature on sexual assault is robust. Adult trauma survivors experience strong symptomology during and shortly after a traumatic event, though they tend to recover more quickly than children. Children who are exposed to trauma often have problems developing into adults with certain age ranges proving to leave children more vulnerable to developmental difficulties. Children and those who have experienced intimate interpersonal trauma report the highest level of trauma-related amnesia.

People who experience repeated trauma or more than one kind of trauma tend to have a higher number of symptoms and a higher severity of symptoms. Refugees and child soldiers represent groups of people who experience multiple kinds of trauma. These groups experience the immediate difficulties associated with trauma but also often experience more trauma as they attempt to integrate into society.

Social support has shown to help mitigate the effects of trauma exposure. Treatments for PTSD include CBT, EDMR, and neurofeedback. CBT seeks to help people consciously integrate their traumatic experience so that a survivor can mitigate avoidance and escapist behaviors. EDMR attempts to recall traumatic sensations and reassociate those sensations with benign ones. Neurofeedback focuses on rewiring the brain by creating beneficial brainwave patterns to replace those associated with PTSD.

I believe this research sketches a broad outline of what trauma is and how it affects people. However, our survey is too vague to allow us to pinpoint the nature of trauma itself. In the next chapter, I will bring empirical trauma research into conversation with philosophical analysis in an attempt to more sharply define psychological trauma.

Chapter 3: Defining Trauma

3.1 What is Trauma

"Trauma" has a wide range of uses but the term usually falls into one of two categories. The first category is physical trauma and focuses on traumatic physiological injuries. "Traumatic injury is a term which refers to physical injuries of sudden onset and severity which require immediate medical attention" (Traumatic Injury). The second class of trauma is psychological trauma. Often, the two are connected. If I am in a severe automobile accident, I may suffer both physical and psychological trauma. Also, emerging evidence suggests that psychological trauma causes changes in the brain and other parts of the body.[10] Still, physiological trauma and psychological trauma are distinct concepts. Physiological trauma refers to a severe physiological wound but psychological trauma refers primarily to a mental phenomenon. In this paper, I will investigate only psychological trauma. Thus, in the rest of the paper, when I use the term "trauma" I will be referring to psychological trauma.

At the beginning of chapter one, I noted that there is a conceptual distinction between trauma and the effects of trauma. For this project, I want to develop a definition of trauma that is empirically informed and philosophically engaging. Some of the most influential attempts to describe trauma approach defining trauma from a symptom/diagnosis perspective.[11] That is, given certain symptoms, we can diagnose someone as having had trauma, or suffering from

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[10] For instance, PTSD is thought to negatively impact bone health (Kelly, Sidles, & LaRue, 2020) and trauma is believed to contribute to the development of fibromyalgia (Yavne Y. , Amital, Watad, Tiosano, & Amital, 2018). In addition, childhood trauma has been linked to neurological disorders in adulthood (Karatzias, et al., 2017).

[11] Unsurprisingly, this is the approach of the two most influential psychological manuals, the DSM-V (American Psychiatric Association, 2013) and the ICD 11 (World Health Organization, 2018).

trauma related sequelae. Of course, observing the effects of a phenomenon helps us to begin

circumscribing psychic trauma but the cause of the effects is conceptually distinct.

In addition, there is a small (but growing) philosophical literature dedicated to trauma.[12]

However, much of this literature does not spend much time defining trauma. This is because the

main thrust of the authors' arguments is not about defining trauma, but in what trauma means for

other philosophical concerns.[13] There are some notable exceptions, however.

Karyn Freedman explores the epistemic significance of trauma, specifically in relation to

sexual trauma (Freedman, 2006). In her paper, she briefly summarizes the historical development

of the PTSD diagnosis in the DSM and goes on to describe two significant effects of trauma: the

shattered self and the shattered worldview.

> These are the twin sides of surviving sexual violence: a shattered self and a shattered
> worldview. Whereas the former is a statement about ourselves, the latter is a statement
> about the world and our beliefs about it --- the cognitive place" (*Ibid*, p. 108).[14]

I find much of her description to be helpful in understanding the experience of the trauma

survivor and I will return to her work later. However, again, the focus of her paper is on the

effects of trauma as opposed to delineating a definition for trauma itself.

Michelle Panchuk helpfully goes a step further and engages neurological and

psychological research at the beginning of her paper "The Shattered Spiritual Self: A

Philosophical Exploration of Religious Trauma" (2018). In this paper she argues that religious

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[12] For instance see (Freedman, 2006), (Panchuk, 2018), and (McDonald, 2019) all of which are engaged in this dissertation. These examples include some sustained discussion aimed at describing trauma.

[13] For instance, Kei Hotada argues that instead of expecting a trauma survivor to be welcomed back into "our world" we ought to enter the world of the survivor (2019). Yochai Ataria investigates traumatic experience and its meaning for agency (2013). Natasha Liepig investigates the notion of the embodied self and how trauma "creates a new self" (2019).

[14] Freedman appears to understand the "shattered self" as a psychological phenomenon directed toward oneself and the "shattered worldview" as a psychological phenomenon directed toward our beliefs about the external world.

trauma is a distinct kind of trauma and as such can be religiously incapacitating just as general

trauma can be incapacitating. Primarily, she argues this incapacitation results in "non-culpable

failure to worship God" (Panchuk, 2018, p. 505). Toward the beginning of the article, Panchuk

explains the difficult nature of defining trauma. "The term *trauma* is multiply ambiguous. It can

refer to a particular type of experience, to the effects of that type of experience, or to the

combination of the two" (*Ibid*, p. 507). She then goes on to use the word "'trauma' to refer

generally to the experience and the post-traumatic distress it causes." For my purposes, this use

of "trauma" is still problematic. First, this definition is used to describe both the cause and effect.

Second, traumatic experience may be distinct from trauma. That is, properly speaking, trauma

may not be an experience but something else. Thus, one's experience of trauma may be distinct

from trauma itself. If I have an experience of x, I want to know what x is. My goal in this chapter

is to describe x. For the rest of the chapter, then, I will principally be engaging the empirical

literature to formulate a more precise definition of trauma. This definition will serve as the

foundation for my analysis during the rest of the project.

3.2 Empirical definitions

In trying to define trauma, it will be helpful to find its genus or the kind of thing that

trauma is. One of the most frequently cited definitions of psychological trauma is that of the

Substance Abuse and Mental Health Services Administration (SAMSHA). "Individual trauma

results from an event, series of events, or set of circumstances that is experienced by an

individual as physically or emotionally harmful or life threatening and that has lasting adverse

effects on the individual's functioning and mental, physical, social, emotional, or spiritual well-

being" (2014, p. 7). The SAMSHA definition is representative of a common approach to

defining trauma in the empirical literature where trauma is described by what it effects and not

by its inherent characteristics.[15] What is clear from this definition is that trauma is linked to a significant event or events and that it has negative effects on multiple facets of a person's well-being. This definition also asserts that there are lasting negative psychological effects which are caused by trauma.   Thus, SAMSHA acknowledge the "3 E's of Trauma: Event, Experience, and Effects" (p. 8). The three "E's" help us initially situate trauma somewhere within the fenceposts of a traumatic event, traumatic experience, and traumatic symptoms. However, while this framework sets helpful boundaries, it is still not specific enough to describe the phenomenon we are looking for. To describe trauma, we will need to narrow the focus. Seemingly, we are looking for the kind of thing that links a traumatic event to traumatic effects. What happens during a traumatic event that might leave such an impression on someone? In addition, trauma seems to be the kind of thing which explains our tendency to want to minimize or prevent it. We think that someone who has endured trauma has lived through something bad and we ought to prevent people from enduring trauma insofar as we reasonably can. Thus, we are looking for a definition which addresses the following three criteria:

1. We want the kind of thing which explains the distinction between a traumatic event and an event in general.
2. We are looking for the kind of thing which explains why a traumatic event leads to traumatic effects.
3. We are looking for the kind of thing which coheres with the empirical research regarding post-traumatic stress. What I mean by cohering with empirical research

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[15] Again, see the DSM-V (American Psychiatric Association, 2013) and ICD-11 (World Health Organization, 2018) for the most influential examples. Agarwal, et al. (2020), use the DSM-V PTSD diagnosis to identify persons exhibiting posttraumatic stress but do not appear to distinguish between psychological trauma and traumatic physiological injury. Jonathan Sherin and Charles Nemeroff (2011) explore the neurobiology of PTSD. They begin by considering possible causes of trauma and then use PTSD diagnostic criteria as a way of identifying trauma. They seem to assume that observing the neurobiology of PTSD is observing what happens during trauma also.

is that the definition coheres with the observational data regarding the phenomenon in question (i.e., trauma). This definition may or may not fit neatly within established conceptual or definitional paradigms.

As I have already stated, most of the empirical literature is concerned with Post-traumatic Stress Disorder (PTSD) so we will want a definition that harmonizes with observations concerning persons with PTSD. Ostensibly, there are people who have experienced trauma who do not develop PTSD, but all people who have PTSD have experienced trauma. If I define trauma in such a way as to exclude a causative link between trauma and PTSD, I risk mis-conceptualizing the phenomenon I am trying to analyze. This does not mean my definition necessarily must agree with every empirical project, but it must be consonant with general observations. Thus, I use cases of PTSD to identify positive instances of trauma, but I do not think that every trauma results in a PTSD diagnosis.

3.3 Event, Effects, and Experience

Unfortunately, as is, the SAMSHA definition leaves too much conceptual room for a clear understanding of the concept. However, I think SAMSHA's definition helps to circumscribe trauma and it points us in the direction to discover the kind of thing which satisfies the three criteria I have laid out. The SAMSHA definition gives us three places in which to locate trauma: events, experience, or effects. Events as a general concept cannot satisfy any of the criteria. Primarily, the general concept of "event" cannot explain why we think some events[16] are traumatic and others are not. A tsunami crashing into an uninhabited island in the south Pacific is an event. We might even think about it as an extreme event, but we would probably not

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[16] By "event," I mean an extra-mental event (i.e., hurricane, school shooting, etc.). Later in this chapter I will argue that trauma includes specific psychological changes that might be understood as mental events.

think about it as a traumatic event. Moreover, it is clear the same event may be associated with trauma for one person but not another (Substance Abuse and Mental Health Services Administration, 2014, p. 8). Ostensibly, what separates a traumatic event from a non-traumatic event is the effect it produces in a person. If an event does not cause a particular effect in some person, it is not a traumatic event. In addition, an event might be traumatic for one person and not traumatic for another person because it causes a particular psychological effect in one person and does not cause this effect in another person. Thus, if we define trauma as an event, it is an event that produces a specific kind of effect in persons. The kind of effect produced, thus, has logical priority in thinking about a definition for trauma because this psychological effect needs to be defined before the effect can be used as a way of narrowing the kind of event that might be considered "trauma." In this way, it seems our primary concern in looking for a definition is defining a particular psychological phenomenon produced in response to an event.

An additional reason to not define trauma in terms of an event is its etymology. Trauma comes from the Greek word $\tau\rho\alpha\upsilon\mu\alpha$ (trauma) meaning "wound or damage" (Trauma, 2017). When brought into English, the word originally referred to physiological injuries but began to be metaphorically used to describe psychological phenomena by the beginning of the 20th century. Psychological trauma, then, can be thought of as a kind of wound in one's mind. Thus, the locus of trauma historically has not been on a particular event, but on a kind of mental phenomenon.

Traumatic effects may be a more interesting candidate for locating the concept of trauma because they can straightforwardly explain much of our evaluative attitude toward traumatic effects on victims.[17] Generally, many people think that trauma victims who exhibit post-

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[17] Through most of the paper I use the term "survivor" to describe those who have lived through trauma. Here, however, I use the term "victim" because I believe "victim" better captures the evaluation that trauma is generally thought to be something that negatively impacts someone.

traumatic stress symptoms are experiencing something negative.[18] This evaluation explains why therapies are being developed to treat traumatic symptoms. We think trauma effects are the kind of things which impact a person in a negative way. However, trauma is the kind of thing which *causes* traumatic effects. Thus, our definition of trauma must be able to explain the effects, but also allow us to distinguish the effects from what causes them. Traumatic effects are particularly interesting to empirical science because they can be observed and recorded, but they only serve as markers to identify that trauma has taken place. Thus, it is conceptually possible for trauma to have occurred without manifesting externally observable (diagnosable) traumatic effects. For instance, it is possible that Abel is involved in a severe car wreck that results in his death. Because he is dead, he does not manifest diagnosable traumatic effects. This, however, does not tell us whether he experienced trauma prior to his demise. If this is the case, diagnosable traumatic effects are a sufficient, but not necessary condition for trauma. For instance, if someone experiences PTSD, we can conclude that trauma was present because trauma is the only known condition to produce the effects meeting PTSD diagnostic criteria. However, we cannot assume trauma's absence in the absence of PTSD. This does not mean that it is possible for trauma to occur without traumatic effects, only that trauma may occur without one's traumatic effects being observed by others or diagnosed. Causally, trauma and its effects may necessarily occur together. If trauma occurs, it will yield certain effects. Conceptually, though, trauma and its effects are distinct.

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[18] One might respond that survivors can use their experience as motivation to act virtuously thus, their experience is not evaluated as being purely negative. For instance, Maya Angelou describes traumatic experiences during her childhood in her book *I Know Why the Caged Bird Sings* (2004). No doubt these experiences helped motivate her to become an active participant in the Civil Rights movement. However, I do not think it appropriate to think of her experiences of racism or rape as being positive or even neutral experiences. Rather, Angelou was motivated to do good because of her past negative experiences.

If we are to develop a concept of trauma, then, it seems most promising to think about what links the event and the effects together. This middle concept is a necessary condition for describing certain events as traumatic and certain effects as traumatic. Our empirical fenceposts point us toward conceptualizing trauma as an experience.[19] However, one might object to identifying trauma as an experience by arguing that the SAMSHA definition does not present all the conceptual possibilities available. Why think trauma must be equivalent to one of the three empirical boundaries? I argue that there is nothing about the SAMSHA definition which logically entails we restrict our definition to an experience, but experience gets us closer to developing a definition that satisfies my criteria. First, an experience can help us to distinguish a traumatic event from other events. We might think that a traumatic event is one which causes a certain experience. Consider the tsunami example from before. It seems reasonable to think that this was not a traumatic event because there was no one on the island to experience it. However, let us slightly change the case. Let us imagine the same tsunami crashed into an island but this time the island had one person on it. Let us also stipulate the tsunami causes the islander to develop PTSD. We might rightly classify this event as a traumatic event because PTSD is an effect of trauma, so we know that trauma was present. Yet, the only difference between the first case and this case is that there was someone on the island who manifested traumatic psychological effects. Thus, trauma must have something to do with persons and how they are psychologically affected by events. A person's subjective experience occurs temporally between an event and the psychological effects being described. Thus, the experience is a link from event to effects. Thus, if we can investigate the experience, we might be able to identify the thing that

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[19] I have already argued that there is a conceptual distinction between x and an experience of x. I still hold this to be true. There is a distinction between trauma and an experience of trauma. For the time being, though, I will investigate trauma as an experience because I believe that thinking about the experience of x will lead us toward x itself.

is caused by an event and itself causes traumatic psychological effects (criterion 2). We will see this point highlighted more clearly in the APA definition below. Third, we place value on many experiences. Some experiences like eating a pleasant meal are thought to be *prima facie* positive and other experiences like being fired from one's job are thought to be *prima facie* negative. If we think that trauma survivors have endured something negative, it is reasonable to think that what they have endured is a negative experience. Thus, we might think about trauma as something either inherently negative or something that yields negative experiences.[20]

3.4 Beyond Experience

It may be right to look for trauma in one's experience, but it is not sufficient to characterize trauma as an experience. Trauma is the kind of thing which, when present, distinguishes some experiences as traumatic and when absent indicates non-traumatic experiences. I have also sought to establish that trauma is the kind of thing that causes traumatic effects. Thus, trauma is whatever sets apart traumatic experiences from others and causally explains traumatic effects.

Moving forward in search for a genus for trauma, let us look at characteristics of traumatic experiences. In particular, it will be instructive for us to consider traumatic flashbacks because flashbacks are traumatic effects that are thought to be very similar to one's initial traumatic experience [21]. That is, when one experiences a flashback, they are experiencing the same affect (in kind and intensity), or very nearly the same affect, as they experienced during the

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[20] Later in Chapter 6: Trauma and Flourishing, I will argue that trauma in inherently negative as it hinders one's flourishing. This is because trauma not only leads to diminished flourishing, but trauma *is* the disruption of psychic harmony necessary for flourishing.

[21] I will use the terms "traumatic memory" to refer to the memory itself and "flashback" to refer to the recall of the traumatic memory.

initial trauma. "A flashback is a vivid experience in which you relive some aspects of a traumatic event or feel as if it is happening right now" (Post-Traumatic Stress Disorder (PTSD), 2021). Most researchers believe these flashbacks to be distinct from the normal recall of memories in at least three ways. First, flashbacks are "retrieved *as* sensory and affective elements, not *alongside* sensory and affective elements. The implication here…is that the traumatic memory is primarily (and sometimes only) sensory and affective and *not* available as the subject of conscious thought in the way that other memories typically are" (McDonald, 2019, p. 21). In this way traumatic memories are often fragmented collections of sensory impressions that resist organization into a single cohesive experience. One might only recall a certain emotion or feeling without being able to recall any other details of the experience.

Second, traumatic memories cause "anguish." This distinguishes traumatic memories from some others in that other memories may cause one to feel positive emotions. Moreover, some memories may even cause negative emotions like sadness, but these memories do not evoke a severe enough emotional response as to be understood to cause "anguish." For example, I may remember that I lost my favorite pair of sunglasses a week ago. Recalling this memory might make me sad, but this feeling is not intense enough to be classified as anguish. In contrast, one who experiences a flashback feels extreme emotion which is correlated with increases in cortisol levels, heartrate, and heightened adrenaline secretion.

Third, traumatic memories are invasive. Flashbacks can occur at any time and most often occur involuntarily. In addition, traumatic memories invade the present. "[T]raumatic memories can exercise intense power over normal brain function, effectively taking over the present moment" (*Ibid*). One survivor notes,

I feel like I'm straddling a timeline where the past is pulling me in one direction and the present another. I see flashes of images and noises burst through, fear comes out of nowhere. My heart races, my breathing is loud and I no longer know where I am" (Post-Traumatic Stress Disorder (PTSD), 2021).

Thus, traumatic memories are generally recalled without conscious control and traumatic memories are phenomenologically distinct from other memories where one knows the experience occurred in the past. Commenting on the observation of a Vietnam veteran, McDonald writes,

His dissociation is so total that he *cannot tell* the difference between the past and the present. What this shows is that in some sense, traumatic memory is not simply memory in the sense of conscious recollection. Rather, it is a memory marked by an intense experience of reliving… So vivid is the memory in the traumatized patient that he becomes entirely convinced that he and his wife are under grenade fire, or that she is an enemy combatant. Even the most intensely positive memories do not have this kind of power. (McDonald, 2019, p. 22)

In a traumatized person, when the traumatic memory is recalled, the memory is experienced so vividly a person experiences their memory as if it is the present and not an impression of the past. In this way, traumatic memory "is a memory marked by an intense experience of reliving" (*Ibid*). Brain scans of people experiencing flashbacks confirm this hypothesis. Researchers have found that when a person experiences a flashback "their right brain reacts as if the traumatic event were happening in the present. But because their left brain is not working very well, they may not be aware that they are reexperiencing and reenacting the past" (van der Kolk, 2014, p. 45). In normal circumstances, neurologists would expect at least some activity in the left hemisphere, but trauma appears to cause this activity to cease.

The left and right sides of the brain also process the imprints of the past in dramatically different ways. The left brain remembers facts, statistics, and vocabulary of events. We call on it to explain our experiences and put them in order. The right brain stores memories of sound, touch, smell, and the emotions they evoke. It reacts automatically to voices, facial features, and gestures and places experienced in the past. What it recalls feels like intuitive truth---the way things are... Deactivation of the left hemisphere has a

> direct impact on the capacity to organize experience into logical sequences and to translate our shifting feelings and perceptions into words. (Broca's area, which blacks out during flashbacks, is on the left side.) Without sequencing we can't identify cause and effect, grasp the long-term effects of our actions, or create coherent plans for the future. People who are very upset sometimes say they are "losing their minds." In technical terms they are experiencing the loss of executive functioning. (*Ibid*, pp. 44-45)

Thus, a dimming of the activity in the left hemisphere corresponds to a person's inability to recognize the events of a traumatic memory as having occurred in the past instead of the present. These flashbacks are often brought on by triggers which remind one of the initial traumatic event. It is no wonder why one of the primary diagnostic indicators of PTSD is persistent avoidance of stimuli that remind one of their traumatic experience (American Psychiatric Association, 2013, p. 271).[22]

I will return to traumatic memories later[23], but for now, I have discussed traumatic memories enough to indicate that trauma interferes with the normal ways in which memory is encoded and organized. More specifically, during trauma one's brain behaves in an abnormal way that includes a disruption in the processes between parts of the brain responsible for organizing our experiences and parts of the brain responsible for storing phenomenological content of our experiences. This is why trauma creates anguishing and intrusive memories that are often involuntarily recalled. Because of the dimming of activity in the left hemisphere, one does not organize and associate traumatic experiences in the same way one organizes and associates normal experiences in memory.

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[22] This does not mean being reminded of one's initial trauma requires that one experiences a flashback. It may be possible for one to have a semantic memory in addition to one's episodic memory of the traumatic event. That is, one might have a conceptual memory of their traumatic event ("I was traumatized") in addition to a memory with phenomenological content (i.e., feelings and sensations). One may be reminded by recalling their semantic memory of the traumatic event. However, it is doubtful that one could be reminded of the episodic memory without experiencing intense emotion because intense emotion constitutes at least part of the episodic memory. When one recalls the event, their recall necessarily includes intense emotion.

[23] See section **3.5 Trauma as a response**.

3.5 Trauma as a response

The APA defines trauma as "an emotional response to a terrible event" (Trauma). This definition is helpful insofar as it narrows the possible concept of trauma to "an emotional response." Earlier in this chapter I stated I was looking for the genus within which to categorize trauma and "emotional response" appears to be a promising candidate. Of course, we must still narrow our scope because there are many different kinds of emotional responses. Thus, now that we have located the genus of trauma ("emotional response") we now want to identify its differentia. One might respond with surprise when walking into a room of people who have planned a birthday party. One might watch a sad movie and have an emotional response which includes sadness. Thus, I want to continue thinking about what kind of emotional response trauma is.

The APA's definition is consistent with the intense emotion many people report experiencing during traumatic events. In addition, trauma is believed to be associated with the fight or flight response which includes strong emotion like fear. Furthermore, an emotional response is capable of linking a traumatic event to traumatic effects. If I perceive an event to be horrific, there are neurological, psychological, and physiological processes that are triggered by the perception of danger. Thus, a characteristic that distinguishes trauma from other emotional responses is that it is triggered during events which cause intense emotions like horror. In addition, trauma is distinguished from other emotional responses in that trauma is a response that can cause PTSD.

The APA definition moves us from one's experience of an event to one's response to an event. There are two parts of this definition which are helpful. First trauma is emotional. It is characterized by strong negative emotions like terror and horror. For instance, Ananda Amstadter

and Laura Vernon found, "At the time of the trauma, similarly strong overall negative emotion was reported regardless of traumatic event type" (2008, p. 6). Also, "Our results suggest that different types of traumatic experiences elicit high levels of negative emotions, retrospectively recalled, both during and after the events" (*Ibid*, p. 9). Among these emotions were fear, shame, guilt, anger, and sadness.

A person's response is the kind of thing that links an event to psychological effects. Thus, the APA definition satisfies both criteria I set at the beginning. One's emotional response provides a causative link between an event and its psychological effects, and a certain kind of emotional response is a criterion which differentiates traumatic events from non-traumatic ones. Those events which elicit a particular emotional response are traumatic and those which do not elicit this response are non-traumatic.

Yet, the APA definition ("an emotional response to a terrible event") needs clarification. One might be tempted to think that trauma is characterized as an affective non-cognitive response. To think about it in this way is to miss an important dimension of trauma. When survivors are able to recall the memory of their trauma, they can often describe the event that was occurring, significant impressions they had, or describe what things or what people were involved. Furthermore, the memory itself serves as evidence that one must have been conscious, and thereby cognitively functioning on some level as the memory contains cognitive content. Cognitive content also helps to explain the common theory regarding the physiological process which occurs during traumatization. According to this theory, traumatization is connected to the fight or flight response.

> [W]hen traumatized people are presented with images, sounds, or thoughts related to their particular experience, the amygdala reacts with alarm…Activation of this fear center triggers the cascade of stress hormones and nerve impulses that drive up blood pressure,

heart rate, and oxygen intake---preparing the body for fight or flight" (van der Kolk, 2014, p. 42).

In order for the body to prepare for fight or flight, however, one must judge[24] the world as dangerous. This judgment is a cognitive process[25], though it may be subconscious. For these kinds of events to trigger the kind of experience we are talking about, one must believe they are in danger.[26] That there is a cognitive element is reinforced in that persons may develop PTSD from in-person witnessing a traumatic event happening to someone else or learning of a traumatic event happening to a close family member or friend.[27,28] Thus, traumatic memories, the

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[24] When I use the word "judge" in this context I do not mean to imply that judgment must be a deliberative, lengthy cognitive process. Instead, I understand judgments to include quick, reflexive assessments. Thus, when one "judges" they do not need to engage in a process that requires them to consciously consider alternatives and reason about which alternative assessment is the best evaluation of a situation. Similarly, I previously asserted that I assume a cognitive view of emotions where a judgment is part of what constitutes an emotion. One might immediately become angry when cut off in traffic. This response includes a judgment about another driver's action but this judgment does not appear to be the product of conscious reflection.

[25] Here, I understand cognitive processes to be distinct from merely affective or somatic processes. The APA defines cognition as "all forms of knowing and awareness, such as perceiving, conceiving, remembering, reasoning, judging, imagining, and problem solving" (American Psychological Association, 2020).

[26] As with "judgment" I understand belief to be able to occur both consciously and subconsciously.

[27] The DSM states that witnessing a traumatic event can cause PTSD. "Witnessed events include, but are not limited to, observing threatened or serious injury, unnatural death, physical or sexual abuse of another person due to violent assault, domestic violence, accident, war or disaster, or a medical catastrophe in one's child (e.g., a life-threatening hemorrhage). Indirect exposure [to a traumatic event] through learning about an event is limited to experiences affecting close relatives or friends and experiences that are violent or accidental (e.g., death due to natural causes does not qualify). Such events include violent personal assault, suicide, serious accident, and serious injury. The disorder may be especially severe or long-lasting when the stressor is interpersonal and intentional (e.g., torture, sexual violence)" (American Psychiatric Association, 2013, pp. 274-275).

[28] The DSM-V shows that there is a strong consensus that one can be traumatized and develop PTSD from hearing about the loss of a loved one, but the causal mechanism for how this happens is not definitively known. A possible explanation for how this works is that when one loses one close to them, they feel fear because they are unsure about the future without their loved one or they feel that the loss of a loved one threatens their well-being. Importantly, though, an acute stress response ("fight or flight") often accompanies grief. "When one perceives circumstances as extremely threatening to their emotional and physical well-being, their body is hard-wired to respond… Although the acute stress response varies depending on the person, situation, and level of trauma [severity of the event's impact] and distress associated with the death, it's important that people generally conceptualize acute stress as either part of the grief process or…as a precursor to grief" (Haley, 2015). That one may experience a stress response with grief is further corroborated by what has been recently termed "Prolonged Grief Disorder" (PGD). As of the writing of this dissertation, this is the newest disorder added to the DSM-V-TR (American Psychiatric Association, 2022). I believe the PGD symptomology to be akin to trauma symptomology. PGD symptoms include, "Identity disruption…marked sense of disbelief about the death, avoidance of reminders that the person is dead, Intense emotional pain…Difficulty with reintegration (such as problems engaging with friends, pursuing interests, planning for the future), emotional numbness" (Prolonged Grief Disorder, 2022). An acute stress response would explain why one finds it difficult to move past grief. The adrenaline secreted during an acute stress response makes

fight or flight response, and indirectly caused trauma strongly suggest that trauma is causally

related to cognitive processes.

One might argue that one's physiological response precedes one's judgment that one is in

danger. Thus, one's belief is caused by one's somatic response instead of the other way around.

This conclusion, however, seems implausible. Trauma is thought to originate after the amygdala

is activated when one judges the environment to be dangerous.[29] The judgment which

precipitates trauma requires one to distinguish between a dangerous environment and safe one. If

this distinction is not made one would always be in a state of arousal or one would never

experience fight or flight.[30] Making this distinction requires one to take in information about the

environment so that one can quickly act in a way that promotes survival. Recognition that one is

in a dangerous environment begins a response that changes the way memories are created and

stored. "When something terrifying happens…we will retain an intense and largely accurate

memory of the event for a long time…But that is true only up to a certain point. Confronted with

horror…this system becomes overwhelmed and breaks down" (van der Kolk, 2014, p. 178).

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the memory of the loss, particularly one's felt emotion, more vivid. Vivid emotion draws one's attention to the memory (for more on emotion's attention directing capacity, see section **5.11 Virtuous relationships**). Furthermore, I believe the hypothesis I propose in chapter four to explain trauma may provide insight in explaining similar symptoms of PGD.

[29] "The amygdala is the brain structure that actually detects stress and tells the [hypothalamus-pituitary-adrenal] axis to respond. It can detect both emotional and biological stressors. An emotional stressor is something in the environment that may cause you to feel scared, sad, or frustrated, like the bear" (Bezdek & Telzer, 2017). "The central function of the amygdala…is to identify whether incoming input is relevant for our survival. It does so quickly and automatically, with the help of feedback from the hippocampus… Because the amygdala processes the information it receives from the thalamus faster than the frontal lobes do, it decides whether incoming information is a threat to our survival even before we are consciously aware of the danger" (van der Kolk, 2014, pp. 59-60).

[30] Some who experience post-traumatic stress report a constant state of arousal (hypervigilance). These people are in a constant state of high-alert because previous trauma has caused them to now misjudge non-threatening situations as dangerous (van der Kolk, 2014, p. 21).

In her book *Deeper than Reason: Emotion and its Role in Literature, Music, and Art*, Jenefer Robinson seems to disagree with my analysis that a judgment initiates one's stress response. In particular, she seems to disagree that cognitive activity must precede affect in the stress response. Summarizing influential social psychologist Robert Zajonc's work, Robinson writes, "Zajonc has accumulated a great deal of data designed to show that affect can precede and therefore does not require cognitive activity" (Robinson J. , 2005, p. 39). However, I believe our disagreement to only be apparent and not substantive. She goes on later to write,

> However, as Pheobe Ellsworth, among others, has pointed out, whether affect can precede cognition depends on what you mean by affect and cognition. Most theorists agree that we should keep the term 'cognition' for higher processes, although what counts as 'higher' and 'lower' is not very precisely definable, given our current state of knowledge. I think I am on the side of the majority in using the term 'cognition' only when we are talking about processes localized in the neo-cortex" (*Ibid*, p. 45).

Thus, our disagreement stems from how we have each understood cognition. Robinson, Zajonc, and others have defined cognition to be limited to higher order processes like conscious deliberation or involving complex information processing (*Ibid*). These are all processes performed by the neo-cortex.

In contrast, I have adopted the American Psychological Association's current definition of cognition as "all forms of knowing and awareness, such as perceiving, conceiving, remembering, reasoning, judging, imagining, and problem solving" (American Psychological Association, 2020)."[31] At least some of these processes have been observed to be performed by

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[31] One possible reason for the difference in Robinson's definition and the one I adopt is that contemporary psychology has experienced a shift in its understanding of cognition since Robinson's book was first published in 2005. "History repeated itself in the latter half of the twentieth century, as the 'consciousness revolution' which followed on the cognitive revolution spun off an interest in unconscious mental life as well. This happened slowly. For a long time, if the unconscious was discussed at all, it was construed merely as a repository for unattended percepts and forgotten memories. But in addition to this wastebasket view of the unconscious, the classic multistore model of information processing made room for the unconscious by identifying unconscious mental life with early, 'preattentive' mental processes that occur prior to the formation of a mental representation of an event in primary

the thalamus and not only the neo-cortex. "The thalamus, once viewed as passively relaying sensory information to the cerebral cortex, is becoming increasingly acknowledged as actively regulating the information transmitted to cortical areas" (Saalmann & Kastner, 2015). Thus, one's cognitive processes can occur both consciously and subconsciously. In addition, according to the American Psychological Association definition, cognitive processes include judgments and perceptions. These processes need not be the longer more laborious "higher-level" mental processes excluded by Robinson. In fact, I agree that the kinds of judgments that set off one's stress response often occur below the level of one's awareness and are quicker than higher deliberative processes. Furthermore, Robinson uses the term "appraisal" for what I am referring to as judgments. Referring to these judgments in the context of basic emotions, she writes, "I will call such appraisals 'affective appraisals', and I shall assume that they are 'non-cognitive', in the sense that they occur without any conscious deliberation or awareness, and that they do not involve any complex information processing" (2005, p. 45). I have adopted "judgment" instead of "perception" to indicate that an evaluation has taken place. This contrasts with some simple perceptions like the sense impression of hearing a loud boom without identifying the source of the sound or identifying what kind of sound it is. In this sense I understand a simple perception to be the awareness of a sound sense impression.

In addition, the evaluation that initiates one's stress response is more complex than a simple physiological reflex.

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memory. However, by implicitly identifying consciousness with 'higher' mental processes, the classic multistore model left little or no room for a more interesting view of the 'psychological unconscious' – complex mental structures and processes, and full-fledged mental states, that influence experience, thought, and action, but which are nevertheless inaccessible to phenomenal awareness, insusceptible to voluntary control, or both. The rediscovery of the unconscious by modern scientific psychology began with comparisons between automatic and effortful mental processes and between explicit and implicit memory. Since then, it has continued with the extension of the explicit–implicit distinction into the domains of perception, learning, and thought. Taken together, this literature describes the 'cognitive unconscious'" (Kihlstrom, 2016, p. 413).

When someone confronts an oncoming car or other danger, the eyes or ears (or both) send the information to the amygdala, an area of the brain that contributes to emotional processing. The amygdala interprets the images and sounds. When it perceives danger, it instantly sends a distress signal to the hypothalamus" (Understanding the stress response, 2020).

Van der Kolk puts it this way,

Danger is a normal part of life, and the brain is in charge of detecting it and organizing our response. Sensory information about the outside world arrives through our eyes, nose, ears, and skin. These sensations converge in the thalamus, an area inside the limbic system that acts as the 'cook' within the brain. The thalamus stirs all the input from our perceptions into a fully blended autobiographical soup, an integrated, coherent experience of 'this is what is happening to me.' The sensations are then passed on in two directions—down to the amygdala, two small almond-shaped structures that lie deeper in the limbic, unconscious brain, and up to the frontal lobes, where they reach our conscious awareness" (2014, p. 60).

Note that many traumatic memories are very vivid due to higher adrenaline secretion triggered by the amygdala in response to danger. The fragmentation of traumatic memories, however, is due to being overwhelmed by an event which is judged not just as dangerous but as something like a "horror." This coheres with the explanation that one's interpretation of the environment as dangerous activates the amygdala and triggers a cascade of physiological responses. Horror is not an objective empirical fact about an event, it is the way one perceives the event. Whether a lion attacking an antelope is regarded as a horror depends on one's subjective perspective. "When we feel [horror], it is precisely because we cannot imagine a world in which what *is* happening could possibly *be* happening" (McDonald, 2019, p. 84).[32] This is not to say that one cannot literally imagine what is happening. Instead, McDonald seems to be suggesting that horror is an emotion indicating we have judged an event to be so inconsistent

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[32] It is important to understand that McDonald is not asserting that those with more active imaginations are less likely to experience horror. Instead, she is pointing to a situation in which one has difficulty *accepting* what is happening because of how terrible the event is. For more on the concept of acceptance and its relation to trauma see section 6.9 Belief and Acceptance.

with our established understanding of the world that it is difficult to accept that the event is

actually part of the world we know.[33] For the lion, the situation may cause similar physiological

responses as the fight/flight response, but it is not horrific. The antelope, however, may regard

the situation as horrific because it is the one in imminent danger and cannot imagine a world in

which it is eaten.[34]

Moreover, other empirical psychological literature agrees one's perception triggers the

cascade of physiological processes known as the fight or flight response.[35]

> The stress response is produced by reflexive neural…and neuroendocrine…processes, and is activated by external…or internal cognitive information…that are subconsciously or consciously perceived as a threat (Ulrich-Lai and Herman, 2009). Hence, a stress response might be activated subconsciously, and thus, the physical and neurological processes activated by stress might be initiated before a human in his/her conscious mind have identified a threat motivating feeling fear or anxiety (LeDoux, 2000; Pariyadath and Eagleman, 2007; LeDoux and Pine, 2016). (Bertilsson, et al., 2019, p. 2)

Psychologist Elizabeth Scott summarizes,

> It is important to remember that the strength of the stress response is related to the level of *perceived* threat rather than an actual, physical threat. This is why two people can experience the same situation and have different stress reactions to the same thing; some people perceive a threat where others don't. Knowing this, people can reduce the strength of their stress response by reminding themselves that this particular threat may not be as immediate as they feel it is. (Scott, 2020)

The stress response is thus triggered by one's perception which includes cognitive information.

In particular, one's perception must include the judgment that one is in danger. Thus, one's stress

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[33] I will explore the notion of "worldview" and its connection to trauma in much more detail in Chapter 4: Worldview and Identity. In addition, I will develop the concept of "acceptance" in section **6.9 Belief and Acceptance**.

[34] I suspect that it is far from certain whether an antelope has the kind of capacity to recognize "horror." If that is the case, we can substitute an organism (like a human) that is capable of horror recognition in the same scenario.

[35] The "fight or flight response" is also known as the "stress response." I will use these terms interchangeably.

response is triggered by one's cognition and is not merely a noncognitive somatic reflex like the curling of one's toes when stroking the bottom of one's feet.[36]

Even though traumatic memories often appear to be little more than seemingly unconnected, chaotic collections of sense impressions, they still contain cognitive content because these sensory impressions are ways in which one comes to have at least partial awareness of the event that resulted in trauma.[37] For instance, van der Kolk tells the story of a man who was abused by a Catholic priest when he was a boy. Initially, this man was able to only to coherently remember the details of one of the rooms in which the abuse happened and one instance of abuse. "Other than that, his memories were quite incoherent and fragmentary. He had flashes of images of [the priest's] face and of isolated incidents" (van der Kolk, 2014, p. 75). During one recollection the traumatized man recalled his perception of the priest's face but not the location of the abuse nor the act of abuse itself. Thus, one thing that distinguishes traumatic memories from other memories is not that traumatic memories lack cognitive content. Instead, traumatic memories lack the organization of other memories. When recalling traumatic memories, persons experience sensory impressions that lack organizational cognitive links to related sensory perceptions of the traumatic event (e.g., experience extreme anxiety but not being able to identify the visual perception that originally triggered the anxiety) and/or lack the cognitive perception of the experience as being in the past.

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[36] This reflex is known as the Babinski reflex and is checked to indicate neurological abnormalities in both children and adults (Babinski Sign, 2016).

[37] That traumatic memories are fragmentary indicates that there is a disruption in the normal mental processes responsible for encoding and storing memories. I will discuss possible causes of this fragmentation of memory in section 4.9 Therapy and the worldview paradigm. In addition, I believe the disruption of normal memory processes to be consistent with my view of trauma as disrupting "psychic harmony" that will be developed in Chapter 5: Constructing a Virtue Inspired Paradigm.

We might also believe that trauma includes cognition because persons with PTSD develop negative fundamental beliefs[38] about the world and their place in it. Yet, this conclusion is a bit too quick. There are multiple models attempting to account for the psychological processes that produce PTSD, but these models all point toward some common negative thoughts and beliefs being relevant to the development of PTSD. These beliefs are:

1. Negative thoughts about the self, which can include perceptions of incompetence or self-blame.

2. Negative thoughts about the world, which can include perceptions that danger lurks everywhere and that situations previously believed to be benign are unjust and threatening.

3. Negative beliefs about the meaning of posttrauma symptoms, including perceptions that one has "gone crazy" or been permanently changed, and

4. Perception of loss of control and autonomy during the trauma can set the stage for more generalized perceptions of helplessness. (Beck, Jacobs-Lentz, Jones, Olsen, & Clapp, 2014, p. 173)

For my purposes, using the negative beliefs above as an assessment of the kind of thing trauma is, is problematic for at least two reasons. First, it is not clear these beliefs are formed in every instance of trauma since it is thought that not all cases of trauma result in PTSD (PTSD: National Center for PTSD, n.d.). Second, PTSD must be diagnosed at least one month after a traumatic event (Post-Traumatic Stress Disorder) which means there is time between the initial emotional response and the diagnosis for beliefs to be formed. Thus, these beliefs could be formed as

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[38] What I mean by "negative fundamental beliefs" is that one forms beliefs that reflect valuations like "not good," "not beneficial," or "not conducive to well-being."

effects of trauma and may not be constituent of trauma itself. This does not rule out these negative beliefs as being a constituent part of trauma, but given the passage of time, it is difficult to positively assert that these beliefs are part of one's emotional response to a perceived horrific event. One way to think about how this might happen is to consider the following case. Suppose a child is walking to school one day and is attacked by a large dog. This dog does not significantly harm the child's body, but the experience is so overwhelming it causes trauma.[39] Sometime after the event, it is found the child now exhibits PTSD symptoms that indicate he now believes all dogs are dangerous. It is quite plausible that this belief was not generated during the initial traumatic event. One explanation is that a traumatic response is an extreme example of one's fight or flight response to danger. Inferring the characteristics of all dogs from one dog is a higher order thought process that belongs to rational faculties bypassed in cases of immediate danger. One appears to be inferring from a single dog to all dogs because one's initial experience was with a single dog and this experience informs the way in which one perceives all dogs. Thus, if there is a belief which is part of the initial response it is "*this* dog is dangerous." Thus, the child's new belief about all dogs could be caused because she experiences the same or similar emotional response each time she encounters a dog later. Because she feels fear any time she is around a dog, she comes to believe all dogs are dangerous. Therefore, it is plausible these beliefs are formed as effects after the initial emotional response and are not a part of that response. Thus, for now, I will not assume that PTSD beliefs are a constituent part of trauma.[40]

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[39] Many people describe traumatic events as being too overwhelming to bear (van der Kolk, 2014, p. 2). I will explore what it means to be "overwhelming" in a later chapter. For now, I think the general sense of the word conveys enough meaning to construct a definition of trauma.

[40] I do think that certain beliefs play a fundamental role in causing trauma, particularly in triggering the dissociation of trauma. For more on this see Chapter 4: Worldview and Identity. For now, though, I do not think that we can definitively assume that all PTSD beliefs are constituent parts of trauma.

So far, I have attempted to distinguish trauma as the kind of emotional response that includes one's stress response and can yield PTSD beliefs. This response includes a cognitive element, namely making a quick reflexive judgment that precipitates one's physiological response. It is important to indicate that trauma is an emotional response which also includes important physiological elements as well. During trauma, a person's heart rate and breathing change and adrenaline is secreted. This results in at least one of three physical responses, each of which are associated with different cases of trauma. In the first two responses, the body speeds up and prepares for action. In the third, the body slows down and prepares to shut down. The first is the body preparing to attack the danger. "A sudden threat precipitates an intense impulse to move and attack" (van der Kolk, 2014, p. 84). The second response is to prepare to flee, or flight. The third response is for the body to "freeze." "Collapse and disengagement are controlled by the [dorsal vagal complex] …part of the parasympathetic nervous system that is associated with digestive symptoms like diarrhea and nausea. It also slows down the heart and induces shallow breathing" (*Ibid*).[41] Thus, the definition of trauma must include a description which recognizes physiological components of the response.

Yet, the APA definition is too broad in the sense that it does not define what kind of emotional response occurs during trauma. We may be able to narrow the kind of emotional experience which characterizes trauma by first thinking about what kind of experience it is not. Trauma is not marked by emotions like joy, hope, or pleasure. We might think of these emotions as the kind of emotions people generally appreciate experiencing. Thus, we might think of them

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[41] Some sexual trauma recovery sources have also asserted that additional responses like "flop" or "friend" are instinctual reactions (Understanding how we react to Trauma) (Woodward, 2020). In the flop response, one essentially "plays dead." It is unclear whether this is physiologically distinct from the freeze response. If it is, flop is another important physiological response. The friend response seeks to placate the attacker so a victim will not be hurt as badly. Most likely, the friend response indicates someone who is experiencing physiological symptoms associated with fight or flight but is using also engaging higher order cognitive processes to mitigate the danger.

as positive emotions. Instead, trauma is generally characterized by negative emotions like fear, dread, or helplessness. This coincides with the thought that trauma is triggered by our fight or flight response. If trauma is initiated by our instinctual response to danger, it makes sense that it would be marked by emotions associated with fear and anxiety. We might think of these as negative emotions.

Yet, one might think it not quite right to characterize trauma as an experience with negative emotions. This is for two reasons. First, it is not clear that trauma is marked by just any negative emotion. Thus, we will want to be more specific as to what kind of negative emotion is part of trauma. Second, and perhaps more importantly, many trauma survivors report becoming emotionally numb. This often occurs if a person's traumatic response includes freezing. Bessel van der Kolk tells the story of Stan and Ute who were part of the worst multi-car accident in Canadian history. After cars finished crashing into one another, van der Kolk describes the scene.

> Then came the eerie silence. Stan struggled to open the doors and windows, but the eighteen-wheeler that had crushed their trunk was wedged against the car. Suddenly, someone was pounding on their roof. A girl was screaming, "Get me out of here—I'm on fire!" Helplessly, they saw her die as the car she'd been in was consumed by flames. The next thing they knew, a truck driver was standing on the hood of their car with a fire extinguisher. He smashed the windshield to free them, and Stan climbed through the opening. Turning around to help his wife, he saw Ute sitting frozen in her seat. Stan and the truck driver lifted her out and an ambulance took them to an emergency room. Aside from a few cuts, they were found to be physically unscathed. (van der Kolk, 2014, pp. 65-66)

When Stan had a flashback a few months later during a study observing his neural activity via an fMRI machine, Stan reported "This was just the way I felt during the accident… I was sure I was going to die, and there was nothing I could do to save myself" (*Ibid*, p. 66). In contrast, during

the same study, when Ute recalled her experience she reported, "I felt nothing" (*Ibid*, p. 70). This experience, too, matched what she reported she felt during the accident.

In emotional numbing, one fails to feel emotions (i.e., Ute) and is thus rendered emotionless in a context where one would normally expect to feel emotion. Emotional numbing seems to protect one's psyche from potentially intense negative emotion. However, this does not mean that negative emotion is not part of the trauma. I have already argued that trauma occurs by first triggering the fight or flight response. To trigger this response, particularly in a way that is conducive for trauma, one must first experience something like horror. Without this initial emotion, emotional numbing does not occur. Therefore, even in cases of emotional numbing, I believe it accurate to assert that a negative emotion, or an emotion that contains a negative evaluation, is part of the emotional response. Emotional numbing seems to be an attempt to insulate one from an ongoing experience of intense negative emotion.

3.6 Defining the emotional response

So far, I have described trauma as a negative emotional response where the response contains cognitive, affective, and physiological elements. It will be helpful to next hone this definition by considering what cognitive, affective, and physiological processes take place during trauma. The characteristics which set apart these responses will distinguish trauma from other emotional responses.

Before describing the processes, van der Kolk outlines the major parts of the brain relevant to trauma.[42] The human brain is thought to be composed of three smaller "brains." At

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[42] The triune brain model was first suggested by Paul MacClean and is fully detailed in *The Triune Brain in Evolution: Role in Paleocerebral Functions* (MacLean, 1990). His schema "has been rated as the most influential in post-war neuroscience" (Pogliano, 2017). However, it is also very controversial in evolutionary biology. Most

the top of the hierarchy is the rational brain. "Beneath the rational brain lie two evolutionarily

older, and to some degree separate, brains, which are in charge of everything else: the moment-

by-moment registration and management of our body's physiology and the identification of

comfort, safety, threat, hunger, fatigue, desire, longing, excitement, pleasure, and pain" (van der

Kolk, 2014, p. 55). The first part of the brain to develop is the part which controls much of the

autonomic functions of the body, the "reptilian brain." This part is primarily comprised of the

brain stem and the hypothalmus. It controls basic functions necessary for life like eating,

sleeping, breathing, and feeling pain. The next part of the brain to develop is the limbic system.

"It is the seat of the emotions, the monitor of danger, the judge of what is pleasurable or scary,

the arbiter of what is or is not important for survival purposes" (p. 56). Last to develop is the

neocortex. The neocortex is comprised of the frontal, parietal, occipital, and and temporal lobes.

The frontal lobes,

> enable us to use language and abstract thought. The give us our ability to absorb and
> integrate vast amounts of information and attach meaning to it…[They] allow us to plan
> and reflect, to imagine and play out future scenarios. They help us to predict what will
> happen if we take one action…or neglect another. They make choice possible and
> underlie our astonishing creativity" (p. 58).

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notably, he assumed that his model described the evolutionary development of the brain. This claim has since been disproven since many reptilian brains have been observed to have neural structures analogous to parts of the "mammalian brain" (Heimer, Van Hoesen, Trimble, & Zahm, 2007, pp. 15-16). His model has persisted longer in psychiatry and neuroscience, however. Apart from attempting to explain evolutionary neural development, his paradigm has been useful in distinguishing neural processes and their mental correlates. There is discussion as to what elements ought to be included in the "limbic system" or whether the term should be scrapped altogether (*Ibid*). I include MacClean's model because it is a useful conceptual device in delineating the different neurological processes associated with cognitive and non-cognitive processes. It has also proved to have explanatory power in trauma research and is often cited in trauma literature (for other examples of trauma researchers referencing the triune model see (Cantor & Price, 2007) and (Smith, 2018)). If it turns out that neural functions cannot be neatly divided along MacCleanian lines, I do not think my view will be altered substantially because my view is based primarily in mental categories and processes (i.e., cognition, emotion). Thus, researchers may link these mental categories to different neurological structures and/or systems, but the categories/processes still exist.

It should come as no surprise, then, that trauma is thought to originate in the limbic system, of which the amygdala is a part. As I have already stated, most trauma researchers think traumatic events trigger a person's fight or flight response. The fight or flight response is triggered by the amygdala when one believes there to be danger in the environment. The danger signal can be sent by interpretations derived from the natural environment or by facial and body language cues from other persons. "Ordinarily the executive capacities of the prefrontal cortex [part of the rational brain] enable people to observe what is going on, predict what will happen if they take a certain action, and make a conscious choice" (van der Kolk, 2014, pp. 61-62). This allows them to make plans and to maintain relationships. However, when danger is sensed by the amygdala, this system is bypassed and "we automatically go into fight-or-flight mode" (*Ibid*). When people experience fight or flight fear "the inhibitory capacities of the frontal lobe break down, and people 'take leave of their senses': They may startle in response to any loud sound, become enraged by small frustrations, or freeze when somebody touches them" (*Ibid*, p. 62). In other words, trauma can be characterized as an emotional response where the rational brain no longer functions in relationship to the limbic system as it normally does.

Yet, there must be something else involved in trauma besides the usual fight or flight response. After all, most people experience this at least at some point in their lives. For instance, one night while I was laying asleep in bed I heard footsteps coming down the hall. Unbeknownst to me, my wife had gotten up to do something in another room. When I heard the steps I thought an intruder was in the house. As soon as my wife appeared in the doorway, I kicked the blanket off of the bed, yelled, and prepared to beat up whoever just came in our room. Simultaenously, my wife, not knowing I was awake, responded to my action by almost careening into the wall trying to get out of the doorway. When she turned the light on, it took a few seconds for us to

gather our senses, but when we did, we had a good laugh about the whole incident. Here, both of

our fight or flight responses were triggered, I was ready to fight and my wife ready to flee.

However, it does not seem that either of our responses were trauma. There is something missing

from this story which would account for the development of something like PTSD. I have argued

that it is possible for one to experience trauma without developing PTSD. Even if all cases of

trauma do not result in PTSD, to give a full account of trauma we must include a description

which explains why some cases of trauma do result in PTSD. My example does not explain why

my experience might result in a traumatic memory or motivate me to persistently avoid triggers.

At the very least, then, my search for a description of trauma remains incomplete.

3.7 Trauma as Psychic Disruption

MaryCatherine McDonald argues that our identities (or self-understandings) are

constructed, at least in part, by narratives (McDonald, 2019). These narratives are the way in

which we are able to integrate our experiences into one cohesive first-person perspective.

Generally, when an event happens we are able to form a memory of this event with a lower-level

perspective (the sensory experience of the event itself) that can be viewed from a higher level

perspective (i.e, a meta-level that allows one to reflect on the memory). This higher level

perspective allows us to narrate our experiences in a way that we can integrate this experiences

into the overall narrative of our lives. McDonald tells the story of Goldie to illustrate the

difference between higher-level and lower-level perspectivs. One night, Goldie tripped over a

suitcase he thought his wife had negligently left out and he felt anger toward her. However, later

as he is recalling the memory he came to realize he was the one who left the suitcase out. Thus,

as he is recalling his memory he recalls his experience but he is able to also take the place of a

narrator who has a certain amount of distance from the event. In essence, Goldie was able to

reflect on the memory. This is because he is aware the event happened in the past (*Ibid*, p. 82).

Trauma, however, inhibits this narrative integration.

> In telling the story, and inhabiting a higher-level perspective, the subject can look critically at the meaning that the event carries for her. This cannot be done from the lower-level perspective because what is available to the subject internal to the story is only the emotion that was initially attached to the event. (*Ibid,* p. 83)

McDonald's view seems to imply that meaning is created when one evaluates their experience in light of the rest of their experiences and beliefs and comes to incorporate their experience and its evaluation into their self-understanding. To make this evaluation, one must reflectively transcend the experience itself to think about the experience and its connection with the rest of one's beliefs and experiences. For instance, let's say I went to a party last night and I met a famous celebrity who paid me a compliment. To make meaning of the experience, I must be able to conceptualize my experience as a cohesive whole (i.e., the visual impressions of the celebrity, their vocal sense impression, and the interpretation of their words are all associated as being part of one coherent event) and evaluate this experience by using prior beliefs (i.e., celebrities are important, this celebrity only compliments someone when they deserve it, etc.). This evaluation must then be associated with who I believe myself to be. Thus, the compliment by the celebrity means that I am in some way a good person because I deserve the compliment an important person gave me.[43] Trauma, however, is the kind of thing that creates memory in such a way as to disallow one from recalling it in a way as to be integrated into one's life narrative. This is because traumatic memories are chaotic collections of sense impressions that are not connected to form a coherent mental record of an event. In addition, trauma disallows one from evaluating their experience in light of their prior beliefs and, perhaps most importantly, associating this

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[43] As stated, this is not a deductively valid conclusion, but I think it plausible that this psychological process does not always follow standard rules of logic.

meaning with their self-concept. Trauma disallows one from assuming the higher-level

perspective to evaluate and connect one's memory to one's other beliefs and experiences because

one's self-concept is distanced from the mental record of their experience.

In cases of trauma, there appears to be a disruption between some of one's cognitive

faculties and one's emotional and physiological response.

> Dissociation[44] is the essence of trauma. The overwhleming experience is split off and fragmented, so that the emotions, sounds, images, thoughts, and physical sensations related to the trauma take on a life of their own. The sensory fragments of memory intrude into the present, where they are literally relived. As long as the trauma is not resolved, the stress hormones that the body secretes to protect itself keep circulating, and the defensive movements and emotional responses keep getting replayed. (van der Kolk, 2014, p. 66)

Dissociation is a state in which one's self-concept becomes distanced from one's current

experience in such a way that the experience does not become psychologically linked to one's

self-concept or identity. This disruption looks to be a psychological flight response. When one

cannot physically escape a traumatic event, one is only left to mentally escape if they are to

survive. In addition, many people may not even be aware of a connection between these

responses and a traumatic event. For example, Marilyn had her boyfriend over to her house one

night. The two of them fell asleep on her bed watching TV. In the middle of the night, he rolled

over. "When Marilyn felt his body touch hers, she exploded---pounding him with her fists,

scratching and biting, screaming, 'You bastard, you bastard!'" (van der Kolk, 2014, p. 125). This

incident led Marilyn to seek psychiatric help because she had no idea why she reacted as she did.

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[44] "Dissociation is a disconnection between a person's thoughts, memories, feelings, actions or sense of who he or she is. This is a normal process that everyone has experienced. Examples of mild, common dissociation include daydreaming, highway hypnosis or 'getting lost' in a book or movie, all of which involve 'losing touch' with awareness of one's immediate surroundings" (Wang, 2018). I will discuss dissociation in more detail in section **6.8 Dissociation**.

After much therapy it was discovered she was sexually and emotionally abused as a child. Marilyn's case demonstrates the disconnect between certain cognitive processes of the brain and the emotional and physiological processes. Marilyn was attacking her boyfriend without being aware that her response was motivated by her childhood experience. Even more telling is what Marilyn was yelling at her boyfriend. Her repeated exclamation indicates she had made some kind of personal evaluation even though she could not identify why she was saying those words and why she was yelling them at her boyfriend. When Marilyn was attacking her boyfriend, she was in a dissociative state whereby her self-understanding was disconnected from her current situation. Her reaction was a response to her childhood trauma that she believed was happening in the present. Marilyn's attack stands in stark contrast to the incident with my wife. My experience may have triggered my stress response, but I did not experience dissociation when I thought my wife was an attacker.[45]

Trauma is distinguished from simple fight or flight experiences in that the traumatic experience so overwhelms a person that the normal relationship between their self-concept and the awareness of their current experience is temporarily disrupted. Here, I would like to return to our discussion of traumatic memories and their formation. Because of ethical and practical considerations, researchers very rarely if ever can observe people initially experiencing trauma. However, given the nature of the traumatic memories as reexperiencing the past, we can glean much about trauma from understanding what happens during a flashback. At present, it is believed that there are two primary systems responsible for memory formation (McDonald,

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[45] Additionally, I did not experience the conflicting cognitions that lead to dissociation and the fragmentation of memory. I will explore more fully how conflicting cognitions lead to fragmented memories in section **4.9 Therapy and the worldview paradigm**. I will also explore traumatic dissociation in greater detail in section **6.8 Dissociation**.

2019, pp. 23-25). The first system is responsible for creating and storing "memories that the subject can distinctly focus her attention on, recall consciously, and refer to in thought or speech." This system is associated with the hippocampus (part of the rational brain). The other system associated with the amygdala is responsible for encoding and storing memories that have "strong emotional resonance." Thus, the hippocampal system is responsible for memories that are explicit and do not have felt emotional content, and the amygdala system is responsible for memories that have felt emotional content but implicit content. It is possible for these systems to act independently. McDonald recounts a study where a French doctor worked with a patient who was amnesiac and unable to form no new conscious memories. One day, he introduced himself and shook the patient's hand with a pin in his own which poked the patient. When the patient returned for the next session, the doctor had to introduce himself as usual, but the patient refused to shake his hand even though she could not identify the reason for her refusal (McDonald, 2019, p. 24).

> However, in most circumstances, these memory systems are complimentary.

> When an event occurs, the amygdala and the medial prefrontal cortex ascertain what is happening and what the body's response should be, sending this information along to the brain stem, which responds by activating the body accordingly through use of the hormone system. The information is then sent to the hippocampus that sorts it in relation to data that already exists. (McDonald, 2019, p. 26)

The hippocampal system, then, works as a kind of filing system. During a traumatic event, however, a person's capacity to catalog their experience shuts down. "[N]euroscience research shows that when people are reliving, they cannot think rationally because the critical frontal lobe areas necessary for executive functioning go offline, and only the primitive fear, arousal…parts of the brain light up" (Joseph LeDoux quoted in McDonald, 2019, p. 28).

In a normal fight or flight response, one may react before they have had time to think about why they are reacting, but they are later able to recognize and integrate that experience. This experience does not contain elements that are so horrendous as to be persistantly cognitively avoided. The traumatic experience, on the other hand, is judged to be so terrible, the mind is disabled from sorting and cataloguing the experience. Thinking about the event is literally unbearable.[46] This explains why post-traumatic stress is characterized by avoidance.[47] Even though they may not be conscious of it, persons so want to avoid thinking about the experience they want to avoid anything which reminds them of the traumatic experience. In the case where my wife and I scared each other, we were quickly able to realize that we were in no real danger and thus our experience was not later judged to be horrendous or horrible and posed no threat to our cognitive well-being. Marilyn's childhood abuse, was immediately judged to be so horrendous that she could not bear the thought of it. However, the emotional imprint of the experience was still latent in Marilyn's memory so that affected her limbic and autonomic systems. Thus, she was unable to cognitively process the event and integrate it into her past experiences. During trauma, one's sense of self is disassociated from one's experience. In this way, trauma is an emotional response characterized by personal disintigration where the normal relationship between at least some of one's cognition (self-concept), and one's emotional and physiological processes (one's experience) is disrupted. Thus, recovery from posttraumatic stress begins when we,

> learn to "own" our emotional brains. That means learning to observe and tolerate the heartbreaking and gut-wrenching sensations that register misery and humiliation. Only after learning to bear what is going on inside can we start to befriend, rather than obliterate, the emotions that keep our maps [of how we think of ourselves and the

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[46] That is, one does not accept the event. I will explain more about acceptance and its role in trauma in section 6.9 Belief and Acceptance.

[47] See section 2.1 Trauma and Stressor-Related Disorders.

external world] fixed and immutable. (van der Kolk, 2014, p. 131)

Trauma stems from not accepting the emotional weight of an event. Recovery, then, focuses on being able to integrate and accept this intense negative emotional experience.

I do not wish to say that trauma causes one's cognitive faculties to stop working altogether. Something like this might happen, like in the case of Ute, but people's faculties continue to function during many other traumatic experiences. In Marilyn's case she was later able to recall her childhood abuse. "When her father started to touch her, she made herself disappear; she floated up to the ceiling, looking down on some other little girl in the bed. She was glad that it was not really her---it was some other girl who was being molested" (van der Kolk, 2014, p. 134). Thus, we see that Marilyn's cognitive faculties were active. She was aware that her father was in the room. She was able to think about the event and form beliefs about it. However, her thoughts and beliefs demonstrate a disassociation between herself and her experience. It was "some other girl" who was experiencing the abuse. In order to endure the horrendous experience, she had to psychologically distance her self from the experience. In a typical threat response, one's fight or flight response may be engaged before one has time to conceptualize the experience and form beliefs about it, but one's cognitive faculties are not unchained from the emotional experience. They are simply operating at a slower rate. During trauma, it may be possible that one retains a sense of self but this sense of self is not psychologically associated with one's experience. "[W]e are physiologically designed to function best as an integrated whole, just like the computers that we now build. The fragmentation that accompanies traumatic experience degrades this integration and impedes maximum performance in a variety of ways" (Bloom, 1999, p. 3). In other words, human beings

function best when they can associate their identities with their experiences. Trauma prevents this process from occurring.

McDonald argues that it is important to consider not just the psychological and neurological bases of trauma, but we also must also think about it phenomenologically. In contrast to McDonald, my approach attempts to analyze trauma as it is in itself and not necessarily its role in our lived first-person experience. However, I find part of her view to be instructive. That is, an analysis of trauma is incomplete without understanding the perspective of someone who is a "being-in-the-world." She argues this analysis does not contradict psychological and neurological assessments, but it is, instead, complimentary. Specifically, McDonald argues that one should view trauma as an adaptive response to an event that has significantly changed one's world. If one's world has been changed, one's perspective as a being-in-the-world has changed. One must adapt so they might be able to engage with the world. To illustrate this adaptivity, McDonald tells the true story of a woman who became mute after she was forbidden to see her lover. She had also been rendered mute one other time in her life just after she experienced a volcanic eruption.

> What her symptoms *also* accomplish is a breaking away, a cutting off from a world which feels unfamiliar and uninhabitable…She loses her voice *not* because she suddenly loses access to words, or even that words cannot adequately express what she is experiencing, but because the impediment that is placed upon her interrupts her way of being-in-the-world. (2019, p. 63)[48]

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[48] Compare this experience with Maya Angelou's. Angelou was compelled to testify against her rapist when she was eight years old. The rapist was convicted but served no jail time. The day he was released he was kicked to death and dropped off in another part of town. Angelou believed her testimony killed him. "[I]f I talked to anyone else that person might die too. Just my breath, carrying my words out, might poison people and they'd curl up and die like the black fat slugs that only pretended. I had to stop talking" (Angelou, 2004, p. 70). Angelou remained mute for almost five years.

While there is good evidence to think that the woman actually *did* lose access to her words, [49,] McDonald's analysis appears to provide insight into why one may respond to a horrific event by cognitively disengaging one's sense of self from one's emotional experience. The traumatic event presents a world in which one does not believe they can live. For this reason, they must cognitively distance themselves from such a world. This distancing represents a way of adapting to a significantly changed world so that one might continue to survive in it.

To summarize, I started looking for a definition by attempting to locate a genus for trauma. I have argued that an event, an experience, and an effect are all insufficient categories for locating the genus of trauma. Instead, following the American Psychological Association's definition, I have argued that the genus of trauma is an emotional experience. I then argued that trauma is differentiated from other emotional experiences in that it includes one's fight or flight response triggered by an intense negative emotion like terror or horror and trauma also includes one's dissociating one's sense of self from one's experience. Thus*,* I want to define trauma as *a negative emotional response to a perceived horrifying event which includes one's stress response and the judgment that the event will cause an emotional experience which is too overwhelming to bear and where such a response is characterized by a disruption in the normal relationship between one's sense of self and one's experience.*[50] In short, trauma is a negative emotional response to a horrific event that includes dissociation.

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[49] During trauma, one's part of the brain responsible for being able to verbalize one's experience shuts off. "Without a functioning Broca's area, you cannot put your thoughts and feelings into words. Our scans showed that Broca's area went offline whenever a flashback was triggered. In other words, we had visual proof that the effects of trauma are not necessarily different from---and can overlap with---the effects of physical lesions like strokes" (van der Kolk, 2015, pp. 42-43).

[50] I have attempted to formulate this definition based on previous empirical and philosophical work. I plan to use the definition as a jumping off point and will explore some of these concepts in more detail later. In Chapter 4: Worldview and Identity I will more fully explain what I believe to be the psychological processes involved in trauma.

This definition helps explain why some people may be traumatized by an event and others not be traumatized by the same event. Several parts of the definition indicate that trauma is dependent on subjective perspective. First, one must perceive an event to be dangerous. Many people will assess the degree of danger a situation presents differently. Second, different people can experience different emotions from the same event. For instance, when the winner of the last presidential election was announced, many people felt happiness, excitement, or relief. Others felt anger, disappointment, and sadness. Furthermore, the degree of emotion felt can be different for persons experiencing the same event. Most of the time when a young child dies, her mother will feel a greater degree of sadness then the official presiding over the funeral. Third, what one believes themselves to be able to bear will be different from person to person and can be affected by personal or cultural values and/or relationships.

However, the definition is also an objective description of a phenomenon. One's response must be triggered by a certain kind of perception of an event, one must make certain judgments about the character of the event and the emotional experience, and one's response must include dissociation. Thus, it is possible for someone to be wrong about whether they have experienced trauma. If someone has a deeply upsetting experience but this experience does not include a response with the cognitive, emotional, and physiological elements I have described, it is not trauma. In addition, this definition allows the possibility that one could have had a trauma in the past but now be unaware of it and seem to experience no ill effects of such trauma in the present.

This definition fulfills all three criteria I set at the beginning. 1. My definition explains how we might distinguish traumatic events from other kinds of events. Traumatic events are ones which induce the emotional response I have described where events which do not induce this response are nontraumatic. This means that a single event may be traumatic for some and

nontraumatic for others. 2. My definition helps to explain why such an event leads to traumatic effects. Many traumatic effects studied in the empirical literature are parts of the initial response that reoccur. For instance, one who experiences hypervigilance is experiencing the same or similar response they initially had during a threatening event. The difference is that they are now responding to situations that most people do not consider threatening. Other effects may be seen as effects of the initial response. For instance, negative beliefs about one's value are tied to one's emotions during the initial traumatic event. 3. My definition is in line with most post-traumatic stress empirical research.

One might worry that as I have been arguing for my definition, I have conflated an experience with a response. That is, one might argue that either trauma as a response is something I do, or trauma is something I experience. I think there is something to this worry although I think this way of thinking about trauma is a false dichotomy. For instance, I may be on the sidewalk when I hear a good friend yell my name a short distance away. In response, I walk over to greet my friend. I do not think it problematic to think of my walking as both a response and an experience. My walking is a thing that I do, but I also experience my walking. Furthermore, my walking is not instantaneous. It occurs over time. Similarly, I believe trauma to be the kind of thing which can occur over time (though it could be a very short time) so that while I am responding to an event, I am also experiencing that response. Still, there is a conceptual distinction between the response and the experience of that response. I will distinguish these two concepts by using the term "trauma" for the response and derivatives of the term "being traumatized" for the experience.

An interesting implication of this definition is that it implies persons with post-traumatic stress, specifically PTSD, are traumatized again by subsequent seemingly benign events. For

instance, in Marilyn's case, when she awoke to the movement of her boyfriend, she began hitting

and berating him. Of course, she had no idea why she reacted the way she did. Because she

reacted out of fear and her relevant cognitive faculties were disengaged, her description seems to

indicate that she had the kind of emotional response I have described. If this is true, she was

traumatized, but this time the event which directly precipitated her trauma was her boyfriend's

movement, not her childhood abuse. Given that a different event caused her trauma, it does not

make sense to say that she was "re-traumatized" by her childhood abuse. It is quite true that

Marilyn's childhood experience significantly contributed to her reaction to her boyfriend in that

this experience shaped her cognition and emotions. But it does not appear that this abuse was the

efficient cause of her response. Rather, this new response is itself a trauma triggered by a

different event.[51] However, this new trauma is grounded in the old trauma because the new

trauma would not have occurred without the occurrence of the initial trauma and the current

triggering event is in some way cognitively related to the initial event in Marilyn's mind.

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[51] If these seemingly benign events can cause trauma, then conceivably someone can traumatize someone else unknowingly and unintentionally. While it may be impossible for someone to never cause anyone trauma, it may behoove them to be more aware of common trauma triggers, particularly if they are concerned about creating safe environments (i.e., classrooms).

Chapter 4: Worldview and Identity

4.1 What Do Worldview and Identity Have to Do with Trauma?

In chapter two I surveyed empirical literature investigating trauma and in chapter three I developed a definition for trauma to serve as a basis for my analysis. In this chapter I want to continue to focus our understanding of trauma by considering possible mechanisms that cause trauma. In this chapter I will investigate psychological literature dealing with worldview and identity. I believe both concepts will shed light on the causal mechanism for trauma. I will argue that trauma is caused when one's experience confronts one with unignorable evidence that conflicts with the core of their worldview, namely their self-concept (identity). Understanding this causal mechanism will help situate trauma within the Plato/Aristotle inspired paradigm I develop in chapter five and hone in on the specific ways trauma hinders human flourishing in chapter six.

4.2 Trauma and Worldview

I believe there are clues in trauma that lead us to investigate trauma as concerning one's worldview. The first clue is that many trauma survivors report that there is something about trauma that is "unbearable." "I view trauma as, in essence, an experience of unbearable affect" (Stolorow, 2015, p. 9). Van der Kolk states "Trauma, by definition, is unbearable and intolerable" (2014, p. 1). Thus, we find that the quality which distinguishes the emotion of trauma from other emotions is that it is "unbearable." However, it will be helpful to consider what this means. One may not be able to bear an emotional experience because one's interpretation of the experience is fundamentally at odds with one's mental construction of oneself or one's mental construction of the world.

Once again, it will be helpful to consider PTSD responses for clues as to what happens during trauma. Karyn Freedman argues that people often conflate a trauma survivor's beliefs (having cognitive content) and emotions (not having cognitive content)[52] and this conflation results in behavior that hurts the victim. In particular, Freedman argues this conflation leads to a kind of epistemic harm.

> As friends or partners of survivors of traumatic events we can show deep understanding of the consequences of terror and violence, indeed we show a certain compassion even in the absence of any personal connection to the survivor. But as epistemologists we routinely dismiss traumatically informed beliefs as irrational for one of two reasons. Either we dismiss the beliefs due to insufficient evidence or we reinterpret the beliefs, not as legitimate experiessions of a shattered worldview, but rather as emotional responses--- we say it is fear talking, not reasoned opinion. In other words, if it is agreed that the beliefs under consideration are propositional attitudes (or propositionally contentful) then they are thought to lack adequate justification; otherwise it is assumed that they are reducible to emotional states. Psychological trauma, at least as a source of justified belief, lacks a kind of epistemic legitimacy. (2006, pp. 104-105)

I think Freedman is correct to distinguish between one's beliefs and emotions. It is possible to have mental states where we affirm the truth of a proposition without experiencing affect about the content of the belief. I believe two plus two is four, but this belief does not elicit any discernable affect. This allows us to distinuish a belief from an emotion that accompanies a belief.[53] Thus, she argues it is important to recognize two primary effects of trauma: the shattered self and the shattered worldview. On Freedman's view, the shattered self refers to the emotional volitility one experiences after trauma and the shattered worldview refers to a change in one's beliefs, particularly one's beliefs about the world. For the time being, I will focus on the

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[52] Again, I have assumed a cognitive view of emotions, so I understand emotions to also include cognitive content. However, it appears Freedman uses the term "emotion" to refer to a non-cognitive affective state.

[53] For more on emotionally tagged beliefs see section **4.3 The psychology of worldviews**.

shattered worldview. Describing her own posttraumatic stress experience on behalf of rape survivors she writes,

> It is as though there is a traumatized part of our body that stores the experience of the trauma, and when something triggers that part, because it is not *itself* a cognitive place, no form of *rational* persuasion can effectively mitigate it" (2006, p. 110).

What Freedman seems to mean here is that persons suffering from posttraumatic stress experience seemingly spontaneous emotional and physiological symptoms without any obvious cognitive[54] cause. Thus, when a traumatized person is triggered, they experience an emotional and/or physiological response without understanding why they are responding as they are. In the previous chapter I argued that dissociation is consituitive of trauma. That is, one's sense of self is disassociated from one's experience. Thus, one's traumatic experience is not stored in memory in the same way one's other experiences are. One's recall of traumatic memories tends to be fragmentary and involuntary.[55] If this is the case, one's traumatic experience is not psychologically linked to part of one's cognition in the way normal experiences are. Thus, it may seem to someone that one's body recalls trauma independent of their conscious mind. Her statement echoes the kind of disruption between one's cognition and emotional response I have been arguing for. One's emotional response includes physiological changes (i.e, adrenaline

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[54] By using the term "cognitive" Freedman appears to be referring to conscious deliberative processes. This contrasts with the definition I adopted in section **3.5 Trauma as a response**. There I follow the current American Psychological Association's definition of cognition as "all forms of knowing and awareness, such as perceiving, conceiving, remembering, reasoning, judging, imagining, and problem solving" (American Psychological Association, 2020). Thus, Freedman's point seems to be that one's traumatic memories are not psychologically linked to rational processes nor do traumatic memories respond to deliberation. My definition of cognition is a bit broader. Thus, I agree with Freedman that traumatic memories do not respond to deliberation in the way other memories might.

[55] Because of the way traumatic memories are encoded and stored, they are much more difficult to voluntarily recall. In addition, traumatic memories are encoded in such a way that they lack the kind of organization that normal memories have. They tend to be recalled as fragmented collections of sensory impressions. For more on the fragmentary nature of traumatic memory and its possible causes see section **4.9 Therapy and the worldview paradigm**.

secretion, changes in hearbeat). But these physiological states manifest themselves during flashbacks without an obvious association to deliberative processes. From a first-person perspective, one's emotions and physiology seem to be acting independently of one's control. Thus, on Freedman's view, no amount of rational argumentation can relieve one's traumatic symptoms because one's rational faculties (being a part of one's cognition) are disassociated from one's experience.[56]

However, more to our current point, she later argues that trauma results in cognitive dissonance where the survivor is confronted with new beliefs that conflict with previously held ones. Again describing her experience, Freedman shares that prior to her rape she held two beliefs: the world is basically fair and if one is sufficiently "careful, intelligent, moral, and competent you can avoid misfortune." Her description of the aftermath of her assault is particularly illuminating. Because Freedman touches on a number of things I will attempt to flesh out in this dissertation, I think it will be helpful to quote her at length.

> In the case of rape survivors, the kinds of beliefs that are most volatile after an attack are those that center on relationships (actual or potential) and themes of trust and safety.[57] This is certainly true of my own experience, and it is regularly confirmed by the women I meet in sexual assault survivor groups, as well as by first-person reports and autobiographies of trauma survivors. So, for example, prior to my rape I believed in what Aphrodite Matsakis calls (1998, 26) the "just-world philosophy," according to which the world is basically fair, and so long as "you are sufficiently careful, intelligent, moral, and

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[56] This is an interesting point and one that I do not believe is quite clear. On the one hand, the affect of traumatic memories does not appear to be able to be diminished by rational argumentation. However, therapies like CBT have been effectively used to diminish PTSD symptoms. CBT is a strategy that utilizes techniques from more traditional behavioral therapies and also employs one's cognition (particularly self-reflection) as an effective strategy for diminishing PTSD symptoms. For more on CBT see section **2.7 Trauma Therapies**. I will not further explore this point in this section because I do not believe it necessary to my project to determine whether traumatic memories can be later mitigated by cognition or not. I am primarily interested in thinking about trauma itself and less about PTSD.

[57] In section **6.12 The self and other selves**, I will argue that trauma inhibits one's Self-Concept Clarity (SCC) which in turn diminishes one's ability to engage in intercognitive dependence necessary for close relationships.

competent, you can avoid misfortune."[58] I believed, in other words, that it was within my power to protect myself from any harm. This belief, however, was difficult to sustain in the aftermath of my rape. The evidence that supported it, garnered from decades of safe living, now seemed scant. The bare facts of the rape were outrageous enough (though, I was soon to learn, not uncommon) to cast serious doubt on the idea that the world is "basically fair."[59]

The "just-world philosophy" goes hand in hand with what Brison calls the "myth of our own immunity," the idea that acts of unspeakable violence cannot happen to us (2001, 9). Both this myth and the belief that the world is basically fair get destroyed in an act of sexual violence; in my case, the consequence was a whole mess of inconsistent beliefs… So what *was* I to believe? I may have spent years after my rape in a state of shock and fear, but I also spent years in a state of cognitive dissonance, with a smattering of inconsistent beliefs that caused my palpable distress. But it was not at all easy to resolve the dissonance: which beliefs should be kept, which ones should be tossed out, and, more to the point, which ones was I (am I) justified in holding. Well, then, is the world not a safe place—am I really not safe anywhere? But surely (I thought) this cannot be true, I must at least be safe among friends and family. There must be someone who I can trust, on whom I can depend. Yet it was my most trustworthy friend who, albeit unwittingly, led me to the place of my attack—and so on. So, what was I to believe? I may have spent years after my rape in a state of shock and fear, but I also spent years in a state of cognitive dissonance, with a smattering of inconsistent beliefs that caused me palpable distress. But it was not at all easy to resolve the dissonance: which beliefs should be kept,

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[58] I will later argue that this kind of belief is a special kind of belief known as a "worldview belief" in section **4.3 The psychology of worldviews**.

[59] Some might argue that to prevent trauma, we simply need to teach people, particularly children, to adopt beliefs like "the world is not a safe place." However, this approach, by itself, is insufficient for at least two reasons. First, consciously teaching people that the world is not a safe place does not necessarily mean that they will abandon the belief that the world is a safe place at a subconscious level. See the study on "magic beliefs" in section **6.9 Belief and Acceptance** for empirical evidence to support this point.

Second, and perhaps more complicated, children need to have a certain environment of safety if they are to develop well. "The need for ongoing nurturing relationships refers to the presence of the child's caregiver and the form of constant interaction with the child, through physical care and affective interactions. The need for physical protection and safety aims to guarantee favorable conditions to maintain the child's physical and physiological integrity, involving food, hygiene, sleep, shelter, movements, growth and development monitoring, support for healthy habits and protection against infections and accidents, as well as regulations based on laws and other measures that protect the child against physical, social and environmental damage. The need for experiences tailored to individual differences is related to the supply of care particular to each child, excluding any form of standardized expectation. The need for experiences appropriate to child development involves actions to stimulate and add new interactions to an evolutionary process of each child's individual demand, allowing the children to gain self-confidence and feel accepted, cared for and loved. The need for limit setting, structure and expectations refers to the establishment of appropriate limits, encouragement and acknowledgement of the children's accomplishments, cooperating for the children to be able to empathize, through affect, safety and bonding. The need for stable and supportive communities and cultural continuity is linked to the concept that community and culture are foundations for the development of children and their family, considering the care, educational and health aspects in their social network, for the children to gain the feeling of belonging to the family and community. The set of these needs entails relevant implications for the promotion of the child's health and physical and emotional safety" (de Mello, et al., 2014, p. 605). This kind of environment is likely to lead children to form beliefs like "the world is a safe place."

which ones should be tossed out, and, more to the point, which ones was I (am I) justified in holding?[60] (2006, pp. 111-112)

Freedman readily confesses that her previously held beliefs were challenged by new beliefs formed as a result of trauma. Thus, her questions indicate dissonance between conflicting cognitions. She believed the world was a safe place, but she also believed the world was not a safe place. She believed that if she was careful, intelligent, moral, and competent she could avoid misfortune, but at the same time she held held the belief that she was careful, intelligent, moral, and competent, and yet, still experienced misfortune.

I believe it will be helpful to further think about Freedman's account of cognitive dissonance.

Cognitive dissonance describes the state of simultaneously holding two or more conflicting cognitions. The aversive state that an individual experiences during this time is described as dissonance and can cause a variety of uncomfortable feelings and emotions such as guilt, anger, or embarrassment" (Levine, 2014).

In short, cognitive dissonace is a state where one experiences negative affect because of conflicting cognitions. In Freedman's case, she held conflicting beliefs about herself and the world. Yet, people can hold conflicting beliefs without enduring trauma. Leon Festinger, who intially developed cognitive dissonance theory, observed a cult who believed that the world was going to be wiped out by a catastrophic flood (Festinger, Riecken, & Schachter, 2009) . Yet, when the flood did not happen he observed two primary responses among the members. Fringe members gave up their belief about the apocalypse and left the cult. Fringe members were members who were less committed to cult. However, committed members explained the lack of

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[60] One might think that the decision of which beliefs to adopt and which beliefs to reject are obvious in the case. Freedman ought to adopt the belief "the world is not a safe place" and abandon the belief "the world is a safe place." Yet, when an emotion is attached to a belief, it makes it much harder to abandon such beliefs. For more one emotionally tagged beliefs see section **4.3 The psychology of worldviews**.

a flood as a blessing for their faithfulness. In both instances, members sought to assuage the cognitive dissonance they felt. Fringe members gave up earlier beliefs and the more committed members constructed an explanation to synthesize the new information with the old.

Freedman's example of cognitive dissonance is taken from a self-report of someone who has struggled with PTSD so it is not, by itself, proof that cognitive dissonance is a core part of trauma. Yet, we must remember that PTSD symptoms are thought to be indicative of the psychological and physiological processes active in the initial trauma. In addition, many people report when undergoing therapy for PTSD, their phenomenological experience matched what their phenomenological experience was during their initial trauma. For instance, van der Kolk describes his first experience with a Vietnam veteran during a flashback. "Bill was obviously seeing the same images, smelling the same smells, and feeling the same physical sensations he had felt during the original event" (2014, p. 16). Stan, who was involved in the multi-car Canadian car wreck attested after a flashback, "This was just the way I felt during the accident" (*Ibid*, p. 66). Thus, we find PTSD symptoms are akin to one's original traumatic phenomenological experience.

What this tells us is that there is something about trauma that can generate a crisis of belief and that we might learn something about this crisis by examining PTSD symptomology. Yet, this crisis of belief is more than a sense of existential dread. Reading Arthur Schopenhauer's work might make me rethink my existence and its meaning, but it does not invoke the emotional and physiological response we find in trauma, particularly dissociation. Perhaps part of the reason for this is that the fear elicited in trauma is closer to being visceral than reasoning through the implications of a philosophical position. The emotion generated in trauma is the result of an incredibly quick judgment about one's survival instead of the conclusion of a reasonable

argument. Thus, the terror of trauma is not an emotion generated by reasoning processes, but it threatens one's worldview by attacking the integrity of one's core belief system.[61] The threat presented by a traumatic event challenges one's worldview and the emotion associated with the event draws one's attention to the event and counterevidence for one's worldview so that one does not use typical psychological defenses to protect one's worldview.[62] However, trauma presents a case different than mere belief rejection. I might reject the belief that Neo-Darwinian evolution explains the development of biological life on Earth because it does not fit with my theological assumptions. Rejecting this belief hardly ever results in the severe disharmony associated with trauma. Thus, trauma presents more than a belief rejection, it is a case where one is presented with a new belief that conflicts with one's worldview. One's intense emotion marks the belief so that one is motivated to pay attention to the belief.[63] Thus one's worldview belief contradicts one's belief formed during trauma. Both beliefs are emotionally tagged. This motivates one to simultaenously affirm two contradictory beliefs. In Freedman's case, she was motivated to affirm both that her being careful insulated her from significant harm and also that she was being harmed even though she was being careful.

4.3 The psychology of worldviews

Up until now, I have done little to explain the concept of "worldview" or to argue for worldview's relevance in discussing trauma. Here, I think it will be helpful to briefly discuss the concept of a worldview and its relationship to beliefs. "Worldview" has been defined in different

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[61] I will explain the concept of worldview and defend its psychological importance in the next section. For now, I just wish to assert my hypothesis.

[62] For more on emotions' attention drawing role, see section **4.3 The psychology of worldviews**.

[63] Some beliefs are "emotionally tagged." That is, some beliefs are associated with specific emotions. This "tagging" motivates one to pay more attention to a belief than if the belief was not associated with an emotion. For more on emotional tagging see the next section, 4.3 The psychology of worldviews.

ways in psychological and philosophical literature[64], but most understandings of worldview point

toward a cognitive framework that allows one to interpret reality. Pradeep Chakkarath asserts

that a worldview

> refers to an elaborate cognitive framework or belief/orientation system that provides
> societies and individuals with a means of understanding their environment and ordering
> their lives in accordance with various key assumptions that are widely shared by the
> members of their ingroups. As worldviews structure the way in which we perceive and
> interpret the world, ourselves and others, as well as the way in which we acquire and
> apply knowledge, they strongly affect human cognitions, emotions, motivations, and
> behavior. (Chakkarath, 2013).

Thus, we find that a worldview functions as an interpretive framework for integrating one's

beliefs and experiences into an intelligible whole. For instance, one might hold the belief that

humans are fundamentally thinking things. Thus, this belief may affect the way I evaluate those

human beings who do not think well. Or, this belief might allow me to a way to categorize

human beings as a coherent group of objects. That is, those things which exhibit thinking (in a

particular way) are classified as human beings.

This interpretive framework includes, beliefs and attitudes. Grounding one's worldview

are beliefs about some of life's biggest questions. Worldviews, "address theories about the origin

and meaning of the world, individual and collective life, the relationship between individual and

community, appropriate moral and aesthetic attitudes, priorities, individual obligations and rights

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[64] For instance, the term worldview (*Weltanschauung*) was coined by Immanuel Kant in *Critique of Judgment* (1892, II.26). Kant utilizes the term without specifically defining it, but his use of the word refers to the tendency of human beings to understand the world as a unified whole. More recently, James Sire has asserted, "A worldview is a set of presuppositions (assumptions which may be true, partially true or entirely false) which we hold (consciously or subconsciously, consistently or inconsistently) about the basic makeup of our world" (Sire, 2015, p. 19). For a sustained account of the philosophical history and development of "worldview" see (Naugle, 2002).
In contrast to philosophers, psychiatrist Alison Gray defines worldview as "a collection of attitudes, values, stories, and expectations about the world around us, which inform our every thought and action" (2011, p. 58).
Psychologists Kathryn Johnson, Eric Hill and Adam Cohen write, "[W]orldviews are the socially constructed realities which humans use to frame perception and experience (Redfield, 1952). A worldview involves how an individual knows and thinks about what is in the world, and worldviews influence how he or she relates to the persons and things in the environment" (2011, p. 138).

and the structure of interpersonal…relationships" (*Ibid*). Beliefs about the origin and the

meaning of the world, and beliefs about the meaning of life, help us to evaluate our everyday

experience in light of what we believe to be true about this questions. For instance, I may wonder

what the purpose of my life is. To answer this question, I may appeal to my belief that the world

is simply an unintentional product of time and chance. Thus, my life does not have a

transcendent objective purpose. In contrast, if I believe that the cosmos was created intentionally

by an all-powerful entity who intended the universe to sustain human life, I may come to believe

there is a transcendent objective purpose for my life.[65] Thus, I may evaluate my experiences as

being more or less in line with my life's purpose.

In addition, worldview beliefs help draw connections between different beliefs I have.

For instance, perhaps I believe that I can know the earth is spherical because scientists have

observed it to be spherical through satellite imagery. In addition, maybe I also I believe that I can

know that running an electrical current through water will allow me to separate water into its

constituent elements, hydrogen and oxygen because I ran the experiment as a science fair project.

If I hold both of these beliefs, its appears I have a higher order belief like "empirical observation

is sufficient justification for knowledge." Thus, my belief about the shape of the earth and my

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[65] This is not to assert that the belief "the universe was a product of time and chance" necessarily produces the belief "my life has no objective transcendent purpose" or that the belief "a powerful entity intentionally created the universe to support human life" necessarily leads to the belief "my life has objective transcendent meaning." It may be the case that the development of the second belief in each set requires other beliefs in addition to the initial belief I have described. However, the worldview beliefs I have identified still play a significant role in forming the secondary beliefs. If I have the belief "the universe was a product of time and chance," this excludes beliefs likely to be required for the formation of a belief like "my life has objective transcendent meaning." Of course, it is quite possible to hold two opposing beliefs. Yet, the point of this example is not to explain how one belief necessarily leads to another. Instead, this example is intended to demonstrate how one's worldview beliefs tend to influence one's other beliefs.

belief about hydrolysis are connected because they both assume the higher order belief

"empirical observation is sufficient justification for knowledge."[66]

Moreover, I believe it to be the case that many of our deepest held beliefs are

"emotionally tagged." Emotional tagging as a concept first appeared in a neuroscience review

article by Gal Richter-Levin and Irit Akirav (2003). The researchers initially used the term to

describe the effect emotion had on memory encoding and recall.

> The ability of the amygdala to modulate emotionally dependent information into
> enhanced memories as a function of their emotional significance by strengthening
> neuroplasticity in other brain regions is what we refer to as *Emotional Tagging*. An
> enhanced memory may be more persistent (i.e., long-lasting), stronger (i.e., resistant to
> disruptions) or more accurate, or a combination of the above. (Richter-Levin & Akirav,
> 2003, p. 248).

In other words researchers found that sometimes emotions were attached to memories. The

memories that were emotionally tagged tended to be more persistent, stronger, more accurate, or

some combination of these three traits than memories that were not found to be emotionally

tagged. After reviewing studies investigating the role of emotional neural structures and memory

encoding processes, they conclude,

> Evidence from human and animal studies supports the notion that the emotional content
> of an experience contribute[s] to the formation of enhanced long-term memories of that
> event. We hypothesize that in addition to their more general arousal influence, the
> emotional aspects of the experience should have a more specific impact on memory
> processes, i.e., in potentiating the important aspects of an experience during their
> acquisition and consolidation into long-term memory. (Richter-Levin & Akirav, 2003, p.
> 253)

That there is neurological evidence that shows emotionally tagged memories tend to be

more easily recalled or that emotionally tagged memories tend to be more accurate is an

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[66] Note, the beliefs in question are beliefs about what I can know ("I can *know* the earth is spherical," "I can *know* hydrolysis splits water into hydrogen and oxygen"). Thus, the higher order belief "empirical observation is sufficient justification for knowledge" is a belief about the justification for knowledge that accommodates both other beliefs.

interesting observation on its own, but does not appear to be directly applicable to one's set of beliefs. Yet, more recent research suggests beliefs can be emotionally tagged as well.

Christine Laudenback, et al., summarize more recent work on emotional tagging,

A large literature in neuroscience posits that the personal, emotional experience of an outcome alters the "hardware" and thus the functioning of our brain, irrespective of our cognitive abilities (for an overview, see Moncada et al. 2015). According to the Synaptic Tagging and Capture hypothesis (Frey and Morris 1997), local tagging of synapses at the moment an experience is made leads to a more stable connection between synapses and eventually memory of the experience.[67] Emotional arousal enhances this tagging as it signals to the brain whether an experience is important and should be memorized (LaBar and Cabeza 2006). The more intense the emotional arousal, the stronger the anchoring of an experience in memory and the easier its availability in the future (Talarico, LaBar, and Rubin 2004). Emotional tagging refers to the transfer of an experience into memory as a function of its emotional significance (Richter-Levin and Akirav 2003). It works similarly for positive and negative experiences (Hamann et al. 1999).

Thus, emotional tagging indicates the importance of a memory for someone. The more intense the emotion associated with an experience, the more readily the memory is able to be recalled and the less likely the memory is to be forgotten. Memories can be tagged with both positive and negative emotions.

Seeking to apply the insights of emotional tagging research to economics, Laudenbach, et. al., decided to test whether emotional tagging could provide explanation for a certain phenomenon in economic decision making. They state that when making economic decisions, individuals tend to overweigh events that are easily remembered instead of taking a more strictly Bayesian approach to decision making.

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[67] In the original study, Frey and Morris attempt to explain how the repeated stimulation of hippocampal neurons can create an "immediate and prolonged increase in synaptic strength" (1997, p. 533). They postulate that "[long-term potentiation] initiates the creation of a short-lasting protein-synthesis-independent 'synaptic tag' at the potentiated synapse which sequesters the relevant protein(s) to establish late LTP" (*Ibid*). By synaptic tagging, the researchers refer to a process that results in a strengthened connection between two neurons. When these synapses are strengthened in a specific way because of a particular neurobiological process, they are referred to as "tagged." Synaptic tagging is thought to increase a memory's persistence (Redondo & Morris, 2011).

> Given that the effects [of the mechanism underlying overweighing] are long lasting and also found in highly educated, well-informed individuals (Malmendier, Nagel, and Yan 2017), it seems unlikely that they are due to simple cognitive mistakes that could be undone with financial literacy training or education in Bayesian updating. (Laudenbach, Malmendier, & Niessen-Ruenzi, 2019, p. 567).

Thus, the researchers hypothesize that persons' emotionally tagged experiences influence the weight individuals place on beliefs that influence their decision-making. Beliefs associated with emotionally-tagged experiences will be weighted more heavily (thought to be more important) than those beliefs that are not associated with emotionally tagged experiences. "We exploit the regime change in East Germany…from communist to capitalist and show that emotional tags tied to the communist experience shape East Germans' beliefs about communism and capitalism in the long-term" (*Ibid*, p. 568). It was predicted that those former East Germans who had positive emotional tags under communism would have more positive beliefs about communism (and negative beliefs about capitalism) in the present and those former East Germans with negative emotional tags under communism would exhibit negative beliefs about communism (and positive beliefs about capitalism) in the present, many years after the fall of communism and the reunification of Germany. Interestingly, "on average, living under communism tilts peoples' beliefs about communism upward in spite of their experience with its everyday hardship" (*Ibid*, p. 569). Yet just because respondents had lived under communism did not mean they always formed positive beliefs about communism. Those who had positive emotional tags under communism generally developed more positive beliefs about communism (and more negative about capitalism) but those who had negative emotional tags under communism tended

to have more negative beliefs about communism (and more positive beliefs about capitalism)

today.[68] Laudenbach et al., conclude that,

> Experiencing a communist system has long-term effects on beliefs about the benefits of communism, even after the communist system is overthrown. The experience of living under communism seems to be deeply anchored in peoples' memories. Positive and negative emotional tags strongly affect the pro- or anti-communist leaning. The emotional tags seem hard to reverse even many years later. (*Ibid*, p. 571)

Thus, there is evidence to suggest that beliefs associated with an emotionally tagged experience

tend to adopt at least some of the characteristics of emotionally tagged memories. The emotions

attached to the beliefs signify the belief's importance and the tagged beliefs tend to be persistent.

Independently, neuroscientist Paul Zak states,

> When you establish your beliefs, if they include emotional tags, the brain saves that information differently so it's more accessible and impactful…The strongest beliefs are tied to things like 9/11 or the birth of a child; highly emotional events create beliefs that are almost impossible to change. (Morgan, 2019)[69]

The East German survey respondents held emotionally tagged beliefs about communism even

decades after they stopped living under Communist rule. This was true both of those with

positive emotional tags as well as negative tags. It is unclear exactly how emotionally tagged

experiences lead to emotionally tagged beliefs, but the results of the study strongly suggest

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[68] People who had lived in a county that was home to and Olympic gold medal winner and responses that indicated East Germany were stronger than West Germany in sports were considered to have positive emotional tags. These themes were assumed to yield positive emotional tags because success in sports was used by government officials to indicate the superiority of communism over Western capitalism. Those who lived in a region where the Catholic Church was strong and responses that indicated disapproval with Marx's statement that religion is the opium of the people were considered to have negative emotional tags. This is because communism "saw religion as a suppression tool of the ruling classes" (Laudenbach, Malmendier, & Niessen-Ruenzi, 2019, p. 569).

[69] This is not to say that every belief based on an emotional experience is emotionally tagged and hard to change. For instance, it may be the case that after the birth of a child, I form the belief "I need to purchase diapers." This belief may not be emotionally tagged, and I might quite easily change my belief when I later remember that my friends and family have already bought me a sufficient supply of diapers. However, Zak seems to mean that the hardest to change beliefs we have are emotionally tagged beliefs, not that all beliefs grounded in an emotional experience are emotionally tagged. Thus, forming a belief based on an emotional experience is a necessary but not sufficient condition for that belief to be emotionally tagged.

beliefs formed that are connected to an emotionally tagged experience track the judgment of one's emotion. When persons emotionally evaluated communism in a positive light (they felt positive because of local athlete's success) they formed positive beliefs about communism. When persons emotionally evaluated communism negatively (they felt negatively about communism's role in religious persecution) they formed negative beliefs about communism.

Thus, it appears that an emotional tag indicates one's evaluation of both an experience and the contents of a belief (Eagly & Chaiken, 1993, p. 112). For instance, if I almost drown in a lake, I form a belief that going into a lake again will likely kill me. The belief is tagged with the emotion "terror." This emotion indicates the belief about lakes is both important (emotional intensity) and unpleasant (emotional valence). If emotionally tagging beliefs is like emotionally tagging experiences the process of emotional tagging serves to mark those beliefs that are particularly important to oneself and how one values the content of the belief. When one emotionally tags a belief, that belief becomes resistant to change in proportion to the strength of the emotion. The more intense the emotion attached to a belief, the harder it is to convince me otherwise. This coheres with the research about emotional tagging and memory. To repeat Richter-Levin and Akirav emotional tagged memories "may be more persistent (i.e., long-lasting), stronger (i.e., resistant to disruptions), or more accurate, or a combination of the above. (2003, p. 248). It is hard to believe that emotional tagging would lead to a belief being more accurate,[70] but if the neurobiological process of emotionally tagging beliefs is similar to emotionally tagging memories, there is good neurobiological evidence to think that emotionally tagged beliefs tend to be more persistant and stronger than non emotionally tagged beliefs. In addition Jennifer Talerico and colleagues found the more emotionally intense a memory the

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[70] My feelings about whether a belief is true appear to have no bearing on whether a belief is actually true.

more persistent the memory and the more vivid the memory. "[N]ot only will highly intense events tend to be remembered longer, but they will also tend to be remembered with greater vividness [and] a greater sense of recollection" (Talarico, LaBar, & Robin, 2004, p. 1127).

While one's worldview provides a basic framework through which one can make sense of the world, some worldview beliefs are more tightly held than others. In particular, some identity beliefs appear to be core kinds of beliefs.[71] Beliefs which are central to one's concerns, particularly ones which concern beliefs about the self, value, self-interest, and social identification tend to be the kinds of belief most resistant to change (Frijda & Mesquita, 2000, p. 61). Many identity beliefs are shaped by experience, particularly social experience. For instance, Elizabeth Para argues that social support vitally impacts one's identity development.

> Two sources of support appear to have the greatest influence on the individual: family and peers. Families stimulate and support the development of distinctive points of view; peers offer models, diversity and opportunities for exploration of beliefs and values (Bosma & Kunnen, 2001). Both play a part during one's development of personal identity. (Para, 2008, p. 3)

If some of our identity beliefs are formed because of emotional experiences with our families and peers, this helps to explain why at least some identity beliefs tend to be hard to change. For instance, maybe as a child I was in a play and as soon as I went on stage during a performance I forgot all of my lines. This experience made me anxious and afraid and I formed the belief "I am not good at acting" because of the experience. This belief persists even though I received many compliments about my performance in later shows. These kinds of identity beliefs are emotionally tagged.

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[71] I understand core beliefs to be more persistent than other beliefs and I understand core beliefs to inform more beliefs than other kinds of beliefs. I will more fully explain what I mean by "core beliefs" in the next section, **4.4 Worldview and identity**.

In addition to some identity beliefs being formed from emotionally tagged experiences, beliefs about one's identity and their place in the world ground a significant part of one's total worldview. Because worldview beliefs are necessary for one's self-understanding and understanding of one's place in the world, it is unsurprising that worldview beliefs tend to be hard to change. There is potentially a high psychological cost to pay for abandoning any of one's worldview beliefs. When one abandons a worldview belief, they lose at least some ability to organize their self-understanding and understanding of the world. The psychological cost of abandoning a worldview belief or beliefs and the emotion tagged to a worldview belief make these beliefs very persistant. By psychological cost I mean to suggest that if one changes a worldview belief, they will experience significant cognitive dissonance unless they change other related beliefs to be consonant with the new worldview belief. Thus, changing a worldview belief carries the risk of changing many other beliefs, and thus significantly altering one's cognitive interpretive framework and understanding of reality.

> It probably is the anticipation of emotional situations and corresponding emotions that can give beliefs their enormous power when challenged. You perceive your world as collapsing, the organization of your life coming apart…Generally speaking, challenging major beliefs challenges an individual's world view, which challenges sense of security. According to terror management theory (Pyszczynski, Greenberg, & Holt, 1985), the latter tends to evoke terror. Anticipating such basic terror evokes reactions to prevent that terror, among which is derogating the carrier of the challenging beliefs and increasing the strength of the challenged ones (Greenberg, Solomon, & Pyszczynski, 1997).[72] (*Ibid*, p. 63)

Moreover Joseph Hayes et. al, write about the psychological process of accomodation. Accomodation is a psychological mechanism whereby one changes one's beliefs to

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[72] Terror management theory asserts that one's worldview "provide[s] a buffer against the anxiety that results from living in a largely uncontrollable perilous universe, where the only certainty is death" (Greenberg, et al., 1990, p. 308). Thus, when one's worldview is challenged, one's buffer against the anxiety of facing death is weakened. For more on Terror Management Theory see section **4.7 Worldview and PTSD**.

accommodate new novel evidence. By changing one's beliefs to align with new information one can better align their psychological view of the world to the actual world itself. That is, accomodation as a generic psychological process can be advantageous when one better understands the actual world. Accomodation reduces the cognitive dissonance one experiences when confronted with evidence contrary to one's established belief system. The process of accomodation is not one that always occurs "lightly," however. People tend to be very hesitant about accomodation when it comes to more central (or core) beliefs and only accommodate if they "must" in these cases.[73] In addition, belief accomodation usually occurs at the level of peripheral beliefs and not core ones.

> Core constructs, which have multiple connections to other constructs and are thus central to the organization of the overall system (cf., Steyvers & Tenenbaum, 2005), are highly resistant to change. Modifications to these beliefs would lead to numerous inconsistencies with interconnected beliefs, causing a cascading threat to neighboring constructs and thereby necessitating large-scale changes throughout the entire network to maintain consistency and balance (cf., Heider, 1958). As such, accommodation ideally involves making changes to more peripheral constructs that lie on the fringes of the cognitive network and have relatively few connections to other constructs. According to Kelly (1955), "peripheral constructs are those which can be altered without serious modification [to the] core structure" (p. 483). Furthermore, when relatively central constructs must be accommodated, they will be changed in such a way as to minimize the spread of implicated inconsistencies. (Hayes, et al., 2015, p. 522).

Empirical literature on persuasion proves to be particularly illuminating here. In general, people employ mental defense mechanisms (often subconciously) to avoid negative emotions of cognitive dissonance when confronted with counterevidence for their deeply held beliefs. "In an effort to reduce these negative emotions, people may begin to think in ways that minimize the impact of the challenging evidence: discounting its source, forming counterarguments, socially validating their original attitude, or selectively avoiding the new information" (Kaplan, Gimbel,

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[73] This is not meant to suggest that people are consciously aware of whether they will accommodate a new belief. Rather, people show a tendency to accommodate only when under great psychological pressure to do so.

& Harris, 2016). In addition, the more fundamental a belief is to one's identity, the more likely one is to employ these defense mechanisms and the attitude one has toward a held belief increases in strength the more fundamental that belief is to one's identity. "When the issue is of high personal importance, the persuasion practitioner should expect resistance and that resistance will likely be both cognitive and affective" (Jacks & Devine, 2010, p. 29). Frijda and Mesquita specifically single out the defensive mechanism of discounting the source of counterevidence.

> Disbelieving is an important mechanism by which information that contradicts one's convictions can be discounted. Disbelieving is supported by considering the information sources as untrustworthy. Information provided by an enemy can be written off. There is indeed solid evidence that those people who voice dissenting world views are being derogated. (2000, p. 70)

Thus, when a person's core beliefs are challenged, a person tends to employ cognitive and affective mechanisms to defend their held beliefs against counterevidence. One faces a high psychological and affective cost for abandoning their worldview beliefs. Abandoning worldview beliefs significantly alter one's understanding of the world and their place in it. Altering one's worldview has at least two potential important consequences. First, changing key parts of one's self-conception risks setting off an emotional domino effect. If some identity beliefs form a core part of one's worldview as I have suggested, changing these beliefs risks creating cognitive dissonance between the changed identity belief and all of the other beliefs that are associated with the identity belief. Second, one's ability to understand reality as a coherent whole is at the least, significantly challenged, and at worst, destroyed. If trauma involves exposing one to counterevidence of their deepest held beliefs, and thus their beliefs attached to the strongest emotions, we ought to expect cognitive and affective defense mechanisms as part of trauma.

Identity theory poses similar psychological defense mechanisms regarding the protecting of one's identity.

> The [identity theory] model assumes that individuals are motivated to maintain or achieve consistency between the self-meanings[74] they hold for themselves as a person, role occupant, or group member and their ''reflected appraisals'' (i.e., their perceptions of self relevant meanings from social feedback in a situation). When consistency occurs, identity verification results. When it fails to occur, identity nonverification results. Emotional reactions follow suit. Identity verification produces positive emotion, whereas identity nonverification produces negative emotion. Furthermore, identity theory assumes that any inconsistency, regardless of valence, will lead to negative emotion (Stets and Burke 2014). Negative emotion is part of the ''alarm system'' that provides the motivation for an individual to work to achieve identity verification (Burke 1991:840). (Miller, Kalkhoff, Pollock, & Pfeiffer, 2019, p. 99)[75]

Thus, when persons are confronted with evidence that challenges their identity, or the consistency of their identity, they are motivated by negative emotions to downplay the evidence or ignore it altogether.

Normally, these defense mechanisms can either be countered or they are successful. When defense mechanisms are countered, the old belief is given up. For instance, one may initially discount the source of counterevidence but come to believe that the source is truthworthy or one might realize their counterargument does not defeat the new evidence. In this way, one may or may not abandon their previous belief. If they do not, they will experience cognitive dissonance which includes an affect motivating one to resolve the dissonance. If the defense mechanisms are successful, one retains their old belief. However, trauma cases appear to be importantly different. During trauma, I argue that one's emotional response presents counterevidence that contradicts deeply held worldview beliefs, specifically certain identity

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[74] i.e., self-appraisals

[75] It is important to note that identity nonverification does not mean that other people fail to identify someone. Rather, identity non-verification happens when other people communicate beliefs about oneself that contradict the beliefs that one holds about oneself. For instance, one might diet and exercise so that one loses a significant amount of weight. After the dramatic weight loss others may say they do not recognize the individual because of the weight loss. Because others fail to recognize the individual, the individual might feel positive emotion instead of negative emotion. Yet, this does not appear to be a case of identity non-verification because after losing the weight, ostensibly one's self-concept includes beliefs about one's new physical appearance. The comments of others that they do not recognize the individual do not contradict one's self-concept. Instead, they appear to reinforce one's self-concept.

beliefs, but one does not employ the cognitive defense mechanisms we would normally expect. Instead, one's experience is psychologically disassociated from one's identity thus psychologically insulating one from accomodating the new evidence. I believe this is what happens during traumatic dissociation. One's experience is quarantined from one's sense of self in such a way that one does not form a normal psychological association between the experience and one's sense of self.

I propose that during trauma, one's typical worldview defense mechanisms are overcome and the resulting dissociation between one's core beliefs and emotion is the last defense mechanism protecting the old belief. When typical defense mechanisms are successful one is able to avoid rejecting a deeply held belief. This is only accomplished, though, by diminishing the impact of the counterevidence by forming a belief that the counterevidence is false or by forming an explanation that interprets counterevidence as not really conflicting with one's worldview. However, traumatic events do not allow one to diminish the impact of counterevidence in these typical ways.

Yet, not even all worldview beliefs appear to be the kinds of beliefs that generate trauma. For instance, some people abandon many of their religious beliefs and even report being happier for doing so. For instance, one online forum contributor writes

> When I was 21 or 22, I was finally able to admit to myself that an invisible mind who thought the Big Bang into existence and then decided to have nothing to do with the resulting universe was nonsensical. Believers often say that humans have an innate emptiness only God can fill. But now that I'm in my late 20s and can look back at my college years with a little more clarity, I think I found what I was missing when I freed myself from myth and superstition and gained a new appreciation for life and for the existence of our universe. I mean, let's face it. Science is awesome. I've never actually written any of this down until now. It's cathartic! (quoted in Scheidt, 2021, p. 16)

Many religions have explanations for the existence of the universe, the nature and purpose of human beings, and foundational ethical beliefs. These beliefs may be associated with many other beliefs a person has and thus constitute worldview beliefs. This is especially true if one's religious beliefs are used to evaluate a number of one's other beliefs. Thus, one's religious commitments could quite plausibly constitute at least part of one's worldview. In the quote above, the author's former belief about God informed their belief about the meaning of the universe and the meaning of life. Likewise, after coming to atheism, the author's beliefs about the absence of God informed their beliefs about the meaning of the universe and the meaning of life. I do not know the full autobiographical account of this person's "deconversion," but I find it plausible to think that one can change their religious commitments without going through trauma.

One of the reasons for this is that one might change their religious beliefs based on evidence other than an intensely emotional experience (i.e., philosophical arguments). In these more mundane cases persons' religious commitments are not confronted during an experience of terror or horror.[76] In addition, it seems quite unlikely that one would dissassociate one's sense of self from one's experience unless the experience conflicted with one's sense of self. Thus, if one is confronted by evidence that challenges their religious commitments, this challenge seems unlikely to result in trauma unless the religious beliefs being challenged are part of one's self-concept.

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[76] Although, it is certain possible for someone to have their religious commitments challenged during a traumatic event. For more on religious trauma see (Panchuk, 2018).

4.4 Worldview and identity

Thus, I want to suggest that it is not just any class of worldview beliefs that are challenged during trauma. I will argue the specific kinds of beliefs that are challenged are emotionally tagged worldview identity beliefs. I will briefly distinguish the difference in classification between identity beliefs and worldview beliefs and then argue why emotionally tagged worldview identity beliefs are the best candidate as the class of beliefs challenged during trauma.

One might have various kinds of worldview beliefs that are not inherently identity beliefs. For example, one might believe that God exists. This belief might have implications for one's identity, but this belief itself is not about one's identity. In addition, one might believe that generally, good things happen to good people, bad things happen to bad people, and terrible things do not happen to good people. But each of these beliefs are not themselves identity beliefs. Rather, they are beliefs about people in general or the nature of the external world. Identity beliefs are marked by a cognitive connection with one's self-concept. For instance, "terrible things do not happen to good people" is not an identity belief because this belief does not refer to one's own self-understanding. However, "terrible things do not happen to *me* because *I* am a good person" is an identity belief because "I" and "me" indicate a connection with oneself.

Identity beliefs are beliefs that we form about ourselves and our relationship with the world around us. Identity beliefs answer the question "who am I?" Sanaz Talaifar and William Swann characterize one's identity (the totality of one's identity beliefs) as "a multifaceted, dynamic, and temporally continuous set of mental self-representations." (2018, p. 2). One's identity provides "a sense of consistency, a sense that there is some connection between who a

person was yesterday and who they are today" (*Ibid*, p. 1). Importantly, "these self-representations, whether conscious or not, are essential to psychological functioning, as they organize people's perceptions of their traits, preferences, memories, experiences, and group memberships. Importantly, representations of the self[77] also guide an individual's behavior" (*Ibid*). Thus, it is important to note that one's identity serves an integrative function. How one understands oneself allows one to identify oneself as the same person who exists throughout different time slices, thus providing a sense of continuity.[78] That is, one can integrate one's otherwise disparate self-conceptions that occur at different times into a coherent whole. I do not just believe that I am the person who feeds a small child at one time and separately, the person provides for my child's education at another time. Instead, I view myself as a father who both feeds my children and provides for my children to be educated. This allows me to connect my self-representation as one who feeds a child in one instance and one who provides for a child's education in another instance. Moreover, the continuity identity provides allows one to move in and out of groups by providing a sense that it is "me" who belongs to these groups. One's self-concept, then, is at the heart of how one is able to function with others. It also appears that developing an identity is necessary for distinctly human activities.

> [C]hildren do not display several emotions we consider uniquely human, such as empathy and embarrassment, until after they have developed a sense of self-awareness…As Darwin has argued…emotions like embarrasment exist only after one has a developed sense of self that can be the object of others' attention. (*Ibid*, p. 3)

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[77] Talaifar and Swann use the terms "self" and "identity" interchangeably. The authors discuss William James' distinction between the "I" and "me" of the self. "The 'I' is the self as agent, thinker and knower, the executive function that experiences and reacts to the world, constructing mental representations and memories as it does so…The 'me' is the individual one recognizes as the self, which for James included a material, social, and spiritual self…This article focuses on the 'me' that will be referred to interchangeably as either the 'self' or 'identity'" (Talaifar & Swann, 2018, p. 2).

[78] This does not mean that one's identity does not change over time. However, it does mean that there is a certain amount of chronological stability to one's identity. For more on the importance of identity stability, particularly its connection with self-concept clarity, see section 6.12 The self and other selves.

Children must first develop a sense that they are an individual self before they can recognize

other persons as individual selves. Once children develop a sense of self they begin forming

beliefs about the kind of self that they are. If we need to form an identity, or a set of beliefs about

one's self, to empathize and develop socially relevant emotions like embarrassment, it appears

our identities form an integral part of how we relate to other persons.

In addition, some kinds of identity beliefs appear to be more central to one's self-

concept than others. Nina Strohminger and Shaun Nichols believe that one's beliefs about moral

traits are the defining aspect of one's identity. Summarizing previous observations they write,

> People are reluctant to take pharmaceutical enhancements for traits that are considered
> fundamental to the self; two moral traits (empathy and kindness) top this list (Riis,
> Simmons, & Goodwin, 2008). Children judge moral goodness to be a more stable
> dispositional trait than other personality traits, including intelligence (Heyman and
> Dweck, 1998, Haslam et al., 2004), and moral attributes are predominant in person
> perception (Skitka et al., 2005, Goodwin et al., 2014). Willingness to attribute moral
> change to the true self is contingent upon one's pre-existing moral beliefs (Knobe, 2005,
> Newman et al., 2014). Finally, the concept of the soul—by some counts a placeholder for
> the self at its very pith—carries with it strong moral connotations (Shweder et al., 1997,
> Bering, 2006, Richert and Harris, 2006). (Strohminger & Nichols, 2014, p. 161)

In their own research Strohminger and Nichols discovered that "moral traits— more than any

other mental faculty—are considered the most essential part of identity" (*Ibid*, p. 160). They also

found that memory, particularly autobiographical and emotional memory contributed

significantly to one's identity, though not as significantly as one's moral traits. Lower-level

cognition, perception, and physical traits contributed less to forming a person's identity beliefs

than one's memory or moral traits.

In contrast, Stephanie Chen et. al., conclude that,

> For judgments both of one's self and of others, we found that some features are perceived
> to be more causally central than others and that changes in such causally central features
> are believed to be more disruptive to identity and that the most central aspect of one's

identity is determined by that aspect's causal relationship to other parts of one's identity (Chen, Urminsky, & Bartels, 2016, p. 1).

For instance, in one of their experiments, Chen et. al. surveyed subjects by asking them what parts of their personal identity were caused by their aesthetic preferences. Some of the choices they were given were "degree of shyness," "personal wholesomeness," "level of loyalty," and "Cherished memory of time with parents/family." The parts of persons' identies that were perceived to be causally related to more of the other parts of their identity were seen to be the most central parts of their identity. Across their three experiments, the researchers discovered,

> People perceived more causally central features as being more necessary for continuity of identity, both for the self and for others…Furthermore, when we experimentally increased a feature's causal centrality[79], perceptions of the extent to which that feature defined identity also increased. (*Ibid*, p. 1404)

It is hard to draw too firm a conclusion about the causal nature of identity beliefs from Chen and colleagues' research, however. Their studies observed what persons *believed* the casual relationship between beliefs were. The difficulty is that person's beliefs about the causal structure of their beliefs could quite plausibly be wrong. I might think that my belief that I am intelligent was caused by my high school standardized testing when in reality, the belief was caused when my kindergarten teacher told me she thought I was smart. In future studies, it will be helpful to identify ways we might test persons' perception of belief causation with how belief causation actually works.

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[79] This manipulation occurred in the third of the three experiments. In this experiment, participants read vignettes describing "Jack" In the initial version of the story, four of Jack's identity features were related by a single common cause. "Jack's memories of being a lonely child caused his shyness, his preference for solitary activities, and his awkward demeanor...To manipulate whether a given feature was causally central or peripheral, we created two versions of each vignette. In the other version of the vignette, the position of two target features (shyness and memories) were flipped so that Jack's shyness caused his memories, preferences, and demeanor... Thus, the same features were counterbalanced to be either the causally central cause feature (memories in Version A and shyness in Version B) or the causally peripheral effect feature. This was done to control for any idiosyncratic influences of specific features" (Chen, Urminsky, & Bartels, 2016, p. 1402).

Even though there is not agreement on which beliefs are more central to one's identity, the research regarding emotional tagging, the place of moral traits in one's identity, and the research regarding one's perception of belief causation suggest that there are some beliefs, even among identity beliefs, that appear to be more central than other beliefs. By "more central" I mean that there are some identity beliefs that are more persistant and deeply entrenched, such that if there is a conflict between identity beliefs, the more central beliefs are more likely to be kept than non-central beliefs. To flesh this concept out, let us say I hold two identity beliefs, "I am a good person," and "I stole a candy bar from the grocery store." If my notion of "good person" includes the belief "good persons sometimes steal things that are of little consequence," the original two beliefs may not create tension and thus I might easily retain both beliefs. However, if my notion of "good person" includes the belief "good persons never steal things, even if they are of little consequence" I may find myself in a state of cognitive dissonance and wish to resolve the apparent contradiction. If my belief "I am a good person" is the more central belief, I will be more likely to keep that belief and reject or modify the belief "I stole a candy bar from the grocery store." I might modify the belief by changing my definition of stealing to only include items of a certain value (i.e., "stealing" only includes taking things that cost more than $10) or I might reject the belief that I stole something (i.e., I only borrowed it). If, I instead reject or modify the belief "I am a good person," the rejected/modified belief proves to be the less central (more peripheral) belief. In this way, more central beliefs are more persistent and influence which peripheral beliefs are formed or kept. Beliefs that are coherent with one's central beliefs will be more likely to be retained and beliefs that conflict with central beliefs are more likely to be rejected or modified. Thus, I understand one axis that determines a belief's centrality to be a belief's persistence. I understand belief *A* to be more central such that when belief *A*

comes into conflict with belief *B*, belief *A* will be retained and belief *B* will be modified or abandoned.

In addition to persistence, I understand the other axis of centrality to be causal. That is, a more central belief will be part of the process of forming a more peripheral belief.[80] For instance, I might hold the belief "the earth is warming." On reflection, I also form the belief "I need to conserve electricity" because I believe that conserving electricity will cause power plants to burn less fuel contributing less carbon dioxide to the atmosphere, thereby mitigating the warming of the earth. My belief "I need to conserve electricity" is caused, in part, because I have the belief "the earth is warming." In this way worldview beliefs tend to be more central than other beliefs because worldview beliefs are the interpretive framework through which one forms their beliefs about the world. My belief "all persons have inherent value" may contribute to forming the belief "that person has inherent value." If so, the worldview belief "all persons have inherent value" is more central than "that person has inherent value."[81]

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[80] See Figure 1.

[81] I suspect there is an interesting relationship between belief persistence and belief causality such that more persistent beliefs tend to be part of forming a greater number of other beliefs whereas less persistent beliefs tend to be part of the causal process of forming a lower number of beliefs. This is because one holds more persistent beliefs for a longer period of time. The longer one holds a belief, the more likely that belief will be used in the formation process of other beliefs. It would be interesting to verify whether this is the case empirically.
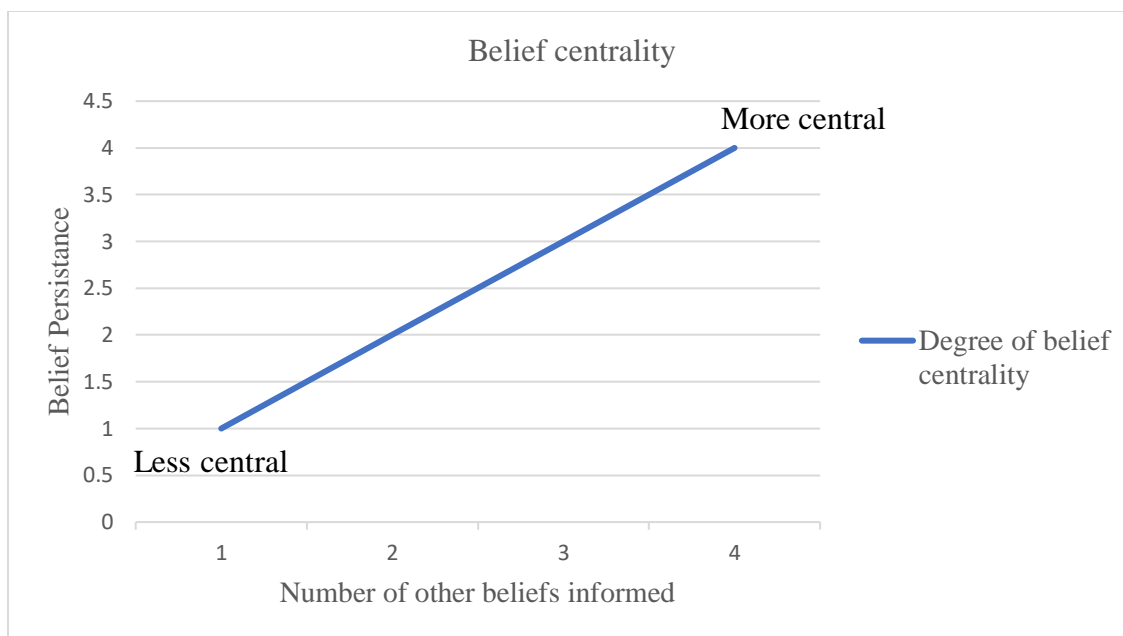
Figure 1

Even so, some worldview beliefs are more central than other worldview beliefs. I have

argued that some identity beliefs tend to be more central than some worldview beliefs (i.e., "I am

a good person" tends to be a more central belief than "the world is fundamentally just").

However, some identity beliefs will be more central than other identity beliefs. That is, some

identity beliefs tend to be more persistant than other identity beliefs and some identity beliefs

tend to be used in forming more beliefs than other identity beliefs. If some of our identity beliefs

are emotionally tagged, these emotionally tagged beliefs are likely to be more persistent than

identity beliefs that are not emotionally tagged. Thus, our identity beliefs formed on account of

our experience, particularly emotional experiences, will tend to be more central than identity

beliefs developed by deduction. If my belief "I am a father" was formed after a particularly

emotional labor, delivery, and NICU stay, "I am a father" will likely be a more central belief

than the belief "I am 37 years old" that was formed after calculating the difference between the

current date and my birthdate. This is because the emotional tag attached to "I am a father"

makes this belief more persistent. Furthermore, because emotion tends to draw one's attention, emotionally tagged beliefs will likely be used in forming more beliefs than non emotionally tagged beliefs because emotionally tagged beliefs tend to draw one's awareness more than non emotionally tagged beliefs. When one's awareness is drawn, one is more often aware of an emotionally tagged belief, and thus more likely to use this belief in the formation of other beliefs. Thus, it is likely that emotionally-tagged identity beliefs will be the most central kinds of beliefs that one has.

In addition, we may have identity beliefs that are also worldview beliefs. For instance, consider a belief like Karyn Freedman's "mythical" belief from section 4.2. "The world is basically fair so that as long as I am sufficiently careful, intelligent, moral, and competent, I can avoid significant harm" (2006, pp. 111-112). Freedman argued that this myth was shattered after she become the victim of rape. Not only was Freedman's belief a worldview belief in that she used it to interpret the world, it was also an identity belief because it was a belief about herself. The world is ordered justly *and* I am capable of avoiding harm by exhibiting certain attributes. Thus, some identity beliefs can also be worldview beliefs. In addition, Freedman's belief was quite likely emotionally tagged. She states that the evidence for her belief was "garnered from decades of safe living" (*Ibid*). Thus, her belief about the nature of the world and herself was formed at least in part from her experience. I believe emotionally tagged worldview identity beliefs (ETWIBs) are the most central beliefs we have.[82] It is ETWIBs that I believe are at the heart of trauma. When one's ETWIB is challenged by an event that both triggers a sufficient

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[82] See Figure 2.

emotional response and presents one with evidence conflicting with one's ETWIBs, one may experience trauma.

ETWIB illustration

Worldview beliefs

ETWIBs

Identity beliefs

Emotionally tagged beliefs
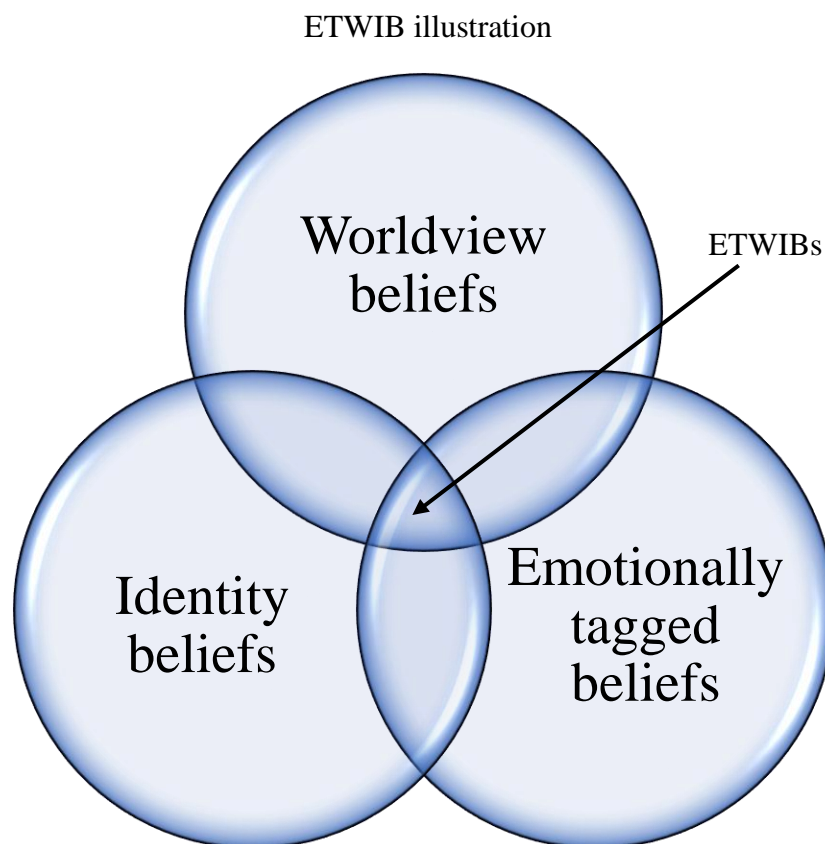
Figure 2

This notion of belief centrality may help to explain some of the subjectivity of trauma (i.e., why some people are traumatized by an event and others are not). Certain kinds of beliefs about oneself may be more central to one's identity while those kinds of beliefs might be less central to another's identity. For instance, a friend of mine might consider their racial identity to be a core part of who they are. That is, my friend's beliefs about their race may be persistent and used in the formation of many other beliefs. Their beliefs about their race inform their beliefs about their moral worth, their beliefs about their place in communities, and even ground beliefs

about the kind of person they want to become (their future self). Additionally, many of my friend's racial identity beliefs may be emotionally tagged.

On the other hand, perhaps my racial identity is less central to who I believe myself to be. My racial identity only influences how I believe I fit in *some* communities, has little to no bearing on how I view my moral worth, and does not influence the kind of person I want to become. However, for me, it is my religious identity that informs my beliefs about my moral worth, my beliefs about my place in most communities, and my beliefs about the kind of person I want to become. In addition, many of my religious identity beliefs are emotionally tagged. Thus, for me to change a belief about my racial identity would affect less of my overall identity and worldview than it would be for my friend. Moreover, I would have to overcome less emotion to change a belief about my racial identity. Similarly, my friend may be able to change beliefs about their religious identity with fairly little trouble, whereas I would find it quite difficult to do the same. My friend's racial belief may be an ETWIB for them while my religious belief may be an ETWIB for me. The difference in which identity beliefs are most causally central could partially explain why some people are traumatized by an event and others are not. Two people might experience the same event and the same counterevidence to identity beliefs but because the event challenges more central identity beliefs (ETWIBS) of one person and not the other, the first person is traumatized while the second person is psychologically affected, but not to the level of being traumatized.

Thus, I believe ETWIBs to be the most central beliefs because these beliefs tend to be the most persistent and these beliefs tend to inform the formation of other beliefs. They tend to be the most persistent because one's identity is what allows one to retain a sense of continuity from moment to moment and identity beliefs that are emotionally tagged are even more likely to

be used to form other beliefs because the emotion draws one's attention to the ETWIB.

Additionally, ETWIBs tend to inform many other beliefs because identities "organize people's perceptions of their traits, preferences, memories, experiences, and group memberships" as well as guide behavior (Talaifar & Swann, 2018, p. 1). Lastly, ETWIBs are formed because of one's emotional experience. Emotional tagging plausibly increases both a belief's persistence and increases the number of other beliefs informed by the tagged belief beyond the level of non-emotionally tagged worldview identity beliefs.

4.5 Identity and Compartmentalization

While one's identity beliefs constitute a significant part of one's self-understanding, memory appears to be important for constructing one's identity as well. "[E]pisodic memory has been of particular interest because it is thought to involve *re-experiencing* events from one's past, providing a person with content through which to construct a personal narrative" (Talaifar & Swann, 2018, p. 3). Episodic memory is the kind of memory that contains phenomenological content. This kind of memory is responsible for the autonoetic, or the "what it is like for me" feature of experiential memory. Episodic memory helps to shape our identities by shedding "light on the individual's traits or preferences and how he or she will or should act in the future" (*Ibid*).

To review, traumatic memories tend to encode as disorganized sense perceptions that are not well-organized within the overall web of one's understanding (one's worldview).[83] In this way it is plausible to think that trauma acts as a defense mechanism to protect one's identity by

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[83] See section 3.5 Trauma as a response.

quarantining a potentially dangerous[84] episodic memory from contaminating the rest of one's identity. Mary, who was molested as a child by her father, had strong reason not to have that experience influence her identity. She was supposed to be her father's child who was entrusted to his protection, but the repeated molestation events provided startling evidence that she was really involved in a quite different relationship with the person she thought of as her father, and thus she was quite a different person than she thought she was. This relationship was not one marked by him as her protector and her as one who needed protection. Instead, the events signalled that she was a person worthy of being violated by someone she depended upon. Thus, she dissociated her self because the conflict between her interpretation of the experience and her identity belief was so great. The trauma of the soldier who could no longer play with his kids because of his violent acts in war can also be explained in this way. This person had believed himself to be a loving father and his trauma acted as a defense mechanism to quarantine his episodic memory of killing other families during war. Of course, this trauma later had the result of degrading his relationship with his family, but in the moment of battle, it served to help protect an important part of his identity by keeping the violent child-killing episodic memory from being psychologically connected to his identity that included the other memories of being a loving father to his own children and from destroying his identity as a loving father.

The failure to integrate one's episodic memory with other memories psychologically associated with one's identity is related to the psychological phenomenon known as compartmentalization. "Compartmentalization is a defense mechanism in which people mentally separate conflicting thoughts, emotions, or experiences to avoid the discomfort of contradiction"

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[84] The episodic memory might be thought of as dangerous because it presents evidence that could cause one to experience significant cognitive dissonance and destabilize one's worldview.

(Psychology Today Staff). That is, compartmentalization refers to the process whereby one isolates some cognitions from other cognitions that would normally be psychologically associated with one another. The APA states that compartmentalization is "a defense mechanism in which thoughts and feelings that seem to conflict or to be incompatible are isolated from each other in separate and apparently impermeable psychic compartments" (Comparmentalization, 2022). Thus compartmentalization is a psychological attempt to prevent cognitive dissonance by preventing one from making psychological connections between conflicting or incompatible cognitions. For example, an ER nurse may treat a child who has been severely mauled by a dog. She associates this experience with her career as a nurse. However, when she goes home she plays with her own child and their dog and she does not associate the treatment of the child in the ER with her own child. Thus, her ER experience is not associated with her experience at home even though she is the one who has experienced both events and both events include a child and a dog. In this case I am arguing that compartmentalization is similar to dissociation in that compartmentalization hinders connecting some cognitions with others. However, dissociation is a kind of compartmentalization that hinders one from connecting one's experience to oneself whereas in some cases of compartmentalization one may connect one's experience with oneself but not connect the experience with other experiences that would normally be psychologically related. The discomfort associated with conflicting beliefs is cognitive dissonance. Because identity beliefs play such a prominent role in grounding one's worldview, they tend to be associated with more intense emotions. Thus, conflicting identity beliefs can result in much stronger emotional responses than more mundane conflicting beliefs. I might want to compartmentalize a memory I had of falling down while defending another player during an informal basketball game because I also coach an elementary basketball team. When I am

coaching I want to believe that I have great basketball skills but my previous experience

indicates otherwise. Thus, I compartmentalize my playing experience from my coaching

experience even though both instances contain my interaction with the game of basketball. Yet,

my skill as a basketball player is not as much a core belief as the former soldier's identity as a

loving father or of Mary as an innocent child. Because of this, and the fact that I do not interpret

the event as being horrific, I do not experience dissociation.

This compartmentalization has been observed specifically in the treatment of post-

traumatic stress.

> In the aftermath of a trauma, people sometimes hold conflicting ideas in their mind.
> Trauma, as well as addiction, can lead to a psychic architecture built of walls, closets, and
> closed doors, so that thoughts or experiences can be kept in different "rooms."
> (Psychology Today Staff)

The popular rap artist, NF, utilizes the metaphor of a house to explain how he compartmentalized

different experiences of childhood abuse. Referencing the memories of physical abuse he

suffered as a child, NF describes his psychological compartmentalization:

> Physically abused, now that's the room that I don't wanna be in
> That picture ain't blurry at all, I just don't wanna see it
> And these walls ain't blank, I just think I don't want to see 'em
> But why not? I'm in here, so I might as well read 'em…
>
> You used to put me in the corner, so you could see the fear in my eyes
> Then took me downstairs and beat me 'til I screamed and I cried
> Congratulations, you'll always have a room in my mind
> But I'ma [*sic*] keep the door shut and lock the lyrics inside. (Strahm & Feuerstein, 2015)

Here, NF describes the space in his mind that holds memories of the abuse he received as a child.

NF describes the writing on the walls of the rooms as song lyrics that are inspired by the

experiences in each room. The lyrics remind him of painful parts of his past and he is motivated

to keep the recollection of those memories out of his consciousness. His language explicitly

indicates that he does not want to recount these memories and instead wants to "keep the door shut and lock the lyrics inside." The room is a metaphor indicating that these memories are stored in such a way as they are isolated from other memories or experiences. This is because these memories are so emotionally painful that he is averse to bringing them into his awareness. Given that compartmentalization is a commonly observed mental phenomenon, I find it plausible to think of trauma as an extreme form of compartmentalization. One's emotional experience is isolated from the rest of one's cognition because of the experience's negative emotional valence and intensity, and because of how the experience confronts one's core identity beliefs. Thus, one's experience is psychologically quarantined from the parts of one's cognition responsible for associating one's experience with one's identity. Because one's experience is not associated with one's identity one cannot integrate one's experience among the set of cognitions associated with one's self.

Human psychology operates in such a way that we have a need for psychological coherence. I have already mentioned this need in discussing cognitive dissonance.[85] When we have two conflicting beliefs, we feel anxiety that motivates us to resolve the conflict. We are also motivated to develop coherence in the formation of our identities.

> [P]eople have a fundamental need for psychological coherence or the need for regularity, predictability, meaning, and control…Coherence is a [*sic*] distinct from consistency because it refers specifically to the consistency between a person's enduring self-views and the other aspects of their psychological universe…The coherence motive may be even more basic than the needs for communion and agency…That is, self-views serve as the lenses through which people perceive reality, and incoherence degrades the vision of reality that these lenses offer. When people feel that their self-knowledge base is incoherent, they may not know how to act. (Talaifar & Swann, 2018, p. 16)

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[85] See section **4.2 Trauma and Worldview**.

Thus, we find that there is a psychological cost for feeling an incoherence in one's identity. First, feeling incoherence in one's identity beliefs is a form of cognitive dissonance which results in anxiety. Second, our minds are structured in such a way that we are motivated to maintain consistency not only between different identity beliefs, but between our idenity as a whole and the rest of our psychology. When our self-understanding is incoherent it affects the way we view the rest of reality and it hinders us from acting. Thus, it is plausible to think that while we can tolerate feeling some level of identity incoherence there is a threshold at which identity incoherence is so great as to significantly alter one's view of reality and to incapacitate one's ability to act. Thus, trauma may be seen as an attempt to alleviate the negative emotion associated with a powerful form of cognitive dissonance. This coheres with one of the primary symptoms of PTSD, avoidance. A central symptom of PTSD is that persons go to great lengths to avoid any triggers associated with the initial traumatic event.[86] If trauma includes an experience of great cognitive dissonance it would explain what persons find too "overwhelming to bear." Particularly, the intense emotion is more than what one "can bear."[87]

4.6 Identity defense and preservation

Given the centrality of ETWIBs to one's psychological picture of reality, it is advantageous to protect these beliefs. If ETWIBs change they augment one's whole psychological picture of reality. Because these beliefs play such a prominent psychological role, emotionally tagging these beliefs adds a degree of stabilility to one's identity. That is, the set of one's identity beliefs are more likely to remain the same over time if they are emotionally

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[86] See section 2.1 Trauma and Stressor-Related Disorders.
[87] I will explore in greater depth what it means for someone to "bear" a traumatic experience. I will argue that when one is traumatized, they do not accept their experience. For more on the role of acceptance during trauma, see section 6.9 Belief and Acceptance.

tagged. Thus, it is psychologically advantageous to retain these identity beliefs unless changing one's beliefs brings about a greater psychological or survival advantage. This perhaps explains why persons typically experience psychological defense mechanisms protecting these beliefs from changing when presented with counterevidence.[88]

However, in the case of trauma, the usual defense mechanisms seem to remain unused. The reason one is unable to use normal defense mechanisms is because trauma occurs during a state of terror or horror. This state induces what has come to be known as "threat-confirming belief bias" (TCBB). TCBB is a member of a group psychological tendencies known as belief biases. "Belief bias is the tendency in syllogistic reasoning to rely on prior beliefs rather than to fully obey logical principles" (Ding, et al., 2020). When one experiences a belief bias, the information that one finds to be believable does not necessarily track what one deduces from evidence. Instead, one is motivated to believe evidence that conforms to a particular bias. TCBB is triggered by one's fear emotion. TCBB is a belief bias where one tends to favor threat-confirming beliefs and eschew safety confirming beliefs. "When considering the validity of danger rules[89], people tend to look for confirmatory evidence, whereas they look for disconfirming information in case of safety rules" (de Jong & Vroling, 2014, p. 38). Thus, people are much more inclined to form beliefs confirming they are in danger than to form beliefs confirming they are safe when experiencing fear. During trauma, the danger belief caused by the traumatic event is precisely the belief that conflicts with one's ETWIB. In the veteran's case, his

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[88] It is not clear whether a belief must be emotionally tagged when formed or whether an existing belief can later become emotionally tagged. For instance, it could be possible that one originally forms an identity belief as the result of non-emotional reflection and deliberation. It may be possible for this belief to later become emotionally tagged after it has been reinforced a certain number of times (i.e., one's feeling of confidence in the veracity of the belief raises over time). Whether this is the case would be an interesting question for future empirical research to investigate.

[89] A danger rule is described as an interpretation of danger signals. "'If there is a certain signal, then there is danger' (danger rule) and 'If there is a certain signal, then there is no danger' (safety rule)" (*Ibid*, p. 26).

killing a village of women and children presented him with unignorable[90] evidence motivating him to abandon his worldview belief, "I am a loving father." Yet, because of one's TCBB one is pressed to form and accept a belief about the event which is happening to them. Thus, one cannot employ the usual cognitive defense mechanisms to shield their "almost impossible to change" identity belief from the contradictory belief being presented during trauma. Thus, there are two opposing highly emotionally tagged beliefs, "I am a loving father" and "I am a hateful man," vying for one's acceptance. "I am a loving father" resists change because it has been emotionally tagged from past experiences the veteran had with his children. "I am a hateful man" is emotionally tagged because he came to form this belief based on his emotion during his attack. The conflict generates intense affect and threatens one's ability to accept the interpretation of their experience and to create the psychological associations one would normally create with one's experience (i.e., connections with one's identity, connections with other like experiences). No wonder survivors assert that their emotional experience is too overwhelming to bear. The anxiety of the cognitive dissonance experienced during trauma is much greater than a more common case of cognitive dissonance because the emotional intensity attached to each opposing belief is much greater.

Thus, we might think loosely of trauma as a condition where an unstoppable force meets an immovable object. Something has to give. One is compelled to both retain an ETWIB and

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[90] I need to clarify what I mean by "unignorable." It may appear that dissociation is precisely the process of one "ignoring" the evidence. When I assert that one is presented with "unignorable evidence" I mean to indicate that one's TCBB draws one's attention to the evidence one's traumatic event presents thereby undermining one usual response to worldview threat, ignoring the counterevidence to one's core belief. If one ignored the evidence, trauma would not ensue because the counterevidence is at least part of what triggers trauma and not being aware of the trigger means that one would not be traumatized. One dissociates oneself precisely because one is aware of the evidence presented by the traumatic event. Thus, I understand "ignoring" in this context to mean "intentionally not making oneself aware" of the evidence. Some people talk about witnessing an event so terrible (e.g., a train wreck) that they could not look away. I believe TCBB causes something like this to happen.

reject it. To protect one's psyche, then, trauma disallows the emotional experience (which presents counterevidence motivating one to abandon a core belief(s)) from being accepted and assimilated into one's unified psychological view of reality. Given the affective intensity attached to both beliefs, accepting both beliefs may result in a cognitive dissonance so profound it results in a state of anxiety with which one cannot cope. Disallowing the psychological integration of the emotional experience protects one from having their psychological interpretive framework from being shattered. Thus, traumatic dissociation protects one's worldview architecture by keeping the traumatic event disassociated from the rest of one's identity preserving one's identity stability so they are still able to continue make sense of reality in the wake of a traumatic event. This explains why even though traumatic experience is still stored in memory, it is not stored or organized like other memories. Because one dissociates oneself from one's traumatic experience, one's traumatic experience is not linked to one's unified psychological picture of reality. Furthermore, it explains why one is unable to regulate their emotion when the emotional experience intrudes into their present consciousness. The traumatic experience has not been assimilated into one's psychological picture of reality (because the experience has been disassociated with oneself) and thus, one is prohibited from evaluating it against other beliefs or attitudes that one holds.[91] So while the normal connection between one's identity and one's experience is not made, the connection between one's emotions and one's physiological response remains intact so that when one's emotional experience is recalled, their autonomic functions replicate the initial traumatic experience (e.g., one experiences elevated heartrate and adrenal secretion during a flashback).

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[91] For more on how one's values are thought to be able to help regulate emotion, see section 5.12 Plato and the Rule of Reason.

Yet, it is not just a non-affective belief generated from counterevidence to one's worldview that fails to be assimilated. Importantly, one's emotion attached to the traumatic event also fails to be associated with oneself. Thus, recovering from trauma is not just a matter of changing beliefs. To integrate the new belief generated from trauma, one also has to associate the intensely tagged emotion with oneself. Van der Kolk hints at this belief/emotion integration when he writes, "What is critical is that the patients themselves learn to tolerate feeling what they feel and knowing what they know" (van der Kolk, 2014, p. 127). Even after Marilyn comes to recognize that her rape is no longer in the present, she still has to cope with the emotion she, herself, experienced during the traumatic event. When one recalls a traumatic event, one recalls the emotion from the event in addition to one's interpretation of the event. The emotion one felt is what is thought to be "too overwhelming to bear." Thus, any recall of a traumatic event in which one reexperiences their traumatic emotion is a difficult experience with which to cope because even after being able to associate the experience with oneself, one must still experience the emotion. Recognizing that I felt a particular emotion does not diminish the intensity or undesirability of that emotion.

4.7 Worldview and PTSD

The model I am proposing is an attempt at explaining what causes initial instances of trauma (i.e., the initial emotional response to a perceived terrible or horrific event which includes cognitive/emotional dissociation). While my view pertains primarily to trauma and not traumatic effects, I find it an upshot of my view that it is consonant with a family of theories of PTSD known as "worldview theories" or the "cognitive perspective." This set of theories appears to be the most popular kind of theory attempting to explain PTSD. "The fundamental assertion of worldview-based models of posttraumatic stress disorder is that trauma symptoms result when

traumatic experiences cannot be readily assimilated into previously held worldviews" (Edmonson, et al., 2011, p. 23). It is important to note that worldview-based explanations are not empirically definitive, but I believe it is suggestive that my model of the causal mechanism for trauma is broadly consistant with these theories. In the future other non-worldview or non-cognitive based theories may better explain PTSD. In light of those theories, my view may need to be revised. It is doubtful, however, that any such new view will overturn work on emotional tagging, cognitive dissonance, or threat confirming belief-bias. Given that my model is primarily based on these phenomena I believe the basic structure to be on solid footing.

Worldview based theories affirm the kind of perspective Freedman described earlier. The "shattered worldviews" theory is one example of such an explanation. Put forward by Ronnie Jannoff-Bulman this theory argues that we all "develop fundamental, yet unarticulated, assumptions about the world and themselves (i.e., worldviews) that allow for healthy human functioning" (*Ibid*, p. 2). When one experiences an event that damages this worldview it results in a state of terrifying helplessness and despair. This feeling is then responsible for the physiological response associated with trauma.

Another worldview-based explanation invokes terror management theory (TMT) According to TMT all organisms experience death but humans are unique in that they can anticipate and thus dread death.

> To assuage the potentially paralyzing terror engendered by this knowledge, humans embed themselves in cultural worldviews: humanly constructed beliefs shared by individuals in groups that provide a sense of meaning and significance and promises of symbolic and literal immortality to those who adhere to the standards of value prescribed by their culture. (Terror Management Theory, 2008, p. 327)

Often, these beliefs are not conciously affirmed but remain in the subconcious. Terror management theory has significant empirical support.[92] Thus, TMT is used to explain trauma by arguing that an event violates one's worldview so significantly that they cannot rely on their worldview as a proximate defense mechanism. Proximate defenses occur immediately after an overt reminder of death and suppress death thoughts immediately. "A compromised worldview fails to provide proximal defense. That is, after an overt reminder of their own mortality, individuals with a compromised worldview experience increased [death thought accessibility] immediately" (Edmonson, et al., 2011, p. 3).

Janoff-Bulman and TMT tend to be some of the more influential theories, but they are only a few examples of the worldview explanation family of theories.[93] What these theories have in common is that they all invoke the violation of fundamental worldview beliefs to explain PTSD symptomology. "Although differing in particulars, many of these theories share the notion that traumatic events violate individuals' global belief systems (worldviews) resulting in damaged or negative beliefs that contribute to the experience and maintenance of post-traumatic stress disorder (PTSD) symptomatology" (Park, Mills, & Edmonson, 2012, p. 2). In addition, "Although theories of PTSD have emerged from diverse backgrounds (e.g., psychodynamic, biological, behavioral, cognitive), to date, the cognitive theories appear to be the most compelling in terms of face validity, research generation, predictive ability, treatment development, and treatment success" (*Ibid*). Thus, models of PTSD that explain PTSD in terms of violated worldview beliefs are on solid footing empirically.

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[92] The International Handbook of the Social Sciences asserts that there are over 200 experiments which support TMT (2008, p. 327). Edmonson et. al. state, "A large body of research has demonstrated that when individuals are reminded of their personal mortality…they rely on worldviews as a psychological defense" (2011, p. 3). For a meta-analysis of TMT related studies see (Burke, Martens, & Faucher, 2010).
[93] For more examples of worldview-based explanations of PTSD see (Park, Mills, & Edmonson, 2012).

4.8 Worldview and emotional numbing

So far I have attempted to explain trauma conditions where the normal relationship between one's worldview, specifically one's identity, and emotional experience is sacrificed to maintain one's psychological integrity. Emotional numbing, though, appears to present a slightly different situation. Emotional numbing occurs when someone ceases to feel any kind of emotion during a traumatic event. If one becomes emotionally numb then it appears that one cannot be overwhelmed in the way I have described. When one is emotionally numb, it may appear they do not have sufficiently intense emotions to generate the kind of dissonance I have argued trauma requires.

Yet, it is difficult to explain how one's fight or flight response is generated apart from feeling an emotion of fear or horror. After all, it is the judgment associated with these emotions that kicks off the body's physiological stress response. Because trauma is grounded in the stress response there must be an emotion associated with trauma, even in the case of numbing. If there is no feeling of terror or horror, there is no stress response. If there is no stress response, there is no emotional numbing. Yet, one's numbness can still appear to be one's traumatic response instead of an intense emotion like terror.

Thinking about trauma as an emotional response caused by the confrontation of evidence that threatens the integrity of one's psychological view of reality helps to explain how people might experience trauma but not develop PTSD. The US Department of Veteran Affairs (VA) states, "Going through trauma is not rare. About 6 of every 10 men (or 60%) and 5 of every 10 women (or 50%) experience at least one trauma in their lives" (PTSD: National Center for PTSD, n.d.). Although high percentages of people experience "trauma," only six percent of the population will go on to develop PTSD. It is important to note the VA's definition of trauma is

much different than the one I argued for at the beginning of this project. They use trauma to describe a certain class of intense events whereas my definition describes a class of emotional responses. According to the VA a traumatic event is a "shocking and dangerous event that you see or that happens to you." However, the VA's statistics do make it plausible to think that one could be traumatized (i.e., experience the emotional response I have described), and not develop PTSD.

Importantly, one cannot be technically diagnosed with PTSD unless they have had symptoms for at least one month (Post-Traumatic Stress Disorder). Thus, it is possible for one to have an initial response that includes the dissociation between one's identity and emotional experience and yet later be able to resolve this disruption without a diagnosis. One might later be able to alter their worldview[94] so as to accommodate the new belief initiated by their emotional experience. If one responds to trauma in this way, this does not necessarily mean that emotion of the trauma will subside immediately. Rather, they have begun restoring the harmony between their worldview framework and emotional experience. This harmony can be established with strong emotion insofar as an emotion is not stronger than what the person will "bear." Another way one might later respond is that they might be able to mitigate their emotion enough that it is not so forceful that one might accept the emotionally tagged belief. Thus, to resolve trauma, one must accept both the traumatic emotion and belief because these two cognitions are psychologically linked. Often, therapists seek to flesh out one's traumatic experience in a safe environment where a survivor knows they are safe. This safety awareness may serve to diminish

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[94] I have intentionally used the concept "worldview" here as opposed to identity. This is because one might be able to resolve one's trauma through a reinterpretation of the event. A reinterpretation of the event could require one to change beliefs not associated with one's identity. However, I have also argued that some identity beliefs are also worldview beliefs so that if one changed their identity beliefs to resolve their trauma, this could still be considered a change of worldview.

one's affective experience enough to begin repairing the relationship between one's worldview

and emotional experience. If one is able to reflect on their experience when in a safe

environment they may be able to begin restoring the normal psychologial harmony[95] between

one's identity and their experience. Of course there are many times when survivors must seek the

help of trained professionals to learn how to recover from trauma. I believe it will be helpful to

turn to examining these therapeutic approaches in light of the paradigm I am attempting to

establish. If the paradigm I have been describing is accurate it will be able to accomodate

successful therapeutic practices. Furthermore, my view may help inform the values and goals of

trauma therapy.

4.9 Therapy and the worldview paradigm

Some contemporary approaches to trauma therapy seem to recognize the need to address

both one's traumatic belief and one's traumatic emotion. Most prominent among PTSD

treatments is trauma focused cognitive behaviorial therapy (TF-CBT). Given the evidential

support of its efficacy for children and adolescents, TF-CBT has been called the "gold-standard"

of adolescent trauma treatments (Trauma-Focused Cognitive Behavioral Therapy (TF-CBT))

(Thomas, Puente-Duran, Mutschler, & Monson, 2020)[96]. TF-CBT is a type of cognitive

behaviorial therapy (CBT) that is adapted to account for elements specific to trauma. CBT

recognizes that certain beliefs can elicit strong emotions. That is why CBT "session[s] typically

blend content and process issues to help clients make effective changes in their attitudes, beliefs,

and expectations" (Overholser, 2011). At its core TF-CBT, like the more generic CBT, attempts

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[95] In Chapter 5: Constructing a Virtue Inspired Paradigm," I will further explore the notion of psychological harmony by exploring and modifying Plato's tripartite account of the just soul.

[96] I use TF-CBT as an example that lends support to my account of trauma as a concept, not to demonstrate TF-CBT's efficacy in all cases of resolving trauma nor to advocate that "talk therapy" is always best treatment for PTSD.

to address psychological problems by changing thought and behaviorial patterns so that persons

can better cope with their trauma. Thus, a prominent part of TF-CBT involves cognitive

processing skills. In practice with children, the therapist directs

> the child and parent to understand the relationship between thoughts, emotions and
> behaviors, just like in CBT. Then the child and parent learn how to replace negative
> thoughts with thoughts that are helpful and more accurate. The therapist does not focus
> on the trauma experience with the child but works around it by focusing on other aspects
> of life. (Watson)

For instance, Emma Jane Watson tells a story of Sam who was a child that went through TF-

CBT. He and his mother were stabbed by his mother's former boyfriend who was later

incarcerated. Even though the ex-boyfriend was safely behind bars, the child struggled with

angry and aggressive behavior toward his peers. As part of the therapy, Sam uncovered and

examined relevant beliefs he had formed.

> Slowly, Sam uncovered his fears, and was able to talk about them. During the process,
> the therapist helped Sam change his thinking from, "I was a bad kid, and it was all my
> fault that mom got hurt," to "It was the boyfriend who hurt my mom. I was just a little
> kid in a bad situation. It made me scared and sad that I couldn't help her." (*Ibid*)

Thus, we find that a major component of TF-CBT implies that certain thoughts or

thought-patterns are responsible for eliciting emotions. A plausible explanation for Sam's

behavior was that he was terrified of being forced into another traumatic situation. Thus, we find

that Sam's belief about his culpability elicited emotions like fear and anger. Moreover, his

perceived culpability likely informed his identity, which I have argued can also be intertwined

with his worldview. In turn, these emotions directed his behavior toward his peers. He was afraid

of being forced into another traumatic situation. Thus, part of Sam's therapy consisted of

teaching him to form and adopt beliefs better conformed with reality that do not elicit emotions

like anger and fear, or beliefs that elicit these emotions to a lesser degree so these emotions are not overwhelming.

James Overholser argues that collaborative empiricism, guided discovery, and the Socratic method are central strategies for therapists in implementing CBT. Each of these strategies target one's belief (and attitude) structure in a different way. In collaborative empiricism, the therapist helps clients examine the evidence underlying salient beliefs.

> Collaborative empiricism can be used to help clients learn to identify problematic attitudes and devise a means to test the validity of these thoughts. Through a mixture of logical discussion and behavioral experiments, collaborative empiricism helps clients learn to examine the evidence supporting or refuting different beliefs" (2011, p. 63).

In guided discovery, the therapist skillfully uses questions to help his client cultivate "adaptive attitudes" (p. 63). These questions require clients to exercise their reasoning capacity to explore, learn and solve various life problems. Lastly, the therapist uses guided discovery implementing the Socratic method to help the client discover contradictions among her beliefs[97].

One might be tempted to think that the relationship between thoughts and emotions is equilateral and that neither one's worldview nor one's emotions have priority. After all, a change in feelings affects one's way of thinking (Tyng, Amin, Saad, & Malik, 2017). However, we must not forget that engaging in any kind of voluntary therapy requires one to act deliberately. This means that one must utilize their reasoning processes in deciding whether to seek professional mental health help. Deciding to undergo practices designed to face "one's fears instead of avoiding them," or "learning to calm one's mind and relax one's body" (What Is Cognitive

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[97] Interestingly, Overholser argues that part of the Socratic method, as he develops it here, is Socrates' disavowal of knowledge. He argues that this admitted ignorance is important for the therapist in treating his client. That is, the therapist functions more like a facilitator than an expert. Ultimately, the client is the expert of her own mind and her life, and the therapist is there to help prod and direct her to discover her own solutions. In this way the therapist is to seek to know what the trauma was like from the client's perspective.

Behaviorial Therapy?, 2017) assumes that one has made a decision that is at least partially a result of deliberation. Moreover, deliberating whether to seek therapy requires one to be aware of one's own goals. One's own goals are grounded in one's worldview and identity. Perhaps more to the point, this therapy requires participants to "reconceptualize" their trauma. Thus, CBT focuses on reintegrating one's traumatic experience into their whole life narrative.

It is important to admit that CBT is not the only treatment for trauma. Eye movement desensitization and reprocessing (EMDR) and neurofeedback have more recently developed. Unlike CBT, these therapies do not primarily to equip survivors to develop a new understanding of trauma. Instead, they attempt to help people cope with the emotional phenomenology of posttraumatic stress. In EMDR, participants are instructed to think about one aspect of their trauma while following an object as it moves through their field of vision. In this case one must use their rational faculties to recall a part of their trauma and follow the instruction of the therapist. The goal of this therapy is to "enhance information processing" so that "associations with new adaptive memories or information" can be made (What is EMDR?). Similarly, neurofeedback rewards participants for producing positive brain wave states. To produce these states, participants are required to concentrate, aim at a desired goal, and try to think in a certain way. Thus, both EMDR and neurofeedback seek to link new cognitions or cognitive patterns to one's traumatic affect.

However, while EMDR and neurofeedback target one's tolerance of an emotional experience, they do not appear to account for the belief one has formed as a result of one's emotional experience. Furthermore, EMDR and neurofeedback do not appear to facilitate an individual modifying their worldview or their interpretation of a traumatic event so as to integrate their experience into their unified psychological picture of the world. Tacitly, then, all

three of these therapies assume that one's reasoning capacity can be used to shape the emotions

in ways that allow persons to better cope with the world and ostensibly live a better life. But only

TF-CBT includes one attempting to grapple with the belief conflict I believe to be at the heart of

trauma.

Given the role one's reasoning processes play in shaping one's emotional experience one

might be tempted to think that one's reasoning processes can be used to unilaterally control one's

emotional processes. Recent research indicates this paradigm is not really the case, however.

Emotions affect reasoning in beneficial ways as well.

> When emotions provide accurate information (when they are elicited by an external event
> and are proportional to the importance of the event), attending to emotion (emotional
> awareness) increases the accuracy of beliefs and promotes adaptation. When beliefs or
> emotions (or both) are not adaptive (e.g., self-deprecating beliefs, exaggerated emotions),
> emotional awareness is associated with increased distress. (Blanchette, Does emotion
> affect reasoning? Yes, in multiple ways, 2014, p. 6)

> In a related kind of case, emotions sometimes provide motivation to reason.

> Emotion provides information about the importance of the situation in relation to a
> person's well-being or goals. This information might be used strategically to alter the
> amount of cognitive resources devoted to the reasoning task, or the time spent on it.
> (Blanchette, Does emotion affect reasoning? Yes, in multiple ways, 2014, p. 12).

In contexts where emotions signal a situation bears a great deal on one's well-being or goals,

more neurological resources may be devoted to reasoning ostensibly providing for a more robust

reasoning process (i.e., one spends more time calculating whether they can jump over a ravine

than whether they can jump over a puddle). In cases where one's well-being or goals do not seem

to be at stake, emotion signals less resources for a reasoning task (i.e., avoiding tripping over a curb while walking utilizes less resources than estimating whether to run across a busy street).[98]

For this reason, we ought to think of an outcome of traumatic recovery not as the tyrannical mastery of an emotional response. The tyrannical mastery approach might sound like the following: If I can somehow muster the willpower to play with my children despite immense shame or if I can somehow manage to walk along the water's edge despite almost crippling affect (fear) I have resolved my trauma. In many cases these examples would be a step in the right direction. Being able to do acts which one previously could not do despite a near-crippling emotional response is surely no small feat and is often a hard one. However, on my view, trauma fundamentally stems from dissonance between one's self-concept and one's emotional experience. If this is an accurate reflection of trauma, therapy must also seek to address the underlying belief conflict in addition to being able to tolerate one's traumatic affect. I do not know whether it is possible in all cases for one to come to the place where they can accommodate their experience within their self-concept and pragmatically there may be many cases where tolerating one's traumatic affect is the best that can be accomplished. However, not to acknowledge the role beliefs, and more broadly reasoning processes, play in trauma and how they might be treated in recovery, ignores developing treatments to account for the whole phenomenon of trauma on both one's affect and one's reasoning about the world.

Instead, it might be helpful to think about recovery as a reestablishment of a balanced relationship between one's identity and one's traumatic experience that includes both one's traumatic belief and one's traumatic emotion. Thus, recovery could aim at helping persons

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[98] Note this is a different process from how emotions affect one's reasoning when decisions must be made quickly. When someone's fight or flight response is activated, one's emotions draw one's attention to potential dangers, but the emotions motivate quick efficient thought processes and not necessary more laborious deliberative processes.

integrate their trauma into their narrative so that persons can properly guide and direct the interpretation of their emotional experience in a way they can accept.[99] By reestablishing a relationship between one's identity and one's experience, I do not mean to suggest that the goal of post-traumatic recovery should be a return to the psychological state a person exhibited before their trauma. In many cases this kind of recovery may not be possible and in others it may not be desirable. For example, let us imagine that Marilyn, who was assaulted as a child, later becomes an outspoken advocate of child abuse victims. Let us also stipulate that she takes great pride in her work and derives sense of personal pride from her advocacy so much so that being an abuse victim advocate consitutes part of her self-identity. Her decision to advocate was heavily influenced by her own trauma as a child and the ongoing suffering she experienced as a result. In this case, it is unlikely that Marilyn would want to go back to the identical psychological condition she experienced before her trauma.

This example helps to clarify the outcome I am describing. Marilyn's present experience may not be devoid of extreme emotion. She may still feel fear when alone in a room with men or she may still experience sudden, intense anger. However, she has come to understand that her emotional responses are the ongoing legacy of her trauma. She is able to recognize her emotional experience and associate it with her self-concept. In situations that are obviously safe, Marilyn may still feel fear in the presence of men, but she is able to understand that her fear is a result of her trauma and not the indication of an unsafe situation. Moreover, Marilyn directs her emotional response to motivate her toward accomplishing goals that align with her life project. Thus, Marilyn's recovery is not necessarily marked by an absence of strong emotion. Instead, it is marked by an integration between her experience and identity. She interprets the traumatic event

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[99] I will say more about acceptance in section 6.9 Belief and Acceptance.

in such a way that her identity as an abuse victim motivates her to advocate on behalf of other victims.[100]

Yet, we need not expect all trauma survivors to become public advocates. Public advocacy may be contrary to one's life project regardless of whether they are a trauma survivor. What we should work toward is the reestablishment of the link between one's identity and one's experience, where possible. Establishing the link between one's identity and one's traumatic experience will require at least two conditions. First, one's traumatic experience will need to be accessible to one's reasoning faculties. "People cannot put traumatic events behind until they are able to acknowledge what has happened and start to recognize the invisible demons they're struggling with" (van der Kolk, 2014, p. 220).[101] Yet, the way in which traumatic experiences are encoded into memory makes it difficult for people to even access the memory of their experience.

> Memory processing depends on the creation of associations, all part of encoding, storage, and retrieval. To be successfully retrieved, episodic memories must be encoded in a temporal context and stored with salient cues that will reliably trigger retrieval. Traumatic experiences have predictable effects on this process. They are typically sudden, create discontinuities with prior experience, involve arousal of intense affect (including fear, anger, and sadness), and may create conflicting patterns of association (e.g., a parent previously viewed as loving and protective is seen in this context as sexually abusive or a threat to life… Thus, the encoding of traumatic experiences tends to be distinct from that of more ordinary events, and the associated implications of such memories for one's view of oneself (safe, worthwhile, and loved versus in danger, worthless, and hated) can create, especially in children, conflicting networks of information. Just as in depression information is selectively retrieved that tends to perpetuate the dysphoria (I am worthless, disliked, incapable) despite the presence of memories that would contradict this self-evaluation, an inconsistent and at times terrifying environment may create selective networks of association that preclude a more balanced view of the world (sometimes dangerous, sometimes safe) or of the self (good versus deserving of punishment).

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[100] I use the term "victim" instead of "survivor" here because it is not clear that "survivor" is an identity belief that one has during a traumatic experience. Survivor seems like the kind of belief one develops on reflection of their experience.

[101] In context, Van der Kolk's expression "put traumatic events behind" seems to mean that one has found a way to cope with their traumatic experience.

(Spiegel, 2012, p. 566)

Here we find that when normal memories are encoded, they are associated with other cognitions so that they can be readily retrieved later. However, trauma disrupts the normal association processes. First, given that the recollection of traumatic memories are most often recalled involuntarily or not able to be recalled at all and that when traumatic memories are recalled persons believe the traumatic event to be happening in the present, we can conclude that there is something about trauma that disrupts the normal cognitive assocations in the memory encoding process, particularly the association with one's sense of time and whatever other cognitive associations that allow for voluntary memory retrieval. Second, if I am right that a traumatic event presents one with evidence conflicting with one's ETWIBs, this explains why traumatic memories are encoded as chaotic sensory perceptions. One's mind does not associate one's experience with consistent beliefs about oneself. The disruption may be exacerbated by further conflicting beliefs (i.e.,"a parent previously viewed as loving and protective is seen in this context as sexually abusive or a threat to life" (*Ibid*)). Thus, other parts of one's traumatic memory may be associated with conflicting non-identity beliefs. I agree that one's traumatic experience may include conflicting beliefs that are not properly identity beliefs, but I do not think it is plausible for trauma to occur without conflicting identity beliefs. This is because conflicting beliefs about oneself explain why one would dissociate oneself from one's experience but conflicting non-identity beliefs do not. Dissociation mitigates the cognitive dissonance between identity beliefs because one's set of identity beliefs is what is dissociated from the new traumatic identity belief. It is difficult to see how the dissociation of one's identity beliefs would mitigate cognitive dissonance brought on by conflicting non-identity beliefs. Thus, I believe conflicting identity beliefs to be a necessary condition for the occurance of trauma. Conflicting

non-identity beliefs may exacerbate the disruption in memory encoding, but they do not cause trauma. Thus, it will be advantageous to discover ways persons can recall traumatic memories so they can reflect on the traumatic event and discover ways it will be possible for them to tolerate associating their identities with the traumatic experience.

Advocating for the recall of traumatic memory is complicated by the second condition for establishing a link between one's identity and one's traumatic experience, finding a way for one to tolerate the intense traumatic emotion which is what the trauma survivor found to be intolerable ("too overwhelming to bear") in the first place. Consider flashbacks. In these cases a person experiences their initial trauma all over again as if the initial traumatic event is happening in the present. Without recognizing that one's traumatic emotion is what was originally intolerable, we might think that exposure therapy is always the right kind of therapy because it forces one's trauma to the surface so they might be able to reflect on it. Yet, "reliving trauma reactivates the brain's alarm system and knocks out critical brain areas necessary for integrating the past, making it likely that patients will relive rather than resolve the trauma" (van der Kolk, 2014, p. 222). Thus, one must be able to first tolerate one's traumatic emotion before one can reflect on one's traumatic experience. Thus, while certain therapies like EMDR and neurofeedback may not directly address one's traumatic belief, they may be critical first steps to allow one to begin to tolerate their traumatic emotion so that they might then begin reflecting on their experience and link it to their self-concept.

4.10 Conclusion

In this chapter I have attempted to understand the causal mechanisms which lead to trauma. Namely, I have argued that trauma is caused when one is exposed to an event that triggers one's stress response and where one's experience presents one with unignorable

evidence that conflicts with one's ETWIBs. Because ETWIBs form such a core part of one's psychology, this conflict threatens to collapse one's interpretive framework of the world. Thus, there are adaptive reasons for one to have trauma, namely to protect one's psychology.

Yet, trauma is generally not thought to contribute to a flourishing life. What I mean is that I am not aware of anyone who seriously prescribes that persons experience trauma so they can live a better life. Most often, persons who experience trauma have more difficulty living their lives. For example, trauma survivors often must deal with managing posttraumatic anxiety, debilitating physiological symptoms, and flashbacks. In the next chapter I will attempt to construct a paradigm of flourishing inspired by both Plato and Aristotle. I believe this paradgim will be useful in elucidating specific ways trauma, and not just traumatic effects, undermines human flourishing.

Chapter 5: Constructing a Virtue Inspired Paradigm

5.1 Introduction

Now that I have argued for a psychological framework to explain trauma, I would like to shift gears and begin to develop a philosophical framework to think about flourishing. This model of flourishing will focus on both psychological and social concerns. To do this, I will begin with the concepts of a just soul in Plato and human function in Aristotle. I will argue that a modified Platonic paradigm indicates that a person who is psychologically flourishing will experience intra-psychic harmony. In addition, this psychic harmony is necessary to fulfill proper human function, specifically the function of relating well to others.

I will not attempt to argue for the best interpretation of Plato or Aristotle. Instead, I will use their frameworks as a jumping off point with which to develop a virtue-inspired paradigm for flourishing.[102] At the end of this chapter, I will briefly suggest the way in which my philosophical paradigm offers a lens through which to view the psychological portrait of trauma I have developed so far. Using the synthesis of my philosophical and psychological arguments, I will attempt to show how trauma inhibits flourishing in greater detail in chapter six.

5.2 The tripartite soul

For both conceptual and historical reasons, I think it will be helpful to begin our evaluation of trauma with Plato's view of the soul. Before we begin, I think it important to

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[102] To clarify, I have stated I will be developing a "virtue-inspired" paradigm. I do not mean that I will necessarily be discussing specific virtues or moral traits at length. Instead, I am attempting to utilize conceptual resources that have been traditionally associated with virtue ethics. For example, Plato's development of the just soul in the *Republic* occurs within a broader context where Plato argues that the just soul (or the virtuous soul) is a necessary condition for acting justly (*c.f.*, 588b-592b). In addition, Aristotle understood the virtuous life to be one in which one fulfilled one's proper human function.

clarify a few things. First, I will be following Plato in using the term "soul," but I do not mean to imply his ontology of the soul. That is, whether the "soul" exists as a separate substance apart from the body is a question about which I will remain neutral. I use the word "soul" because terms like "mind" or "consciousness" do not account for the conceptual breadth of the Platonic framework I think applies to trauma (cf. Lorenz, 2009, 3.2).[103] Second, while I think there is interesting convergence between the platonic soul and modern neurology, I do not mean to insist that neurological distinctions and platonic distinctions must map onto each other perfectly. In fact, I will spend a respectable amount of space attempting to modify Plato's account in light of current psychological and neurological research. Rather, I want to use Plato's framework to think about the relationships between different aspects of the soul. Thus, I will utilize Plato's tripartite soul as a jumping off point for analyzing trauma, but I will not argue that Plato's view is the correct view of the soul.

Plato presents a tripartite model of the soul in both the *Phaedrus* and *The Republic*. In the *Phaedrus* Plato offers an illustration of a charioteer who is in command of a chariot drawn by two winged horses (246a).[104] One horse is "beautiful and good" and the other "has the opposite sort of bloodline." This latter, badly behaved horse is the one that tends back toward physical reality and pulls the soul away from perfect knowledge of universal Forms. Thus, Plato conceived of the soul as consisting of a ruling element, an element naturally inclined toward good, and another element that is wild and is drawn to behave independantly. If one is to attain the kind of wisdom Plato believes is paramount for human flourishing, the elements of one's soul must be operating in harmony. On Plato's analogy, the best condition for an embodied person is

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[103] Similarly, I will use the phrase "psychic harmony" to describe a state in which the elements of the soul are in a balanced state. I have decided to use this phrase because it is inspired by the Greek world for soul (or life), *psyche*.
[104] I am using A. Nehamas' and P. Woodruff's translation of the *Phaedrus*.

when the soul's winged horses are both pulling in the same direction as the charioteer is leading. A soul whose consitituent elements do not function harmoniously is one that is pulled in a number of different directions and thus is unable to reach the kind of wisdom Plato believes is essential for full human flourishing.

In the *Republic* Plato more fully develops the nature of this three-part soul. In the *Phaedrus* Plato presents the chariot analogy as a concise way of describing what the soul is like so that he might describe the soul's proper activity. He does not spend much time identifying or arguing for the soul's tripartite structure, though.

In contrast, his presentation of the soul in the *Republic* begins with arguments seeking to establish that the soul does indeed have three elements and also to establish the nature of each of these elements. Plato's argument for the tripartite structure of the soul is grounded in observations about opposites.

> It is obvious that the same thing will not be willing to do or undergo opposites in the same part of itself, in relation to the same thing, at the same time. So, if we ever find this happening in the soul, we'll know that we aren't dealing with one thing but many. (436b)

Thus, if we can identify instances where the soul wants to do something and does not want to do something, we should be able to ground these opposing motivations in distinct parts of the soul.[105] For instance, a man may be thirsty, yet refuse to drink. Thus, it appears that the man is being pulled in two different directions. He is being pulled to both drink and not to drink. One way to highlight Plato's point is to consider the traditional observation of Ramadan in Islam.

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[105] Plato stubbornly refuses to elaborate as to what kinds of "things" reason, spirit, and appetite are. "Evidently Plato thinks he has proved that there are more than one something or other in the soul. But more than one what? That is the difficulty. He never tells us satisfactorily *what* there are more than one of in the soul; and he does not know" (Robinson R. , 1971, p. 44). For the sake of simplicity, I will refer to the tripartite divisions as elements or parts. Later, I will define these as non-affective cognitive, affective cognitive, and affective non-cognitive processes.

During this month, Muslims are not supposed to eat or drink during the daylight hours. At sunset, the fast is broken by the *iftar* meal and Muslims are permitted to eat and drink for as long as the sun is down. Ramadan is meant to encourage spiritual discipline because it is difficult to deny oneself food and drink. Hence, fasting during Ramadan highlights Plato's point that we might desire something (drink) and yet refuse to fulfill that desire. According to Plato this shows there are at least two distinguishing elements of the soul. "[T]he one with which a man reasons, we may call the rational principle of the soul' the other, with which he loves, and hungers, and thirsts, and feels the flutterings of other desire may be termed the…appetitive" (439d). The rational part of the soul is the one which understands the concept of Ramadan and its associated practices, values the practice of Ramadan, and wants to act in accordance with this practice. The opposing element which generates a sense of thirst is tied to physical sensation. The appetites are the sensations in the soul that are connected to physiological drives like thirst, hunger, and reproduction.

Assuming that something cannot "do or undergo opposites" may seem like a problematic way to begin an argument. After all, when their children become adults and move away from home, many parents report they feel both sad and happy for their children. An archer both pushes and pulls a bow when attempting to launch an arrow (Plato, Republic, 2004, 439b). However, Plato attempts to narrow his argument by explaining that opposite things cannot do or undergo opposites "in regard to the same thing." Thus, he argues that we should say the archer pulls with one hand and pushes with the other. Yet his clarification does not seem to solve the problem. The archer may use one hand to push the bow and one hand to pull the bow but it is still the same archer who both pushes and pulls in regard to the bow. Likewise, parents of adult children may feel happy and sad for different reasons (happy for their children's future but sad because of their

absence), but it is still the same agents who feel opposites in regard to their children. Richard Robinson argues that this shows Plato's soul elements cannot be agents. "Plato's psychic entitites cannot be real agents, any more than boxes printed on paper can be real officers. There is only one agent, the man" (1971, p. 47). However, Robinson points out that Plato's use of the dative case might make some think that Plato was attempting to characterize the divisions of the soul as tools.[106] This cannot be right, though, because the elements cannot be empirical either. Robinson argues that while one could observe something like another person using a hammer and directly observe when that person hammers the nail home, this cannot be done with the soul. This is because an observer cannot independently perceive the soul in a way analogous to observing someone hammering in a nail.

> The psychologist is absolutely correct in saying "You did that with your Id, or with your Reason, or whatever," because he means nothing by "Id," "Reason," etc., except the imaginary tool that does precisely that kind of thing. Whereas zoology divides into two, the anatomy which tells us what there *is* in the body, and the physiology which tells us what *happens* in the body, psychology can have no anatomy of the soul but only a physiology of it. (*Ibid*)

I agree with Robinson that it would be mistaken to characterize the parts of the soul as agents because the soul *en toto* is the one who acts. However, I think Plato's argument still has merit. First, his opposites argument identifies opposing motivational forces that are common to most, if not all, people. The Muslim who fasts during Ramadan experiences the tension between her beliefs and her appetites. Fasting is observed precisely because of this motivational tension.

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[106] Specifically, Robinson quotes Republic 436a. "That is…we learn with one, we get angry with another of the <things> in us." The English word "with" signals Plato's use of the Greek instrumental dative noun case. (Robinson R. , 1971, p. 46). Plato does not use a noun to refer to the divisions within the soul but instead seems to be content with the substantival use of an adjective. A more literal translation of Plato would read, "we learn with a different [one], and we become angry with another [one] in us, and with a third [one] we desire." Note that Robinson supplied the word "things" and I have supplied the word "one" to make a meaningful sentence in English. There is no word in place of "things" or "one" in the original Greek. Instead, the adjectives "different," "another," and "third" are in the dative case possibly indicating that some "thing" is being used as an instrument with which to learn, become angry, and desire.

Thus, the motivational forces are perceived, and thus are real in some sense.[107] In this way, we might think that psychic motivational forces are empirical because they are indirectly observable. One can report the kind of psychic influences they are experiencing. Second, I believe there is empirical psychological and neurological evidence to divide these psychic motivational forces along lines similar to what Plato has drawn. I will begin discussing this empirical evidence in the next section.

5.3 Reason

Plato begins his quest for identifying the composition of the soul by developing an argument from opposites. Socrates asserts,

> The same thing clearly cannot act or be acted upon in the same part or in relation to the same thing at the same time, in contrary ways; and therefore whenever this contradiction occurs in things apparently the same, we know that they are really not the same, but different" (Plato, Republic, 2004, 436b).

Thus, if there are opposing movements within the soul, there must be more than one constituent element of the soul. Socrates goes on to give an example of a man who is thirsty but refuses to drink. In other words, one experiences both a movement toward drinking and a movement toward abstaining. Socrates argues that this demonstrates there to be at least two elements in the soul.

> Would you not say that there was something in the soul bidding a man to drink, and something else forbidding him, which is other and stronger than the priniple which bids him?... And the forbidding principle is derived from reason, and that which bids and attracts proceeds from passion and disease?

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[107] One might argue that some things we perceive are not real, like mirages. However, it may be the case that someone may be thinking they see something that really isn't there, they are still having some sort of visual experience. Thus, the mirage is at least a visual experience in the mind. Similarly, one can perceive oneself being pulled to act in contradictory ways.

In this way Plato argues that there are at least two parts of the soul, *reason* and *appetite*. In this section I will focus on *reason* and in section 5.6 I will say a few things about *appetite*. Plato seems to assume in his example that the reason the thirsty man does not drink is because he has deliberated and decided to not drink for some reason. Thus, there some part of the soul that is responsible for thinking, namely *reason*.[108] Simply defined, on Plato's view *reason* is that part of the soul responsible for reasoning. Since I have introduced Plato's distinction between *reason[109]* and appetites, I would like to explore how Plato defines both *reason* and appetites. While doing this, I will make a case for modifying Plato's distinctions in light of neurological and psychological evidence. After defining the appetites, I will return to Plato's opposites argument and how he uses another example of opposites to identify the third part of the soul, spirit.

Plato understands *reason* to be the ruling part of the soul because it is the part of the soul that is "wise" (Republic, 2004, 441e). *Reason* is wise because it has the the capacity to reason which is necessary to become wise. But *reason* has another important teleological function in Plato's view. *Reason* is what compels humans upward to become godlike in their knowledge of the forms. Similar to Diotima's speech in *The Symposium* extoling how bodily beauty draws one to ultimately find the form of the Beautiful (210a-210c), in the *Republic* Plato argues that knowledge of the corporeal ought to draw one to contemplate the incorporeal realm of the Forms. In Book VII of the *Republic* Socrates explains that the geometrical study of solid objects prepares one to study abstract geometry and abstract geometry motivates one to study astronomy, which is a contemplation of the heavens and draws one further to the realm of the Forms. Socrates states, "Then I said, in astronomy, as in geometry, we should employ problems, and let

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[108] It is interesting that Plato's thirst example foreshadows his later arguments about *reason* ruling the soul. In the thirst example, the man does not drink because his reasoning prevails over his physiological urge.

[109] From here forward, I will use italics to denote *reason* as the platonic division of the soul. This is to disambiguate the term from the more general noun and verb uses of reason.

the heavens alone if we would approach the subject in the right way and so make the natural gift

of reason to be of any real use" (530c). In this passage Socrates believes that one who engages in

a proper course of study will be drawn up from the knowledge of the particular and mundane to

knowledge of the universal and heavenly. Note, Socrates asserts that in order for the gift of

reason[110] to be "of any real use" one must ascend to knowledge of the highest things. Thus,

reason's proper end is to engage in reasoning, eventuating in contemplation of the Forms..

Moreover, *reason's* excellence, like anything else is found in how well it approaches its

end,

> First, it seems that the capacity to form true beliefs about sensible reality, so far as this is possible, is taken to be constitutive of the excellence of the rational soul, alongside the possession of *nous*. Second, the alignment of our rational soul is brought about in the first instance through the contemplation of the intrinsic rational order of the cosmos. (Jorgenson, 2018, pp. 84-85)

Thus, we can flesh out a few characteristics of Plato's *reason*. First, *reason* is the part of the soul

responsible for belief formation. Not only does *reason* form beliefs, but *reason* retains beliefs.

Second, *reason* incorporates *nous* or intelligence. This means that *reason* has the ability to think

and to understand. This is why *reason* is ultimately responsible for contemplating the Forms. The

Forms are abstract universals that are only perceived by the intellect.

To summarize, I find it appropriate to think that *reason* is the part of the soul that has the

capacity to reason. To think about Plato's analysis in modern terms, I think it might be helpful to

think of *reason* as that part of the soul responsible for "reasoning processes." Using this

terminology may help us to avoid ambiguities of whether Plato conceives of *reason* as inherently

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[110] I understand this use of "reason" to be referring to rational ability and not necessarily the part of the soul.

agential or whether this terminology is merely metaphorical.[111] *Reason* seems to include the

mental processes we normally associate with rational thinking. For example, Plato believes that

reason thinks, contemplates, and understands. While *reason* may be able to perceive what Plato

referred to as "Forms," I would like to avoid importing Plato's ontology of the Forms.[112] I will

leave the question of whether such Forms exist an open question, but I do think Plato's overall

picture of the *telos* of *reason* to be essentially correct. When *reason* (or one's reasoning

processes) is functioning well, it is capable of abstracting general metaphysical principles from

concrete particulars. For instance, I might be a biologist and contemplating how we might

categorize a newly discovered species. Thus, I observe the characteristics of this particular

organism: it has wings, feathers, eyes, and a bill. Because certain other animal species also have

these attributes, I come to the conclusion that I have discovered a new species of duck. *Reason*

has allowed me to isolate physical features, make a judgment as to what features are salient,

compare these characteristics with other known species, and make a judgement on how to best

categorize the new organism. This process occurs whether or not there is an actual duck Form.

Thus, determining how well *reason* abstracts is one way of evaluating whether *reason* is

fulfilling its proper function.[113] This is true of other reasoning processes like thinking,

understanding, and contemplating. The better *reason* is able to accomplish these functions, the

more excellently *reason* is functioning.

Simply put, Plato's *reason* is the part of the soul responsible for reasoning. *Reason* is the

kind of thing that can generate knowledge and recognize truth. However, *reason* is also the kind

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[111] For instance, in Book IX of *Republic*, it is not immediately clear whether *reason* must be agential in order to make *spirit* its ally and to cultivate the gentler appetites and suppress the coarser appetites (589a).

[112] I do not mean to be making the claim that Plato's Forms do not exist. Instead, I want to leave it an open question as to whether one must agree with Plato's ontology of Forms.

[113] I will discuss proper function of individual psychic elements more in section 5.7 Sub-psychic ends.

of thing that can provide direction. That is, *reason* is the part of the soul with the capacity for understanding (specifically understanding the proper *telos* of things) and planning (being able to formulate a strategy for achieving ends). In effect, *reason* is the part of the soul that enables one to be intentional. *Reason* is,

> concerned to guide and regulate the life that it is, or anyhow should be, in charge of, ideally in a way that is informed by wisdom and that takes into consideration the concerns both of each of the three parts separately and of the soul as a whole…these concerns must be supposed to include a person's bodily needs, presumably *via* the concerns of appetite (Lorenz, 2009).

Reason includes the capacity to understand the proper ends of each of the elements of the soul and the capacity to deliberate and develop a plan for achieving the proper ends of both the consituent parts of the soul and the soul as a unified entity. Thus, *reason* is responsible for recognizing and taking care of the needs of not only itself, but also of *spirit* and *appetite*.[114] To be able to do this, *reason* must have the capacity to know and understand what different elements need and how to fulfill these needs. *Reason*, then is the kind of thing that has the capacity for understanding and making plans. *Reason* also must be able to be imaginative to think of worlds in which the needs of the members of the soul are met. When we look at *reason's* capacities and responsibilities, it becomes apparent why Plato thought *reason's* proper place is to be the ruler of the soul. It is the only element which has the capacities to seek the good of the other elements. In addition, it is the only element which has the capacity to guide those elements toward their fulfilments.

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[114] For instance, Socrates argues that the wise man will seek to rule his soul in such a way that the elements of the soul are neither unnecessarily deprived nor unnecessarily provided for. Thus, he will foster a just condition of the soul that will lead to just behavior. "He will look at the city which is within him, and take heed no disorder occur in it, such as might arise either from superfluity or from want; and upon this principle he will regulate his property and gain or spend according to his means" (Republic, 2004, 591e).

Roughly speaking, I believe that *reason*, as a part of the soul, corresponds to that part of the psyche responsible for much of our cognition. This is because *reason* has the capacity for understanding and deliberation which are both cognitive processes. *Reason* is also responsible for considering alternatives and judging which alternative would be best to follow. This is how *reason* is supposed to guide the soul. *Reason* has the capacity to understand the proper ends of the individual elements of the soul as well as the soul *en toto* and to deliberate by considering the different possible ways to go about fulfilling those ends and judges the best way for one to achieve the fulfillment of those ends. The APA defines cognition as "all forms of knowing and awareness, such as perceiving, conceiving, remembering, reasoning, judging, imagining, and problem solving" (American Psychological Association, 2020). Thus, *reason* is fundamentally cognitive because its proper end is to think, to come to know, and to contemplate. The capacities to understand, deliberate, and plan distinguish *reason* from the appetites which do not have these cognitive abilities. Later, I will argue that the third part of the soul, *spirit*, is also cognitive, so it will be helpful for me to delineate *reason* in a more precise way. On Plato's original view, *reason* is presented as being without affect. That is, *reason* is not something that is "felt."[115] Rather, *reason* is responsible for directing the other parts of the soul associated with affects like *spirit* and appetites. Thus, I will define *reason* as that part of the soul responsible for non-affective cognitive processes like understanding, deliberation, and planning. I also understand *reason* to be responsible for the formation of beliefs that are used in understanding, deliberation, and planning. This is because beliefs are the kinds of things that can be utilized in reasoning processes whereas affects are not.[116] I believe some cognitive processes are straightforwardly

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[115] This is not necessarily to say that *reason* cannot be motivating.

[116] This does not mean affect never *influences* rational processes. I will explain ways emotions influence reasoning processes in section **5.11 Virtuous relationships**. However, I believe it is the judgment part of emotions that

non-affective. What I mean, is that there are many cognitive processes that can be distinguished from any affective state. Furthermore, one might be able to associate one reasoning process with a number of different affective states. What we think of as reasoning, or calculation, might be thought of in this way. My mental process that occurs when I attempt to solve a complex math problem is distinct from the way I feel while doing the problem. For example, I might imagine a Pythagorean triangle.[117] As I envision the polygon, I do not evoke a certain feeling, I simply picture the figure in my imagination. Cognitive non-affective processes are thought to be produced in the frontal lobes of our brains, or the neocortex. "The frontal lobes are responsible for the qualities that make us unique within the animal kingdom. They enable us to use language and abstract thought. They give us our ability to absorb and integrate vast amounts of informationa and attach meaning to it" (van der Kolk, 2014, p. 57).

Other cognitive processes might be harder to attribute to *reason*. Taking imagination as an example again, I might imagine that I get to meet my childhood hero. As I am imagining, I begin to feel giddy. Yet, in this example we can conceptually distinguish between the act of imagining and the emotion produced by the imagining. Thus, the act of imagining produces the emotion of giddiness. In addition, the limbic system, not the neocortex, is thought to be the "seat of the emotions" (van der Kolk, 2014, p. 57).[118] I will later discuss ways in which one's

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provide information with which to reason. In addition, the role affect plays when attached to beliefs is to bring attention to a belief or to make a belief more persistent. It is the belief itself, though, that is used in deliberation. For more on emotionally tagged beliefs see section **4.3 The psychology of worldviews**.

[117] i.e., a right triangle whose sides form a Pythagorean triplet ($a^2 + b^2 = c^2$)

[118] Experiments where lab animals' cortical regions have been removed and studies on children who are missing the cortex because of congenital conditions show that "core emotions" (i.e., fear, anger) persist in mammals (including humans) even when the cortex is absent. "Clearly, our primary-process emotions and their powerful affective messages are deeply embedded in our mammalian brains. Humans and other mammals still experience these emotions without a neocortex, and the subcortical regions are organized in an evolutionary hierarchy of importance" (Davis & Montag, 2019, p. 4). However, while emotions do not seem to be generated by neocortical systems, emotion-producing neural systems are highly interconnected with neocortical systems (The Relationship between Neocortex and Amygdala, 2001).

reasoning can elicit and shape emotions and how emotions can inform rational processes[119]. For now, it is enough to establish that there are conceptual and neurological reasons for distinguishing *reason* from other parts of the soul. I have argued that the mental processes Plato attributes to *reason* are best characterized as non-affective cognitive processes. Therefore, *reason* is the part of the soul responsible for non-affective cognitive processes. What I mean by "non-affective cognitive processes" are those psychological processes of which affect is not a necessary constituent feature. For instance, I do not need to have some kind of feeling to conceivably deliberate about which route to take to a friend's house. However, affect is a constituent feature of emotions. We cannot conceive of anger without including reference to a certain affect because part of what it means to be angry just is to feel a certain way. The rational processes are thought to be generated in the neocortical region of the brain. When I refer to reasoning as an act, I will refer to the activity performed by these non-affective cognitive processes.

5.4 *Reason* and memory

Another cognitive process which poses a challenge to delineating *reason* is remembering.[120] Remembering does not appear to be a uniquely reasoning process, though remembering does utilize reasoning. To highlight why categorizing remembering as only a process of reasoning is problematic consider the difference between semantic and episodic memory. The semantic/episodic distinction was first proposed by Endel Tulving (Tulving &

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[119] For this discussion see 5.14 From Plato to the present." Note that in the current section I have offered a conceptual distinction between non-affective rational processes and other kinds of neurological processes. This is not to assume that non-affective rational processes always (or ever) occur in isolation from other kinds of cognitive processes. In fact, I will later argue that one utilizes one's worldview to reason about one's emotions and experiences (see section 5.14).

[120] It is controversial whether memory and imagining constitute separate processes. For a defense of memory as an imaginative reconstruction process see chapter 6 in (Michaelian, 2016). I mean to distinguish imagining from remembering by defining remembering as having cognitive contact with the past.

Donaldson, 1972). Researchers still observe this distinction, though the understanding of the

characteristics and mechanisms behind semantic and episodic memory have evolved. "Perceptual

characteristics of stimuli are stored in episodic memory (and thus episodic memory would be a

'more or less faithful record of personal experience' whereas semantic memory encodes

'cognitive referents of input signals'" (Renoult & Rugg, 2020, p. 2). Simply put, episodic

memory is primarily memory about one's own experiences and contains autobiographical

content. "I climbed that tree" or "I felt the wind in my hair" would be examples of recalling

episodic memory. Semantic memory, on the other hand, is closer to remembering "that."

Semantic memory is generally associated with classroom learning. For instance, I might

remember that George Washington was the first president of the United States or the first

Chevrolet Corvette was manufactured for the 1953 model year.

While it might not be accurate to attribute memory to only one part of the soul, or one

kind of psychological process (i.e., reasoning), I think it is helpful to think that remembering as a

general concept is a process that requires both reasoning and emotional processes (and possibly

the appetites, or fundamental biological processes[121]). If we understand remembering as

something like "recalling or reconstructing the past," it is possible for the past to be recalled or

reconstructed in different ways. One might remember non-affective details about the past. In the

case of many traumatic memories, one might only remember particular feelings or affects.

Lastly, one might remember both non-affective and affective cognitive content. Thus, memory as

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[121] Emerging research suggests past psychological trauma may be responsible for some autoimmune disorders. For examples of these studies see (Bookwalter, et al., 2020) (Macarenco, Opariuc-Dan, & Catalin, 2021) (Yavne Y. , Amital, Watad, Tiosano, & Amital, 2018). It is thought that these autoimmune disorders are caused, at least in part, by the body's overactive stress response. The body continues to react in ways it reacted during an initial trauma.

generally conceived does not seem to be a product of a single class of psychological processes
(e.g., reasoning, emotional).

5.5 Spirit

In addition to these two elements (*reason* and *appetite*), Plato argues for a third element.
He tells the story of Leontius who observed dead bodies at an execution site (Republic, 2004,
439e). Simultaneously, Leontius desired to see the dead bodies and was also repulsed by the
sight. He had a visceral desire to look on the dead bodies, but he was outraged at their sight. To
borrow a modern idiom, sometimes people describe similar situations by saying that that
watching is like "looking at a train wreck. You just can't look away." One is both intensely
drawn to the sight and repulsed by it at the same time. According to Plato, this shows that there
are two distinct parts of the soul. Thus, Plato identifies the three parts of the soul as *reason* (the
ruling element), *spirit*, and *appetite*.[122]

Apart from Plato's argument, we might distinguish between something like *spirit* and
appetites by examining the neurological correlates for the psychological phenomena Plato
delineates for each part of the soul. In section 3.6 Defining the emotional response, I briefly
explained the neurobiological tripartite brain model. In short, those psychological processes we
would associate with rationality like deliberation, generally correspond to activity in the neo-

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[122] Plato's Leontius example appears to be problematic as a way of delineating parts of the soul because Plato
assumes that one part of the soul cannot have opposite desires (Republic, 2004, 439e-440e). Thus, when Leontius
desires both to look at the dead body and look away from the dead body, Plato argues that this shows there are two
distinct parts of the soul. However, on Plato's own view, this seems to present difficulties. Namely, the appetitive
soul has multiple competing desires. For instance, perhaps I like the taste of hot wings, but I do not like how spicy
they are. Thus, I have ostensible appetites pulling me in different directions. I want to eat the hot wings for the taste
but do not want to eat them because of their spiciness. These kinds of possibilities seem to cohere with Plato's
picture of the appetites as a multi-headed chimera (Republic, 2004, 688c). While I think Plato's argument for
identifying *spirit* is questionable, I believe him to be on the right track in his conclusion that *spirit* (or as I will
argue, emotions) are a distinct part of one's psyche.

cortex (frontal, parietal, occipital, and temporal lobes), emotional processes generally correspond to activity in the limbic system, and more base-level physiological urges correspond with activity in the brain stem. In addition, we might conceptually distinguish emotions from appetites by acknowledging that whereas emotions contain a judgment, appetites do not. When I become angry because my favorite sports team loses, my anger is in part a judgment about my team losing. In contrast, feeling hungry requires no such judgment. Rather, my hunger is generated from a lack of nourishment. Thus, we might think that appetites, unlike emotions, are directly generated by a lack of, or perceived lack of, some physiological fulfillment. It is certainly possible that I experience an emotion about an appetite. For instance, if I am trying to lose weight, I might become hungry because I am limiting my calorie intake, but I might also feel frustration because I am hungry. I am frustrated because my hunger makes it difficult to continue my diet. In this case, though, my emotion is not directly caused by a lack of physiological need. Rather, my hunger (appetite) is generated from a lack of food and my frustration (emotion) is a judgment about my hunger.

Plato terms the third part of the soul *spirit* (*thumos*). His concept is notoriously hard to pin down. The way Plato uses *thumos* in *The Republic* does not appear to include all emotions, but instead a certain subset of them. Plato's *thumos* is a particular kind of *pathos*. "Plato's treatment of *thumos* is focused more specifically on the political emotions (honor, anger, moral indignation, shame, guilt, and disgust) that are especially heightened during times of war when individuals, and sometimes polities themselves come face to face with their own demise" (Tarnopolsky, 2015).

Even though Plato's use of *spirit* tends to include only political emotions, I want to argue that Plato's paradigm still provides a useful sketch if we expand his notion of the second part of

the soul to include non-political emotions as well. Specifically, I will argue that non-political

emotions can fulfill the role of *thumos* in the just soul. Christina Tarnopolsky argues that *The*

Republic is, at least in part, a discussion about how "outlooks are formed and changed and what

consitutes a good outlook" (2015, p. 247). She argues that Socrates' method for countering the

outlook of his interlocutors changes from Book I to Book II.

> While the talk therapy of Socrates in Book 1 involved countering *muthoi* with *logoi*, the
> new Platonic Socrates of Books 2 through 10 claims to be a Socrates who is greedy for
> images (Rep. 6.488a) and who offers some of the most famous myths, stories, and images
> "of our entire philosophical tradition" (Craig 2003, 270). (*Ibid*)

The telling of myths is thus meant to compliment Socrates' rational arguments in Book I.

Socrates myth-telling is meant to engage the *thumos* of his interlocutors. Tarnopolsky concludes

that in the just soul, the role of *thumos* is to serve and harmonize with reason. In some sense

then, *thumos* vivifies the objects of reason. "For Plato, *thumos* is the part of the soul by which

human beings take to heart those vivid stories, inventions, and worldviews that then ground and

limit their possibilities for rationally strategic action" (Tarnopolsky, 2015, p. 247). It thus

becomes apparent that *thumos* can beneficially relate to reason in at least two ways. First, *thumos*

vivifies the conclusions reached by reason. One not only believes it right to be patriotic, one feels

patriotic too. Second, *thumos* reinforces the beliefs derived from reason. When *thumos*

harmonizes with reason, not only do people hear stories and believe their content, they adopt the

lessons and principles at a deeper level than mere intellectual assent. They "take them to heart."

Third, when *thumos* harmonizes with reason we are more motivated to act in accordance with

our beliefs. This limits the amount of possibilities we consider for action.[123]

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[123]Ostensibly, the reason the number of possibilities we consider for action diminishes when *thumos* and *reason* are
in harmony is because emotions draw one's attention to only those beliefs that are relevant to one's reasoning

I want to argue that non-political emotions can function in the same way. Consider the following example. I might reason that it is wrong for a parent to physically abuse a child because parents have a responsibility to raise their children into well-functioning adults and support their development to that end. Abuse accomplishes the opposite. However, if I am watching a movie where a child is being abused, my conclusion gains a phenomenal element as I experience emotions like sadness or pity.[124] (1) I not only believe that child abuse is wrong, I feel anger toward the abuser or pity for the child. (2) Anger or pity reinforce my belief that the child has been wronged by making the belief more persistent and thus make the belief that child abuse is wrong more persistent. (3) The pity or anger attached to my belief that child abuse is wrong motivates me to help the child who is being abused. I might want to step in and try stop the abuse from happening or I might be motivated to help the child recover. One might argue that given this is a fictional scene from a movie, I might not be moved to do these things because I know what I am watching is not real and my actions are impossible. However, I still believe it to be the case that I am moved in the direction of those actions. The fact that my motivation for helping the abused child is diminshed because of my awareness that the movie is fiction may be a case of my reasoning reigning in my emotions.[125] I reason that the movie is fiction and not real case of child abuse. Thus, the child I see in the movie is not really being abused and does not need to be rescued.

These observations seem to be in line with the way Plato treats emotions more generally.

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process. When *thumos* and *reason* are out of sync, one's emotions draw one's attention to non-relevant beliefs. For more on how emotions influence reasoning processes see section **5.14 From Plato to the present**.

[124] i.e., my beliefs a about child abuse become emotionally tagged.

[125] I will discuss the emotions' influence on rational processes more fully in section 5.14 From Plato to the present.

If emotions form a class in Plato, it is perhaps in their being a desire that may become potentially moral, just, and means for reason to rule over one's life.[126] And maybe that's why the emotions are always embodied in characters: manipulating the emotions, Plato's paideia works for a transformation of the way of living" (Candiotto & Renaut, 2020, p. 6).

Laura Candiotto and Olivier Renaut argue that Plato's interest in emotions is not about emotions themselves. Instead, when Plato discusses emotions, it usually seems to occur in contexts where one's emotions either motivate one toward virtuous acts or away from virtuous acts. "It may be argued that, at some point, Plato is much more interested in emotions being potentially 'moral emotions' or 'auxiliaries' than in emotions *per se*" (*Ibid*). Thus, Plato's focus on emotions in the dialogues is part of his pedagogical strategy to teach his readers about how they might become virtuous. One might argue that this is precisely the reason why Plato discusses *thumos* in the *Republic*. The overarching project of Plato in the *Republic* is give an account of the nature of justice and why justice is both an instrumental good and an intrinsic good.[127] The role of *thumos* ought to be directed toward virtuous behavior, although *thumos* must be trained to do so. "[T]he notion of θυμός [thumos] has emerged in the platonic studies as being a central feature to educate emotions and to give them a proper value, bearing in mind that their power is ambivalent and possibly dangerous" (*Ibid*). On Plato's account, then, emotions can be trained to compliment the exercise of reason by motivating persons to act in ways that are consonant with reason. The virtuous person's behavior is a product of this harmonious relationship between *reason* and emotions.

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[126] The authors seem to have in mind a Humean picture. That is, reason can "rule" the soul because it has recruited *thumos* to motivate one to act in ways that are consonant with the conclusions of one's reason. I will discuss Plato and Hume more in section **5.13 Motivating the soul**.

[127] For example, see the end of Book I where Socrates offers a summary of his discussion (354a-c). Also, see Glaucon's pressing Socrates for an argument to support Socrates' assertion that justice is an inherent good at the beginning of Book II. Glaucon's challenge motivates the rest of Socrates' response in the *Republic*.

Before moving on I think it will be helpful to make explicit an assumption I am making about the nature of emotions. Contemporary theorists are divided between cognitive and non-cognitive theories of emotion. Essentially, what primarily distinguishes cognitive theories from non-cognitive theories is whether a judgment is part of the emotion or whether it is separate. For this project I will assume a cognitive theory of emotion. "A principle of [cognitive] approaches is that an emotion is a judgment of value…for instance, that a particular event is important, that it is pleasant to be with a certain person, or that a specific concern is urgent" (Oately & Johnson-Laird, 2014). I find this approach fits best within the general platonic sketch of the soul and I believe it fits well with trauma as an emotional response. First, Plato's *thumos* can be directed and shaped by *reason*. If emotion does not contain a judgment, it is difficult to see how this could be. Second, trauma is an emotional response that includes a judgment about an event. However, this judgment occurs much quicker than the kind of deliberative rational processes Plato associates with *reason*.[128] Third, trauma judgments occur neurologically independently of

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[128] The kinds of mental processes Plato associates with *reason* like deliberation and deduction seem to be processes that are performed by the prefrontal cortex. However, when one's stress response is triggered, one's judgment is thought to be produced by the amygdala instead of the prefrontal cortex. This stress response judgment is quicker and less thorough than the deliberative processes correlated with activity in the neocortex. "Ordinarily the executive capacities of the prefrontal cortex enable people to observe what is going on, predict what will happen if they take a certain action, and make a conscious choice… When that system breaks down, we become like conditioned animals: The moment we detect danger we automatically go into fight-or-flight mode… Neuroimaging studies of human beings in highly emotional states reveal that intense fear, sadness, and anger all increase the activation of subcortical brain regions involved in emotions and significantly reduce the activity in various areas in the frontal lobe, particularly the [medial prefrontal cortex]" (van der Kolk, 2014, pp. 62-63).

other kinds of cognitive processes.[129] The neural pathways by which trauma is initiated bypass

the prefrontal cortex. Instead, the stress response is initiated in the amygdala.[130]

Emotions are not purely cognitive, however. Unlike the products of reason, emotions are

felt, that is emotions have affect. I feel sad, or angry, or happy. I don't feel the square root of 64

is eight.[131] Furthermore, emotions are responsible for changes in physiology. Specifically,

emotions cause changes in the visceral motor system that controls smooth muscle, cardiac

muscle, and glandular activity.

> The most obvious signs of emotional arousal involve changes in the activity of the
> visceral motor (autonomic) system…Thus, increases or decreases in heart rate, cutaneous
> blood flow (blushing or turning pale), piloerection [body hair standing on end], sweating,
> and gastrointestinal motility can all accompany various emotions… In summary, emotion
> and motor behavior are inextricably linked. (Physiological Changes Associated with
> Emotion, 2001)

If we assume emotions to fulfill the role of *thumos*, we find that emotions can serve as a

kind of mediator between *reason* and *appetite*. Perhaps part of the reason why emotions can play

this role is that they share attributes of both *reason* and *appetite*. Plato sharply demarcates *reason*

as being responsible for the soul's thinking and *appetite* as being affective.[132] However, many

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[129] See previous footnote. Higher order deliberative processes are thought to be produced in the prefrontal cortex. In
contrast, the quick judgments made that activate one's stress response are correlated with activity in the amygdala.
The central function of the amygdala… is to identify whether incoming input is relevant for our survival. It does so
quickly and automatically, with the help of feedback from the hippocampus, a nearby structure that relates the new
input to past experiences. If the amygdala senses a threat—a potential collision with an oncoming vehicle, a person
on the street who looks threatening—it sends an instant message down to the hypothalamus and the brain stem,
recruiting the stress-hormone system and the autonomic nervous system (ANS) to orchestrate a whole-body
response" (van der Kolk, 2014, p. 60).
[130] If it turns out that a noncognitive view is correct, I do not believe this development will be a fatal blow to my
view because the emphasis of my view is on the relationship between the individual members of the soul. However,
my view would need to be modified to more accurately reflect how reason, emotion, and appetite relate to one
another.
[131] Of course, I might feel anxious when I am asked to calculate the square root of 64. I could also feel pride when
asked to do the same. Thus, different emotions can be associated with the same cognitive process. Thus, my anxiety
or pride is conceptually distinct from the cognitive process required to calculate the square root of 64.
[132] E.g., *Republic* 439d

emotions seem to be a complex synthesis of both thought processes (i.e., judgments) and affect. Candiotto and Renaut caution against attempting to force the phenomenon of emotions into too narrow of a category. Instead, they suggest it might be helpful "to acknowledge that emotions are complex events which require several faculties: bodily affections, perceptions, beliefs and judgement, even rational calculation" (2020, p. 5). Thus, the complex nature of emotions make them prime candidates to serve as mediators between one's reasoning and one's appetites in a way similar to what Plato imagined. Emotions provide judgments with which one might reason and emotions also include affect that can increase or oppose the affective motivational force of one's appetites. For instance, perhaps a professor experiences a sexual urge that motivates them to engage in an inappropriate relationship with a student. However, the professor reasons that this relationship would be wrong. Additionally, when the professor considers possibly acting on their urge, they feel shame. Thus, their shame includes a judgment that engaging in the relationship would be wrong and shame's affect opposes the professor's sexual urge. By relating I mean to say, at the very least, that emotions can be causally connected to each of the other elements of the soul.

Plato maintains a distinction between *spirit* and *appetite* throughout the *Republic*.[133] On Plato's account *spirit* is open to reason whereas the appetites were "not open to reason at all and could only be forcefully held down by an alliance between reason and *thumos*, or to be more exact a careful harmonizing of these dual capacities of the human soul" (Tarnopolsky, 2015, p.

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[133] For instance, in Book IV Plato argues for a certain kind of education that strengthens *reason* and *spirit* so that they rule in harmony over the appetites. "And ought not the rational principle, which is wise, and has the care of the whole soul, to rule, and the passionate or spirited principle to be the subject and ally?... And these two, thus nurtured and educated, and having learned truly to know their own functions, will rule over the concupiscent, which in each of us is the largest part of the soul and by nature the most insatiable of gain" (2004, 441e-442a). Later in Book IX, Plato creates an illustration of the elements of the soul. He represents reason as a man, *spirit* as lion, and the appetites as a many-headed chimera (*Ibid*, 588c-589a).

245). Thus we find, that on Plato's model, the second part of the soul, what I will call from here on out "emotion," is essentially cognitive and the appetites are non-cognitive. But, we know that emotions can modify the appetites. Specifically, as the sympathetic part of the nervous system is activated by an emotion like fear, the body prepares to utilize metabolic resources to deal with a challenging situation. However, if an emotion triggers the parasympathetic system, the body begins storing metabolic resources instead. Thus, fear can affect whether one feels hungry or not. "As [Walter] Cannon pointed out[134], 'The desire for food and drink, the relish of taking them, all the pleasures of the table are naught in the presence of anger or great anxiety'" (Physiological Changes Associated with Emotion, 2001).

Another reason why emotions seem to be a good candidate to replace *thumos* is that emotions fulfill the role of vivifying life. Another way to think about it is that emotions give life its lustre. "Children 'are full of spirit from birth,' Plato tells us. Spirit puts sparkle in the eyes and joy in the heart. Spirit makes us angry at injustice; it drives the athlete to victory and the soldier to battle" (Melchert & Morrow, 2018). Thus, Plato observes emotions not only vivify life, they motivate people to act. Interestingly, Plato's description aligns with contemporary empirical observations about the role emotions play. "Not only do emotions provide automatic feedback that can help keep you safe, but they can also motivate you to take action and empower you to make decisions" (Lindberg, 2021)

Also, by "vivifying life" I mean to suggest that emotions add a desirable phenomenal quality to one's experience. To illustrate this point, I think it will be instructive to briefly discuss emotional numbing. The role of emotions as vivifying life is broadly coherent with contemporary

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[134] (Cannon, 1914, p. 275).

observations of emotional numbing. Van der Kolk tells the story of Tom who served as a soldier in Vietnam (2014, pp. 12-13). After his best friend was killed, Tom attacked a local village killing children and raping a Vietnamese woman. When Tom returned from the war, he was no longer able to relate well to his family. In particular, Tom no longer felt the familial emotions he once felt toward his family. In Tom's case, he felt emotionally numb because of his wartime trauma. When he returned home, he wanted desperately to feel certain emotions for his family he had felt for them before his trauma, but he could not. He was so distraught by this state of affairs that he commented he felt "dead" inside. Marilyn[135] was so heavily involved in tennis because that was one of the few things that made her "feel alive." Thus, in cases of emotional numbing, we find evidence to support Plato's observation of the vivifying role of emotions. Moreover, emotional numbing provides a context in which persons who would normally be motivated by positive emotional experiences lack these experiences post-trauma. For Tom to interact with his children, he must find other motivation beside the positive emotions he once felt. This indicates another nuance of the pyschic disharmony associated with trauma I will more fully develop in chapter six. Tom believes that he has fatherly duties to positively interact with his children, but his emotional experience does not compliment his reason. In this case he is not overcoming a negative emotion. Instead, he is trying to act when an important motivating emotion is no longer present. Thus, even though Tom still sometimes acts in fatherly ways, his motivation for acting is at least somewhat diminished. Furthermore, Tom is denied the emotional pleasure he would normally receive from acting in fatherly ways. Thus, because Tom experiences emotional numbness, we think that Tom is missing goods he would otherwise experience if he was not traumatized. Tom has reasons to do good but is lacking an important motivation for doing good

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[135] See section **3.7 Trauma as Psychic Disruption**.

and he is missing emotional pleasure from doing good. So, not only do emotions make a life more vivid in a general sense, they may also vivify our moral lives more specifically. By moral lives I mean to refer to the experience we have when thinking about, committing, and reflecting on moral acts.

In short, emotions are cognitive-affective judgments that generate physiological changes. The emotional part of the soul, then, is the part of the soul that produces emotions. Because emotions are cognitive they can be causally connected to reason. Because they engage physiological systems, they can affect the appetites.

5.6 Appetite

When Plato attempts to argue for the existence of *spirit* as distinct from the appetites, it is unclear whether his example of Leontius correctly makes a distinction between one's emotions and one's appetites. On his view, the appetites are directly related to physiological experience and lack the evaluative property (judgment) intrinsic to emotions.

> [T]here is a distinct class of desires in the soul, and that the most conspicuous of these are the ones we call "hunger" and "thirst…"
>
> And here comes the point: is not thirst the desire which the soul has of drink, and of drink only; not of drink qualified by anything else; for example, warm or cold, or much or little, or, in a word, drink of any particular sort: but if the thirst be accompanied by heat, then the desire is of cold drink; or, if accompanied by cold, then of warm drink; or, if the thirst be excessive, then the drink which is desired will be excessive; or, if not great, the quanity of drink will also be small: but thirst pure and simple will desire drink pure and simple, which is the natural satisfaction of thirst, as food is of hunger? (Plato, Republic, 2004, 439d-e)

For example, when I am thirsty, my appetite (thirst) is not necessarily for tea, or lemonade, or water, but for a drink. Thus, thirst is an appetite. Leontius' desire to see the dead bodies is more of a cognitive curiousity than a visceral impulse. Neurologically, this impulse seems better

explained as competing emotions. Jonathan Haidt argues that the evolutionary development of the frontal cortex did not just give humans an extra ability, reason, it also expanded an already available capacity, emotions (2006).[136] The orbitofrontal cortex,

> is one of the most consistently active areas of the brain during emotional reactions. [It] plays a central role when you size up the reward and punishment possibilities of a situation…When you feel yourself drawn to a meal, a landscape, or an attractive person, or repelled by a dead animal, a bad song, or a blind date, your orbitofrontal cortex is working hard to give you an emotional feeling of *wanting* to approach or to get away. (p. 19).

Leontius is both drawn to approach the dead body and simultaneously wants to get away. Thus, it appears Leontius is experiencing a disharmony within the first "horse" (emotions). If this is the case, it appears Plato's analogies for the emotions should be augmented. For instance, in the latter part of the *Republic,* Plato depicts *spirit* (emotions) as a lion and *appetite* as a wild many headed chimera. The many heads of the chimera are meant as an illustration of the many different kinds of desires one might have and how they may even compete with one another. The lion, on the other hand, is a single unified object and is in charge with helping to keep the appetites in line. Given our modern neurological picture, it would be more correct to think of some kind of many-headed beast as representing the emotions. We can have competing and conflicting emotions like Leontius and our emotions can be very powerful. In addition, it is unclear whether the emotions ought to be depicted as any less wild than the appetites. After all, emotions can be so powerful that they can overcome appetites. One might be so distraught over a loved one that they refuse to eat.

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[136] I believe this corresponds with Christine Korsgaard's point that the faculty of reason transforms the kind of life humans live. I will develop this point more fully in section **5.10 Human function**.

Unfortunately, the Leontius example is Plato's primary attempt at distinguishing between appetitve soul and the emotions (*spirit*). I find the way Plato uses appetites helpful because it helps to distinguish competing desires. However, unless we have other reasons apart from Leontius for thinking a distinction between appetites and emotions is appropriate, it would be better to think about two divisions of the soul instead of three. Thus, if a tripartite paradigm is to remain viable, we need other reasons to think that *reason* and *appetite* are not the only elements of the soul. One way to argue for an appetitive part is to think about why Plato is even interested in developing a framework for the soul. In the *Republic* Plato is primarily concerned with the notion of justice. Using the just city as an analogue, Plato attempts to identify the nature of a just soul. Importantly, on Plato's view, the most just souls rule the just city.[137] Thus, we find that the condition of a soul is intrinsically connected to one's acts. The just soul will perform just acts and the unjust soul, unjust acts. Plato's investigation of the soul partly stems from a quest to determine what kind of soul performs virtuous acts. He wants to identify the parts of the soul that influence behavior. Particularly, Plato wants to identify the parts of the soul that reflect various "desires" that people have. If we can identify another part of one's psyche that produces a "desire" that is generated directly by one's physiology, we have reason to think of the appetite as a part of the soul.

In section 5.5 Spirit, I argued that we might distinguish emotions from appetites in that emotions include a judgment whereas appetites do not. In addition, appetites seem to be derived from the lack or perceived lack of physiological fulfillment. Yet, emotions and appetites are similar in that they are felt (have affect) and can motivate behavior. I have already summarized

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[137] "Then he who is to be a really good and noble guardian of the State will require to unite in himself philosophy and spirit and swiftness and strength" (Plato, Republic, 2004, 376c).

Plato's argument that such a part of the soul exists. When I am thirsty but do not drink for some reason, he argues this state shows that there are two opposing desires of the soul: one to drink, one not to drink. In this case, reason concludes one ought not to drink (i.e., during the day while observing Ramadan). However, *appetite* moves one to drink.

Plato's concept of appetites are intrinsically connected with one's physiology. Of the appetites Socrates says, "the [appetites], with which he loves[138], and hungers, and thirsts, and feels the flutterings of any other desire, may be termed the irrational or appetitive, the ally of sundry pleasures and satisfactions" (Plato, Republic, 2004, 439d). Later, Socrates again describes the appetitive part as,

> having many forms, has no special name, but is denoted by the general term appetitive, from the extraordinary strength and vehemence of the desires of eating and drinking and the other sensual appetites which are the main elements of it; also money-loving, because such desires are generally satisfied by the help of money. (*Ibid*, 580e)

Hungering and thirsting are signals the body sends to the brain to indicate that it is lacking something. Something similar may be said of sexual desire. Thus, the appetitive part seeks things with which to be satiated. Plato includes "money-loving" as part of the appetitve list because money makes it possible to gain the objects which satify the appetites (e.g., one can buy food).

> The idea must be that given suitable habituation and acculturation in the context of a life lived in human society, appetite tends to become attached to money in such a way that it begins to give rise to desires for money which in each case are based, simply and immediately, on the thought that obtaining money is, or would be, pleasant; and this idea is natural and plausible enough. (Lorenz, 2009, 3.2)

So, the appetites signal various desires associated with one's physiology. The desires of appetite are generated independently of reason and emotion and thus are construed as being wild by

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[138] Here, the word translated "love" is the Greek word *era* (era) which is the verb form of the noun *eros*. Thus, Socrates does not have in mind the contemporary broader notion of love as a more general affinity for another person or thing. Instead, he is targeting sexual love. Thus, the appetites are responsible for one's sex drive.

nature. They resist the influence of reason. One cannot reason with an appetite to fill its desire. Regardless of how much I reason with myself to stay on a diet in the hopes of becoming healthier, I still feel hungry when I see that fast food commercial on late night TV. Within Plato's view of the soul, the appetites play the role of signalling bodily urges. While Plato may associate the appetites with the physical body, and thus as something which is not as good as immaterial Forms, he does not outright reject the appetites as inherently evil. Rather, *reason's* task is to direct one to moderate one's appetites. Thus, becoming hungry is not itself a vicious state. Rather, the unjust soul is the one that is led by their appetites. Their hunger is the most significant motivation for their behavior.

Plato's argument from opposites may be tenous to establish a tripartite distinction in the soul, but our contemporary neurological picture supports a distinction in the psyche for a system that primarily generates physiological desires. I have previously referred to this part of the brain as the "reptilian brain." The reptilian brain controls the autonomic functions of the body like heartrate and temperature and "is responsible for prompting the appetite, hunger, [and] sex" (Tumanako, 2018, p. 1). This part of the brain, also known as the "brain stem," is composed of three primary parts: the Medulla Oblongata, the Pons, and the Midbrain (or Mesencephalon).

Thus, we find that the appetitive part of the soul tracks the neurological distinction of the reptilian brain. We might then think of the appetitive soul as being that part of the soul that generates urges related to biological survival and reproduction. The urges, themselves, I will also refer to as appetites. These appetites provide motivation to act in ways that promote immediate survival. For instance, if I want to drink, I am motivated to pour a glass of water. The urge exists as long as the body lacks what it desires. In this case I am thirsty until I drink enough water to satiate that thirst.

Because these urges promote survival, we must heed them at least part of the time. To never heed physiological urges will result in starvation and/or dehydration. This implies that urges are not inherently wrong (or "unjust") nor is acting on urges inherently wrong. But, it is not hard to see how why it is problematic for one to be ruled by urges.[139] Biological urges can conflict with values we might believe are good or with longterm goals.[140] For instance, a corporate CEO might find one of his subordinates attractive and experience a sexual urge that motivates him to act sexually toward his subordinate. However, the CEO reasons that he ought not act sexually toward his subordinate because acting this way violates the norms of the workplace and a violation of this norm will end his career. If the CEO acts on his urge he acts contrary to what he has reasoned and threatens his future success as a business person. Yet, the CEO's urges will motivate him to fulfill those urges whether the urges motivate him to act in line with his goals or whether those urges motivate him to act contrary to his goals. Thus, if one wants to behave in ways that achieve their goals, they need to have the capacity to make judgments about how and when to behave in ways that fulfill one's urges and how and when to abstain from fulfilling one's urges. Because one's urges do not include evaluation, one's urges cannot adjudicate when to act to fulfill these urges and when to abstain from fulfilling these urges. Instead, urges must be evaluated by another part of the soul before one decides whether to act in accordance with an urge. Thus, it is fitting to think the appetites must be evaluated by another part of the soul before one acts.

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[139] By "ruled by urges" I mean to say that one consistently behaves in accordance with their urges when this behavior conflicts with the conclusions of one's reason. For instance, I may believe it is unhealthy for me to eat ice cream every day, but I eat ice cream every day to satisfy my craving for something sweet.
[140] For a moral realist like Plato, one's goals will include acting in morally permissible ways.

Plato argues for another role for *reason*. On Plato's initial view, *reason* is responsible for watching,

> over the many-headed monster like a good husbandman, fostering and cultivating the gentle qualities, and preventing the wild ones from growing; he should be making the lion-heart his ally, and in common care of them all should be uniting the several parts with one another and with himself" (Plato, Republic, 2004, 589b).

In this way, Plato's *reason* has three primary functions. First, *reason* is to groom the appetites. *Reason* must foster certain appetites and diminish others. Second, *reason* is to enlist the aid of the emotions in ruling the appetites. Third, *reason* is tasked with establishing harmony between all of the parts of the soul. If we modify Plato's account to be more consistent with the sub-agential character of the parts of the soul we might think about *reason's* role in the following way. One reasons about ways they might satisfy those appetites that are necessary for survival and how to make the appetites that interfere with one's goals diminish in affective strength. When I think about how I might satisfy my thirst while working outside, I come to believe that carrying a water bottle with me will facilitate me satisfying my thirst (satisfying survival appetite). Similarly, I recognize that every time I drive by a particular ice cream shop, I come to have a craving for ice cream. Thus, I reason that it would be better for me to drive a different way that does not cause me to drive by that ice cream shop (diminishing the affective strength of an appetite that interferes with achieving my goal). Second, one will also reason about ways one might foster emotions that will help to overcome the affective strength of the appetites when they conflict with one's goals. I realize that I feel disgusted toward homeless people so that I am motivated to not care about them. Thus, I reason that I need to hear an autobiographical account of a homeless person's life because I know this will increase my empathy with homeless people which will diminish or mitigate my disgust. In addition, my reasoning will either up-regulate or

down-regulate my emotions when appropriate.[141] Third, one will deliberate about ways one

might shape one's appetites and emotions so that the affect of both appetites and emotions

motivates one to act in ways that are consonant with one's goals.

I think it is helpful to think about Plato's view of the soul in light of our neuroscientific

picture of the brain presented earlier. Perhaps oversimplistically, we might associate the function

of the rational part of the soul with the neocortex, the function of the emotions with the limbic

system,[142] and the function of the appetites with the reptilian brain.[143] To review, the neocortex is

responsible for absorbing and integrating information, planning, and imagining. The limbic

system is the home of the emotions where judgments about environmental safety are made. The

reptilian brain controls the autonomic functions of the body like heartrate and temperature and

"is responsible for prompting the appetite, hunger, [and] sex" (Tumanako, 2018, p. 1). This is not

to say that the theories are identical, but it does suggest a correlation. Hedrik Lorenz insists that

Plato's view is broader than our typical concept of mind and this association with neural

processes offers a picture which extends beyond the conscious and subconscious mind to include

basic autonomic functions. Plato's view,

> continues to be part of this conception that it is soul that accounts for the life of the
> relevant ensouled organism. But if it is soul that accounts for the life of, say, human
> organisms, there must be some sense in which the human soul accounts not only for
> mental functions like thought and desire, but also for other vital functions such as the
> activities and operations of the nutritive and reproductive systems. (2009, 3.2)

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[141] For more on the psychological process of regulating emotions see section **5.14 From Plato to the present**.
[142] This is an oversimplification because some emotions appear to correlate to activity in the neocortex as well as the limbic system (Dixon, Thiruchselvam, Todd, & Christoff, 2017). However, the limbic system appears to active in all emotional responses (Rajmohan & Mohandas, 2007).
[143] I am aware that Plato himself would probably object to reducing parts of the soul to physiological neural functioning. I don't mean this comparison to necessarily assume a physicalist interpretation of the mind/body problem, much less a reductionistic one. However, empirical data suggest that activity in certain parts of the brain corresponds to certain mental functions Plato attributes to parts of the soul.

Plato believed the tripartite soul to account for the life of a human being. If we correlate

functions of part of the soul with a more modern tripartite neural picture, we can sketch a rough

picture of how the soul-functions correspond to neural functions necessary for establishing and

maintaining life.[144, 145] The functions of the parts of the platonic soul have corresponding neural

functions which are responsible for one being alive and staying alive. The appetites correspond

with activity in the "reptilian brain" that is associated with basic physiological processes. More

specifically, the appetites seem to be correlated to activity in the hypothalamus. The

hypothalamus produces hormones that controls body temperature, heart rate, hunger, mood, sex

drive, sleep, and thirst (Hypothalamus, n.d.). The rational element corresponds to the part of the

brain (neocortex, specifically the frontal lobe) responsible for predicting what will happen so that

one might better predict changes in their environment. Activity in the frontal lobe is corresponds

with mental activity like the capacity to plan, organize, and initiate action, problem-solving,

language processesing, self control, and emotional control (Guy-Evans, 2021). It also

corresponds to the part of the brain which catalogues and integrates memories. The emotional

element corresponds to the part of the brain which makes immediate judgments about the safety

of the environment and prepares one to act quickly. This framework suggests that we think about

each of the elements of the platonic soul as being responsible for a broader range of phenomena

than what Plato originally described.

For Plato, the truly happy soul and thus the most excellent soul is characterized by a state

of justice. Justice is a state of the soul characterized by a harmony between the elements of the

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[144] That is, we may be able to explain how a Platonic picture of the soul accounts for the kind of life that is more complex than just the satisfaction of biological urges. I believe Plato's account fits well with the Aristotelian account of human flourishing. I will develop this line of thinking in section **5.10 Human function**.
[145] I do not mean to say that Plato's immaterial soul and the neurological explanation are identical in *how* the soul/brain endows a human with life.

soul where each part of the soul is fulfilling its proper function and operating in right relationship with the other elements.[146]

> [F]or the just man does not permit the several elements within him to interfere with one another, or any of them to do the work of others---he sets in order his own inner life, and is his own master and his own law, and at peace with himself; and when he has bound together the three principles within him, which may be compared to the higher, lower, and middle notes of the scale, and the intermediate intervals---when he has bound all these together, and is no longer many, but has become one entirely temperate and perfectly adjusted nature, then he proceeds to act" (443 d-e).

Harmony is established when *reason* directs the soul and is aided by the emotions to control the appetites. The just soul is the soul worth emulating and acting justly is a fundamental requirement for being happy. "[T]he just person…is happy, whereas the person whose soul is unjust is wretched" (Lorenz, 2009, 3.2). More specifically, "Then virtue is the health, and beauty, and well-being of the soul" (Plato, 2004, 444d). Thus, the best condition for a person to be in is one in which one experiences harmony between the rational, emotional, and appetitve elements. In contrast, the disharmonious soul is supremely unhappy. "[Appetite] wants what reason says it may not have. Spirit rejoices at what reason advises against. These are cases in which the parts of the soul are not content to perform their proper function. One wants to usurp the function of another" (Melchert & Morrow, 2018, pp. 174-175).

5.7 Sub-psychic ends

So far, I have attempted to explain and defend a kind of tripartite picture of the "soul" that takes Plato's view as inspiration and coheres with modern empirical psychology and neurology. I believe the divisons Plato makes between *reason*, *spirit*, and *appetite* help to delineate distinct mental functions that loosely correspond to observed activity in parts of the

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[146] I will elaborate on what constitutes justice in the soul in the next section **5.7 Sub-psychic ends**.

brain. Furthermore, conceiving of the soul as having conceptually distinct parts is important

insofar as I am able to use these distinctions to explain and establish the importance of intra-soul

harmony. I believe Plato's paradigm is helpful in that it aids us in thinking about distinct aspects

of our psychology and how those aspects are properly related. I will use the concept of psychic

harmony as a lens to evaluate psychological trauma and how trauma is an impediment to

flourishing in the next chapter. For now, I will turn to thinking about what constitutes psychic

harmony and why psychic harmony is beneficial.

To understand what constitutes harmony in the soul it is important that we understand

how Plato (and Aristotle) understand proper function. This is because the virtuous[147] state of the

soul is one in which all of the consituent elements fulfill their proper function. When each of the

elements fulfill their function, they act in harmony and thus the soul itself is in a harmonious

state. Plato argued that everything has a proper function. In the *Republic*, Socrates asks a

rhetorical question. "I will proceed by asking a question: Would you not say that a horse has

some end?... And the end or use of a horse or of anything would be that which could not be

accomplished, or not so well accomplished, by any other thing?" (Plato, 2004, 352d-e). We go

about determining a thing's proper function by thinking about what that thing is particularly

well-suited to do. Plato states that the end of a thing is "that which could not be accomplished, or

not so well accomplished, by any other thing" (*Ibid*). In other words, a thing fulfills its nature

when it performs its unique function well. The eye functions well when it sees well because an

eye is uniquely suited to see. Thus, Plato thinks that the soul achieves and maintains harmony

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[147] The term "virtuous' implies moral qualities and so far I have mentioned nothing about the soul and morality. Plato believed the virtuous state of the soul not only results in virtuous acts but is also the best state of soul and best promotes the flourishing of the individual. At this point in the project, I want to focus more on the virtuous soul as being a psychic state that promotes flourishing instead of a state that is morally praiseworthy.

when *reason*, emotions, and *appetite* fulfill their unique functions well. Comparing the well-functioning soul with the well-functioning state, Plato writes,

> We cannot but remember that the justice of the State consisted in each of the three classes doing the work of its own class?... We must recollect that the individual in whom the several qualities of his nature do their own work will be just, and will do his own work. (Plato, 2004, 441d-e)

This is because the proper function of each part is partially defined in the way it interacts with the other parts. I will discuss these harmonious relationships more when I move to discussing the rule of reason.[148] For now, I will focus on the function of each part as it functions by itself.

Echoing Plato, Aristotle writes that the "good and the 'well' is thought to reside in the function" (2009, 1097b). Thus we distinguish a good eye from a bad eye by observing how well an eye allows someone to see. The eye that allows someone to see well is a good eye and one that does not allow one to see is a bad eye. Interestingly, the proper fulfillment of the individual functions of the psychic parts is supposed to work in a symbiotic relationship. When *reason* functions well, it allows emotions to function well. Similarly, when *reason* functions well it allows *appetite* to function well. Thus, we must understand the proper ends of each element of the soul if we are to understand what it means for the elements to function in harmony (or function well together). We need to understand intra-soul harmony to understand the proper function of the soul as a whole.

Christine Korsgaard points out a few common objections to the function argument as it pertains to proper human functioning (Korsgaard, 2008). Most of these objections are directed toward the process of identifying a proper function for a human. I will argue for a particular

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[148] See 5.12 Plato and the Rule of Reason."

understanding of human proper functioning in a bit,[149] but I want to start out thinking about the proper function of the individual parts of the soul. Parts of Korsgaard's argument will be helpful in thinking about the proper functioning of sub-agential psychic elements.

According to Korsgaard, people often unneccessarily limit the scope of Aristotle's function argument to the concept of purpose. That is, it is often thought that identifying a thing's proper function implies that thing must have a purpose. However, on a purely mechanistic understanding of the world, this approach seems clearly antiquated.[150] Aristotle, however, understands the function, and thus the end of a thing, in broader terms than purpose. Korsgaard argues that Aristotle's notion of teleology is deeply intertwined with his metaphysics concerning form and essence. "The thing is what it is when its parts are arranged in a way that makes it capable of the activities that are essential to or characteristic of it --- capable of performing its function" (2008, p. 135). Thus, defining the form, or the defining characteristics of a thing, necessarily depends on an understanding of the thing's function. She offers the example of a Native American teepee, a Victorian house, and a medieval castle (*Ibid*, p. 137). All of these examples have the form of "house." However, not all of them have the same material composition or structure. What unites them in the common form "house" is that they function as shelters. Thus, on the Aristotelian view, in order to know the form of something, one not only needs to know the structure of a thing, one must also know its function. "These kinds of cases, together with the connection Aristotle makes between the form of a thing and its characteristic activity, suggest the idea that the form is the *function* of a thing" (*Ibid*).

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[149] See 5.10 Human function."
[150] Obviously, not everyone holds to a purely mechanistic view of the universe (e.g., theists). However, conceptualizing the universe as something like a non-directed mechanical system is a widely held and influential assumption.

To understand the function of a thing as its form, Korsgaard suggests a way of conceptualizing form/function that integrates a thing's structure and its function. This way of thinking distinguishes a thing's function from its "purpose." For example,

> you could say of a radio that among its purposes is to broadcast music and live entertainment, provide a medium for advertisement, keep people up to date on the news and serve as an early warning system in an emergency…[also] we could talk about transmitting electromagnetic waves of certain frequencies and rendering them audible, and about the mechanisms that make this possible. The various things the device does are its purposes: the second thing, *how* it does all this, is its form or function. (2008, p. 138)

Thus, we have a way of talking about the function of a thing without relying on controversial teleological assumptions. To discuss a thing's function, we need to be able to identify both what a thing does and how it does it. In the case of the radio, we might say that a radio's function is to provide a medium for advertisement by receiving electromagnetic waves and converting those waves into audible sound. This way of conceptualizing form demonstrates the tight connection in Aristotelian thought between matter and form. The material "organization or construction makes the thing to do what it does; to understand how the construction makes the thing capable of doing whatever it does is to have knowledge of the thing, and this knowledge is a grasp of its form" (*Ibid*, p. 140).

In the following section I will discuss the function of *reason*, emotions, and *appetite*. To do this I will consider both what each psychic element does and how that element accomplishes this activity. Thus, I will rely on a kind of synthesis between the Platonic and the Aristotelian/Korsgaardian arguments. The proper function of each part of the soul is that activity that each part of the soul is particularly well suited to do. Thus, an adequate account of the proper function will need to address the activity each element is uniquely suited to do and how this activity is accomplished. Then, I will consider the more controversial question of what kind of end a person as a whole has.

First we will think about *reason*. What might we think is the proper end of cognitive non-affective processes? Part of what we might plausibly understand as the end of these processes is coming to know or be aware. After all, cognitive processes are defined as those processes that are responsible for "knowing and awareness." Thus, when these processes function in ways that enable us to come to know and be aware, they are functioning well. When they do not enable us to come to know or be aware, they are functioning poorly. More specifically, certain cognitive non-affective processes allow us to interpret and make sense of both the external world and our own selves. I believe many of these cognitive non-affective processes to be a part of developing and sustaining one's worldview."[151] Thus, our worldview allows us to function well when it facilitates our coming to accurately know the external world and our identity facilitates our proper function when it enables us to come to know ourselves. When our worldview inhibits coming to the know the world or when our identity inhibits coming to know ourselves, they are not functioning well. To make the same point slightly differently, when one's worldview causes one to have a distorted view of the world or when one's self-concept causes one to have a distorted view of oneself, one's worldview and/or one's identity hinders one from functioning well.

In addition, on Plato's view *reason* is not a domineering force whose primary role is to restrict the exercise of *spirit* and *appetite*. Instead, as a wise ruler, *reason* must understand the nature of the other elements and help to harness their powers to direct good behavior. Thus, there

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[151] Here, I have asserted that non-affective cognitive processes are an integral part of forming and sustaining one's worldview and identity, but I will later discuss how these processes are intertwined with emotional processes. Thus, I believe it possible to separate non-affective cognitive processes in worldview and identity from affective ones both conceptually and neurologically. However, the psychological picture is much more complicated. Worldview and identity beliefs are often "emotionally-tagged." For an explanation of this phenomenon see 4.4 Worldview and identity." For a discussion on how one's emotions can beneficially provide information for one to use in reasoning see 5.14 From Plato to the present."

is hope that the opposition often experienced between the elements can eventually be relieved. This must mean that the fundamental natures of both *spirit* and *appetite* do not oppose *reason*. If their fundamental natures conflicted with the nature of *reason* it would be better to get rid of some element or suppress them. Otherwise there would never be harmony.[152]

Of course, I have defined *reason* differently from Plato. I find that understanding *reason* to be non-affective cognitive processes, or at least certain non-affective processes, retains much of what Plato thinks are proper functions of *reason* without trying to parse out whether Plato's parts of the soul must be agential. According to Plato, *reason* is responsible for the "common care" of all the elements and should seek to "unite them all." There are certain non-affective cognitive processes that appear to fullfill this role of "uniting" the soul. One process that comes to mind is belief integration. This is the function of *reason* that organizes and relates one's beliefs to other beliefs. For instance, I might have the belief that that all grass is green. When I have a conversation with a friend about maintaining their lawn, I come to believe that their lawn must be green. Thus, my belief about their lawn is influenced by my previous belief about all grass. Furthermore, I associate my belief about my friend's lawn with other beliefs about grass in general. In another case, I find myself volunteering for a non-profit organization. I already have a belief that "good people volunteer for non-profit organizations." Thus, when reflecting on my actions I come to have the belief that I am a good person because I have associated my belief about my specific act with my belief about a certain class of beliefs in general. Thus, non-affective cognitive processes associate certain beliefs with other beliefs and oftentimes create

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[152] Plato does appear to advocate for a similar position in the *Phaedo*. "[E]very pleasure or pain provides, as it were, another nail to rivet the soul to the body and to weld them together" (83d). Socrates criticizes pleasures associated with the body as keeping one from becoming pure by pursuing separation of the soul from the body. In this case, it would be better for reason to suppress the appetites and eventually rid the soul of the appetitive element altogether. However, his view seems to have shifted by the time he wrote the *Republic*.

new beliefs based on these associations. Another process that unites is memory integration. This is the process that is responsible for organizing the phenomenological and semantic memory content in a way that is amenable to recall. I might remember the proposition that "for my ninth birthday, I had a large group of friends spend the night at my house." Additionally, I might have the memory of the phenomenological experience during my ninth birthday. Memory integration allows me to associate the semantic with the phenomenological memories allowing for integrated recall. Thus, when I attempt to think about my ninth birthday, I also recall the phenomenological contents of my experience.

This does not mean that non-affective cognitive processes do not utilize information derived from emotions and *appetite*. To be sure, if the processes of *reason* did not use information from emotions and the physiological senses, there would be nothing for *reason* to integrate. Thus, the processes of *reason* are themselves non-affective, but this does not mean they do not integrate affective information from emotions and the senses. Thus, we find that it is the function of *reason* to integrate one's beliefs together and organize and integrate memory content in ways that allow one to recall coherent information or experience. These integrative processes allow a person to create a framework through which to interpret the world. This framework serves to interpret one's emotional and physiological experiences. As I have already noted,[153] many psychologists and philosophers refer to this framework as a "worldview." I will explore this concept more in depth in the next chapter. For now, it is important to note that a worldview allows one to make sense of the world, and their place within that world. Thus worldviews are intricately intertwined with our identity beliefs and attitudes about ourselves. In this way *reason* is tasked with making sure all of the elements flourish or function well. *Reason*

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[153] See section **4.3 The psychology of worldviews**.

fulfills its *telos* (i.e., its end) when it directs the elements of the soul to function harmoniously. This means that *reason* must "reason" well. Reason must think, understand, know, and imagine well. In particular, *reason* is responsible for creating a cognitive framework through which one can accurately interpret the world and interpret oneself.

Emotion fulfills its *telos* when it generates certain emotions. Jorgenson notes that for Plato the things to which *spirit* is sensitive are delivered to it by reason (i.e., inferiority, injustice, etc.). "[*Thumos*] receives its direction from the rational soul, not as an external force that imposes its rule from the outside, but as a governing principle to which it is by nature attuned" (2018, p. 53). Thus, by its very nature, *thumos* is thought to be receptive to the direction of reason. The *spirit* that is functioning in line with *reason* will produce positive emotions in some contexts and negative emotions in others. For instance, *spirit* will produce pride when someone engages in community service but will produce shame when a person steals because of greed. A virtuous *spirit*[154], then, is one which produces emotion that motivates one to act in accordance with one's reason.

Appetite is fulfilling its *telos* when it generates certain bodily pleasures or pains that allow a person to meet their biological needs. Yet, the *spirit* and *appetite* parts' *telos* is not only summarized in their primary function. *Spirit* and *appetite* are thought to achieve their end when the emotions and pleasure they produce are in line with what *reason* dictates. As I have already pointed out, Plato thinks that *spirit* is by nature receptive to reason. The same might be thought of with *appetite*. In general, it is good for me to live.[155] If I go too long without drinking water, I

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[154] Or a *spirit* that is functioning well.
[155] Of course, we might be able to imagine extraordinary cases where this is not true. Perhaps I need a lung transplant to survive and the only way for me to receive one is to kill someone because I am very low on the donation list. However, the sketchy surgeon will perform the surgery simply if someone delivers a set of lungs to him without asking any questions.

will die. Thus, the appetitive part of the soul produces thirst when I need to drink. In this case the production of thirst, and the pleasure of satiating that thirst are consonant with reason. The appetitive part is producing pains and pleasures and these are in line with the dictates of *reason* as it is directed toward virtue. Thus, we might think about *spirit's* and *appetite's* excellence as being determined by two qualifications.

    1. *Spirit* and *appetite* are excellent insofar as they each perform their associated functions.

    2. *Spirit* and *appetite* are excellent insofar as they are each directed by *reason*.

Thus, the non-reasoning elements of the soul are excellent insofar as they are fulfilling their functions as directed by *reason*.

5.8 Psychic harmony

Plato writes that justice is a state where individual parts are fulfilling their functions well in service of the whole.[156] He first explores the state of a just city. Socrates describes the just city by referring to three classes of people: artisans, warriors, and legislators/guardians. When an artisan seeks to be a warrior or legislator, the city is an unjust state. Similarly, when a warrior attempts to become a producer of goods and abandons his warrior duties, the city is in an unjust state. This is because the artisan is particularly suited to produce goods, the warrior particularly suited for defending the city, and the guardian is well-suited for ruling the city.

> "And a State was thought by us to be just when the three classes in the State severally did their own business; and also thought to be temperate and valiant and wise by reason of certain other affections and qualities of these same classes…And so of the individual; we

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[156] "We cannot but remember that the justice of the Sate consisted in each of the three classes doing the work of its own class?... We must recollect that the individual in whom the several qualities of his nature do their own work will be just, and will do his own work?" (Plato, Republic, 2004, 441d-3).

may assume that he has the same three principles in his own soul which are found in the State; and he may be rightly described in the same terms" (Republic, 2004, 435b-c).

Thus, Socrates asserts the just soul is one where the three parts are fulfilling their functions in service of the *telos* of the whole soul. That is, *reason*, emotion, and *appetite* maintain harmonious relationships because they are each doing what they are particularly well-suited to do. It is also important to note that, on Plato's view, when one part of the soul attempts to usurp the function of another part, it hinders the proper directing role of *reason*. For instance, when the appetites revolt against *reason*, this undermines *reason's* ruling expression because *reason* is not directing the appetites. Instead, they are acting independently. When *reason* attempts to rule appetites without the aid of emotion, *reason* attempts to motivate a person to control their appetites in a way that one's emotions, and not one's reason, are particularly well-suited to motivate.

I have briefly hinted at the *telos* of the individual elements of the soul, but we now need to move on to thinking about the *telos* of the whole soul. Plato's description of the just soul describes the state of someone. However, Plato believes the just soul is the good soul, or the state of soul to which all people ought to aspire. Thus, the harmony between *reason*, emotion, and *appetite* is presented as something good. Plato's reasoning for thinking the just state of the soul is good can be helpful in evaluating goals for trauma therapy.[157]

To understand the significance of the just soul, it will be helpful to remember that in the *Republic* Plato describes the just soul as part of an argument voiced by Socrates to demonstrate that a state of justice is intrinsically good and not just good for its consequences. To do this

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[157] For suggestions to this end see 4.9 Therapy and the worldview paradigm."

Socrates argues that a just state of the soul is an excellent state of soul (Republic, 2004, 355b-

354c). He argues that the proper function of the soul (*psyche*) is to live. That is, the soul is what

gives the body life. Thus, a state of excellence of the soul is one in which the soul lives well. On

Socrates' view, living well means being happy. Thus, the just soul will be one which is

supremely happy. Elizabeth Scharffenberger comments, "The notions that the human soul…has

a function---that is, to live---and that it fulfills that function well, producing a 'good' and 'happy'

life by virtue of its excellence…, are fundamental to *Republic*" (Plato, Republic, 2004, p. 357).

This means that *reason*, emotion, and *appetite* are all working harmoniously together to produce

happiness in the soul. When the soul is in a state of happiness it is fulfilling its proper function.

Socrates characterizes this state as a state of health and injustice a state of disease. "Then virtue

is the health, and beauty, and well-being of the soul, and vice the disease, and weakness, and

deformity, of the same" (*Ibid*, 455e). Thus, Socrates answers the charge of justice being merely

an instrumental good[158] by arguing that justice in the soul is a state of happiness which is

health.[159]

Socrates explains that the soul in which the passions and appetites rule is a tyrant soul.

"And also the soul which is under a tyrant…is least capable of doing what she desires; there is a

gadfly which goads her, and she is full of trouble and remorse" (Plato, Republic, 2004, 577e).

Socrates labels this a tyrant soul in part because this kind of soul cannot act intentionally. It is

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[158] In Book II of the *Republic* Glaucon challenges Socrates, "Now as you have admitted that justice is one of that highest class of goods which are desired, indeed, for their results, but in a far greater degree for their own sakes---like sight or hearing or knowledge or health, or any other real and natural and not merely conventional good---I would ask you in your praise of justice to regard one point only: I mean the essential good and evil which justice and injustice work in the possessors of them…And therefore, I say, not only prove to us that justice is better than injustice, but show what they either of them do to the possessor of them, which makes the one to be a good and the other an evil, whether seen or unseen by gods and men" (Plato, 2004, 367c-e).

[159] Of course, it is still debatable whether Socrates sufficiently answers the objection. Do we prefer justice because it produces happiness, or do we prefer justice because of its intrinsic quality?

driven by non-rational affects and urges. Conversely, the just soul is able to act with maximal

intentionality because the just soul is led by *reason* which is responsible for deliberation. *Reason*

has the capacity for understanding and analysis so that one can use reason to deliberate between

possible goals and choose one goal over another.[160] Thus, *reason* alone is capable of

understanding and directing the other elements toward proper goals.[161]

A short time later, Socrates presents an argument defending the superiority of *reason* in

the soul. Socrates' argument is grounded in Plato's metaphysics. Socrates argues that those

things which are universals and have unchanging natures are the most real things, and thus the

highest things. This is a reference to the world of the Forms. Thus, the part of the soul that is

capable of perceiving such things is also thought to be the highest and have the most being, and

thus the greatest pleasure.

> And if there be a pleasure in being filled with that which is according to nature, that
> which is more really filled with more real being will more really and truly enjoy true
> pleasure; whereas that which participates in less real being will be less truly and surely
> satisfied, and will participate in an illusory and less real pleasure. (Republic, 2004, 587e)

Part of Socrates' argument for the nature of the just soul is an argument that the just soul

experiences not simply the most pleasures, but also the highest pleasures because it experiences

the pleasures of reasoning well.

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[160] In Book VII Socrates contrasts "opinion" (*doxa*) and "science" (*episteme*). He argues that the primary difference between the two is that science is arrived at through the dialectic. Thus, it is only through the dialectic that one can really "know" the good (535c). If one cannot know the good, they cannot reliably direct themselves toward the good. Since, knowledge and reasoning are capacities of *reason*, it is plausible to assume that of all the elements of the soul, it is *reason* which engages in dialectic. Dialectic involves analysis and goal recognition.

[161] In section **5.3 Reason**, I argued *reason* provides direction because it is the part of the soul with the capacity for understanding the ends of things and the part of the soul capable of formulating a plan for achieving ends. Thus, *reason* allows one to be intentional about shaping one's emotions and appetites.

I believe some of Socrates' conclusion will be helpful for the present case and remain viable apart from Plato's metaphysical foundation. Rhetorically, Socrates asks,

> Then may we not confidently assert that the lovers of money in the company of reason and knowledge, when they seek their pleasures under the guidance and in the company of reason and knowledge, and pursue after and win the pleasures which wisdom shows them, will also have the truest pleasures in the highest degree which is attainable to them, inasmuch as they follow truth; and they will have the pleasures which are natural to them, if that which is best for each one is also most natural to him? (Republic, 2004, 586e)

Here, Socrates argues that when people who have emotional and appetitive desires follow the lead of wisdom (a product of *reason*), they are able to fulfill those pleasures in ways that fit each person well (most natural). This is because "when the whole soul follows the philosophical principle, and there is no division, the several parts are just, and do each of them their own business, and enjoy severally the best and truest pleasures of which they are capable" (*Ibid*, 587a). Thus, Socrates concludes that when *reason* directs the soul, harmony results. This harmony allows each part of the soul to experience pleasure.

At the opposite end of the spectrum is the tyrant soul which is ruled by appetites. The tyrant soul experiences primarily the pleasures of the appetites but much less the pleasures of *reason* or emotion. When there is disharmony in the soul, pleasures of one part of the soul crowd out pleasures for another part of the soul. Ademantus comments to Socrates that the philosopher (who has a just soul),

> has greatly the advantage; for he has of necessity always known the taste of the other pleasures from his childhood upward: but the [money-lover] in all his experience has not of necessity tasted---or, I should rather say, even had he desired, could hardly have tasted---the sweetness of learning and knowing truth. (Plato, Republic, 2004, 582b).

Harmony in the soul is important because it allows one to experience rational, emotional, and appetitive pleasures. Plato argues, then, that harmony in the soul allows one to experience more

diverse pleasures than disharmony.[162] One might argue that the "money-lover" quite likely has at some point experienced the pleasure of *reason*. If the money-lover gained pleasure from learning that someone owed him money, or that he was going to become richer because he won the lottery, it may seem that he has gained pleasure because he came to know something, namely that he was owed money or that he won the lottery. Yet, here, Plato seems to assume that pleasure of *reason* is not simply gaining pleasure because one has used one's reasoning capacity. Instead, the pleasure of reason is enjoying the proper end(s) of one's reasoning capacity (e.g., understanding) itself (themselves).[163] The money-lover does not enjoy simply coming to know as an end itself. Instead, the money-lover enjoys the more base pleasure of fulfilling his desire for more wealth. In contrast, the just soul would find pleasure in the proper end(s) of reason in addition to any kind of appetitive or emotional pleasure they experience.

In summary, Plato's account provides us with at least two reasons to prefer a harmonious soul over a disharmonious one. First, the harmonious soul is more autonomous. This is because *reason* gives one the capacity to be intentional, specifically, one can be intentional about pursuing the kinds of pleasures associated with each part of the soul. If one can be intentional about shaping one's emotions and appetites that in turn motivate behavior, one can be intentional about the kind of life one wants to live. Second, the harmonious soul experiences a distinct and unique pleasure from the disharmonious soul. The harmonious soul experiences the pleasure of intra-soul harmony. That is, the harmonious soul experiences the pleasantness derived from

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[162] It may be plausible to also think that the state of a harmonious soul provides a unique pleasure distinct from the pleasures of reason, emotion, and appetites individually. That is, one experiences pleasure not just from the expression of each individual aspect of the soul, one also experiences pleasure from of the harmonious interaction of the different aspects of the soul.

[163] I do not wish to take a position as to whether reason has one proper end or multiple proper ends.

experiencing each aspect of the soul functioning concordantly and free from conflict.[164] In asserting the harmonious soul is free from conflict, I mean to suggest that each aspect of the harmonious soul is directed toward the flourishing (or well-being) of the whole person. Thus, ultimately, *reason*, *emotions*, and *appetite* are directed toward the same end.

5.9 Flow and Happiness

Most of this project focuses on instances of disharmony in the soul. Briefly, though, I would like to think about an example of harmony within the soul. If we can identify a psychic state where *reason*, emotion, and *appetite* are in harmony we have reason to think this state is possible. Furthermore, we can investigate this state to test whether Plato's hypothesis yields happiness. If we can identify a harmonious state of the soul that corresponds to an obvious state of happiness, this helps give plausibility to the soul-harmony account.

I think a prime example of psychic harmony is the psychic state known as "flow." Flow was first systematically observed and described by Mihaly Csikszentmihalyi (1975). Since then, hundreds of studies have been conducted to learn more about psychological flow. Flow is described as a state where one is completely absorbed in an activity (Nakamura & Csikszentmihalyi, 2009, p. 195). This state is characterized as

> a state of optimal experience arising from intense involvement in an activity that is enjoyable, such as playing a sport, performing a musical passage, or writing a creative

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[164] It may be debatable whether the absence of something (conflict) requires the presence of something else (pleasure). At the very least, it seems that one who moves from a state of psychic disharmony to psychic harmony will experience pleasure as a kind of relief or respite from intra-soul conflict. Perhaps more positively, though, on a Platonic view, the absence of intra-soul conflict allows one to pursue one's flourishing. On Plato's view, psychic harmony appears to be an active state of the soul because each aspect of the soul performs its function. Aristotle then argues that pleasure is unimpeded natural activity (The Nicomachean Ethics, 2009, VII.12). Thus, if we combine Plato's and Aristotle's pictures we might conceive of intra-soul harmony as pleasant. On Plato's view, psychic harmony requires each of the members of the soul to function according to its own end (with the ends of *spirit* and *desire* including being directed by *reason*). That is, a state of psychic harmony is a state in which each part of the soul performs its natural function. Thus, intra-soul harmony is a state in which the soul is engaged in unimpeded natural activity.

piece. Flow arises when one's skills are fully utilized yet equal to the demands of the task, intrinsic motivation is at a peak, one loses self-consciousness and temporal awareness, and one has a sense of total control, effortlessness, and complete concentration on the immediate situation (the here and now). (flow, 2020)

Flow is so enjoyable that it motivates people to replicate the experience. In fact, Csikszentmihalyi noted in one observation of a painter in flow, "the artist persisted single-mindedly, disregarding hunger, fatigue, and discomfort---yet lost interest in the product once it was completed" (Nakamura & Csikszentmihalyi, 2009, p. 195). When in a state of flow, one is not disturbed by physiological urges. This does not mean that a state of flow lacks any appetitive content. On the contrary, often people report flow states during sex. Instead, one's physiological urges are consonant with the activity at hand. "When attention is completely absorbed in the challenges at hand, the individual achieves an ordered state of consciousness…thoughts, feelings, wishes, and action are in harmony" (*Ibid*, p. 197). Flow is generated when one engages in a challenging activity that requires a high degree of skill. However, if the activity is too easy or too hard, flow does not occur. One must be challenged, but not overwhelmed.

Let us now think about flow within the paradigm I am sketching. Flow engages each element of the soul. *Reason* is engaged in problem solving, concentration, and other cognitive activities. When in flow persons report experiencing emotions like pride or ecstasy. Furthermore, one's appetites are consonant with one's activity. Researchers note that activities which generate flow are "autotelic," that is, they are intrinsically enjoyable.[165] People engage in these activities

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[165] For instance, summarizing previous research, Jackson et. al. describe the characteristics of flow states. "They include a challenge-skill balance, merging of action and awareness, clear goals, unambiguous feedback, concentration on the task at hand, sense of control, loss of self-consciousness, time transformation, and an autotelic (intrinsically rewarding) experience" (1998, pp. 358-359). In fact, a popular contemporary topic in flow research is "autotelic personality." "Autotelic personality literally refers to the tendency to engage in an activity for its own sake (Csikszentmihalyi, 1975, Csikszentmihalyi, 1990, Csikszentmihalyi, 1996) and can be defined as the propensity to experience flow (i.e., Asakawa, 2004, Asakawa, 2010" (Ross & Keiser, 2014). For more recent research regarding autotelic personality see (Baumann, 2021).

because they believe the activity to be intrinsically worthwhile, not because of the consequences of the activity. Thus, flow presents us with one example where one's soul is in harmony and this harmony produces a state of pleasure or happiness.

If we look closer at flow experiences, they are experiences not just of pleasure, but of fulfillment. One's reasoning processes are engaged in problem-solving, attention, and strategizing. Additionally, initiating a flow state requires an initial period of concentration on a task (the task of reason). One's emotions are engaged by generating feelings like pride or ecstasy. Recent neurological studies show that parts and processes of the brain associated with reasoning and emotions experience elevated activity during flow (Katahira, et al., 2018) (Gold & Ciorciari, 2020). Furthermore, when the appetites are linked to an activity (i.e., sex), one also experiences the satiation of the appetite. When one's appetites are irrelevant to the activity, they are suppressed. Thus, cases of flow are examples of each part of the soul fulfilling its *telos* and relating harmoniously with another. *Reason*, emotion, and *appetite* work together to produce a pleasurable experience.

Flow states and Plato's just soul states are importantly different in one respect, however. Flow states are temporary states. They only occur rarely and for a limited duration. Plato, on the other hand, argues that the just soul will maintain its inner harmony over the course of his life. Socrates argues that the just soul will nurture his physical health, disavow the love of fame, foster contentment, and avoid those things that cause disorder in one's soul (Republic, 2004, 591c-592a). Thus, harmony of the soul may include something like flow states, but it is not reducible to these transient states. Flow states give us *one* example of happiness that is derived from the harmony of the soul. A primary reason why flow states are enjoyable is because one's psyche is fully engaged in an activity that one loves for the sake of that particular activity. When

one's psyche is harmoniously engaged in working toward one's goal, one experiences pleasure.
"In the sporting context, the athletes will experience flow when goals are clearly set by the
athlete, feedback is immediate and unambiguous…This enables the athlete to be completely
concentrated and absorbed by the activity, and to perceive the task at hand as self-rewarding,
controllable and joyful" (Stavrou, Psychountaki, Gerogiadis, Karteroliotis, & Zervas, 2015, p.
2).[166]

Happiness for the just soul works similarly. The primary goal for the just soul is living a
virtuous life. Thus, when the just soul is in harmony and performing virtuous acts, one
experiences happiness. Aristotle seems to broadly agree with this assessment when he states that
happiness is a "virtuous activity of soul" (2009, I.9). On Aristotle's view, happiness is derived
from the *telos* of something. The *telos* of people, is thus determined by the kind of thing they are.
Because Aristotle believes humans to be reasoning things, their *telos* must be to use their reason
well. Also, on Aristotle's view, acts require one to choose and choice requires reason (*Ibid*,
III.3). Thus, "human good turns out to be activity of soul exhibiting virtue" (*Ibid*, I.7). Thus,
Aristotle believes happiness to be a life where one acts well. While he distinguishes between
pleasure and happiness, this does not mean that the happy life will be devoid of pleasure. On the
contrary, the virtuous person will find pleasure in things that are intrinsically pleasant.

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[166] It might be tempting to think that one loses a sense for who one is, or loses a sense of one's identity, when
engaged in a state of flow, but this does not appear to be the case. In footnote 165, I cited a source that indicated
persons engaged in flow experienced a "loss of self-consciousness." Losing self-consciousness is not the same as
dissociating oneself from one's identity. The loss of self-consciousness indicates that one loses an awareness of
themselves as being distinct from their activity. This does not mean that one does not associate the activity with
one's self-concept, or network of beliefs about oneself. States of flow actually seem to increase one's positive self-
concept. For examples of research demonstrating this see (Bonaiuto, et al., 2016) and (Mao, Roberts, Pagliaro,
Csikszentmihalyi, & Bonaiuto, 2016). This point is important because in the next chapter, I will make the point that
one's identity functions well when it can associate one's experiences as happening to a single first-person
perspective. If flow is a state of psychic harmony that includes the suppression or dissociation of one's identity, it
appears that one's identity does not have to be associated with one's experiences for one to experience psychic
harmony.

Furthermore, they will not experience psychic conflict like others because they will not have competing desires (*Ibid*, I.8). Flow, when generated by an excellent activity, appears to provide an example where someone derives pleasure from engaging in an intrinsically worthwhile activity.

Aristotle later argues that the greatest kind of happiness is contemplation (2009, X.7-8). This is because reason is a capacity of the gods, thus making reason the best capacity of human beings. Also, Aristotle thinks that one can reason more continuously than we can do anything else. If happiness is an activity, it is best if it is a continuous activity. Therefore, reason is the most valuable capacity persons have and it is that capacity that defines them. "[T]hat which is proper to each thing is by nature best and most pleasant for each thing; for man, therefore, the life according to reason is best and pleasantest, since reason more than anything else *is* man" (1178a, emphasis in original).

In general, I believe Aristotle to be on the right track when he grounds human happiness in the kind of thing humans are. Intuitively, a robust concept of happiness includes a notion of fulfillment. Aristotle concludes that happiness is the proper *telos* of humans in part because it is worthy of seeking in itself and not because it is instrumental for another good (*The Nicomachean Ethics*, 2009, I.7). Fulfillment seems to be an intrinsic good as well. I seek fulfillment not because it brings me something else, but because my own fulfillment is desirable itself. I am most happy when I have a sense of fulfillment. In contrast, I am unhappy when I have a sense of unfulfillment because being unfulfilled indicates I am lacking something.

Fulfillment is the achievement of some end. The capacities of a thing determine its possible ends and therefore, the possible ways a thing's end might be fulfilled. For instance, a rock does not have a rational capacity. Thus, a rock's end cannot be fulfilled by reasoning

because a rock cannot reason. However, humans can reason and so at least one human end is to reason. A human's reasoning end is fulfilled when a human reasons. Of course, this sense of fulfillment is an objective sense and not the same as having a "sense of fulfillment." I find the objective sense and the subjective sense to be linked, though. I gain a sense of fulfillment when I am aware or believe that I have achieved or am achieving a goal (i.e., an end I intend). Thus, if reasoning well is a goal and I am aware that I am reasoning well, I experience a sense of fulfillment. More generally, if living well is a goal, and I am living well, I experience fulfillment.[167] Conversely, if I am not living well and I am aware I am not living well, I lack a sense of fulfillment and thus lack happiness. For the time being, I will ignore defining "living well" but I will come back to this concept later when discussing human proper function.[168]

But, humans are not just reasoning beings. They are also emotional beings and embodied beings. In book I of the *Nicomachean Ethics*, Aristotle asserts that finding the *telos* of human beings requires us to seek "what is peculiar to man" (2009, 1097b). He notes that plants engage in nutrition and growth, and animals engage in perception but rejects these as the proper ends of man. But I do not think it is at all obvious that human *telos* is determined *only* by what sets humans apart from other organisms. The exclusion of capacities that are shared with other organisms is especially perplexing when we look at how Aristotle argues a few lines earlier.

> For just as for a flute-player, a sculptor, or any artist, and, in general, for all things that have a function or activity, the good and the 'well' is thought to reside in the function, so would it seem to be for man, if he has a function. (*Ibid*, 1097b)

Thus, to live "well" is to live as a well-functioning human and human function includes more than just emotionally detached reasoning.

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[167] Aristotle may argue that I feel a sense of fulfillment *and* I objectively fulfill my human end.
[168] I will discuss proper human function in more detail in 5.10 Human function."

Earlier in this chapter, I also asserted that each element of the soul has a function: *reason* reasons, emotions emote, and *appetite* signals biological needs (it generate physiological urges). Thus, a properly functioning soul reasons, emotes, and signals biological needs well. Thus, Aristotle ignores other functions of a human being, specifically emoting and desiring when these two functions operate in a peculiarly human way. If reasoning, emoting, and desiring are all functions of a human soul, the proper end of a human *en toto* requires us to take into account all of these functions. If Plato is correct, human proper function is a synthesis of the proper function of each human capacity. Thus, a synthesis of reasoning, emoting, and desiring well constitute human happiness because these activities address the full range of what it means to function as a human.

If this is true, I believe a certain understanding of Aristotle is mistaken if it reduces the *telos* of human beings to one of their faculties, reason. Even if the reasoning capacity is the best part of humans, this does not mean that human excellence is defined by this capacity alone.[169] Contemplation may be intrinsically good, but if this activity occurs in tandem with another intrinsically good activity, the resulting state is better than contemplation alone because two intrinsic goods have been realized instead of one. Moreover, if the relationship between the two goods is realized in such a way as to constitute a state of happiness (i.e., harmony between reason and emotion), this relationship is also an intrinisic good. Thus, if two human activities are

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[169] Aristotle believes reason to be the highest human faculty. Whether reason is the best human faculty is controversial, at least for reasons Aristotle espouses. Aristotle's evaluation seems to be based on his view of the gods and their attributes. Aristotle believed that contemplation was at least analogous to the activity of the gods. "If reason is divine, then, in comparison with man, the life according to it is divine in comparison with human life. But we must not follow those who advise us, being then, to think of human things, and, being mortal, of mortal things, but must, so far as we can, make ourselves immortal, and strain every nerve to live in accordance with the best thing in us; for even if it be small in bulk, much more does it in power and worth surpass everything" (*The Nicomachean Ethics*, 2009, 1177b). Whether Aristotle was polytheistic is arguable, but there are many today who would object to evaluating reason based on whether this capacity is shared with a god or gods . In addition, he argues that reason alone leads one to truth. However, it is possible that at least some emotions share this truth-seeking attribute. For instance, Mikka Salmela argues that emotions can meet the criteria for truth-apt states (Salmela, 2006).

realized and related to each other in the right way it results in a state that is better than contemplation alone.

One might object that emotions are not an activity because they are mental states and not activities. That is, emotions are not the product of intention and do not exist over time like contemplation. In Book I, Aristotle explicitly rejects that happiness can be a mental state. "For the state of mind may exist without producing any good result, as in a man who is asleep or in some other way quite inactive, but the activity cannot; for one who has the activity will of necessity be acting, and acting well" (2009, 1099a). I think it may be possible to argue that emotions can still fit this account of activity, but I do not think that is necessary here.[170] For now, I want to point out that my argument does not depend on whether emotional states in themselves are happiness. Instead, I am arguing that reasoning, when accompanied by emotions which fit well (i.e., are in a right relationship), produces an activity that is better than an activity of reason alone. Thus, if contemplation constitutes happiness, contemplation accompanied by a fitting emotion (e.g., joy) constitutes a more complete happiness.

Here, I think it will be helpful to briefly sketch what I have in mind by "fit" because this notion is notoriously vague.[171] Minimally, I understand an emotion to "fit" reason when an emotional judgment tracks a deliberative process' appraisal and the emotion motivates me to behave in a way that is consonant with my deliberation. For instance, suppose I reason that when

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[170] I think it plausible to conceive of producing and experiencing emotions as an activity. If we can shape and direct our emotions, we can intentionally associate some emotions with virtuous acts. For instance, when I taught high school classes, we used to take our junior year students on a half-week-long service project trip. Without fail, every year we returned, many of the students reported feeling an emotional connection with groups of underprivileged people they did not experience before. For these students, then, the moral obligation they believed they had to serve these people is now supported by an emotional connection with those people. Thus, these emotions become the product of intention and they endure over time (both during the initial token emotional experience and when the emotions recur during later virtuous acts of the same type).

[171] For instance, in evidentialist versions of justification, it is not immediately clear what it means for evidence to "fit" beliefs. For examples discussing evidential fit see (Steup, 2018) and (Perrine, 2018).

I study for a test, I better learn the material. If I better learn the material I will do better on the test. If I do well on the test, I will be able to accomplish my goal of getting an A in the class. As I study I feel some positive emotion (e.g., pride) because I am behaving in a way that will achieve my goal. In addition, my positive emotion includes a judgment that I am doing something beneficial which is consonant with the conclusion of my deliberation. In another case, I believe that persons ought to show hospitality. I also believe that showing hospitality includes inviting persons who are in need into my house. I realize that a refugee family has moved into my neighborhood. I reason that the refugee family is in need because they had to flee their home and leave many of their belongings in their native country. Because they are in need, I also reason that inviting them into my house would be an act of hospitality and thus something I ought to do. When I invite them over to my house, I feel joy. My positive emotion, joy, tracks my evaluation of my act because I am doing something I believe I ought to do. In addition, my positive emotion, joy, motivates me to continue being hospitable. Conversely, if I refuse to invite the refugee family into my home when I am asked to do so, I feel shame.[172] This negative emotion is a negative evaluation of my refusal which coheres with my deliberation. In addition, my shame motivates me to be hospitable in the future because I do not like feeling shame. These examples are ones where an emotion complements reason's valuation of an act.[173]

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[172] The situation can become complex very quickly. For instance, suppose I am a mid-level manager at a large corporation. I know that I will have to lay-off a certain number of people if the company is to survive. I feel a positive emotion because I know that laying-off people will benefit more people in the long run. However, I feel sad because I know that lay-offs will cause families hardships. In this situation, it is arguably better that I feel both the positive and the negative emotion than the positive emotion alone. It is for this reason I have argued that feeling a positive emotion that complements my moral valuation is a minimal state. It may be that the most virtuous state includes both a positive and negative emotion, though these emotions will track different parts of moral deliberation (i.e., happiness tracks reasoning about the beneficial outcome for most people working for a company and sadness tracks the impact of the decision on the fewer people who will be laid off.)

[173] I do not have time to explore this here but, I believe it quite plausible that the virtuous person empathizes well (I will explore empathy more in section **5.11 Virtuous relationships**). Thus, one who empathizes well with another will experience a positive emotion when imagining a virtuous act being done to someone else and will

5.10 Human function

In the preceding section, I argued that an adequate account of a well-functioning human (or human flourishing) must take into consideration all the psychological capacities of humans. More specifically, an account of proper human function will need to assume that one's psychological capacities operate in harmony to produce fitting human acts. In this section I want to continue to explore Aristotle's account of proper human function as it applies to living a peculiarly human kind of life.

In an article entitled "Aristotle on Eudamonia" Thomas Nagel explores Aristotle's argument for human function (1972). On Nagel's account Aristotle's function argument is an attempt to define what makes a man a man and not another kind of thing. Nagel appears to be suspicious of an argument that isolates a unique human capacity and reduces human function to the capacity that sets humans apart from other organisms. To illustrate the problem, Nagel provides an example of a combination corkscrew and bottle opener. We could not say that the proper function of this device is to remove corks because this would not distinguish it from ordinary corkscrews. Yet, neither can we say that the function of the device is to open bottles because opening bottles does not distinguish this device from ordinary bottle openers. "The thing must have a simple conjunctive *ergon* [function], and its excellence is a function of both conjuncts" (*Ibid*, p. 254). That is, the proper function of the device is to remove corks *and* open bottles.

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experience a negative emotion when imagining a vicious act being done to someone else. However, one who empathizes virtuously will not always track the actual emotions of others. For instance, an abuse victim who repeatedly experiences abuse might feel shame when they are treated unjustly. However, when the virtuous person attempts to empathize with the abuse victim, they will feel indignation when imagining the victim being treated unjustly.

However, Nagel rejects a simple conjunctive explanation of human function. That is, we cannot explain the proper function of humans (or humans functioning well) as just a long string of activities that humans are capable of. This is because an organism and its functions are coherently organized. A thing's "proper excellence is not just the conjunction of the special excellences of its component functions, but the optimal functioning of the total system in [an organism's] life" (Nagel, 1972, p. 256).[174] Thus, an organism's activities are organized into a hierarchy. Lower activities are performed in service of higher ones. The highest level account of this functioning, then, must be grounded in the highest capacities of an organism. Thus, according to Nagel, on Aristotle's view "the highest-level account of a human life puts all the other functions into a supportive position in relation to rational activity" (*Ibid*). Even when centering one's view on reason, we find that reason can be engaged in different kinds of activities. For instance, reason can be employed in the service of fulfilling lower desires. When I have a craving for barbeque food, reasoning allows me to locate and travel to a restaurant that I believe will satisfy my craving. However, reasoning is also capable of being engaged in higher activities beyond satisfying mudane concerns.

> The model of feedback does not work for the *ergon* of humans, because the best and purest employment of reason has nothing to do with daily life. Aristotle believes, in short, that human life is not important enough for humans to spend their lives on. A person should seek to transcend not only his individual practical concerns, but also those of society or humanity as a whole. (*Ibid*, p. 257)

Aristotle's hierarchal evaluation of human activity is tied to some of his controvesial metaphysical assumptions. Primarily, he believes abstract reasoning (contemplation) to be an

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[174] Note, this coheres well with the Platonic intra-psychic harmony I have developed in previous sections. The just state of the soul as a whole is not just the conjunction of the functioning of each part. The just state of the soul includes each part functioning well in relation to one another.

activity of the gods.[175] Thus, when we engage in this kind of reasoning, we are engaged in an activity that is beyond mundane human good. Therefore, on Aristotle's view, contemplation is the highest human activity because it allows humans to transcend what they are. The highest level explanation of human activity must be grounded in the highest activity, reason. Yet, one need not assume the existence of a Greek pantheon to appreciate Aristotle's reasoning. Even if contemplation is not an activity of the gods, it is an activity unique to humans that allows humans to transcend themselves by being able to conceive of a world beyond their own immediate conscious experience. For instance, we have the ability to transcend our individual experience of reality by imagining multiple possible futures. We have the ability to transcend the experience of ourselves by simulating or interpreting the mental states of others. We also have the ability to transcend our biological urges by developing a regimen of habitual discipline to shape and direct those urges. These activities allow human beings to live a different kind of life from other organisms.

Nagel finds Aristotle's description a compelling, though not definitive one. He offers two possible avenues for developing the Aristotelian vision. First, one might insist that human beings have multiple proper activities. However, to do this, one will have to argue why some activities may contribute to one's well-being but not be a component of well-being (i.e., digestion). Second, one's approach might

> be to preserve the assumption that the *ergon* of man is one, but to offer a different account of its organization, according to which the highest-level specification of human capacities was not just intellectual but involved both theoretical and practical concerns.

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[175] See footnote 169. Also, Bryan Reece has argued that Aristotle should be taken to mean that the human capacity to reason is type-distinct from the capacity exercised by the gods (2020). If this is true, Aristotle's hierarchy still depends on an account of the gods because reason's place in the hierarchy is determined by its resemblance to an activity of the gods.

(1972, p. 259)

For my purposes, I do not think it necessary to identify which approach would be best.

Tentatively, I tend to agree with Nagel that the second suggestion provides the most promise and

I think proper human function might be better defined as "relating well to other persons."[176]

However, I will not attempt to defend interpersonal relating as *the* proper human function here.

More modestly, I intend to show that whether we construe proper human functioning as a single

activity (excellent interpersonal relating subsumed within the life of reason or *vice versa*), or

multiple activities (rational activity and interpersonal activity), we cannot provide an adequate

account of proper human function without accounting for how human reason and emotions

function well together because relating well to others requires a harmonious synthesis of rational

and emotional activity.[177]

Returning to Korsgaard, she argues that on Aristotle's account, the activity of the rational

soul may still be conceived of as the function of human beings not because this activity is merely

unique to humans but because it marks the kind of distinctive life humans live. Aristotle "means

rather that rational activity is *how we human beings do what we do*, and in particular, how we

lead our specific form of life" (2008, p. 141, emphasis in original). Humans engage in activities

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[176] Construing proper human activity as relating well to others requires accounting for all the human faculties used in engaging in interpersonal relationships. Thus, interpersonal relating must be a life of reason, but also emotions, perceptions, and other abilities. However, relating well does not seem to immediately capture all the ways in which one can reason well. For instance, I may use my reason to discover the solution to a complex calculus problem. This solution does not immediately appear to serve any kind of interpersonal function, though. Yet, we might think that solving the calculus problem is a good thing in and of itself. Furthermore, at least sometimes, rational activity is employed in service of emotional activity. For instance, one reads an intensely emotional memoir to feel the way the author felt. Or one deliberates and decides to recall a memory of their loved one after the loved one's death to experience the emotion of that memory. In these cases, it is harder to argue that reason is the highest activity of humans because reason is serving to stimulate what appears to be worthwhile emotional activity.

[177] It may be the case that relating well to others requires a synthesis of rational, emotional, and physiological activity. Because traumatic physiological responses generally track one's traumatic emotions, I will spend a good deal of space exploring the relationship between reason and emotions in interpersonal relationships and will largely leave the role of *desire* unexplored in the context of interpersonal relationships.

that are common to lower life-forms like reproduction, fleeing what we fear, and perhaps even play. However, rationality transforms these lower activities into a uniquely human kind of life. Unlike non-human animals, humans are not bound by instinct but can choose their own "way of life." That is, humans can deliberate and make decisions.[178] In this way, human rational activity is not just another activity in addition to the activities we have in common with other organisms. Instead, rationality fundamentally alters the nature of even the lower activities. I eat not just because I am hungry, but because I choose to eat. Furthermore, I can choose to eat the kinds of foods I want. Thus, humans have a markedly different kind of life than other organisms.

> So rational choice introduces a whole new sense of *life*, a new sense in which a person can be said to "have a life." And---importantly---it is life in this sense that we primarily have in mind when we say of someone that he lived well or badly---whether he was *eudaimon* or not. So this is the sense of "life" relevant to the function argument. Reason is the function of a human being, because it is *how we do what we do*, which is to lead a specfically human form of life. (*Ibid*, p. 143, emphasis in original)

Thus, on this view, the function of human life is the ability to live one's life in accordance with one's values. I find Korsgaard's argument persuasive and think she is correct in arguing that human lives are distinguished by this kind of intentionality. In addition, I find it illuminating to think about rational activity as not just an additional independent activity in the lives of humans, but one that fundamentally alters the other kinds of activities we engage in.[179]

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[178] It may be helpful to be reminded that Korsgaard is commenting on Aristotle's own position. Given what we know and what we might come to know, it may be the case that some non-human animals also have the ability to make decisions in a similar manner. If this turns out to be true, it does not necessarily diminish the Aristotelian case. If there are non-human animals that have a kind of life that is marked by the ability to deliberate and act on deliberation, the Aristotelian view of well-being will become salient for thinking about how we conceive of and treat these non-human animals.

[179] I think it will be helpful to remind the reader that while I personally think the model of flourishing I am developing is a convincing account, my purpose is not to definitively prove that a certain model of flourishing is *the* best account of flourishing. Instead, I want to develop an account of flourishing that can be supported philosophically and is relevant for evaluating trauma. To sufficiently defend a particular model of human flourishing as the best overall philosophical account of human flourishing would require a separate book.

However, it seems to me that there is something important lacking in Korsgaard's account. I think it true that reason transforms the kinds of activities people are engaged in, but it does not seem that deliberation summarizes the full function of humans. If we return to Korsgaard's original argument for identifying function, she argued that we know the function of a thing when we know what a thing does and how it does it.[180] Deliberation surely captures much of human function. I take a walk through the park on a cool spring evening because I have read the weather forecast, considered whether taking a walk during such weather would be pleasant, and on the basis of this thought process decided to take the walk. I ride public transportation to work because I have considered the environmental impact of driving my personal vehicle, compared this impact to the environmental impact of taking public transportation, I have decided to take public transporation as a result of this deliberation. What I intend to show is that while Korsgaard may be right that reason distinguishes human life from other forms of life, and thus the life of reason is a proper human end, we cannot account for the totality of proper human function by rationality alone. This is for at least two reasons. First, relating well to other persons is a proper human function and this proper function requires not just rational activity but emotional activity as well. Rational activity and emotional activity must occur in harmony to relate well to one another. Second, rational activity is often influenced and informed by emotional activity. While emotion can cloud rational judgments sometimes, it also enhances rational processes in other contexts.[181] Thus, if we are to give a full account of what rational activity is, we must be able to account for a person's emotional activity as well. Thus, it may be possible to characterize the human life as the life of reason, but it is not possible to give a complete account of proper human function without explaining the proper harmony between

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[180] For a review of her argument see 5.7 Sub-psychic ends."
[181] I will argue more fully for this in 5.14 From Plato to the present."

persons' rational and emotive activities. Thus, relating well to other persons is the "what," or a proper end of humans, and the harmonious rational and emotional activity is part of the "how we do it."

If reason transforms all of the activities of humans then reason also transforms the nature of how humans relate to one another. That is, human beings relate to one another in distinctly different ways than other organisms relate to each other because we engage in rational activity. For example, human beings make, keep, and break promises. The act of entering into a promise with someone else requires one to understand the commitment the promise requires of the promise-maker and the act requires one to make a decision to commit themselves to keeping the promise. If either one of these conditions is not met, it is not clear whether a promise has actually been made. Once a promise is made the promise maker enters into an obligation to fulfill the promise. This obligation means the promise-accepter has a justified expectation for the promise-maker to fulfill the conditions of the promise when the promise-receiver is aware that a promise has been made. Furthermore, if the promise-maker does not fulfill their promise, both the promise-acceptor and the promise-maker understand that a broken promise constitutes a violated norm.[182] Making and keeping promises is thus a distinctly a rational activity and thus, a human activity. Reason allows us to think about the contents of a promise, deliberate about it, and decide whether to make a promise, accept a promise, or break a promise. Thus, promising is a distinctive human activity that is interpersonal. Furthermore, we can describe promise-keeping as a function by identifying the "what" and the "how." The what, or the activity itself, is making a

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[182] This is obviously a generality and there are exceptions. For instance, I might make a promise to a police friend that I will always tell the truth to governmental authorities. However, it just so happens that I am a German during World War II, and I am hiding a Jewish family. When the Gestapo asks me whether I am hiding any Jewish families, I lie and say no. If my friend is a virtuous friend and they find out about my lying, they may recognize that a promise has been broken, but this broken promise may not constitute a violation of a norm. In fact, keeping the promise may have constituted breaking a norm.

promise. The how, is through deliberation, understanding, and in cases where a promise is accepted, agreement.

I use promising as an example of one activity that belongs to a broader class of activities that are definitively human activities. Promise-making and promise-keeping are activities that fall under the broader category of "interpersonal activity."[183] What I mean is that a fundamental activity of humans is participating in interpersonal relationships. Participating in interpersonal relationships is not just one activity among many of which humans are capable, but it is an activity that is part of what makes human life human. Only humans make promises to one another. More interestingly, only humans tell jokes to one another and only humans plan and attend funerals for others. These latter activities are not merely rational but integrate human emotions as well.[184] A certain affect often accompanies finding one's joke funny. I might understand why the joke is humorous, but I also feel it to be funny.[185] Funerals are generally places where groups of people grieve together.

Interpersonal relationships are distinct from merely social relationships. Many animals are social animals in the sense that they live in close proximity, cooperate, and form some kind of familial structure. Interpersonal relating is distinct from mere social behavior because interpersonal relating requires that two persons interact as *persons*. This means that interpersonal

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[183] One might argue that one can make a promise that is not interpersonal. One might make a promise that they will cut down a tree in their backyard without telling anyone about the promise nor entering into an obligation with anyone else because no one else is aware of the intended act nor will it directly affect anyone else. Yet, this does not appear to be a clear case of making a promise because there is no clear explanation for how one becomes obligated to fulfill the promise. One might argue that one is obligated to oneself. Yet, again, it is not clear whether one can issue moral obligations to oneself. At any rate, the paradigm case of promise keeping requires two distinct persons.

[184] I find it quite plausible that we need to include an account of human emotions to explain why people are motivated to keep their promises as well. We often feel shame if we break promises, even if the conditions of a broken promise are beyond our control.

[185] A recent neurobiological study found that brain structures associated with both one's reasoning processes and one's emotional processes were activated during experiences of humor (Farkas, et al., 2021).

relating require both what humans share with lower animals (i.e., social interactions, emotional responses) and the ability to reason. This is because distinctly human activities often include emotional and/or appetitive activities that have been transformed by the capacity to reason. Grieving over the death of a loved one generates strong emotions, but these emotions are tied to thoughts, memories, and beliefs of the one who has passed. One might feel elated after one successfully defends a doctoral dissertation. The emotion of elation is associated with thoughts and beliefs about one's writing project and its success. Thus, much of distinctly human activity requires a synthesis of reason and emotion. If this is the case, it should be no surprise that often the distinctly human activity of interpersonal relating also requires a synthesis (some kind integrated combination) of reason and emotion because synthesizing reason and emotion is a distinctly human capacity. In short, interpersonal relating is a proper human function that requires the integration of rational and emotional activity.[186]

Aristotle points to interpersonal relating as fundamental to human nature. In book II of Aristotle's *Politics* he develops an argument that people are by nature political animals. To show this, Aristotle argues that men and women come together because they want to reproduce their own image. Thus, persons unite for procreation which results in the creation of families. In time, these families unite with one another until there are enough of them to form a village. Then, villages are drawn to create larger communities. When this happens, Aristotle argues that the

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[186] One could also argue that relating well to others may also involve integrating appetites. For instance, two persons who decide to have sex are ostensibly attempting to satisfy similar appetites. I find this argument plausible, but I will not pursue arguing for the synthesis of appetites in proper human function. This is because, when we get to considering psychological trauma, I will argue that trauma is primarily a disruption between one's reason and emotions, specifically a disruption between one's self-concept and one's emotional experience. The relationship between one's emotions and one's appetites appears to remain intact during trauma. That is, when persons experience terror, their fear triggers a suppression of hunger and other appetites.

state comes into being. In this way, politics are grounded in human nature. But human concern

for politics is importantly different from how lower animals relate to one another.

> Now, that man is more of a political animal than bees or any other gregarious animals is
> evident. Nature, as we often say, makes nothing in vain, and man is the only animal
> whom she has endowed with the gift of speech. And whereas mere voice is but an
> indication of pleasure or pain, and is therefore found in other animals…the power of
> speech is intended to set forth the expedient and inexpedient, and therefore likewise the
> just and the unjust. And it is a characteristic of man that he alone has any sense of good
> and evil, of just and unjust, and the like, and the association of living beings who have
> this sense makes a family and a state. (Aristotle, Politics, II.2)

Thus, humans are distinct from lower animals in at least two ways. One distinction is that

humans use language to communicate with one another. The other distinction is that humans are

governed by morality. "And it is a characteristic of man that he alone has any sense of good and

evil, of just and unjust, and the like, and the association of living beings who have this sense

makes a family and a state" (*Ibid*). Furthermore, political engagement is a distinctively human

activity. "But he who is unable to live in society, or who has no need because he is sufficient for

himself, must be either a beast or a god: he is no part of a state. A social instinct is implanted in

all men by nature" (*Ibid*). It is not my purpose to argue whether Aristotle's account correctly

presents a human history of politics nor is it my purpose to defend Aristotle's version of an ideal

state. Instead, I want to note that Aristotle thought that political practice is a distinctive human

activity and thus a proper end for human beings. Engaging in politics requires interpersonal

relating because politics is fundamentally concerned with organizing and structuring the ways in

which people relate to one another as persons.

Whether Aristotle's account of the origin of politics is sound, his observation of the

uniqueness of human language is supported by more contemporary observations. Human

language is considerably different than the way non-human animals communicate. Evolutionary

biologist Mark Pagel asserts that there are two fundamentally different characteristics of human language that separate language from communication practiced by non-human animals.

> Human language is distinct from all other known animal forms of communication in being *compositional*. Human language allows speakers to express thoughts in sentences comprising subjects, verbs and objects—such as 'I kicked the ball'—and recognizing past, present and future tenses. Compositionality gives human language an endless capacity for generating new sentences as speakers combine and recombine sets of words into their subject, verb and object roles... Human language is also *referential*, meaning speakers use it to exchange specific information with each other about people or objects and their locations or actions. (Pagel, 2017, p. 1)

Thus, when humans employ language, they employ something distinctly human. Furthermore, the primary purpose of language is communication. However, some scholars argue that language is employed for more than just communication.

> Of course we don't have to *communicate* when we use language…we can hint, suggest, adumbrate things which go beyond the more stringent requirements of communication. All these possibilities fall under the broad rubric of information flow or information transfer. Communication is only the primary type of use and the use of language is itself one type of information flow. (Parikh, 2001, p. 7)

It is not immediately clear whether Prashanth Parikh's additional uses of language fall outside the general notion of "communication."[187] Even if they do, however, it is evident that the additional ways language is used to facilitate "information flow" assume that language is used to transfer information between people. Thus, the distinctive human activity of using language facilitates humans relating to one another as humans because information transfer via language

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[187] Parikh's understands "communication" to be one type of information flow. "Communication is the main type of use. Intended information flow between agents can be of many other types. A speaker might, for example, suggest something to an addressee without actually communicating it. A waiter in a restaurant might say 'Would you like to order anything else, sir?' and suggest that it is time to leave. If he were to *communicate* this additional information, it may be taken as a sign of rudeness. Communications implies a relative openness of information flow. In particular, the speaker's intention is revealed in communication" (2001, p. 4, emphasis in original).

requires one to have reasoning and linguistic capacities. One must understand the meanings of words as well as rules of language if information is to be exchanged.

In addition, Aristotle considers friendship necessary for living a fully human life. On Aristotle's view, friendship is required for a life of happiness. Friendship seems to be the kind of thing that truly happy people desire.

> For without friends no one would choose to live, though he had all other goods…But [friendship] is not only necessary but also noble; for we praise those who love their friends, and it is thought to be a fine thing to have many friends; and again we think it is the same people that are good men and friends" (The Nicomachean Ethics, 2009, 1155a).

Also,

> Surely it is strange, too, to make the supremely happy man a solitary; for no one would choose the whole world on condition of being alone, since man is a political creature and one whose nature is to live with others. (*Ibid*, 1169b)

More importantly, though, Aristotle believes friendship provides a context in which virtuous activity takes place. Those who are rich, need to demonstrate generosity, those with power, beneficence, and virtuous friends stimulate one another toward more virtuous activity (The Nicomachean Ethics, 2009, 1155a). Because contemplation of good things is a virtuous activity, contemplating another's virtuous actions is itself virtuous (*Ibid*, 1169b-1170a). Friends make life more pleasant and we generally think the happy life is to be a pleasant one (*Ibid*, 1170a). It is natural for the virtuous person to desire another self like themselves (*Ibid*, 1170a-b). Because a virtuous friend is virtuous, and the virtuous person loves what is good, he will love another self that is good. "The man who is happy will therefore need virtuous friends" (*Ibid*, 1170b). Thus if happiness (flourishing) is the proper end of human beings, excellent interpersonal relationships (friendships) are a necessary part of achieving that end. Moreover, the activity of engaging in virtuous friendships is part of what consitutes happiness.

Thus far, I have argued that Aristotle implies engaging in interpersonal relationships (e.g., politics, language use, and friendship) are necessary for living a distinctly human life. The case of friendship shows us, though, that interpersonal relationships not only contribute to a distinctly human life, but taking part in these relationships is actually part of what constitutes living a distinctly human life. Thus, interpersonal relationships, or at least certain kinds of interpersonal relationships, are a proper end of human beings. In this way, it is not only rational activity that captures the proper end of humans, but also the activity of engaging in certain interpersonal relationships.

Engaging in any kind of interpersonal relationship, does not seem to fit Aristotle's description of a proper human activity, though. I can relate poorly to other persons. For instance,

> In gatherings of men, in social life and the interchange of words and deeds, some men are thought to be obsequious, namely, those who to give pleasure praise everything and never oppose, but think it their duty "to give no pain to the people they meet"; while those who, on the contrary, oppose everything and care not a whit about giving pain are called churlish and contentious. (Aristotle, The Nicomachean Ethics, 2009, 1126b)

Aristotle believes that people go wrong when they tolerate every action by others or resent all actions by other people. Interpersonal virtue (friendliness) is partially defined as the personal trait where "a man will put up with, and will resent, the right things and in the right way" (*Ibid*). Thus, it is not just engaging in interpersonal relationships that constitutes a proper human end, but engaging well in interpersonal relationships. Furthermore, Aristotle's concern for politics is, at heart, a concern for how villages of humans might rightly relate to one another.

5.11 Virtuous relationships

If relating well to others constitutes a proper human function, we need an account of how humans relate well to one another if we are to understand what it means for humans to function

well. I will argue that rationality, by itself, cannot account for what it means to relate well to others and thus cannot, by itself, account fully for explaining proper human function. While it may be the case that rationality transforms the nature of human activity to distinguish it from other organisms, rationality by itself does not seem to be able to account for what it means to engage well in interpersonal relationships. It is true that some kinds of interpersonal relating is rational. For instance, I might make plans with friends to go out and see a movie or I might work with coworkers to plan, execute, and evaluate a common project. However, relating well to others requires more than just one's rational faculties. Because humans are, by nature, rational *and* emotional, and also engage each other using these capacities, any account of interpersonal relationships must also be able to account for how humans employ rationality and emotion in their relationships with one another.

There are various ways we do this. Some are like promise-keeping, obviously rational activites. Others, however, are less clearly rational activities, or at least not purely rational activities. For instance, consider a passage from the Old Testament book of Job. In chapter one and the beginning of chapter two of the book, Job has just endured great loss. He has lost all of his wealth and all of his children. In fact, things are so bad for Job that he has developed sores all over his body. Things are so bad that Job's wife encourages him to act in such a way that he will be killed so he can be put out of his misery.[188] When his friends hear what has happened to Job, they decide to come and comfort him. Yes, to their surprise, when his friends encounter Job, he is covered in sores. Their response to his situation gives us an example of uniquely human activity that is not purely rational but concerns interpersonal relating.

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[188] "[Job's] wife said to him, 'Are you still maintaining your integrity? Curse God and die!'" (Job 2:9, NIV).

> When Job's three friends, Eliphaz the Temanite, Bildad the Shuhite and Zophar the Naamathite, heard about all the troubles that had come upon him, they set out from their homes and met together by agreement to go and sympathize with him and comfort him. When they saw him from a distance, they could hardly recognize him; they began to weep aloud, and they tore their robes and sprinkled dust on their heads. Then they sat on the ground with him for seven days and seven nights. No one said a word to him, because they saw how great his suffering was. (Job 2:11-13, NIV)

Anyone who has endured suffering or who has attempted to comfort someone else who is suffering might relate to this scene. Initially, Job's friends came to him to comfort him with words but they were struck by Job's pathetic condition. Instead of offering arguments or consoling words, they simply sat with him (at least at first). The physiological movement required for sitting is not the only non purely rational activity Job's friends are engaged in. Interestingly, Job's friends tore their clothes when they saw Job because his physical condition appeared so pathetic. In the ancient near eastern context, tearing clothing was a sign of mourning, but it was also a sign of empathy. Writing about the ancient practice of tearing clothes in the Old Testament, Obiorah Jerome and Favour Uroko write,

> Only doleful life situations of various types can induce one into tearing one's garments. Conspicuous among these is the real or imagined death of a loved one. It is a separation in this present world and tearing clothes signifies both the reality of the separation and the psychological status of the bereaved. It is a condition of intense distress that does not deserve comfortable fine garments. Because garments are readily at hand, the mental agony and anger of the sufferer are vented on what is very close. (2018, p. 7)

Thus, tearing one's clothes was supposed to represent the emotional distress one was experiencing. Yet, we find the distress Job's friends experienced was induced by Job's appearance. Job's friends tore their clothes, not because they were directly suffering, but because they recognized Job's suffering and empathized with him.

> When all his children died and he also lost all his possessions, Job expressed his mental agony by tearing his garments (Job 1:20). Similarly, his three friends – Eliphaz, Bildad, and Zophar – did the same (Job 2:12) when they came to console with [*sic*] him and

observed that his body was full of sores. Tearing clothes can be an expression of empathy for another person's pitiable condition. (*Ibid*, p. 5)

Commenting on the neurological process employed during empathy, neuroscientist Christian Keysers states, "Very rapidly, we got this unifying notion that when you witness the states of others you replicate these states in yourself as if you were in their shoes, which is why we call these activities 'vicarious states'" (Armstrong, 2017). People can empathize so vividly with others that they are motivated to alleviate the suffering of the individuals they observe.[189] If empathizing motivates comforting behavior, one's vicarious emotion motivates one to intend behavior that comforts the sufferer. That is, when I experience vicarious suffering, I am moved to think about ways I can alleviate the suffering of another person.[190]

The activity of experiencing the vicarious emotions of others is not unique to humans. Other higher order mammals also have this ability, at least to some degree. Empathizing serves very important pro-social functions.

[E]mpathy coordinates the actions of individuals in rapid, automatic fashion, which allows them to respond more effectively as a collective to potential opportunities or threats…empathy helps solve the problem of understanding others' thoughts and intentions. When two individuals feel similar emotions they are better able to understand each other, to take each other's perspective, and thus are more likley to accurately perceive each other's perceptions, intentions, and motivations …empathy signals solidarity. (Preston & de Waal, 2002, pp. 21-22)

Of course, experiencing the vicarious emotions of others is not a peculiarly human activity, but human empathizing differs from non-human animals because human empathy contributes to our understanding of others' mental states. "Empathy is commonly conceptualised as comprising two

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[189] People can also experience self-distress when empathizing which hinders empathy's interpersonal value. I will later argue in 6.13 SCC and empathy" that trauma interferes with empathy by diminishing one's self-concept clarity.
[190] In contrast to self-distress, many psychologists refer to this effect of empathy as "empathetic concern." I will explain more about empathetic concern in 6.13 SCC and empathy."

dimensions: affective empathy (the ability to share others' emotions), and cognitive empathy (the

ability to infer/understand others' emotional experiences; Chakrabarti & Baron-Cohen, 2006;

Decety & Jackson, 2004; Singer & Lamm, 2009)" (Thompson, van Reekum, & Chakrabarti,

2022, p. 118). Empathy contributes to one's Theory of mind (ToM). ToM is an important and

uniquely human ability.

> Theory of mind (ToM) is defined as the ability to attribute mental states, such as desires, intentions and beliefs, to other people in order to explain and predict their behavior (Frith and Frith, 1999). It constitutes a central aspect of social cognition which is regarded to be a highly specialized, human-specific skill that forms a crucial prerequisite to function in social groups (Adolphs, 2003a, 2003c; Herrmann et al., 2007)…
>
> Recent social cognitive neuroscience has begun to define subcomponents of the complex concept we refer to as ToM. One important differentiation is that of 'affective' versus 'cognitive' ToM, although different terms have been used for these and related concepts (overview in aron-Cohen and Wheelwright, 2004; Kalbe et al., 2007). Whereas cognitive ToM, for example assessed with so-called false belief tasks, is thought to require cognitive understanding of the difference between the speaker's knowledge and that of the listener (knowledge about beliefs), affective ToM, for example tested with faux pas and irony tasks, is supposed to require in addition an empathic appreciation of the listener's emotional state (knowledge about emotions) (Shamay-Tsoory et al.,2006). (Kalbe, et al., 2010, p. 770)

Because emotional states motivate behavior, phenomenological awareness of others' emotional

mental states contributes to being able to predict others' behavior. Note, though, that ToM

includes the ability to be aware of another's emotional mental state and also the ability to be

aware other cognitive states commonly associated with one's reasoning capacity (i.e., beliefs).

Thus, Korsgaard appears to be correct in her assessment that the rational capacity of humans

transforms their lower capacities. The capacity to vicariously experience the emotion of others

(empathy) is transformed when it is paired with the ability to infer or simulate rational mental

states creating a robust ToM.

However, even though one's reasoning ability is what transforms one's empathetic ability, this does not mean that reasoning alone, and not empathizing, is a human function, nor that empathy is not a proper human function. This is because one does not have a well-functioning ToM without empathetic ability. This is because a ToM that includes another person's emotional state is better than a ToM that lacks another person's emotional state. ToM allows people to engage in uniquely human activities, like interpersonal relating. A ToM that lacks awareness of others' emotional states inhibits one from interpersonal relating because one is less able to understand the mind of others and predict their behavior. Understanding another person's mental states allows for better cooperation because it allows for a deeper understanding of another's motivations for behaving.

Perhaps more significantly, the accuracy of one's ToM appears to be related to one's degree of cognitive interdependence.[191] I will explore cognitive interdependence more in section 6.12 The self and other selves. However, I think it will be helpful to introduce the concept here and briefly suggest why I believe it to be important to interpersonal relating. Cognitive interdependence is

> the tendency of individuals in close, committed relationships to think of themselves less in individual terms and more as partners in a dyadic relationship… Cognitive interdependence is thought to reflect mental processes that stem from the meshing of perspectives, goals, and identities that characterizes committed relationships and is most commonly observed in romantic relationships such as marriage. (American Psychological Association, 2022).

Cognitive interdependence increases the commitment two people have to a relationship and it increases their ability to cooperate with one another. "[C]ognitive interdependence becomes a 'habit of thinking' in which thoughts of the partner or relationship are more readily accessible

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[191] I believe virtuous friendships to require at least some amount of cognitive interdependence.

and influential than thoughts of self" (Davis & Weigel, 2020, p. 1009). This does not mean that one gives up one's own identity and goals to adopt another's. Instead, cognitive interdependence is a merging of two individuals' identities and goals. Christopher Agnew et. al., found that,

> the more romantically committed individuals become, the more they come to regard themselves as blended with the partner, as revealed in perceived overlap in mental representations of self and partner… Furthermore, romantically committed individuals tend to regard their relationships as relatively central to who they are and what their lives are about, as an essential component of that which is important and meaningful in life. (Agnew, Van Lange, Rusbult, & Langston, 1998, p. 951)[192]

These researchers also found that one's self-identified commitment to a relationship tracked one's level of cognitive interdependence. The more committed one was to a relationship, the higher degree one experienced cognitive interdependence. In addition, Agnew and Etcheverry argue that the development of cognitive interdependence includes a change in not just beliefs, but a change in affect as well. Cognitive interdependence includes,

> (1) unique relationship-specific cognitive, affective, and behavioral structures and (2) consideration of the self in relational terms. We believe that these two factors influence each other in a cyclical fashion, with the relationship-specific development of cognitive, affective, and behavioral structures encouraging the development of a relational sense of self that, in turn, encourages the further shaping of cognition, affect, and behavior via relationship interdependence" (2006, pp. 279-280).

Cognitive interdependence happens when one adopts a part of another's self-concept as one's own and one's own self-concept includes beliefs about being in relationship with another person. In regard to the romantic couples they studied, Agnew et. al., wrote,

> We suggest that as individuals become increasingly committed to a relationship, they come to think of their partners as part of the self and come to regard theselves as part of a collective unit that includes the partner. Over time in a developing relationship, John becomes increasingly committed to continuing his involvement with Mary, foreseeing an

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[192] Both Agnew et. al.'s studies asked for feedback from people in both romantic relationships and close friendships. Only information collected from the romantically involved couples were used to evaluate the researchers' hypothesis.

extended future during which his well-being will rest on Mary and their relationship. Accordingly, increased commitment is likely to instigate more frequent relationship-relevant cognitive activity, along with a shift in the nature of personal identity and self-representation. (1998, p. 941)

Agnew et. al.'s studies of cognitive interdependence found higher levels of cognitive interdependence corresponded to higher levels of commitment. The more committed a person was to a romantic relationship, the higher their level of cognitive interdependence. Whether one ever chooses to engage in a romantic relationship, the capacity for cognitive interdependence is a unique human capacity that supports the formation and growth of romantic interpersonal relationships.[193] Bret Davis and Daniel Weigel found that as a person increases their cognitive interdependence, they experience increased positive emotions connected to thoughts about the relationship. Discussing their findings, they write,

> Emotions may play an important role in developing cohesion between relationship partners by coordinating thoughts associated with cognitive interdependence. If emotional interdependence synchronizes relationship thoughts (Anderson et al., 2003) associated with cognitive interdependence, then emotional valence of thoughts should act as an additional indicator of cognitive interdependence. Further, it is important to note that individuals freely listed these positive relationship emotions without prompting when describing their relationships. It seems that when people experience greater cognitive interdependence, they also concurrently experience more positive relationship-related emotions. (2020, p. 1024)

Similar to cognitive interdependence, Marian Morry and colleagues identify a predictor of friendship quality, relational-interdependent self-construal (RISC). RISC refers the the tendency of people to define themselves in terms of their relationships. Thus, RISC seems to

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[193] Agnew et. al.'s research did not find evidence that cognitive interdependence occurred in non-romantic relationships. However, more recent research has observed cognitive interdependence in non-romantic relationships. For instance, Jessica Borelli et. al., measured the level of cognitive interdependence in a sample of children ages 8-12. Cognitive interdependence in this study was observed to be between children, their peers, and/or teachers. Interestingly, they write that their findings, "suggest that depressive symptoms are associated with a less interdependent sense of self…that may, in turn, contribute to a heightened stress response in a challenging performance-based situation" (Borelli, et al., 2018, p. 343).

account for the second condition of cognitive interdependence "consideration of the self in relational terms" (Agnew & Etcheverry, 2006, p. 279). The more one's relationships form a part of one's self-concept, the higher one's RISC. "For individuals high in RISC, relationships and not just uniqueness are essential for self-definition,[194] self-expression, and self-enhancement (Cross, Gore, & Morris, 2003). Therefore, having a high level of RISC should encourage people to promote and maintain harmonious interactions with others" (Morry, Hall, Mann, & Kito, 2014, p. 402). Morry et. al., studied 514 college students to test whether high levels of RISC correspond to higher quality relationships. They found "that individuals higher in RISC reported being more likely to disclose to their friends,[195] having higher fulfillment of their friendship functions, and subsequently higher relationship quality than individuals lower in RISC" (*Ibid*, p. 417).[196] In addition, they found that higher RISC contributed to more relationship supportive behaviors (*Ibid*, p. 420). Moreover, one's level of RISC affects one's emotions and the way one perceives emotions in others. "[S]elf-construal is a key cultural trait that activates a cognitive framework that constrains neural strategies and modulates the neural processes underlying cognition and emotion" (Han & Humphreys, 2016, p. 10). For example, one study found that,

> priming East Asian Americans with interdependent values enlarged an N400[197] response
> to affective incongruity in the emotional expression of a central face relative to the

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[194] In many studies observing RISC, RISC is contrasted with independent self-construal. Independent self-construal measures the extent to which a person's self-understanding is defined by traits that distinguish them from others whereas RISC measures the extent to which someone's self-understanding is defined by their relationships.

[195] On the importance of disclosure, Morry et. al. write, "Indeed, the process of disclosing information to a partner and attending to the partner's disclosures is important to nurturing a new relationship and maintaining an ongoing relationship" (2014, p. 402).

[196] There does appear to be a limit to how high a level of RISC is conducive to relating well with others. For instance, in one study when comparing individuals with higher levels of RISC to those whose self-concepts who were more independent (their self-concept included less beliefs about their relationships) those with more independent self-construal demonstrated greater emotional intelligence. That is those with more independent self-construal exhibited greater "adaptive perception, expression, regulation, and control of emotions in both the self and others" (Mara, DeCicco, & Stroink, 2010, p. 2).

[197] The N400 response is measured via electroencephalography (EEG). In addition, "The N400 forms part of the typical electrical brain activity seen in response to a wide array of meaningful and potentially meaningful stimuli, including visual and auditory words (and word-like strings of letters), acronyms, sign language signs, pictures, environmental sounds, and gestures" (Kutas & Federmeier, 2009).

> surrounding faces as participants judged the expression of this central face, suggesting that interdependent self-construal facilitates attention to emotional context. (*Ibid*, p. 12)

Moreover, one's self-construal appears to affect one's empathic ability.

> Priming self-construals also modulated empathic neural responses to strangers' physical pain that were decreased by interdependent self-construal priming among Chinese… but increased by independent self-construal priming among Westerners… In addition, priming of independent self-construal, which possibly weakened ingroup/outgroup concept can reduce racial in-group biases in empathic neural responses within the anterior cingulate and insular. (*Ibid*)

Thus, one's understanding of oneself directly impacts one's awareness of the emotions of others.

Not only are rational processes (i.e., forming beliefs, inferring conclusions) intertwined with emotional processes when engaging in interpersonal relationships, human rationality in general is not always emotionally barren. More importantly, in some instances, emotions may help persons reason well. I believe the benefit emotions provide to reasoning processes is important to explore because I have argued that Plato's account (or more precisely, my modification of Plato's account) does not conceive of the just soul where *reason* acts against or in spite of the emotions. Instead, *reason* and emotions are aligned and emotions are the ally of *reason*. Additionally, it is easy to generate examples where emotions hinder one's ability to reason. Albert might be in a romantic relationship with Burnadette. Burnadette has exhibited many signs that she is not trustworthy but Albert ignores these clues because he is in love with her. Even though all of the physical and circumstantial evidence points to the fact that my son robbed the bank, I do not believe he did it because my affection for him downgrades this conclusion as a possibility for me. But if emotion can only undermine the well-functioning of our reasoning processes, it does not appear that one's emotional and rational processes can operate simultaneously without one class of processes disrupting the other class of processes. In more

Platonic terms, for *reason* to flourish, *spirit* cannot be active, and thus, not flourish. I believe it will help to substantiate my case for psychic flourishing if I can show that emotions can sometimes aid, or at least not hinder, our reasoning processes.

There is growing empirical support to indicate that emotions help, rather than hinder, reasoning in some contexts.

> Following the 2005 terrorist attacks in London, participants who reported more intense affective reactions (participants in London and Manchester, England) also performed better on some syllogisms involving terrorism-related contents compared to participants reporting less intense affective reactions (participants in Canada; Blanchette, Richards, MeInyk, & Lavda, 2007). Another study found that war veterans reasoned better about emotional combat-related contents than about neutral contents (Blanchette & Cambell, 2012). Studies also show that normative reasoning of patients with different psychopathologies is better on contents related to their condition compared to neutral topics (Gangemi, Mancini, & Johnson-Laird, 2013; Johnson-Laird, Mancini, & Gangemi, 2006). Finally, studies of victims of sexual abuse show a relative improvement on abuse-related contents (Blanchette & Caparos, 2013; Blanchette, Lindsay, & Davies, in press). (Blanchette, Gavigan, & Johnston, Does Emotion Help or Hinder Reasoning? The Moderating Role of Relevance, 2014, p. 1050)[198]

In each of these studies, the participants who had experiences marked with intense emotion performed better on deductive reasoning tasks than the control group did. Importantly, in each of the studies, participants' emotional experiences were related to the contents of the deductive tasks (i.e., sex-abuse victims completed deductive reasoning tasks that contained sex-abuse premises in the deductive reasoning tasks). Isabelle Blanchette argues that one's emotions provide one's reasoning processes with information with which to reason.

> Emotions provide information about a situation that might be used in reasoning; it alters the way information provided in the reasoning statements is processed; and it influences what additional information may be activated during reasoning. Because reasoning is heavily influenced by semantics…if emotion changes the semantic context that is constructed during the process of inference-making, then it is likely to have an impact on the inferences that are drawn. (Blanchette, Does emotion affect reasoning? Yes, in

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[198] In these studies, participants' reasoning ability was tested by completing deductive reasoning tasks.

multiple ways, 2014, p. 10)

Blanchette offers an example of someone reasoning about the statement, "If you walk in this part of town at night, you may not be safe." To evaluate whether this statement is true, a person will activate processes in their long-term memory. Memory contents that contain strong emotion attract more attention when attempting to retrieve information. Thus, when considering whether this is a safe neighborhood to walk through, if one has a memory about one's friend being mugged and this memory includes an emotion about that friend's experience, this memory will more likely be retrieved than if the friend's mugging was encoded as an affectively neutral memory. If they know someone who was mugged in that part of town then the emotion attached to that memory will draw one's attention to it as evidence that the statement is true. In fact, if I am walking in a different neighborhood at night, my memory of my friend's testimony will make it more likely for me to think that the neighborhood I am now walking in is dangerous because the emotion attached to my memory makes it more likely that the memory will draw my attention when reasoning about the saftety of this different neighborhood. Emotions' impact on reason can increase "the number of alternatives being considered (e.g., walking in another part of town and being mugged), which leads to improved logical verification" (Blanchette, Does emotion affect reasoning? Yes, in multiple ways, 2014, p. 10).

Blanchette argues that emotion can aid in reasoning because emotion presents alternatives that would not have been considered otherwise. When walking through either the demonstrably unsafe neighborhood or another one, the emotion attached to the memory of my friend's testimony makes it more likely that I will consider it as evidence in reasoning about the safety of other neighborhoods. One way emotion can help reasoning is that emotion can bring one's attention to logical possibilities. A common error in reasoning is overlooking possibilities.

This is the core problem with the fallacy generally known as a "false dilemma." One might think that a problem has either one solution or the other. One overlooks that the solution may be a third option or it may be a conjunct of the two options. For instance, suppose you are having a problem printing a document. You believe the problem is in the computer or the cable linking the computer to the printer. You fix the cable and assume you have fixed the problem. However, you ignore the possibility that there is a problem with *both* the cable and the computer.

> Any factor that diminishes such oversights improves reasoning, and one such factor is an emotion concerning the topic of inference. When individuals experience this emotion, they are motivated to reason about its cause and to examine possibilities more closely than otherwise. (Blanchette, Does emotion affect reasoning? Yes, in multiple ways, 2014, p. 49)

In other work, Blanchette and colleagues argue that when one's emotions are relevant to the contents of what one is reasoning about, one's emotions can aid in one's reasoning (Blanchette, Gavigan, & Johnston, Does Emotion Help or Hinder Reasoning? The Moderating Role of Relevance, 2014). When one's emotions are irrelevant to what one is reasoning about, one's emotions tend to hinder one's reasoning ability. This is because emotions attract one's attention. Thus, when emotions are related to what what is reasoning about, one considers more relevant alternatives. When one's emotions are irrelevant to the contents of one's reasoning processes, one tends to pay attention to information that is irrelevant to what one is reasoning about. To test this hypothesis, the researchers conducted four studies. In the first three studies, images were presented to participants while participants were asked to engage in deductive reasoning tasks. These images were classified as being emotional[199]/neutral, and relevant/irrelevant.[200] In the last study, participants were shown a video before completing a

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[199] i.e., evoking an emotion.
[200] That is, relevant/irrelevant to the semantic contents of the deductive tasks.

deductive reasoning task. The videos were also characterized as being emotional/neutral and relevant/irrelevant. In some of the studies, participants were also monitored for physiological cues associated with certain emotions.

Before, I finish summarizing the study, it is important that I clarify how the researchers understood relevant/irrelevant emotions. Whether an emotion was relevant or irrelevant appears to track whether an emotional response was grounded in a stimulus related to the contents of what one is reasoning about. When the researchers presented statements to participants, they also presented pictures. For instance, when the statement "If someone washes their clothes, then their clothes will be clean" was presented participants were presented with one of four pictures: "Disabled Child" (emotional irrelevant), "Very dirty person" (emotional relevant), "Dolphins" (neutral irrelevant), and "Ironing board" (neutral relevant) (Blanchette, Gavigan, & Johnston, Does Emotion Help or Hinder Reasoning? The Moderating Role of Relevance, 2014, p. 1061). In the end the researchers concluded,

> When negative emotional responses were produced by stimuli that were semantically unrelated to the contents of the reasoning task, emotions impaired normatively correct reasoning. However, other results show that negative emotional stimuli do not always impair formal reasoning. When negative emotional responses were elicited by stimuli that were semantically related to the reasoning statements, this effect was reduced…We must note, however, that previous studies with participants reasoning about personally relevant emotional topics have reported improvements in reasoning about emotional contents, while we only observed an absence of deleterious effect. (Blanchette, Gavigan, & Johnston, Does Emotion Help or Hinder Reasoning? The Moderating Role of Relevance, 2014, pp. 1057-1058)

Thus, researchers found that as long as one's emotion is relevant to the content one is reasoning about, one's emotions tend to not be a hindrance to one's reasoning processes. When one's emotions are irrelevant to one's reasoning processes, they tend to hinder one's reasoning

processes. Thus, it is plausible to think one's reasoning processes and one's emotional processes can both function well together when they are directed toward similar ends.

However, in cases of PTSD where one experiences an intense emotion where the emotion is a grounded in a stimulus from the past, it appears that one's emotion will tend to hinder one's reasoning processes when one is not reasoning about the past event. Thus, posttramautic symptoms where strong intense emotions intrude into one's consciousness are generally examples of psychic disharmony where the expression of emotion conflicts with the expression of *reason*. Experiencing the strong emotion grounded in a past event will most likely hinder one's ability to reason about the present. This point is particularly poignant when one attempts to reason about one's relationships with others but experiences intrusive emotions grounded in past events unrelated to one's current relationship.

Additionally, Amelia Gangemi, Francesco Mancini, and Philip Johnson-Laird argue that many psychopathologies are fundamentally disorders of emotions instead of disorders of reasoning, even though these psychopathologies tend to be diagnosed by observing significantly flawed reasoning (2014). Gangemie and colleagues' point is that many psychopathologies are more fundamentally problems with emotional processes than they are problems with reasoning processes. In fact, they argue that in relation to their illnesses, these psychopathological conditions generally help persons reason better than they would have otherwise.

> Empirical studies…show that basic emotions tend to occur at the onset of psychological illnesses, that psychiatrists and patients can identify the strategies of reasoning in different illnesses, even when the content is held constant, and that patients suffering from a psychological illness reason better than control participants about the contents pertinent to their illnesses. (p. 44)

Regardless of whether Gangemi and collegues theory can provide a satisfactory explanation of mental illness, the observations they summarize and Blanchette's observations demonstrate at least two important dimensions about the relationship between reasoning and emoting. First, emotions and reasoning are intimately connected in some instances. Emotions provide information for one to reason with. "This situation seems scary, so I must be in danger." "That act makes me feel shameful, therefore it is wrong."[201] Second, emotions do not necessarily inhibit reasoning well. In fact, at least sometimes, emotions may enhance reasoning by making one aware of relevant possibilities that one would not have considered otherwise. Thus, it is possible for one's emotional processes to be expressed while one's rational processes are expressed and for one's emotions to not hinder one's reasoning.

So far, I have argued that relating well to other persons is a proper function of humans, even on Aristotle's own view. Relating well to others requires a well functioning synthesis of one's emotions and reasoning. I have also argued that the relationship between our emotions and how we reason is complex and that emotions do not necessarily undermine reasoning well. In fact, in at least some cases, emotions have a beneficial impact on the way we reason. If these things are true, these points demonstrate that an account of proper human function implies a well-functioning relationship between one's reasoning processes and emotional processes. If reasoning is the proper end of persons, one must explain how emotion contributes to well-

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[201] Aristotle struggles to provide a consistent analysis of shame (The Nicomachean Ethics, 2009, IV.9). He argues that shame is befitting of younger people but not older ones because older ones should not be committing shameful acts. Thus, we might think of shame as being good for the non-virtuous person, but the virtuous person should not experience it. However, it would be odd for the virtuous person to not feel shame if he ever did something wrong. "But shame may be said to be conditionally a good thing; *if* a good man does such actions, he will feel disgraced; but the virtues are not subject to such a qualification" (*Ibid*, 1128b). It is open to Aristotle to think that a virtuous person would feel shame if they imagined themselves doing a wrong act. One might object to this possibility by arguing that the truly virtuous person would never even imagine doing a shameful act. That a virtuous person would never even imagine a vicious act is not immediately clear to me, however. When one weighs alternative acts in a given context, that one feels shame while considering one act may help them to decide to do the other. Thus, shame provides information for the wise person to evaluate moral possibilities.

functioning reason. If interpersonal relating is a proper end of humans, one must explain the

rational/emotional synthesis required to relate well to others.

Whether interpersonal relating constitutes a separate function apart from reasoning or not,

I have argued that relating well to other persons is at least necessary for proper human function.

To explain this function, we need an account of how humans relate well to one another. We

cannot have an adequate account of how humans relate well to one another without an account of

how persons' reason and emotions contribute to relating well to others. I will argue that relating

well requires a well-functioning rational-emotional synthesis. In order to sketch what this

synthesis looks like, I would now like to return to Plato and his account of how reason ought to

rule the soul.

5.12 Plato and the Rule of Reason

While I think it may be possible that Aristotle ignores important human functions in his

analysis, I believe *reason*[202] to play a pivotal role in fostering psychic harmony. Here, we will

return to Plato more directly. A key component of the just soul is the rule of *reason*. When we

reflect on the responsibility of *reason*, we also find out something about its capability. In

addition to the powers of being able to think, know, etc., *reason* has the power to shape and

direct the other elements. Yet, it is not immediately clear how this is to work especially in the

way Plato describes rule. As with his description of each part of the soul, it is not clear whether

Plato's parts must be each be agential.[203] But, again, there is only one agent and the parts of the

soul are meant to be able to describe various phenomena within the single agent. However, I do

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[202] As a reminder, I understand Plato's *reason* to correspond to that part of the psyche that is responsible for one's deliberative processes.

[203] E.g., *reason* is to take care of the appetites as a farmer takes care of his animals, *reason* is to make *spirit* it's ally so that all parts of the soul will be "friends" (Plato, Republic, 2004, 589a-b).

think it important to discuss what it means for *reason* to "rule," and why this "rule" might be beneficial.

Many emotions and appetites occur seemingly spontaneously. If someone cuts me off in traffic, I might immediately become angry. If I see a commercial for fast food on late night TV, I might immediately become hungry. Both of these examples occur instinctively without reflection. So it appears that *reason* was not involved in either case. If emotions and appetites are generated without *reason's* input, how can reason shape or direct them?

The answer could be fairly straightforward in the case of the appetites. Appetites may be shaped through some kind of conditioning process. To live well, I want to encourage certain kinds of appetites and discourage others. For instance, I might have a craving for a food that is terrible for my health. Initially, when I ignore this craving, it only seems to grow stronger. However, if I consistently do not eat this certain food, eventually this craving will diminish to the point where I do not crave that food at all. Alternatively, I might find a nutritious food to substitute for the bad food when I have cravings. I thus begin to expect eating the nutritious food instead of the junk food.

One might object that it is not always possible to shape one's appetites to produce pleasure in line with living well. Personally, I cannot stand the taste of seaweed despite its purported health benefits.[204] It is hard for me to imagine I could condition myself in such a way that I would one day begin to tolerate or even want to eat seaweed. I might decide the health benefits outweigh my sense experience and eat some seaweed despite my disgust. If I do this my soul is not in the harmonious state Plato envisioned. My disgust seems to be in conflict with my

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[204] For an interesting study on some of the health benefits of seaweed see (Rajapakse & Kim, 2011).

reasoning. Thus, it looks like there is a limit to how much we can shape our appetites. I think this is true about individual foods, but I am not sure it is true about food in general. The virtuous person will want to eat healthy foods, but this does not mean they have to find pleasure in eating *every* healthy food. Additionally, if ought implies can, one might not be required to condition oneself to find pleasure in certain foods if it is not possible for one to do so. The point is to show that reason is fundamentally involved in shaping and directing appetites. Knowing what kinds of behaviors shape appetites in what kind of way is a rational process. In addition, constructing a plan for shaping appetites to correspond to specific goals is a rational process because one must have an understanding of the possible alternatives different behaviors will likely yield and make a decision based on those possible alternatives. However, it is not immediately clear whether rational processes, themselves, are capable of motivating the behavior necessary for changing one's appetites.

For this project, I have conceived of *reason* as non-affective cognitive processes responsible for the activity of reasoning. What does it mean for non-affective cognitive processes to "rule?" In my view *reason* rules if one can develop and/or recognize goals and direct the rest of the soul toward accomplishing these goals. For instance, I might deduce that eating ice-cream for breakfast every morning will result in me gaining an unhealthy amount of weight. I also realize that it is a goal of mine to maintain a healthy weight. Therefore, I decide that in order to meet my goal I must do certain things. As I begin the process of introspection, I realize my eating has been a way to assuage negative emotions. Therefore, I realize I must develop a way to either regulate my emotions or discover another way to satisfy my emotional desires. After a couple of days of not having ice cream, I also come to realize that my body "expects" ice cream and I experience urges to eat something very sweet before bed. If *reason* is ruling the way I

imagine, I will find a way to divert my attention from my urges or develop another plan to manage those urges.[205] In this way non-affective cognitive processes like realizing, planning, and deduction shape both my emotions and my appetites to align with my goals.

Yet, it seems plausible that it is beneficial for emotion to "rule" in a similar fashion. I have argued the ability to empathize with other persons is a key capacity that contributes creating a robust ToM and thus contributes to our ability to cooperate and survive.[206] Furthermore, if we think that it is at least sometimes right to care for others, we must be aware of their emotional state.[207] Thus, experiencing vicarious emotional states inform us of the way that others are feeling and the mental states they have. If the feelings and mental states of others are salient to engaging in excellent interpersonal relationships, the information emotion provides is important. Furthermore, it is uncontroversial that emotions motivate. Thus, we might think it also beneficial to be moved by at least some emotions in at least some contexts.

We might think that *reason* is a better candidate for ruling because self-evaluation is a rational process. I can evaluate my emotions and my physiological urges and their implications (e.g., What happens if I attempt to satisfy this affect?, Why do I feel this way?). Furthermore, I can think about my thinking and evaluate whether my thinking meets my goals. Yet, it appears we can have emotions about thoughts. If I think about an embarrasing event that happened during my childhood I will likely feel an accompaning emotion of embarassment. In addition, we can have emotions about emotions too. That is, just like I can evaluate my deliberations by

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[205] In section **5.14 From Plato to the present** I will more fully discuss ways one's reasoning processes influence one's emotional processes. For example, there is evidence that reasoning helps to up-regulate or down-regulate emotional intensity.

[206] See section **5.11 Virtuous relationships**.

[207] Caring for another person requires an awareness of their emotional state (at least sometimes) because one's emotional state is part of one's overall state of well-being. If caring is intending the well-being of another person, one will be better situated to care if they are aware of the other person's emotional state.

higher-order deliberations I can have higher-order emotions that include judgments of lower

order ones. These emotions are known as "metaemotions." Both metaemotion and metacognition

"are involved in the executive control of emotion and cognition, respectively" (Norman &

Furnes, 2016, p. 187).

However, I believe it is the imaginative capacity of *reason* that distinguishes it from

emotion as a better candidate for directing the psyche. Before proceeding to argue that imagining

distinguishes *reason* from emotion as a candidate for directing the soul, I need to be more

specific about how I define imagining. This is because one might think that empathy is a form of

emotional imagination. When I see someone else's face, I interpret their emotions

subconsciously and experience the same or similar emotion. Thus, I am imagining what they

feel. I will mention two points in response. First, it is not clear whether it is an emotional process

that is responsible for interpreting another's physiological cues or whether the emotion is a

response to the non-affective cognitive interpretation of another person's physiological cues. If it

is a judgment of the interpretation of another's physiological cues, the interpretation is plausibly

a non-affective reasoning process. Second, emotions are evaluations of what is present in the

mind, not what might be. I empathize with someone based on the features of their face at the

moment.

Now, this does not mean we cannot have emotions about imagined events. I might

imagine a certain difficult instructor will give me a driving test next week and I subsequently feel

a high level of anxiety. However, the emotion I feel about my driving test is conceptually distinct

from the act of imagining my driving test. My emotion is a reaction to the contents of my

imagining. Thus, I argue that the ability to imagine the world as being different from the way I

perceive it to be is a non-affective reasoning capacity. Unlike *reason*, emotion can only be

reactive, it cannot be proactive. That is, rational imagination can construct mental representations of ways the world could be, but is not currently. Emotions are responses to the contents of one's already present mental representations.

This is important because whatever element rules the soul must be capable of directing the soul toward a goal. This means that the thing that rules the soul must be able to not only evaluate the soul's current activity (i.e., what one is thinking or feeling) and whether that activity accords with the goal of achieving happiness or well-being, but it must also be able to construct ways the soul might reach its goals that are not being currently realized. That is, the ruling element must allow one to be intentional. The ruling element must allow one to construct and distinguish between alternative hypothetical possibilities and define a course of action that includes the possibilities most likely yield the desired results. For instance, say I make it a goal that I want to become a kind person. That is, I want to be instrinsically motivated to do kind acts, feel good about kind acts, and know how to act kindly in salient circumstances. However, I am not yet that type of person. To become that type of person, I will need to imagine what it would be like to be a kind person (construct a mental representation of the way I want to be, but am not currently) and be able to identify ways I can direct myself to acquire the characteristics of the kind person. Furthermore, if one's ultimate goal is psychic harmony, one must also understand what it means for the psyche to flourish. This implies one knows how to best develop one's *reason*, emotions, and appetites, in such a way that these processes do not oppose one another and instead work together.

So far, I have argued that *reason* is the best candidate to be thought of as the "ruler." This is because whatever directs the soul must enable one to be intentional. Intentionality is a product of non-affective reasoning processes. However, I have not commented on whether the "ruler" of

the soul must also be the part of the soul that directly motivates behavior. It is to this concern I will now turn.

5.13 Motivating the soul

Much of the shaping I have discussed involves being engaged in certain behaviors. But, we may question exactly how much "rule" *reason* has to effect the kind of behavior needed to shape emotions and appetites. After all, Hume famously wrote, "Reason is, and ought only to be the slave of the passions, and can never pretend to any other office than to serve and obey them" (Hume, 2002, III.3.3). On the face of it, his view of the role of *reason* in action appears opposed to Plato's because Hume's statement sounds like *reason* is subordinate to the emotions[208] and Plato argues that *reason* ought to rule over the emotions. After all, Hume admits his argument is directed against those who assert that reason ought be the "superior principle" in moral decision-making and that other principles, like the passions, must at least conform to reason. Thus, Hume's argument is two-pronged. First, Hume suggests that the passions are what really motivate us to action and not reason by itself. Second, he argues that reason is not the kind of thing that can oppose passion motivating one to act. Only another stronger passion can overcome a motivating passion.

To the first point, Hume argues that reason is properly concerned with the world of ideas. For him, the world of ideas is distinct and separate from the world of experience where volition lies.

> As [reason's] proper province is the world of ideas, and as the will always places us in that of realities, demonstration and volition seem, upon that account, to be totally removed, from each other…Abstract or demonstrative reasoning, therefore, never

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[208] Hume appears to use the terms "passions" and "emotions" interchangeably. When discussing his argument, I will follow suit.

influences any of our actions, but only as it directs our judgment concerning causes and effects. (2002, III.3.3)[209]

Thus, if Hume is right, reason can only make judgments about what action elicits which passion. It is the passion itself, or the desire to experience such passion that does the real motivational work. Similarly, reason cannot oppose an existing passion by itself. Rather, reason can deliver an opposing "impulse." Hume believes this impulse to be distinct from reason itself as he states, "and that impulse, had it operated alone, would have been able to produce volition" (*Ibid*). In this way, reason's relationship to volition is more of a facilitator than a direct motivator. Reason can only elicit passions to influence the will, it cannot influence the will absent a passion. For instance, I might know the Pythagorean theorem and be able to use it in solving mathematical equations, but unless this theorem elicits an emotion, my knowledge will be impotent to affect my behavior. Similarly, if I am deliberating about whether to build a triangular window frame for my new shed, my knowledge of the Pythagorean theorem does not play a direct role in whether I actually build a triangular frame, or what dimensions I use. On Hume's view, if my Pythagorean knowledge seems to affect the way I build the frame it is really because this knowledge elicits something like pride or fear which directly influences my decision to build. Perhaps I know I will feel pride in building a window that is solid and passes inspection. Or perhaps I am afraid of spending a lot of time and energy trying to build a frame only to find out that my time and energy has been wasted because the dimensions for the frame will not allow me to properly construct it. Whether my pride or fear appear to be generated by my knowledge as in the previous examples or whether they were less obviously produced by this knowledge (i.e., I

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[209] It is unclear to me whether Hume really intends to use the word "influence" as this seems too broad for his argument. If reason confers a judgment concerning cause and effect and it can direct the passions, this seems like an indirect influence on volition, although it may not be seen as primary as the passions.

am afraid of building non-Pythagorean windows because I belong to a religious sect that views

such windows as evil and threatens to throw me off of a ship into the sea for building non-

Pythagorean ones) I will still build the same window. Because the emotion is what directly

affects my will, not reason, whether I feel fear because of wasted time or because I belong to a

fanatical mathematical group, my act would remain the same regardless of how the emotion was

generated.[210]

Interestingly, there is contemporary evidence that suggests that Hume may have been

right about the motivational power of emotions and reason.[211] Given a more contemporary

psychological picture, social psychologist Jonathan Haidt argues that we might represent Plato's

reasoning element as an elephant rider and the the emotions as the elephant. "The rider can see

farther into the future, and the rider can learn valuable information by talking to other riders or

by reading maps, but the rider cannot order the elephant around against its will" (The Happiness

Hypothesis: Finding Modern Truth in Ancient Wisdom, 2006, p. 23). Thus, on Haidt's view the

rider is more like an advisor than a king. If this is the case, we might wonder whether reason has

the capacity to maintain internal harmony as Plato suggests.

I do not think Haidt's picture dismantle's the platonic picture I have been constructing,

though it allows me to clarify. In exploring explanations for the famous marshmallow

experiment (Mischel & Ebbesen, 1970)[212] Haidt explores what made children successful in the

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[210] I do not have the space to explore it in this dissertation, but it would be interesting to think about Hume's argument in relation to future behavior. When deliberating about what to do in the future, is it the passion itself that motivates one or is it the thought of experiencing that passion? If it is the thought of experiencing a passion that motivates, should this thought be characterized as "reason" instead of "passion?"

[211] At least Haidt thinks this is the case. "David Hume was closer to the truth than was Plato when he said, 'Reason is, and ought only to be the slave of the passions, and can never pretend to any other office than to serve and obey them'" (Haidt, The Happiness Hypothesis: Finding Modern Truth in Ancient Wisdom, 2006, p. 33).

[212] The marshmallow experiment has been more recently criticized for not accounting for other variables like income level. For an example of these kinds of criticisms see (Gill, 2021). These criticisms, however, aim at the predictive

experiments. In particular, those children who successfully postponed eating one marshmallow so they might gain two later were able to shift their attention to something other than their appetite for a sugary snack.

> These thinking skills are an aspect of emotional intelligence---an ability to understand and regulate one's own feelings and desires. An emotionally intelligent person has a skilled rider who knows how to distract and coax the elephant without having to engage in a direct contest of wills. (2006, p. 24)

This explanation implies that in emotionally intelligent people, reason can direct the attention of the emotions and can shape what one feels over time. One does not then have to summon olympian rational effort to overcome opposing emotions. Rather, one's rational capacity can gradually shape the emotions to cohere with one's reasoning.

Thus, it might be the case that Hume is right insofar as reason alone cannot motivate actions. It is possible he may also be correct in concluding that reason, by itself, cannot directly oppose a passion[213]. However, this does not prove that reason "is and ought only be a slave to the passions" in the sense that reason cannot indirectly motivate behavior. Fundamental to Hume's argument is that reason and emotions are associated with different domains. Reason deals with the realm of the abstract and the emotions with the realm of concrete experience. Thus, "a passion is an original existence…and contains not any representative quality, which renders it a copy of any other existence or modification" (Hume, 2002, III.3.3). However, if emotion contains no representative quality, it is difficult to explain why emotions can be consistently generated from mental representations. If I am deliberating about what kind of window frame I

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power of the experiment in the later lives of the participants not at the individual behavior of participants during the study.

[213] I think it may be helpful to note here that I am not endorsing nor rejecting Hume's view about the passions. Instead, I am trying to clarify what might be thought of as an apparent objection to Plato's view. If Hume is wrong, Plato's view is less obviously in trouble as this would mean that reason can directly influence behavior. Thus, reason can still rule the soul because it would be possible for reason to motivate behavior without the aid of an emotion.

am going to build, I may be influenced by emotions like pride or fear, but why are those emotions associated with certain outcomes? Each time I imagine building a window wrongly I experience something like humiliation. If I imagine building the window rightly I experience pride. Of course, the emotions associated with these imagined scenarios are likely not as strong as if the situation happened in actuality, but I think it quite plausible that I experience those emotions to some degree. On Hume's view of passions, it is unclear why certain passions are generated by certain imagined outcomes. If emotions contain no representational content, how is it that mental representations can consistantly produce the same emotion? For instance, one might consistently feel at least a twinge of sadness at the thought of a loved one dying, even though this act only occurs in the imagination. The connection between imagined events and emotions is part of what makes reading a suspenseful novel or watching a "tear-jerker" movie so engaging. Furthermore, the author must have some knowledge of what thoughts generally elicit what emotions if the author is to craft a storyline that intentionally engages their reader.

If certain thoughts are generally connected to certain emotions, it would be possible to think that at least some emotions are "irrational." These emotions might be thought to be irrational if the emotion does not "fit" the thought in the right way. For instance, if I experience joy instead of disgust or anger while watching the torture of innocent children, this joy might be thought to be an irrational emotion. At the very least, it would be thought to be abnormal. Hume considers this as an objection to his second point that reason cannot overcome a passion in the will. He argues that only those things which have a reference to reason can contradict it. Thus, "passions can be contrary to reason only so far as they are accompanyed with some judgment or opinion" (2002, III.3.3). In the previous example, disgust plausibly arises from a judgment like "torturing innocent children is unjust." On Hume's view, then, judgments appear to be part of

reason's domain. It is important to note that Hume states these emotions are *accompanied* by a judgment. That is, a judgment is not part of the emotion *per se*. Instead the emotion is elicited by a judgment. Thus, the only way an emotion can truly be considered unreasonable is for "a passion [to] be accompanyed with some false judgment in order to its being unreasonable; and even then it is not the passion, properly speaking, which is unreasonable, but the judgment" (*Ibid*).

As I have already stated, I am assuming a cognitive view of emotions where an emotion is thought to contain a judgment. That is, a judgment is a consituent part of an emotion, not a separate psychological process. This is obviously different than Hume's view. Interestingly, Hume's argument appears to be unable to account for why posttraumatic stress often seems to occur "unreasonably." When Marilyn experienced terror because her boyfriend accidentally touched her during the night she began struggling to protect herself even though he was doing nothing that later, upon reflection, Marilyn thought of as threatening. After he left, Marilyn struggled to find the reason why she acted as she did. If, unlike Hume, we understand trauma as an emotional response that includes a judgment about an event, we might think of her reaction as unreasonable in regard to her actual situation. Her feeling of terror did not match her reflective assesment of her boyfriend touching her leg. However, her terror elicted during the *initial trauma* resulted from a judgment which is perfectly reasonable. She judged her sexual assault to be so horrific she could not bear it. Experiencing sexual assault at the hands of a trusted older relative is rightly judged to be horrific. On my view then, the emotion experienced during the flashback was a judgment not of the Marilyn's current context, but of her initial traumatic event. Thus,

Hume's view does not provide an advantage over the cognitive emotional view in thinking about emotions experienced in posttraumatic stress.[214]

Thus, it appears that Hume's claim is that reason is impotent to move the will without the help of the passions. If a passion is already present, no amount of reason (unless it elicits an opposing passion) will be able to overcome it. If this is what Hume means, I think Hume and Plato are not in disagreement with how the soul is to function, at least not directly. Hume's claim that reason is the slave of the passions is a claim about what directly moves the will. Reason is a slave because it cannot effect behavior on its own, it must always be accompanied by a passion. This, however, does not mean that reason must be controlled by the passions.

> When Hume says that reason is the slave of passions, he does not say thereby that reason is unimportant. He is saying merely that reason alone does not move one to act...However, it is reason that does the groundwork, analyzing facts, perceiving relations, and drawing conclusions, all of which go to determine which action to perform, but the action will not be performed unless one of the passions is also present. (Nuyen, 1984, p. 27)

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[214] One might be concerned that labeling certain emotional responses to events as "fitting" or "not fitting" runs the risk of marginalizing persons who have been traumatized and do not exhibit the emotions normally associated with an event. For instance, someone might become terrified whenever they are approached by a seemingly harmless dog. To say that their response is not fitting may encourage people to make evaluative judgments concerning the persons' character like "they are such a coward." In response, I argue that the fittingness of emotional responses is already used to help diagnose posttraumatic stress. When someone experiences extreme anxiety in a situation where most people do not, this is usually a sign that something non-neurotypical is occurring. In a different situation, perhaps one has grown up being abused and they believe that certain kinds of abuse are proper for them to suffer. Thus, it could be possible that someone who has been abused feels something like relief during instances of abuse. However, this is not a case of a victim making the judgement that they are the subject of injustice. Rather, they believe their suffering to be just. Thus, their relief is not unreasonable. This partially explains why instances of abuse where the victim believes their abuse to be warranted are so tragic. Not only are they being victimized, but they have been conditioned to judge their victimization as being just. At any rate, recognizing their emotional response to their victimization as not fitting provides a cue that the domestic abuse victim needs psychological (and legal) support. To lose any sense of an emotional response "fitting" an event threatens to eliminate cues that someone needs psychological support.

Hume's analysis is restricted to the most fundamental "mover" of the will. In contrast, Plato paints a portrait of the just soul as it exists *en toto*. The scope of Hume's argument is much narrower than what Plato argues for when he states that *reason* is to rule the soul.

To see how this might be the case, we only have to consider how Plato characterizes the relationship between elements in the just soul. Referencing his metaphor of *spirit* as the lionlike part of the soul he writes that the supporter of justice

> should watch over the many-headed monster like a good husbandman, fostering and cultivating the gentle qualities, and preventing the wild ones from growing; he should be making the lion-heart his ally, and in common care of them all should be uniting the several parts with one another and with himself. (Republic, 2004, 589b)

Here, Plato depicts the appetites as being a many-headed beast. This picture symbolizes the many competing appetites and their ability to move a person to behave one way or another. For instance, someone who is dominated by sexual desire will seek to satisfy this appetite often ignoring issues of safety or morality. The salient feature of this example is that Plato argued the just person makes certain emotions his "ally." Thus, Plato acknowledges the power that emotions and appetites play in motivating behavior. It is precisely because appetites and passions motivate that *reason* is to shape and train them. In this way, Plato can accommodate Hume's point that only passions motivate behavior and yet retain his conclusion that *reason* is to be the ruler of the soul. *Reason* rules by directing the emotions and shaping them in certain ways. Thus, if a soul is so organized, just behavior is quite likely to follow. Another way to think about the possible synthesis of Hume and Plato is to think about first order and second order influences on the will. We might characterize emotions as first order influences on the will. Passions are the things that most directly affect the way we behave. However, *reason* acts as a second order influence on the will. That is, *reason* can direct and shape emotions so that emotions motivate certain kinds of

behaviors. Thus, in thinking about single acts we might characterize *reason* as a slave to emotion

because *reason* alone does not motivate behavior. *Reason* needs emotion to move someone to

act. However, Plato may also be right in that *reason* is responsible for directing the soul to shape

and develop emotions that will lead to just behavior.

5.14 From Plato to the present

So far, I have argued that Hume's criticism, if true, does not undermine Plato's position

that *reason* ought to rule the soul. Plato's position allows for emotions to be the direct motivators

of behavior while *reason* plays an indirect role. At this point, I will summarize the major themes

in Plato and Aristotle I wish to develop. First, Plato's picture is helpful insofar as he conceives of

a condition of what I am calling "psychic[215] harmony." That is, psychic harmony is a state in

which a person's different psychological faculties operate together in a way that allows each

faculty to flourish. In other words, each psychological faculty can be expressed harmoniously in

a way that is beneficial to a person. More specifically, one experiences a state of psychic

harmony when one can reason and feel emotions and where the judgment of one's emotions

coheres with one's reasoning. When a person's psychic faculties operate in harmony each faculty

is allowed to fulfill its function and the whole person flourishes. Moreover, one's psychology

functions harmoniously when one can direct one's reasoning, emotions, and urges toward a

common end. To be able to direct oneself toward psychic harmony, one must be able to identify

psychic harmony as an end and intend to direct oneself toward this end. In addition, Aristotle

believed psychic harmony was necessary for proper human function. Using Aristotle as

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[215] I use the term "psychic" instead of "psychological" as a nod to Plato's original use of the Greek word psyche (ψυχή). I also belief the term "soul" to be a bit broader than the term "psychology."

inspiration, I have also argued that proper human function requires one to relate well to other humans.

On my view I believe that Plato was helpful in conceptually distinguishing different parts of one's psychology. In particular, I find the distinction between *reason* and emotions to be helpful. However, as I have already argued, Plato attributes agential properties to these sub-agential parts. Thus, I want to think of psychic harmony as a state in which one's reasoning processes and one's emotional processes function toward common ends and do not conflict with one another. For instance, when I intend to act, and do act in a way I reason is good, I experience a positive emotion. I have reasoned that a particular act is good and I produce and experience an emotion that includes the judgment that I have done something good. In a different case perhaps I reason that I am not in danger when I go to the grocery store. When I do go to the grocery store, I do not feel fear, but feel safe. Lastly, if I believe that all persons have inherent dignity, I will feel an emotion that compliments this belief when I first encounter someone I do not know. Summarily, when my reasoning and emotions are functioning in harmony I experience emotions containing judgements that track the evaluations I make or would make using deliberation.[216]

Plato also pictures *reason* as the proper ruler of the soul. On his view a soul that is in harmony is one in which *reason* directs (shapes) both emotions and *appetite* to function in the ways they ought. On my view, I believe that psychic harmony requires one's worldview to function so that one interprets the world and one's place in the world in such a way that one's

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[216] I include the qualifier "would make" to account for situations where I experience an emotion quickly but do not have time to deliberate during or before experiencing that emotion. My emotional judgment would track my conscious reflection of the event if I was able to reflect on the event. For instance, let's say my friends throw a surprise party for me. When I walk into the room and my friends surprise me, I may feel happy (perhaps after an initial feeling of being startled if my friends jump out from behind the furniture). Because I had no prior knowledge of the party, I may not have reasoned that I will or should feel happy about the event. Yet, if I have the chance to reflect on the event, I will conclude that the event is the kind of thing that should make me happy.

interpretations are consistent with one another and so that one's worldview accurately reflects the world.[217] When one's worldview accurately represents the world and is internally consistent, one has a coherent foundation from which to shape one's emotions. This is because one's worldview provides a framework through which one can interpret and evaluate one's thoughts, emotions, and experiences. Thus, one's worldview provides a framework through which one can formulate goals and intend to accomplish those goals. That is, one's worldview provides a neccesary framework through which one can reason about oneself and one's place in the world. When one's worldview is inconsistent one experiences conflict between one's beliefs (including emotionally-tagged beliefs), conflict between one's beliefs and one's emotions, and/or conflict between the interpretation of one's experiences and one's identity. Thus, one's worldview is utilized as a way of evaluating both one's thoughts and one's emotions.

Plato argues pointedly that *reason* ought to be the ultimate ruler of the soul. However, for *reason* to rule in the actual way Plato describes would require *reason* to intend. As I have stated before, one's reasoning processes are sub-agential and thus cannot intend. I find it more plausible to think that one reasons about oneself and their place in the world by utilizing their worldview. Yet, I do not think that a state of psychic harmony is necessarily one where one's reasoning shapes one's emotions but one's emotions do not inform one's reasoning. I believe that a state of psychic harmony can exist where emotions inform one's reasoning processes as well. Thus, one can reason about how to intepret and shape one's emotions, but one can also use information from one's emotions to reason well.[218]

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[217] I understand a worldview that reflects reality to be better than a worldview that does not reflect reality because I assume that believing truth is better than believing falsehood.

[218] A paradigm example would be the virtuous person. A person who is virtuous will feel the right things at the right times, in the right ways. When deliberating about the right things to do in a given context, these emotions contain

Contemporary research in moral theorizing indicates there to be a complex relationship between reasoning and emotion. I believe this research indicates that we can both utilize reasoning processes to shape our emotions and that emotions can beneficially inform our reasoning processes. Neuroethical research can shed light on whether one's reasoning processes can direct emotion or whether emotion in moral theorizing is always spontaneous and undirected. If it can be shown that one's reasoning can shape and guide emotion in moral theorizing, it is only a short step to showing that one's reasoning can shape emotions which motivate behavior. If one's emotions can be shaped by reason, there may be instances where one's shaped emotions provide information with which one might reason well.

Neuroethicists Chelsea Helion and Kevion Ochsner argue that much of past research in moral psychology has studied and emphasized the conflict between reasoning and emotions in the way people generally morally theorize. Early research focused on how people utilized conscious cognitively controlled processes to morally theorize while more recent research focuses on the impact of affect on moral theorizing. To think about it a different way, the early research assumed that reasoning processes were the most fundamental contributor to moral theorizing and later research argued that emotion was the primary contributor to moral deliberation. [219] However, neither approach has proven conclusive. Helion and Ochsner offer a median perspective.

> [W]e will instead suggest that the relationship between emotion and cognition[220] is not a fight insomuch as it is a smooth dance between equal and inseparable partners---when one shifts the other moves acccordingly, and though one may take the lead, it takes two to

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judgments about behaviors. Thus, the virtuous person has good reason to consider their emotions as input for moral theorizing.

[219] For an influential example of how emotions are thought to be the most significant contributor to moral theorizing see (Haidt, 2001).

[220] Helion and Ochsner appear to use "cognition" differently than I have in this paper. In their study, "cognition" is used as a synonym for deliberative "thinking."

tango. (2018, p. 298)

Thus, there is a complex relationship between emotion and reasoning in moral theorizing where it appears that neither one's reasoning nor one's emotions always take priority.

To think about this, I would like to offer two examples. The first case is one in which one's emotions motivate one to act well before one deliberates about one's act. The second case is one in which one's emotions affect one's reasoning in a beneficial way. In the first case, suppose Abe is walking through the middle of a large university campus. As he is walking he notices a young man yelling at a women and assuming a threatening posture toward her. As Abe looks around he notices that other people see the incident but do not intervene. Abe then becomes angry because of the other young man's actions and also because of the lack of apparent concern by the bystanders and moves to intervene. He physically places himself between the couple and asks the woman if she is ok. Obviously frustrated, the abusive young man walks away. It is quite plausible that Abe did not rationally deliberate the moral reasons for intervening. Instead, Abe's anger motivated him to intervene. Yet, we would be justified in thinking that Abe did something good. In this case, Abe's behavior is motivated by a spontaneous (not elicited by deliberation) feeling, anger. We might think that Abe was acting virtuously if, upon reflection, he believed his act to be virtuous.[221] Thus, his reasoning and emotions align, but his reasoning process (at least explicitly) occurred after his emotions motivated his act. Thus, emotion appears to be directing Abe toward acting well without the immediate aid of explicit reasoning.

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[221] Of course, it would also be necessary that his act actually was virtuous, not just that he believed it to be so.

The second case is meant to describe a situation where one's emotion makes conscious a previously subconcious belief so that one can deliberate about whether this belief ought to be kept or abandoned. I have presented the well-known trolley case to many diverse groups of students.[222] In one of the most well-known variations of the trolley case, students are tasked with thinking about a situation in which a run-away trolley is barreling down the tracks. To complicate the situation, there are five people tied up on the tracks and if no one does anything, the trolley will kill five people. The students are supposed to imagine that they are standing by a switch. If they pull the switch it will divert the trolley to a track on which only one person is tied up. Thus, if they do nothing, five people die, but if they flip the switch only one person dies. One utilizes one's reasoning processes to think through and evaluate how one might consistenly act in line with one's moral values. Thus, one reasons to a conclusion about whether one ought to throw the switch.

However, when one considers how to act in the trolley problem, one's emotions might draw one's attention to beliefs or attitudes that one may not have previously considered. For instance, there is a variation on the trolley problem where people are asked to consider whether they would push a large person off of a bridge that would kill the person but stop the trolley and save everyone on the tracks. Ostensibly, persons who threw the switch in the original scenario would push the person off of the bridge because the reasoning is quite similar: act in such a way that results in one person being killed instead of five. In practice, however, many students who first encounter this trolley problem variation feel that it would be wrong to push the person off of the bridge even if they voted to throw the switch in the initial scenario. Often, reluctance to push the person stems from the way persons feel about pushing someone off of the bridge. Thus, it

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[222] The trolley case was first formulated by Philippa Foot (Foot, 1967).

seems that one's emotion might signal that one has a salient belief that one did not account for in the original trolley case. One's emotion draws attention to this implicit belief. Once one's attention is drawn to this belief, one can use one's reason to deliberate whether one ought to keep or reject this previously implicit belief.

Recent empirical research seems to affirm that emotions can beneficially inform one's reasoning in this kind of way.

> When emotions provide accurate information (when they are elicted by an external event and are proportional to the importance of the event), attending to emotion (emotional awareness) increases the accuracy of beliefs and promotes adaptation. When beliefs or emotions (or both) are not adaptive (e.g., self-deprecating beliefs, exaggerated emotions), emotional awareness is associated with increased distress. (Blanchette, Does emotion affect reasoning? Yes, in multiple ways, 2014, p. 6)

For instance, I might be walking through a field in the American Southwest and see a rattlesnake out of the corner of my eye. I then immediately feel fear. My emotions help me to form the belief that this animal is dangerous. This belief then leads me to not disturb the snake. Thus, my emotion is elicted by an external event (seeing the snake) and I feel enough fear to make me believe the snake is dangerous, but not enough fear to overwhelm me. In this way my emotions provide information with which I am able to reason. If this is the case, reason is at least somewhat dependent on emotions in some cases.

> In a related kind of case, emotions sometimes provide motivation to reason.

> Emotion provides information about the importance of the situation in relation to a person's well-being or goals. This information might be used strategically to alter the amount of cognitive resources devoted to the reasoning task, or the time spent on it" (Blanchette, Does emotion affect reasoning? Yes, in multiple ways, 2014, p. 12).

In contexts where emotions signal a situation bears a great deal on one's well-being or goals, more neurological resources may be devoted to reasoning, ostensibly providing for a more robust

reasoning process (e.g., one spends more time calculating whether they can jump over a ravine than whether they can jump over a puddle). In cases where one's well-being or goals do not seem to be at stake, emotion signals fewer resources for a reasoning task (e.g., avoiding tripping over a curb while walking utilizes less resources than estimating whether to run across a busy street).[223]

Interestingly, emotions associated with trauma indicate a judgment that is extremely important to one's well being.[224] Judging something to be terrifying or horrifying implies a standard by which this judgment can be made. This standard at least takes into account one's own well being. The sexual assault survivor has judged the traumatic event to be extremely detrimental to her well-being. However, other cases of trauma suggest that the perceived well-being of others works similarly. The emotion of the veteran who is traumatized because he regrets the burning down of a village is evoked because his emotion is linked to what he believes his victims to have felt. Thus, traumatic emotion in this case is generated by empathy. The veteran's trauma is a judgement about the vicarious emotional experience of another. If an emotion elicits greater resources for reasoning proportionate to how important an experience is to one's well-being, we should expect cases of trauma to result in many neurological resources being devoted to reason. Yet, this is not always the case. In Ute's case, her emotional response was one that included a shut down of cognitive processing. Brain scans indicated that most of her brain had gone dim. Furthermore, in cases like Marilyn's, one's emotions cause at least some cognitive processes to dissociate from their normal operation in relation to an external world. Marilyn described her experience of sexual abuse by saying it was as if she was floating above

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[223] Note this is a different process than how emotions affect one's reasoning when decisions must be made quickly. When someone's fight or flight response is activated, one's emotions draw one's attention to potential dangers, but the emotions motivate quick efficient thought processes and not necessary more laborious deliberative processes.
[224] That trauma indicates a situation is important to one's wellbeing is evidenced in that it triggers one's fight or flight response responsible for ensuring one's survival in the face of danger. Thus, one's response indicates that one's survival is at stake.

the scene looking down on someone else. Trauma serves to demonstrate that emotions unlock cognitive resources for reasoning up to a point. There is a threshold at which one has an emotion that inhibits the normal way in which one's reasoning processes, particularly those processes that are responsible for intepreting and integrating an experience within one's overall biographical narrative, function.[225] This is because, one's emotion indicates that one has made a judgment about an experience that one cannot accept within one's existing cognitive architecture. Thus, one's integrative psychological framework is disconnected from one's experience or one's emotional processes simply shut down.

Yet, one may utilize one's worldview to interpret and/or shape one's emotions. Neuroscientists Chelsea Helion and Kevin Ochsner argue that "it seems possible to reframe moral behavior as the controlled regulation of emotion so that one acts or makes evaluations that are in line with one's pre-existing ideals and goals" (2018, p. 300). They explain that people may up-regulate or down-regulate their emotional responses to moral stimuli. Down-regulating refers to diminishing the impact of emotion on moral theorizing and up-regulating refers to increasing an emotion's impact. For instance, one might down-regulate their disgust when evaluating an act that triggers disgust but results in no one being harmed. Helion and Ocshner imagine a situation where someone is disgusted by thinking about two-men kissing but down-regulates this disgust to be more in line with their political views.

> They can do this in multiple ways, including reframing the situation as one about equality and fairness, construing the act as one of love and affection, or manipulating personal relevance by thinking about homosexual individuals whom the person knows. This affective transformation would rely on controlled emotional processes that shape the initial automatically elicited emotion (disgust) into a very different emotion (tolerance or acceptance). This proccess requires motivation, recognition…that one is experience an

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[225] I will discuss dissociation in more depth in 6.8 Dissociation."

> emotion that is in conflict with ones [sic] goals and ideals, and a reconstruction of the situation and one's emotions in order to come to a moral resolution. (2018, p. 301)

Thus we find several possible ways one utilizes one's reason to shape one's emotions. One can shape emotions by shifting the focus of theorizing to moral values one prizes, one can shape emotions by reinterpreting the meaning of an act, or one can contrast one's current emotional response with a related emotional response.

5.15 The place of worldview in proper function

We might think of one's worldview as the pyschological structure that grounds persons' goals for themselves. This is because one's worldview contains one's fundamental beliefs and attitudes about themselves and reality. Thus, if one is to direct oneself to allow for psychological flourishing, one will need to be able to understand how and why one's emotions are expressed in the ways they are. Furthermore, if one is to intend to shape one's emotions and appetites in the ways that one wants to become, they must use their worldview as the background through which to think about such things. That is, one must use their psychological interpretive framework to interpret one's emotions and appetites and how one might shape one's emotions and appetites to align with the way one reasons.

I do not wish to assert that one must have a robust grasp of empirical psychology to shape and direct one's emotions and appetites (though this could surely help). I believe that one can reflect on what kinds of stimuli produce what kinds of emotional or appetitive responses and begin to formulate a plan for shaping how one wants to shape one's emotions or appetites in the future. For instance, perhaps on reflection I realize that I experience strong urges to ingest sugary snacks during a certain part of the day. Because I want to improve my physical health, I decide to

begin scheduling an activity during that time of day to draw my attention away from eating a sugary snack. Over time, my craving for a sugary snack during that time of day dissipates.

I want to consider the cognitive framework through which one interprets the world (one's worldview) to be an essential part of how one interprets and reasons about themselves and the world. One's worldview is a framework of beliefs and attitudes about the world and can provide grounding for one's goals about oneself and how one interacts with the world. In the emotional regulation example above, someone is able to up-regulate or down regulate their emotions to be better in line with their political beliefs. That is, part of their core belief network (political beliefs or the beliefs in which their political beliefs are grounded) comprises a goal with which one might aim one's emotions toward. Furthermore, one's worldview includes beliefs about oneself and one's place in the world (one's identity). Thus, one's worldview also contains beliefs that ground one's current self-concept and the self-concept one wants to have. Moreover, one's self-concept allows one to associate otherwise disparate experiences with a single subjective first-person perspective. In this way, one's identity allows one to integrate one's experiences into a cohesive narrative that allows one to interpret the world and their place in it. Because one's worldview and identity contain beliefs about the world and how oneself ought to be, they also function to ground goals for oneself and the world. One's worldview provides direction for shaping one's emotions so that one's emotions might align with one's beliefs about oneself and their place in the world, one's worldview integrates one's experience, including one's cognitive states, one's emotional experiences, and one's physiological urges into a cohesive first-person narrative, and one's worldview provides a framework through which one can reason about how best to fulfill one's goals. Thus, the kind of psychic harmony I envision is one in which one's

emotions align with the kind of person one wants to be based on their worldview and self-concept.

Briefly, I would like to suggest a couple of ways my philosophical framework may shed light on evaluating trauma. These are brief suggestions for future thought and will not be developed fully here. The phenomenon of emotional numbing offers an example of psychic disharmony. In response to the threat to one's worldview, one's emotional processes shut down. When one's emotions shut down, they are no longer functioning in a particularly human way because they are not functioning at all. If one's emotional processes are incapacitated in a situation where they would normally be active, one is not able to be in a state where one's emotional processes operate in harmony with one's reasoning processes. Thus, emotional numbing prevents psychic harmony because it prevents the expression of one's emotional processes.

In addition CBT coheres well with the picture I have been sketching. Cognitive behavioral therapy focuses on the relationship among thoughts, feelings, and behaviors, and notes how changes in any one domain can improve functioning in the other. Thus, CBT seeks to help re-establish psychic harmony for persons suffering from PTSD.

5.16 Conclusion

In this chapter, I have attempted to construct a paradigm for thinking about human flourishing. I began with a discussion of Plato's concept of the just soul and Aristotle's argument for proper human function. Plato and Aristotle's framework serve as inspiration for the paradigm of flourishing I am attempting to develop. This paradigm is composed of two main parts: psychic harmony and relating well to others. In defense of the first part, I have argued that a necessary

condition for psychic harmony is that one's emotions cohere with one's reasoning processes. More specifically, the judgment included in one's emotions coheres with the conclusion of one's reasoning processes. I have argued that one's worldview functions to allow one to set goals, reflect on and direct one's emotions so that one can intentionally shape at least some of one's emotions to cohere with one's reasoning. In addition, psychic harmony exists when one's emotions inform one's reasoning in beneficial ways.

In defense of the second part, I have argued that proper human function requires the presence of psychic harmony because psychic harmony is necessary for relating well to others and relating well to others is a necessary condition for proper human function. In the next chapter I intend to show in greater detail how trauma inhibits psychic harmony and relating well to others. In these particular ways, trauma inhibits human flourishing.

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Chapter 6: Trauma and Flourishing

6.1 Traumatic effects and Human function

Earlier, referencing Aristotle, I argued that not only do parts of the soul have a proper function but that there if there is a proper function for humans in general, it requires one to be able to relate well to other humans.[226] This is derived from the kind of life that is characteristically a human life. Aristotle argued that the reasoning capacity of people marked the human kind of life as distinct from other kinds of life (i.e., non-human animal life). Korsgaard defended Aristotle's argument by showing that Aristotle was not merely advocating proper human function by appealing to what was unique about humans. Instead, Aristotle wanted to define the kind of thing that was characteristic of the human kind of life. In other words, proper human function is the way in which humans live the kind of life that only humans can live. I have argued that one cannot account for proper human function without accounting for the way reasoning and emotions operate harmoniously because understanding the proper relationship between one's reasoning processes and emotions is necessary for understanding certain ways we reason and also how we relate well to others. Proper reasoning and relating to others are intrinisic parts of a distinctly human life.

I find it an obvious observation that the effects of trauma can inhibit one's proper functioning. That is, traumatic effects can inhibit the way one's emotional experiences are or are not integrated into one's life narrative and also inhibit relating well to others. For instance, one might reason that a lake is safe to walk beside, but they still feel like they are in danger when strolling beside the water. Not only does a person experience anxiety that was generated by the

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[226] Section 5.10 Human function.

initial trauma, they experience added anxiety because they do not understand why they are fearful. One's emotional experience, anxiety, is inaccessible to their reasoning about their situation (one does not understand the source of their emotion nor can one use reason to up-regulate or down-regulate their emotion). One feels anxious when one reasons they should not feel anxious. Thus, one reasons that walking by the shore is safe but contrary to their rational deliberation, one's feeling of fear indicates that one also judges walking by the shore to be dangerous. The converse situation is also problematic. If I experience fear in situations that I would not rationally expect to feel fear, my fear may inform my reasoning in such a way that I decide beneficial or benign situations to be dangerous. For instance, let us return to the Mary case. Mary was abused as a child could not recall that abuse. Thus, she woke up screaming and beating her boyfriend one night. Suppose that Mary's trauma caused her to be fearful any time she was near men even though she could not explain why. If she has the feeling of fear each time she is in the presence of a man, she may come to believe that all men are dangerous, even when she reasons that some men are safe. Mary might think she has good reasons to trust a male therapist and recognize that the male therapist wants to help her deal with her trauma. However, every time she is in his office she also feels fear. Thus, it is possible that Mary forms the belief "the therapist is safe" as a product of deliberation but also forms the belief the "therapist is dangerous" as a product of her fear informing her belief-forming processes. If this is the case, Mary experiences cognitive dissonance that is a result of her current emotional experience being at odds with the conclusion of her deliberation. Her *reason* and *emotion* are dissonant. Thus, she does not experience the psychic harmony that is necessary for proper human function. Furthermore, one who experiences emotional numbing will not be able to relate well to others because empathy is the human capacity that enables one to understand the mental state of

another human and empathy requires one to be able to interpret another's emotion and simulate a similar emotion in one's own mind. The inability to experience the mental states of others disallows one from accurately feeling what another person is feeling and thereby to be moved to act in a way that is derived from a robust understanding of another's mental state. The war veteran who has difficulty relating to his own children because he no longer feels the same way toward them as he used to is a poignant example of this difficulty. This is because the veteran does not experience the mental state (or vicariously experience) the mental state of his children and is not moved by their emotions or his response to their emotions. In this way the veteran may deliberate and conclude that he ought to play with his kids, but he will not experience a fitting emotion that motivates him to play with his kids because he does not experience emotion toward them at all.

One might object that traumatic effects cannot inhibit proper human functioning because proper human functioning is simply whatever humans do. Thus, even if they are affected by trauma, they are still functioning as humans because humans are the ones committing the acts. I have already tried to give an account that distinguishes merely human function from proper human function and it is not my current purpose to defend proper human function exhaustively. However, I think it helpful to mention that proper human function is meant to be an account of the function that most accurately characterizes a distinctively human kind of life. Thus, proper human function is a function that is not only unique to human beings but it is also the kind of function that is distinguished by uniquely human capacities. Thus, it may not be the case that all humans are always engaged in proper human function but when human beings are properly functioning, they are living the most human kind of life possible. In this way we might think that humans who are performing their proper function are flourishing as humans. "For just as for a

flute-player, a sculptor, or any artist, and in general, for all things that have a function or activity, the good and the 'well' is thought to reside in the function, so would it seem to be for man, if he has a function" (Aristotle, The Nicomachean Ethics, 2009, 1097b).

Yet, these are instances of traumatic effects. I have been attempting to investigate trauma itself. Even so, I believe trauma itself inhibits human flourishing. The outline of my argument in this chapter goes as follows:

1. Proper human function is necessary for human flourishing.[227]

2. Psychic harmony and relating well to other persons are necessary conditions for proper human function.[228]

3. Trauma creates a state of psychic disharmony by dissociating one's experience from one's self-concept.

4. Trauma creates a state of psychic disharmony by reducing one's self-concept clarity (SCC).

    a. The lower one's SCC, the more difficulty one has in relating well to other persons because low SCC inhibits developing cognitive interdependence.

    b. The lower one's SCC, the more difficulty one has in empathizing well with others.

5. Therefore, trauma inhibits relating well to others. (4a and 4b).

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[227] On an Aristotelian framework I take this statement to be almost analytic. For Aristotle, a well-functioning human was a human that was flourishing. "Happiness [*eudaimonia*], then, is something final and self-sufficient, and is the end of action" (The Nicomachean Ethics, 2009, 1097b). I have worded the premise this way because there may be a subtle distinction between functioning well and the experience of functioning well. When one functions well one will also have the experience of functioning well. I understand the experience of functioning well to be constituent of human flourishing.

[228] I previously stated I would remain noncommittal as to whether there is one proper human function or many proper human functions. Thus, I have argued for necessary conditions instead of individual functions or constituent elements of the same function.

6. Therefore trauma creates psychic disharmony. (3 and 4)

7. Therefore, trauma undermines the necessary conditions for proper human function.
    (2, 5, and 6)

8. Therefore, trauma inhibits human flourishing. (1 and 7)

6.2 The psychological importance of worldview

I have presented evidence from psychology that indicates a well-functioning worldview

is necessary for a person to make sense of the world, understand their place in the world, and to

act.[229] In other words, worldview and identity formation are necessary processes for rational

beings to live in the world. Thus, developing a worldview and utilizing one's worldview as a

way of organizing one's experience is a distinctly human way of living because this capacity

requires one to reason and organize one's ideas and impressions of the world so that one might

be able to live as a person in the world. Thus, identity/worldview formation is necessary for

deliberation and human action. Koltko-Rivera argues that reality cannot be interpreted "as is," or

without some interpretive backdrop network of beliefs. There must be some hermeneutic

framework through which reality can be interpreted, if it is to be interpreted at all. "[E]xistence

itself is uninterpretable without a worldview" (Koltko-Rivera, 2004, p. 20).

It is important that a worldview is relatively stable. This is because if one's worldview

collapses, so does one's ability to interpret the world. If one's worldview collapses frequently,

one will be significantly inhibited from consistently making sense of the world and thus be

consistently inhibited from understanding and acting in the world. This does not mean that one's

worldview cannot ever change. One might be raised in a strongly religious household and later

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[229] See 4.3 The psychology of worldviews."

embrace atheism. Their later embrace of a different worldview does not disable them from interpreting the world. One's worldview can change throughout their life. Yet, it is important to clarify what I mean by changing one's worldview. A worldview is a collection of beliefs and attitudes about the world and one's place in it. Thus, there are multiple parts (beliefs and attitudes) that comprise a worldview. As I have already argued, some beliefs are more central to a worldview than others.[230] That is, some beliefs are more fundamental to a worldview than others. To use an analogy, we might think of a worldview as a multi-story building. It is possible to replace a window or a wall and not substantially affect the building as a whole. However, when one begins to change the foundation of the building, the integrity of the whole building is threatened. If enough of the foundation is disturbed, the building will fall. If the (worldview) building falls, we have no hermenutical framework through which to understand the world. This is why it is psychologically advantageous for one's worldview, particularly the beliefs comprising the foundation of one's worldview, to be stable. Stability ensures one maintains an ability to be able to understand the world and therefore, act in the world. Thus, I have identified emotionally tagged worldview identity beliefs (ETWIBs) to be the most central beliefs one has that are integral to one's worldview. ETWIBs influence many other beliefs and the emotions attached to these beliefs make these beliefs more persistent (stable) over time.

This does not mean that people's worldviews do not ever change. On the contrary, worldview modification seems to be a lifelong process. However, worldview belief changes do

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[230] See section **4.4 Worldview and identity**.

not usually occur at the level of core beliefs.[231] Contemporary empirical research has indicated

that some parts of people's worldviews are more easily changed than others.

> Some aspects of worldviews are dynamic and some are stable over time. Responses based
> on apparently solid belief structures (such as the belief in free-will vs. destiny, for
> example) can be manipulated with subtle unconscious priming (Vohs and Schooler, 2008;
> Mikulincer and Shaver, 2001). At the same time, worldviews can become quite rigid over
> time and resistant to change, even when new contrasting information is presented (Cook-
> Greuter, 2000; Dunbar, 2008). (Schlitz, Vieten, & Miller, 2010, p. 19)

Summarizing others' previous work, Michael Poulin and Roxane Silver write,

> Laboratory research indicates that worldview threats typically lead not to worldview
> disconfirmation, but rather to strenuous efforts either to defend those worldviews (e.g.,
> Hafer & Rubel, 2015; Jost, Gaucher, & Stern, 2015; Pyszczynski et al., 2015) or shift
> attention away from the threatened domain (Heine, Proulx, &Vohs, 2006). Even when
> worldview threats in the lab do prompt accommodation, such changes tend to occur in
> peripheral, but not central, aspects of worldviews (Hayes et al., 2015). (Poulin & Silver,
> 2019, p. 1)

Furthermore, I have already briefly discussed emotional tagging.[232] To review, research suggests

that when a belief is emotionally tagged, it tends to be more persistant and draws one's attention

more than non emotionally tagged beliefs. When applied to one's worldview, emotional tagging

provides a stabilizing function. When a belief is emotionally tagged it is less likely to change and

thus ensures the endurance of one's psychological framework. Thus, we have empirical evidence

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[231] This does not mean that core beliefs do not ever change. In a previous example, a person went from being deeply religious to being atheistic (see 4.3 The psychology of worldviews"). On my view it is possible for one to be raised deeply religious but their specifically religious beliefs to not be part of the core of their worldview in that their specifically religious beliefs do not ground most of their other worldview beliefs. If this is the case, the religious/atheist change would not constitute a change in core worldview beliefs.
Yet, it is quite plausible that one's religious identity forms a core part of their worldview and that this identity later changes as one embraces atheism. If this is a genuine example of core belief change, it is not clear that this belief change happens immediately. Given the empirical evidence, it is highly doubtful that this kind of core worldview belief change happened suddenly (For example see (Kaplan, Gimbel, & Harris, 2016)). Most likely, one's journey from religious to atheist takes time and is thus a gradual process. If it is a gradual process, one's religious beliefs might gradually move from being core beliefs to being more peripheral worldview beliefs. This would be accomplished by gradually grounding more and more of one's worldview beliefs in beliefs other than religious beliefs.
[232] See section **4.3 The psychology of worldviews**.

that indicates human psychology is structured in such a way that it favors worldview stability, at least stability of the core parts of one's worldview. This coheres with the explanation that worldview stability is needed to ensure one maintains an adequate hermeneutical framework for interpreting the world. Thus, worldview stability is important for proper human function because one cannot function as a human in the world without a worldview and worldview stability ensures that one will have a interpretive framework on into the future.

6.3 Trauma as a defense mechanism

However, the emotional experience at the heart of trauma targets the foundation of one's worldview thereby threatening collapse of one's hermeneutical framework. Trauma, then is a defensive mechanism aimed at protecting one's psychology. This is because trauma, as I have hypothesized, is an attempt at protecting one's identity by dissociating one's emotional experience from the rest of one's self-concept. During trauma one's emotional experience presents a challenge to one's core beliefs (i.e., one's ETWIBs) that cannot be ignored or reinterpreted. To change one's ETWIBs based on the information presented by one's traumatic experience is to destroy the foundation of one's current worldview thereby shattering the whole worldview. Thus, trauma protects one's current worldview by dissociating one's traumatic experience from the rest of one's interpretive belief network.

However, integrating one's emotional experience into one's psychological framework is a proper human function. By integration, I mean that that one's experience is accessible to reflection and deliberation, and can be encoded into memory in the way that autonoetic memories are normally encoded. This is because integration of one's experience is a way the capacity to reason transforms otherwise non-human animal functions into human ones. Non-human animals may have experiences, but they are not capable of organizing and integrating

those experiences into a coherent psychological picture of the world that informs their identity beliefs and their beliefs about their place in the world.[233] In the previous chapter I have argued that psychic harmony is a necessary condition for proper human function. Psychic harmony requires reasoning/emotional integration. That is, one's reasoning is capable of directing one's emotions and one's emotions can influence one's reasoning in proper ways.[234] Because trauma is the disruption of reasoning/emotional integration, it is a disruption of proper human function.

My conclusion is a bit paradoxical because I have also argued that trauma is a defensive mechanism that protects one's fundamental psychological framework during terrifying or horrifying events. If trauma is a mechanism that protects one's psychology, including one's capacity to reason and integrate future experiences into a larger psychological framework, then it seems that trauma is a mechanism that protects proper human functioning. That is, the ability for humans to understand their experiences and to integrate those experiences into their understanding of themselves and the world is part of a distinctly human life. If trauma protects this distinctly human life, it seems that trauma protects proper human functioning.

However, we must understand what is being sacrificed to preserve one's worldview and identity. Trauma preserves one's psychology by dis-integrating one's emotional experience from one's broader psychological framework. This is why traumatic memory recollections are chaotic and intrusive because they have not been allowed to be encoded, organized, and stored in the way normal memories are. Sensory impressions are encoded during a traumatic event but they

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[233] If it turns out there are some non-human animals capable of integration in this way, it seems these animals must also be capable of reason. If this is the case, it would be necessary to reframe "proper human function" as something more like "proper person function" or "proper rational being function."

[234] For more on this see section **5.14 From Plato to the present**.

are not encoded in a way that will allow for them to be recalled as a coherent whole later.[235] In addition, some traumatized people have seemingly spontaneous physiological responses that are often in conflict with the conclusion of their deliberation (i.e., the lake case). Thus, trauma sacrifices emotional experience integration to preserve one's basic psychology. Another way to think about trauma is that it sacrifices excellent human function (reasoning/emotional integration) in the present to preserve basic human functioning (being able to make sense of the world) in the future.

In this way, trauma permits one to psychologically survive an event, but one's emotional response to the event (trauma) is a significant impairment to their flourishing regardless of whether one experiences lasting traumatic effects. It is an impairment because human flourishing is functioning as "humanly" as possible and experience integration is part of what it means to live a distinctly human life. Thus, trauma impairs one from living a distinctive human life. Traumatic impairment may be overcome shortly after the event when one is able to remember and psychologically integrate their experience or the impairment may last longer resulting in a PTSD diagnosis. Either way, one must sacrifice a distinctly human function to preserve another. In summary, trauma sacrifices a proper human function to psychologically survive an event. While experiencing trauma, a person is hindered from living a fully flourishing human life. Yet, it is not as though one's emotional experience is simply forgotten. Instead, trauma encodes traumatic memories as chaotic sensory perceptions and anxious or fearful physiological activity. In this way, one's emotional experience is encoded as separate from (unintegrated), opposed to one's worldview, and yet still part of one's psychology. When someone cannot psychologically

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[235] For more on how trauma disrupts memory encoding and storage see section **3.7 Trauma as Psychic Disruption**.

integrate their experience, they are inhibited from developing a way of being that is important for human function and flourishing.

6.4 Acting well

Not only does trauma inhibit human flourishing by disrupting a distinctly human mental function, trauma inhibits excellent human acting. I argued in chapter five that to determine the proper function of a thing we need to determine what a thing does and how it does it.[236] Here, I will evaluate how psychic harmony impacts the way human beings act excellently in general. I will then move to thinking about how psychic harmony impacts the way human beings act more specifically in relating well to other humans.

In the rest of this section, I will spend a lot of time discussing acting well in the context of moral virtue. This may seem odd because up until this point I have argued that trauma inhibits human function in a broader way than just being able to act morally. Yet, I believe Plato and Aristotle's conception of moral virtue is broader than what we commonly attribute to moral virtue today. In particular, Aristotle seemed to believe that virtue is an excellence of distinctly human character. That is, for Aristotle, moral virtue is simply fulfilling the excellent function of being human. This is because, for Aristotle, the excellent function of a thing is grounded in the activity that thing is particularly well-suited to do.

> For just as for a flute-player, a sculptor, or any artist, and in general, for all things that have a function or activity, the good and the 'well' is thought to reside in the function, so would it seem to be for man, if he has a function. (The Nicomachean Ethics, 2009, 1097b)

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[236] This followed Korsgaard's argument in section **5.10 Human function**.

Thus, being wise, brave, or honest are moral virtues because they are distinctively human excellences. I do not wish to provide a defense for an Aristotelian view that all distinctively human excellences must be moral in nature. Instead, I want to make the point that the conceptual framework Plato and Aristotle attribute to moral actions in particular can apply to excellent distinctly human behavior more broadly construed, if there are distinctive human excellences that are non-moral in character. At the very least, I believe moral behavior is at least one class of human excellences that are relevant to thinking about psychological harmony.

It is important to note that the picture Plato paints of the virtuous person is not just one in which a person somehow manages to overcome their weaknesses so they might act in such a way as to fulfill a moral duty. Rather, the just soul is oriented in a way that the right act naturally flows from the justness or harmony of the soul.

> [A]nd when he has bound together the three principles within him, which may be compared to the higher, lower, and middle notes of the scale, and the intermediate intervals---when he has bound all these together, and is no longer many, but has become one entirely temperate and perfectly adjusted nature, then he proceeds to act, if he has to act, whether in a matter of property, or in the treatment of the body, or in some affair of politics or private business; always thinking and calling that which preserves and co-operates with this harmonious condition just and good action, and the knowledge which presides over it wisdom, and that which at any time impairs this condition he will call unjust action, and the opinion which presides over it ignorance. (Plato, Republic, 2004, 443d-444a)

On Plato's view, truly virtuous acts are accomplished by the harmonious soul. Thus, when one acts, one's act is not motivated by a conflicted soul. More specifically, one acts well when their act aligns with both their reasoning and emotions. Thus, there is a sense in which intra-soul harmony (or psychic harmony) enables one to act in ways that are harmonious with both the conclusion of one's reasoning and the way that is consistent with how one's emotions motivate. For instance, we might think of the following situation. Jamie is a just soul. One day, Jamie

decides to stop at a convenience store for a snack because she is hungry. When she walks in, she realizes she accidentally forgot her wallet at home. She also realizes that there is only one clerk working and the clerk is distracted. Jaimie knows that she could take some food from the shelf and walk out and not be caught. Yet, Jaimie also believes that taking what does not belong to her is wrong. She thus reasons that because she has not paid for the food it does not rightfully belong to her. Because the food does not rightfully belong to her, it would be wrong to steal it. So, she decides to leave without stealing the food. In this situation, Jaimie reasons that it would be wrong to steal, but she also feels that it would be wrong. That is, Jaimie believes that if she stole she would feel shame. If Jaimie is truly virtuous, it is not only the case that she believes she would feel shame but it is true that if she stole the food she would feel shame. She is happy because she did not steal and she would have felt shame if she had stolen. Because Jaimie is a just soul, her feelings compliment the conclusion of her deliberation when committing moral acts. Her feeling (or imagined feeling) of shame motivates her not to steal and she has also rationally concluded that she should not steal. For this project, I have assumed a cognitive view of emotions where an emotion includes a judgment. Thus, Jaimie's counterfactual shame includes the judgment that stealing the food was wrong which accords with her rational deliberation. In this way her refraining from stealing and thereby acting honestly is harmonious with her state of soul.

Aristotle agrees with Plato that virtuous action is a natural effect of a harmonious soul. That is, well-functioning rational deliberation (wisdom) is necessary for morally praiseworthy acts and these acts must also be accompanied by proper affect (passion) to be consituitive of virtue. Toward the end of book IV in the *Nicomachean Ethics*, Aristotle comments that everyone (in his day) who talks about virtue asserts that virtue is in accordance with practical wisdom. However, it is not enough for a virtuous act to cohere with practical wisdom.

> For it is not merely the state in accordance with correct reason, but the state that implies the *presence* of correct reason, that is virtue; and practical wisdom is correct reason about such matters. Socrates, then, thought the virtues were instances of reason…while we think they *involve* reason. (2009, 1144b)

Lesley Brown comments on this passage,

> Aristotle refines the commonplace notion that virtue must be "in accordance with right reason" to insist, as elsewhere, that the virtuous person must himself possess correct reason, i.e., practical wisdom…Aristotle means that practical wisdom is a necessary condition of virtue or---a stronger claim---that it is a necessary part or facet of moral virtue. (Aristotle, The Nicomachean Ethics, 2009, p. 243)

I am not going to attempt to adjudicate whether practical wisdom is a necessary condition for

moral virtue to exist or whether it is part of the moral virtue itself. For my view to succeed I

believe it is only necessary to show that practical wisdom is a necessary condition for excellent

behavior. If practical wisdom is part of the individual moral virtue itself, it is still a necessary

condition that one exhibit practical wisdom if one is to exhibit the moral virtue. In addition,

earlier in Book II, Aristotle distinguishes moral virtue from the the product of a virtuous artist.

An artist is virtuous (excellent) insofar as the artist produces excellent artwork. Thus, the artist's

excellence as an artist is determined by the work he produces. However, Aristotle argues that

whether one is morally excellent requires more than an appraisal of their product (the moral act),

it requires an appraisal of the psychological state of the person committing the act. "The agent

also must be in a certain condition when he does them; in the first place he must have

knowledge, secondly he must choose the acts, and choose them for their own sakes, and thirdly

his action must proceed from a firm and unchangeable character" (*Ibid*, 1105a).

> Yet, virtue requires not just practical wisdom but also appropriate emotions.

> Now [virtue] is a mean between two vices, that which depends on excess and that which depends on defect; and again it is a mean because the vices respectively fall short of or exceed what is right in both passions and actions, while virtue both finds and chooses that

which is intermediate. (Aristotle, The Nicomachean Ethics, 2009, 1107a)

When wisdom and fitting affect lead to action, the act is thought to be virtuous. However, Aristotle goes further than Plato in advocating a process for developing virtue. Aristotle does not believe that anyone is born virtuous, but virtue is developed by engaging in the right habits (The Nicomachean Ethics, 2009, 1103a).[237] Thus, there is a sense in which a right act precedes one's developing a virtuous character. Using the Jamie case again, suppose that Jamie walked into the same store, saw the clerk busy, and felt joy at the thought of possibly stealing the food because she likes the thrill of stealing and getting away with it. Yet, Jamie also reasons that stealing the food is taking something she does not rightfully have a claim to and taking what is not rightfully hers is wrong. Because Jaimie knows she feels shame when she commits acts she believes are wrong she believes she would feel shame if she stole the food. Thus, Jaimie decides not to steal the food. In this version of the story, Jamie has conflicting feelings concerning how she should act. Jamie ends up choosing not to steal, which is the right act. It is unclear, though, whether her act is truly virtuous. This is because her act is a result of disharmony between her reasoning and her emotions. Thus, Jamie performs the right act, but not the virtuous one.

Thus, Aristotle seems to agree with Plato in thinking that the goal for human action is more than committing the right act. Rather, the moral goal for activity is committing the right act in the right "spirit."

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[237] Aristotle argues that moral virtues come about as the result of habit, but intellectual virtues (like wisdom) are brought about by education. "Virtue, then, being of two kinds, intellectual and moral, intellectual virtue in the main owes both its birth and its growth to teaching (for which reason it requires experience and time), while moral virtue comes about as a result of habit" (2009, 1103a). This does not mean that moral virtue is brought about by habits without the presence of practical wisdom. In fact, it appears that practical wisdom is what directs a person to recognize the habits that develop moral virtue. "Now it is thought to be a mark of a man of practical wisdom to be able to deliberate well about what is good and expedient for himself, not in some particular respect…but about what sorts of thing conduce to the good life in general" (*Ibid*, 1140a).

> [I]f the acts that are in accordance with the virtues have themselves a certain character it does not follow that they are done justly or temperately. The agent also must be in a certain condition when he does them; in the first place he must have knowledge, secondly he must choose the acts, and choose them for their own sakes, and thirdly his action must proceed from a firm and unchangeable character. (Aristotle, The Nicomachean Ethics, 2009, 1105a)

Both the first and second conditions Aristotle mentions seem to be predominantly rational in character. Knowledge is a paradigmatic case of one using one's cognitive capacities. That is, to know something is to have a conceptual awareness of that thing, to form a true belief about that thing, and be justified in forming one's true belief about that thing. In addition, Aristotle's view of choice requires the use of reason. "At any rate choice involves reason and thought" (*Ibid*, 1112a). Aristotlelian choice is the product of deliberation. "[C]hoice will be deliberate desire of things in our own power; for when we have reached a judgment as a result of deliberation, we desire in accordance with our deliberation" (*Ibid*, 1113a). Yet, a "firm and unchangeable character" is less obviously purely rational. This is because moral character concerns not just how one acts but how one is motivated to act. If emotions are motivating, it seems that an account of moral character must say something about emotions and how they motivate actions.

Aristotle does just this, but before discussing emotions' role in states of character it will be helpful to briefly summarize what Aristotle means by states of character. In defining what a virtue is, he argues that there are only three kinds of things in the soul "passions, capacities, and states of character" (Aristotle, The Nicomachean Ethics, 2009, 1105b)[238]. He then goes on to

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[238] For what it is worth, I do not think Aristotle is in direct disagreement with Plato concerning the constituent elements of the soul, at least not in this passage. Plato argues that the soul is comprised of three "parts," reason, emotion, and appetite. Aristotle's tripartite model, though, is not an account of the basic nature of the soul so much as it is about categories of things can be found in the soul. Both philosophers assert that passions are part of the soul. However, Plato's list seems to divide the soul along the category of capacities. Reason, emotion, and appetites all have certain unique functions that enable unique *psychic* activities. As I try to explain, Aristotle's "states of character" are dispositions that seem to require a synthesis of rational and emotional capacities.

argue that virtue must be a state of character because we are not praised or blamed for either

spontaneous emotions (i.e., fear and anger) nor are we praised or blamed for capacities (*Ibid*,

1106a). Regardless of whether there are only three kinds of things in the soul, a state of character

appears to be an appropriate category for moral virtue because we often praise or blame someone

not just regarding a single act, but regarding a disposition to act a certain way. Consider the

following appraisals. "He's a dirty scoundral because he seems to lie about everything." "She's

just a lazy bum who doesn't ever want to work hard." In both of these statements, moral

disapproval is attached to someone because of their pattern of behavior. Thus, moral appraisal

tracks not just singular acts but also patterns of activity. Aristotle believes these habits are

evidence of one's propensity to act in a certain way, otherwise known as their state of character.

States of character, then, are not examples of capacities or passions. Yet, states of

character include the tendency to feel a certain way. While arguing that virtue aims at an

"intermediate" or "mean" Aristotle explains that virtue often requires the right emotion.

> I mean moral virtue; for it is this that is concerned with passions and actions, and in these
> there is excess, defect, and the intermediate. For instance, both fear and confidence and
> appetite and anger and pity and in general pleasure and pain may be felt both too much
> and too little, and in both cases not well; but to feel them at the right times, with reference
> to the right objects, towards the right people, with the right motive, and in the right way,
> is what is both intermediate and best, and this is characteriestic of virtue. (Aristotle, The
> Nicomachean Ethics, 2009, 1106b)

Thus moral excellence requires one to feel a certain way in certain circumstances. Yet, being

disposed to feel a certain way under certain conditions is not itself sufficient for virtue. This is

because one might be disposed to feel anger in the appropriate contexts but this anger might

seem spontaneous. That is, one's anger does not motivate one to choose to act virtuously, one

just feels angry inexplicably. If this is true, virtue requires that my emotions fit my choice if I

act. This implies that my emotions must fit the conclusion of my deliberation about how I ought

to act in a given situation. By fit, I mean to simply suggest that virtue requires the constituent judgment of an emotion to track one's moral deliberation of an act. For instance, I might feel pride because I rescued a dog from an abusive environment. I believe that my act of rescuing a dog is morally praiseworthy and my pride includes a judgment that I have acted in a morally praiseworthy way. Aristotle's view, then, implies a reasoning/emotional harmony is necessary for virtue. In this way, we might think of states of character as psychic conditions[239] that exist before acting that will influence someone to act in a certain way when they do act.[240] If one's psychic preconditions are virtuous, they are highly likely to act in virtuous ways. Psychic harmony, then provides a psychological precondition that is highly likely to yield virtuous action.

Before continuing, I believe it necessary to clarify that I believe that one need not achieve global psychic harmony to commit individual virtuous acts. One does not need to develop harmony between all of one's reasoning processes and all of one's emotional processes in general to act well in a particular instance. Rather, when one acts, the reasoning processes and emotional processes relevant to the act ought to be in harmony for the act to be considered excellent. In this way, it is possible for those who have been traumatized and whose traumatic experience remains dissociated from their identity to act excellently in many contexts. For instance, the military veteran who has difficulty playing with his children may act virtuously when he stops to help a stranded motorist. This is because the veteran may recognize that

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[239] I have used the term "psychic" instead of "psychological" to attempt to capture the broad understanding of the "soul" that Plato and Aristotle seem to employ. Because the "soul" contains physiological urges, it is not clear to me that the "soul" can be accounted for by referring only to one's "psychology."

[240] I have intentionally defined states of character as a subclass of psychic preconditions so that states of character are not the only possible psychic preconditions to action. This is because I want to leave room for the possibility for other psychic preconditions that influence action that are not normally associated with character (e.g., non-culpable ignorance).

stopping to aid the motorist is a good thing to do and he might fell compassion toward the stranded motorist. Thus, his traumatic experience and the associated psychic disharmony do not play a role in his choosing to act or in motivating him to act or not to act on behalf of the motorist.

More recently, Robert Adams defines moral virtue as "persisting excellence in being for the good" (2006, p. 14). Of course, there are many different ways in which one can be for the good. Adams spends considerable space unpacking this notion. Essentially, he argues that being for something is more than a tendency to be "causally conducive to X" (*Ibid*, p. 16). That is, being for something in his sense is not merely a tendency to cause a certain effect. Instead, being for something requires intentionality. "[B]*eing for x* must involve dispositions to favor x in action, desire, emotion, or feeling" (*Ibid*, p. 17). That is, virtue is intended not just as a tendency to bring about certain virtuous acts. One might be virtuous and be unable to bring about certain acts. For instance, it could be the case that one has been paralyzed in a diving accident. One might still intend to safely walk her children across a busy intersection but be incapable of doing so. "When we speak of virtues we surely mean to speak of enduring psychological states that can in some contexts play an influential part in more or less reliable predictability" (*Ibid*, p. 18). Thus, on Adams' view, one might be virtuous even if one is inhibited from acting on their virtue. If Plato and Aristotle serve as a background for thinking about Adams, we might think that what it means to be "for" something is for one's soul to harmoniously intend the proper ends for something. In other words, when someone is "for" something they have the psychic preconditions for acting, so that if and when they act, they will act in such a way that effects the

proper ends relevant to the act. [241] It is possible for someone to possess these psychic preconditions without being capable of acting on their influence (i.e., the paralyzed mother has the psychic preconditions that would influence her to walk her children across the busy street but these preconditions will not actually effect her acting because she is incapable of the act the psychic preconditions would motivate her to do, namely walk across the street). However, the psychic preconditions are preconditions that will not only yield acting in the right way, they will yield fitting emotion as well. Yet, there seems to be more to these preconditions than I have covered so far. One might be able to have rational/emotional harmony, perform the right act, and yet do so unintentionally. More specifically, one might act in a way that did not intend the relevant ends. For instance, I might give money to a certain charity. I reason that giving money to the charity is a good thing because I will gain social standing for giving to the poor and I find that giving to this charity makes me happy. In this scenario I give money intending solely my own end.[242] However, it is doubtful whether we would classify this as an excellent act. This is because my act was not motivated by a concern for a relevant end, namely the end the charity is working toward. Instead, my intent in giving to the poor is to boost my own ego. Thus, virtue seems to require a certain kind of willing. Adams argues that virtuous desiring is primarily a condition of the will. The primary condition is that being for something is a state in which the will is inclined toward something.

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[241] I suspect it is obvious to many readers that Adams refers to being for "the" good and I am arguing that virtue is about being for proper ends. Personally, I sympathize with Adam's view about there being a unified notion of good. However, I do not think this assumption is necessary for my account. I find it plausible to think that virtue is directed toward what is good for something (its proper end), most often what is good for other persons. There may be a plurality of goods that are subjectively distinct for different individuals. Thus, if Adams is correct and there is a unified notion of "the good" my account of virtue being for good will fit within his paradigm. If he is incorrect, however, I still believe my account to be plausible. In addition, I believe that "proper ends" includes the "good" of something but also may include nonmoral ends.

[242] It is not clear that this kind of giving would even accomplish my own good on a Platonic/Aristotelian system because it does not lead to me becoming more virtuous. At the very least, though, I think I am intending my own good.

Thus, Adams emphasizes that being for the good is a condition of one's will. To understand what he means it will be helpful to consider his definition of the will.

> What I mean, however, by *the will*, of which moral virtue is an excellence, is not exclusively a faculty of such actions. Among its other functions, it is a faculty also of dispositions, of somewhat enduring causal states that influence action, and play a part, more broadly, in psychological processes of decision-making. In this I follow typical medieval conceptions of the will as an intellectual appetitive faculty…It is broadly appetitive in having motivational states as well as decisions among its functions. It involves intelligence, and not merely sensation, inasmuch as those states and decisions involve some *understanding* of their objects. When I speak of being for or against something, I mean likewise to imply some level of understanding of the object. (Adams, 2006, p. 17)

Thus on Adams' account, the will is not just responsible for generating action, it is also responsible for one's being disposed to act in certain ways. This faculty includes deliberative decision making and an "intellectual appetitive faculty." The will has motivational states and it has the capacity for understanding. If we adopt Adams' sketch of the will, the will requires the use of more than one's reasoning. Reasoning processes appear to be required because one must understand and one must be able to make decisions. However, both emotions and appetites can be motivating. Thus, it would be mistaken to attempt to conceptualize Adams' concept of the "will" as a function of only one's reasoning. Given that Adams argues that intentionality is a necessary property of the will, it is plausible to think the will always engages one's reasoning capacity. To intend something is to be able to choose something. To be able to choose something is to be able to deliberate. However, restricting the faculty of the will to only including reasoning processes unnecessarily restricts the way one is motivated. Instead, the will seems to be a faculty that is affected by one's emotions and appetites as well.

Interestingly, the will can often involve emotions. Adams argues that emotions can be for or against things.

> Emotions can be ways of being for or against something, but only insofar as the emotion has an intentionality that involves some understanding of its object. To "feel on top of the world," or to be gripped by nameless anxiety or grief, without any understanding of something one is glad or worried or sad about, is not yet to be for or against anything. (Adams, 2006, p. 18)

If virtue is an excellence of the will where the will is a disposition toward achieving a proper end, then when an emotion is salient in motivatinng one to act for someone's proper end, it is necessary that the emotion is attached to an understanding of the object. For instance, if compassion is a virtue one might reasonably think that interpersonal compassion is being for the well-being of another person. This virtue would include feeling something like comraderie or pity toward another person. To feel this way *toward* another person, one must have an understanding of the other person as a person. Thus, a spontaneous emotion of generic pity without pity being directed toward something or someone (if it is possible to have such a thing) is not virtuous. It is only virtuous if it is combined with an understanding of another person as worthy of deserving such pity. In this way, if virtue is a disposition of the will for proper ends, when being excellently disposed toward a proper end requires an emotion, this emotion must be integrated with understanding.

6.5 Emotions as hindrances or contexts for virtue

Up until now, I have been arguing that one's emotions must fit one's choice that is a product of deliberation if an act is to be considered virtuous. Thus, for one to have virtue one's emotion must fit the conclusion of their deliberation. However, emotions that conflict with one's deliberations sometimes seem to make some acts more virtuous. We might think that someone who has had to overcome more conflicting emotion is to be more highly praised than one who has had to overcome less or no conflicting emotion. For instance, we might think of the

following case. Kay[243] was sexually and physically abused by her prison-guard boyfriend. Eventually she left him only to have to return briefly to gather clothes for her children. On her return her boyfriend shot her multiple times so that she almost died. Years later, Kay decided to become a police officer so that she could work to protect people who were trapped in similar situations. While Kay is on the job, she discovers she must stifle emotions like fear and anger to rescue those who are being abused and apprehend those who are abusers. In this way, she must often act contrary to strong motivating emotions derived from her trauma.

On Plato's model of the soul, the virtuous person was able to experience rational, emotional, and appetitive pleasures without the pleasures conflicting with one another. Thus, the well-ordered soul was a soul free from conflicting pleasures. Aristotle appears to broadly agree with Plato that the virtuous person does not experience conflicting pleasures.

> Now for most men their pleasures are in conflict with one another because these are not by nature pleasant, but the lovers of what is noble find pleasant the things that are by nature pleasant; virtuous actions are such, so that these are pleasant for such men as well as in their own nature. (*The Nicomachean Ethics*, 2009, 1099a10)

Unfortunately for Kay, because of her past trauma she feels a mix of pleasure and displeasure when acting well. Thus on Aristotle's view, it might appear that the survivor who must act against her emotions is less virtuous than one who acts in line with her emotions. If this is the case, we might also think that the advocate who is not a trauma survivor is more virtuous than Kay because the non-survivor finds her act pleasant where Kay finds her act both pleasant and not pleasant. But the fact that Kay overcomes strong emotional motivation against acting rightly seems to be a reason to praise her acts more. Thus, on the one hand we may want to praise

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[243] This case is based on the story of Katrina Brownlee, a veteran of the New York Police Department (Wilson, 2021). At the end of the New York Times piece, she is praised by the New York mayor because he said she never showed any signs of trauma. She responded, quite tragically I think, "You're not supposed to."

someone because they act contrary to strong emotion and on the other hand we want to praise someone because their emotions align with their virtuous act.

Rosalind Hursthouse provides a helpful distinction to think about this apparent dilemma (Hursthouse, 2002, pp. 94-99). She distinguishes between emotions that are generated by character defects and emotions that provide contexts for displays of virtue. If I find a wallet lying on the sidewalk and I eventually return it but I have to overcome a strong feeling of regret in order to do so, this looks to be a case where my regret is generated by my less than thoroughgoing honesty. It would be better for me to return the wallet and feel glad about returning it without having to overcome regret. On my view, this is because my regret contains a judgment about the act of returning the wallet. My emotion indicates that I disapprove of returning the wallet even though I come to the conclusion that the wallet does not rightly belong to me and therefore I ought to return it. However, we might also think about someone who is claustrophobic and decides to accompany a nervous friend up an elevator to a job interview. In this case the claustrophobic exhibits a virtue, courage, that a non-claustrophobic would not exhibit in the same circumstance. Thus, one's fear provides the context for exhibiting additional virtue. Kay's case falls into the latter category. Kay's fear and anger are not derived from a lack of character. That is, her fear and anger are not judgments regarding her current choice to act rightly as a police officer. Instead, they are grounded in her past traumatic experience. That is, Kay's emotions are really judgments about her past traumatic experience. If Kay is able to reflect on her previous traumatic experience, it is quite likely that her emotions will match her reflection. She might realize that how she was treated was unjust and a violation of her standing as a person. Thus, her emotions of terror and outrage fit her reflection of how she was treated. Thus, Kay's traumatic emotion provides a context in which she exhibits virtue that a non-

traumatized police officer does not show because the non-traumatized police officer does not experience the traumatic emotion that provides a context to express such a virtue. In this way, when Kay acts rightly in opposition to her traumatic fear and anger, she has the opportunity to exhibit virtue in a way that is distinct from her non-traumatized colleagues.

Kay's case helpfully illustrates the problem trauma poses to acting virtuously. Her traumatic emotional experience is not integrated into her overall autobiographical narrative in the way that most of her other experiences are. Normal integration allows one to be able to interpret one's experience through one's worldview so that one can make cognitive associations with one's experience and other beliefs, attitudes, or memories that one has. Instead, for many trauma survivors, traumatic experience is unintentionally recalled in ways that are intrusive to one's consciousness and because of the memory encoding process, these memories are presented to one's consciousness as fragmented sensory experiences that include emotional content. Thus, traumatic recall presents emotions that motivate one to act in certain ways (e.g., fight, flight, freeze) but these emotions are not appraisals of one's acting in the present. Instead, they are appraisals of one's treatment or acts in the past. Thus, intrusive emotions derived from traumatic experiences may motivate one to act in ways that do not match one's deliberation, but these emotions do not indicate the presence of vice. Even though current emotions may not indicate vice, they still may motivate one to do things that hinder acting well. For Kay, her fear and anger may motivate her to act unjustly toward other people.

More to the point, when one experiences trauma, one is hindered from rationally deliberating their action because one's reasoning capacity responsible for deliberation and experience integration is dissociated from one's affective processes that temporarily control one's actions. In this way, at least some actions during trauma are involuntary (not a product of

choice) and thus not subject to virtuous or vicious evaluation. This also means that persons who are experiencing trauma cannot act virtuously because they cannot deliberate about their acts and thus cannot intend or choose acts. Furthermore, because they cannot deliberate, their emotional response cannot fit their rational deliberation and their emotional experience cannot be integrated with their belief network that helps to organize and interpret experiences (i.e., worldview). Because virtuous acting requires one to deliberate and have emotion that includes a judgement of one's choice where the judgment is fitting, one cannot act virtuously (or visciously) during trauma because even if one could make a deliberative choice, one's emotion is dissociated from one's deliberation and thus the emotional judgment cannot be *about* one's choice.[244] Then, trauma is not an expression of one's virtue or vice, but its effects can hinder virtue development by motivating one to not develop habits that result in virtue. This is because any time one's traumatic emotional experience intrudes into the present, this experience motivates one to act in certain ways, but the emotional experience is not integrated with one's current deliberation. This is because one's emotional experience is dissociated from any deliberative process. Thus, even if one's traumatic emotion motivates one to do good, it does not contribute directly to acting virtuously because virtue requires that emotion to be about one's deliberation. If one's traumatic emotion is to be part of a virtuous act, it will need to be integrated with one's deliberation.

One might worry about cases where one is motivated by one's traumatic experience to do good acts. For instance, suppose that because of her previous trauma Mary still struggles with flashbacks, but is motivated to lobby her state legislature to pass legislation supporting trauma victims and making it harder for adults to sexually assault children. This is a case where it

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[244] One might argue that persons can act in deliberate ways that result in trauma. The war veteran who killed a whole village of civilians appears to have committed an act that was the result of deliberation and yet this act led to his own trauma. However, I argue that his deliberative act was prior to his trauma. During trauma, I do not think one's salient cognitive capacities operate in a way that can be said to be praiseworthy or blameworthy.

appears that Mary's emotional experience, intense anger toward her injustice, is about the injustice that she reasons that other children have. The worry is that Mary seems to be acting virtuously, but my account looks like it gets cases like these wrong because one's motivating emotion is dissociated from one's deliberative processes.

I do not think the worry is justified, however. In this updated account of Mary, her traumatic experience has begun to become integrated into the rest of her psychological framework. Even though her traumatic experience still intrudes into her consciousness involuntarily she is able to interpret her experience through the lens of her worldview and associate that experience as happening to her. By accessible, I mean that the cognitive processes responsible for deliberation and interpretation have access to one's traumatic experience. Because one's worldview is necessary for making sense of reality, one's worldview is necessary for interpreting and evaluating one's experience. To make meaning of my experience, I must be able to evaluate my experience against the backdrop of my meaning making framework (i.e., the beliefs and attitudes that comprise my worldview).

6.6 Meaning-making

When I discuss making meaning of my experience, I intend "making meaning" to refer to more than a simple descriptive interpretation of an event. For instance, I notice a large dog roaming the neighborhood while I am taking an afternoon walk. I might think, "There is a large dog walking down the street." The interpretation "There is a large dog walking down the street" is simpler than what I have in mind. One might argue this simple description utilizes worldview assumptions to create an interpretation of the world such that I can make sense of what I see. I have beliefs about what kinds of attributes constitute the things referred to as "dogs" (e.g., four

legs, fur) and what kinds of motion constitutes walking. These kinds of beliefs are necessary for me to pick out objects in the world and thus, make sense of the world.

But, there is very little psychological risk for accepting such a belief. Psychological risk is a salient attribute for beliefs because, on my view, trauma occurs when an experience poses a substantial risk to one's worldview by challenging core worldview beliefs, particularly ETWIBs. Thus, I understand that one assigns meaning to one's experience when one evaluates one's experience utilizing one's worldview as the framework for the evaulation. Moreover, the level of meaning I wish to discuss occurs when one evaluates their experience in light of their self-concept. For instance, I might develop the interpretation "there is a dog walking down the street" but this appears to be a descriptive statement and not an evaluative one that is not directly associated with who I am. In contrast, I might form the belief "I am in a threatening situation because there is a dog down the street." This latter belief is closer to the kind of meaning I have in mind. This latter example invokes one's basic interpretation and evaluates this interpretation in light of who one is. A dog walking down the street *means* "I am in danger." Thus, part of the meaning of my visual experience is that I am in danger.

The interpretation "there is a dog walking down the street" does not threaten identity beliefs I hold because, at this point, the intepetation is formed without associating the interpretation with those beliefs. That is, my experience of the dog walking down the street either does not conflict with my identity or I have not connected seeing the dog with my identity, yet. When I integrate my visual experience in a way that is relevant to what is happening during trauma, I connect the interpretation of my experience with beliefs I hold about myself or beliefs about my place in the world, such that my visual experience contributes to my self-understanding. If my experience does not engage my self-understanding in this way, I am

skeptical it will be traumatic. A traumatic experience, then, is an experience where one attempts to include the meaning of one's experience within one's self-concept but inclusion threatens to destabilize one's identity to such a degree that the meaning of the experience is psychologically compartmentalized apart from one's self-concept. Yet, one cannot simply forget their experience in such a way that it no longer affects them because the psychological and physiological responses for memory encoding (e.g., adrenal response, belief association) encode the sensory experiences of these memories particularly vividly and in ways that resist erasure.

Using this explanation, I would like to return to the dog-walking example. If I see the dog walking down the road and my experience does not connect with my self-concept in such a way that it conflicts with my self-concept, I do not believe it will be traumatic. However, let us assume I was attacked by a large dog that was walking down the street when I was a child. The attack terrified me so much that I came to believe that the dog was going to end my life. I experienced my stress response's physiological cascade of defensive processes and I dissociated myself from my experience because I did not accept[245] the experience meant I was going to die. The belief "I am going to die" is an identity belief because it is a belief about myself, particularly my existence (or non-existence). "I am going to die" conflicted with numerous identity beliefs, particularly any identity beliefs that involved the future (i.e., I will be an adult one day, I will be a student tomorrow, etc.).[246]

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[245] I will talk more about acceptance and its relationship to trauma in section **6.9 Belief and Acceptance**.

[246] This line of reasoning also coheres with empirical theories about Terror Management Theory (for a summary of Terror Management Theory see 4.7 Worldview and PTSD"). This does not mean that I do not also hold explicit beliefs like "it is possible that I might die." However, one might hold the belief that "I am not going to die" at a subconscious, more fundamental level. Moreover, I think it plausible that many people have beliefs about their future selves. Assuming that we will exist in the future allows us to make plans, anticipate the reactions of others to future acts, and consider how our actions will affect us.

Analyzing trauma by characterizing trauma as an emotional response that threatens to destablize one's identity allows us to draw out the deeply paradoxical nature of trauma. On the one hand, trauma is an emotional response to a potential identity destablizing event. In order for this to be the case, one must form a belief on the basis of one's experience. When I was attacked by the dog, I formed the belief "I am going to die" because of my experience. This means that I thought the reality represented by the statement "I am going to die" was true. Yet, I also held a number of deeply rooted conflicting beliefs (i.e., ETWIBs) about my future self that I also believed to be true. Thus, it appears I held at least two diametrically opposed beliefs about my self. That is, I thought that at least two of these conflicing beliefs were both true. However, if I was traumatized, there is at least some sense in which I could not accept the thought "I am going to die" even though I believed it to be true.

6.7 Belief Conflict

In previous sections I have explained normal ways people can have conflicting beliefs.[247] If one is aware of conflicting beliefs, one might experience cognitive dissonance. One might also hold conflicting beliefs at differing levels of consciousness. People hold opposing beliefs in these ways without traumatic pathology, so trauma must be about more than holding conflicting beliefs. My view sets trauma apart from these other examples for at least two reasons. First, trauma occurs when one's stress response is initiated by a terrifying or horrifying experience. The physiological response to such an experience modifies the way people process information and the way memories are encoded. Information is processed more quickly through heuristic short cuts as opposed to more in-depth, slower, deliberative processes. Moreover, because of

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[247] In particular, see section 4.2 Trauma and Worldview.

adrenal secretion and other neurological processes, memories from trauma tend to be more vivid and fragmentary. Second, trauma does not concern just any beliefs, it concerns ETWIBs which form the foundation of the network of beliefs enabling one to make sense of the world. Thus, when one has a traumatic experience, one is confronted with an experience that threatens key identity beliefs. Because these beliefs are the foundation for many other key interpretive beliefs, a change in one's identity has ripple effects for the way one understands much of the rest of their experience. In this way, one's emotional experience is opposed to one's existing psychological interpretive framework. What I mean is that one's experience gives evidence for a belief that conflicts with one's established ETWIBs. A child who experiences physical abuse from her mother may believe that she can be loved because previous emotional experiences with her mother have inculcated this belief. Yet, when her mother physically assaults her, she may interpret her experience to mean that she cannot be loved. Concluding "I cannot be loved" from "my mother does not love me" is obviously the product of a sound deliberative process. Logically, even if my mother does not love me, there are many more possibilities of persons who could love me. Yet, I have argued that the interpretive processes engaged during trauma are not these kinds of more thorough deliberative processes. Instead, I find it plausible that the formation of her belief relies more on heuristic processes than on explicit rational processes. She may assume her mother's actions represent the attitude of all people. Therefore, her mother's actions provide evidence that all people hold the same attitude. The drone pilot who serves in the military might have formed the belief that he is a defender of innocent people because he has helped to stop terrorists in the past. Yet, when he makes a mistake and identifies a civilian target instead of a terrorist resulting in the killing of an innocent person, he interprets his experience to mean that he is a killer of innocent people, perhaps indistinct from the terrorists he has been

trying to stop. From her previous experience, a woman may have formed the belief that her sexuality is an intimate and vulnerable expression of herself that she voluntarily reveals to those who are worthy. Yet, when she is assaulted, she may interpret her experience to mean that she is not the kind of person whose sexuality is a voluntary intimate and vulnerable expression of herself to another who is worthy of such expression.

In each of these cases, someone's experience presents them with a belief that is intolerable. That is, in each case a person forms a belief they do not accept.The child has come to believe "I can be loved" but their current abuse, by someone who loves them, gives evidence otherwise. They form the belief "I cannot be loved" because they believe this to be true, but their experience so deeply conflicts with their identity that they cannot reconcile this belief with their established identity. Thus, they distance themself from their experience through dissociation. The drone pilot has formed the belief that they are a defender of innocent people, yet their experience causes them to also believe they are a killer of innocent people. The pilot does not integrate their belief about being a killer into their identity, so they distance themselves from their experience through dissociation.[248] The woman who has been assaulted has established the belief that she is the the kind of person who only sexually engages persons who are worthy of her sexual expression, but her experience communicates that she is the kind of person who sexually engages unworthy persons.[249] This experience conflicts so deeply with her already established identity that she dissociates herself from her experience. In each of the three cases, dissociation occurs

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[248] I will explain and explore dissociation more in section 6.8 Dissociation.

[249] There is a certain amount of ambiguity in how I have used "sexuality" here. It can refer to how one's sexual organs are used or how one's sexual acts express oneself. This ambiguity is intentional for a couple of reasons. First, trauma survivors often find it difficult to put their experiences into words. The nature of sexual trauma takes on another dimension of complexity because the nature of sexuality itself includes interrelated concerns about one's physiology and one's psychology (i.e., one's emotions, one's identity, one's will). Second, it is doubtful that one engages in explicit well-defined reasoning processes during trauma. Thus, there is bound to be some ambiguity in concepts one employs during trauma.

because of the deep conflict between one's traumatic experience and their already formed identity. One's traumatic experience is intolerable because it threatens to destablize one's self, particularly in a context where one does not have the time or appropriate environment to critically evaluate one's interpretation of their experience or their established identity.

One might object by questioning why the new experiences cannot be accepted without changing one's identity. For instance, I may identify as a good father, but I forgot to pick my children up from school one day. The experience of forgetting to pick up my children does not usually result in trauma. Moreover, I may continue to believe that I am a good father. I can still believe I am a good father by incorporating some flexibility into the "good father" identity. That is, my notion of good father is not equivalent to the notion of "perfect father." A good father acts excellently concerning his children most of the time while a perfect father acts excellently concerning his children all of the time. Similarly, why think the drone pilot cannot accommodate their experience by believing that "sometimes a defender of innocent people kills innocent people?" I hypothesize that the drone pilot situation is different because the pilot's identity "defender of innocent people" cannot accommodate being directly responsible for the deaths of innocent people. That is, the pilot does not believe that a defender of innocent people can be directly responsible for the deaths of innocent people. Being directly responsible for innocent people's deaths makes someone something other than a "defender of innocent people." Thus, one does not accept that a "defender of innocent people" can be directly responsbile for the deaths of innocent people. The situation becomes even more acute if someone also believes that "only an evil person is directly responsible for innocent people's deaths." In this latter scenario, not only is one confronted with a belief that challenges their established identity, they are confronted with a belief that indicates their identity is really the opposite of what they had previously believed

themselves to be. Previously, they thought they were a defender of innocent people and now they are confronted with evidence that they are an evil killer of innocent people.

Interestingly, there is emerging evidence in the PTSD literature that the flexibility of one's identity plays a crucial role in whether someone will develop PTSD or not. Self-compassion and cognitive flexibility have been shown to mitigate or protect persons from developing PTSD symptoms after exposure to potentially traumatic events. Researchers have tended to define self-compassion slightly differently, but their definitions tend to include the idea that self-compassion requires one to refrain from judging oneself harshly and also to identity one's experiences as being part of the general human condition (Daneshvar, Basharpoor, & Shafiei, 2022, p. 2046). Cognitive flexibility, on the other hand, requires one to be able to change "cognitive sets" to adapt to different environmental stimuli.

> Dennis and Vander Wal (2010) described three components of cognitive flexibility as follows: (a) considering tough situations as controllable; (b) being capable of perceiving various alternative justifications for life events and human behavior; (c) being capable of creating various alternative solutions to difficult situations. People with higher cognitive flexibility against difficult conditions are more prone to take a more flexible approach in attributions they make for events. (*Ibid*)

I find it plausible to think that people who exhibit self-compassion are more likely to accommodate anomalous experiences into one's identity. The "good father" occasionally makes mistakes because good fathers are human, and part of what it means to be human is to make mistakes. In addition, I think it plausible that cognitive flexibility allows one to consider alternative implications an event has on one's identity or be more likely to adjust the rigidity of one's self-concept to accommodate one's experiences. It is important to note, in these studies, cognitive flexibility and self-compassion were observed for their relationship to PTSD, not necessarily trauma itself. The crucial difference is that cognitive flexibility and self-compassion

may explain traits that help people better cope with posttraumatic symptoms rather than traits that make people less prone to trauma itself. Self-compassion and cognitive flexibility may explain how people better cope with intrusive memories or sudden, spontaneous emotions rather than how well one is able to accomodate a potentially traumatic experience within one's identity.

Yet, if trauma is a response to a potentially identity destabilizing event as I have described, it is plausible to think that the rigidity of one's self-concept plays a role in whether one experiences trauma, such that the more rigid a person's self-concept is, the more likely they are to experience trauma when exposed to an event that challenges their core identity beliefs. Currently, there is little empirical research investigating the relationship between the effects of trauma and identity, much less research investigating the role identity plays in trauma itself (Berman, Montgomery, & Ratner, 2020, p. 275). However, there is some research indicating a link between traumatic events and identity formation. For instance, self-event connections are an integral part of integrating memories from single events into one's overall self-concept. Self-event connections are "explicit statements made within [an autobiographical] narrative that link the experience to an enduring aspect of self" (Merrill, Waters, & Fivush, 2015, p. 1321). Natilie Merrill and colleagues found that,

> Perhaps not surprisingly, individuals who express more negative self-event connections when narrating highly stressful experiences show higher levels of psychological distress and identity distress. In contrast, individuals who express more positive self-event connections when narrating highly stressful and highly positive experiences show higher levels of psychological growth and identity commitment. In addition, narrating more positive self-event connections in highly positive experiences is also related to higher levels of psychological growth and identity exploration and commitment. (*Ibid*, p. 1325)

This suggests that the more negative psychological connections one makes between one's experience and one's self, the more psychological distress one is likely to experience. That is, the

more negative valuations one makes about the connection between an event and one's identity, the more distressed one is likely to become.

This does not prove that trauma is the product of a potentially identity destablizing event, but I believe my theory to be consonant with this research because my account includes significant valuations concerning oneself and a traumatic event. First, trauma includes an emotion of terror or horror which is a negative evalution of an event. Second, the belief one forms about oneself because of the traumatic event is also a negative belief about oneself. The connection one makes between one's experience and oneself includes a negative evaluation about oneself on account of one's interpretation of a traumatic event. This negative evaluation about oneself derived from one's interpretation of a traumatic event leads one to dissociate themselves from the experience. Thus, interestingly, the psychological distress generated from connecting one's interpretation of one's experience to oneself leads to dissociation which is an attempt to prevent one from making a subsequent self-event connection. This second self-event connection is where one incorporates the interpretation of an event into one's self-concept thereby modifying one's self-concept. The first self-event connection only requires that one is aware of the implication of a traumatic event for one's self-concept. The second connection requires the modification of one's self-concept in light of one's interpretation of a traumatic event. In this way, one makes a self-event connection in the sense that one associates the interpretation of an event with one's self concept. However, one fails to make the subsequent self-event connection because the distress caused by the first self-event connection causes one to reject this later connection (modifying one's identity in light of the interpretation of a traumatic event). Because one does not accept what the interpretation of the

traumatic means for their identity they psychologically isolate the experience through dissociation so as to avoid greater distress brought on by another negative self-event connection.[250]

I previously suggested that while traumatic events are contexts in which one's identity resists change, there are appropriate environments for identity modification. By appropriate environment, I mean to suggest that there is an environment more conducive to adjusting one's identity. I do not have the space to firmly dileneate the characteristics of such an environment, but I do want to suggest that this environment is at least felt to be "safe." That is, one does not feel they are in danger and thus, their psychological defenses are not triggered, at least not as acutely as in cases where they perceive themselves to be in danger (i.e., one's threat confirming belief bias is not activated, one can utilize deliberation). Because one's defenses are not triggered, one can utilize longer, more-thorough cognitive processes to evaluate both the interpretation of their experience and why this experience is troubling to their identity. Upon understanding both their experience and its implications for one's identity, one can reason whether changing their self-concept in light of their experience will allow them to maintain their worldview framework for interpreting reality. In contrast, one might also be able to think about the interpretation of their experience and decide whether there is a better interpretation of their experience that does not conflict with their identity. For instance, one who was traumatized as a child might later be able to recall and think about their experience. They might interpret the violence of their mother as meaning that their mother had unresolved anger that had nothing to

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[250] For instance, suppose Akbar is the oldest of two children. Akbar believes himself to be the protector of his sister. However, suppose that Akbar and his sister have an abusive parent. One day, this parent grabs the sister and begins to hit her. Because he is frightened and confused, Akbar yells at his parent to stop but does not physically intervene. Akbar interprets the event to signify that he is not his sister's protector (self-event connection one). The anguish caused by this interpretation (and the emotional and neurobiological context of a horrifying event) cause Akbar to dissociate and thereby protect himself from modifying his self-concept in light of his interpretation (self-event connection two).

do with them. Thus, the abuse they suffered does not mean they are unloveable. That safe

environments are more conducive to this kind of psychological processing coheres with much of

the empirical treatment literature for PTSD treatment.[251]

6.8 Dissociation

Before continuing I will briefly discuss dissociation. Understanding this psychological

phenomenon will help to situate the following section concerning belief and acceptance.

Attempting to adequately disambiguate and define dissociation seems to require its own separate

chapter. However, I will attempt to briefly summarize the concept enough to provide a working

definition for the context of this project. The American Psychiatric Association writes,

> Dissociation is a disconnection between a person's thoughts, memories, feelings, actions
> or sense of who he or she is. This is a normal process that everyone has experienced.
> Examples of mild, common dissociation include daydreaming, highway hypnosis or
> "getting lost" in a book or movie, all of which involve "losing touch" with awareness of
> one's immediate surroundings. (Wang, 2018)[252]

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[251] To take one example, the Department of Veterans Affairs' South Central Mental Illness, Research, and Clinical Research Center's "A Provider's Guide to Brief Cognitive Behavioral Therapy" states, "Patients who perceive the therapeutic relationship to be collaborative, safe, and trusting are in a better position to obtain benefit from the treatment, will likely be less resistant and more open to exploration and change" (Cully, Dawson, Hamer, & Tharp, 2021, p. 17).

[252] This article cites the Sidran Institute for this definition. The Sidran Institute is a non-profit organization dedicated to developing and providing materials for understanding psychological trauma. However, Sidran's glossary entry for dissociation defines dissociation as, "the separation of ideas, feelings, information, identity, or memories that would normally go together. Dissociation exists on a continuum: At one end are mild dissociative experiences common to most people (such as daydreaming or highway hypnosis) and at the other extreme is severe chronic dissociation, such as DID (MPD) and other dissociative disorders. Dissociation appears to be a normal process used to handle trauma that over time becomes reinforced and develops into maladaptive coping" (Glossary). The American Psychiatric Association's summary of this definition is significantly different than the definition Sidran gives. For instance, The American Psychiatric Association says nothing about separating psychological artifacts that would "normally go together." Of course, it is unclear how ideas, feelings, etc., "normally go together." The Sidran Institute also does not mention anything about losing touch with one's surroundings. Part of what may account for the difference in these definitions is the purpose of each article. The Sidran Institute as an organization focuses on dissociation as it is experienced during trauma while the American Psychiatric Association's definition is in the context of an article that is attempting to account for other instances of dissociation like Dissociative Identity Disorder.

By itself, this definition may help us begin to understand the phenomenon but it needs further clarification. When I am reading through a philosophy paper applying Bayes' Theorem to the Problem of Evil, I do not have thoughts of my favorite childhood pet.[253] In this way, we might think that the Problem of Evil thoughts are disconnected from my memories of my childhood pet. But, the fact that we can have many kinds of thoughts that we do not associate with one another is not a very interesting observation, especially within the context of trauma. Furthermore, it is not clear how one's disconnection between pyschological artifacts[254] is related to losing touch with one's awareness of their surroundings. If I am daydreaming, I may not be thinking about the chair I am sitting in, so that I do not associate my chair with my daydream. But, this case does not appear to be significantly different than the previous philosophy paper case. In both contexts, I have thoughts that are not being associated with one another. Also, in both cases, my attention is on one psychological artifact rather than the other. I am thinking about the philosophy paper instead of the pet or I am thinking of my daydream instead of my immediate surroundings. The primary difference between the two examples is that when I am daydreaming, I am using my imagination to think about a world that is different than the one I am aware of via my senses. When I am reading the philosophy paper, I am unaware of my memory of my pet but I am not currently aware of my pet via my senses. If examples like daydreaming, highway hypnosis, and "getting lost" in a book are genuine cases of dissociation, I think the best way to understand these cases is by thinking of them as examples where one temporarily disconnects their consciousness from the present reality conveyed by their senses. That is, my awareness is directed to something other than what is really the case. Normally,

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[253] Of course, it is certainly plausible that, now, after having written this section, if I go back and read a philosophy paper like this, I will now think of my childhood pet while reading the article.
[254] I am using the term "psychological artifacts" to refer to general psychological phenomena like thoughts, beliefs, consciousness, etc.

persons are aware of their place in the external world, but cases of daydreaming and such are cases in which one's awareness of the external world is temporarily diminished or suspended while one's attention shifts to the contents of one's imagination.[255] Thus, it is not just one's individual thoughts, memories, feelings, etc., that are disconnected from one's awareness of the external world, but it is that one's first person subjective viewpoint is temporarily disconnected from the external world. In this way, one's self is disconnected from one's awareness of the external world. Thus, we might distinguish mild cases of dissociation from severe cases by thinking about the degree of difficulty to which it is possible to interrupt a dissociative state and the state's temporal persistance. For instance, daydreaming presents a mild case of dissociation because one could be easily brought out of daydreaming by a loud sound or a tap on the shoulder. Morever, this would be a mild case of dissociation because it is temporary and does not persist very long. In addition we might think that more severe cases of dissociation generate different kinds of beliefs. If I am daydreaming, I generally do not form beliefs about reality based on my daydream, but the traumatized war veteran very likely does. The veteran who experiences a war flashback during the Fourth of July presents a severe case of dissociation. This is because normally he would be aware that he is not in an active war zone, but his first personal subjective experience is one of being in a warzone.[256] That is, it is like his warzone experience is

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[255] For instance, consider maladaptive daydreaming. This kind of daydreaming is different than normal daydreaming. "[M]aladaptive daydreaming is characterized by extensive daydreaming that occupies many hours per day, causes significant subjective distress and interferes with function, and is accompanied by extensive comorbidity… The daydreaming involves a complex inner world with many characters and elaborate plots. The daydreaming has an addictive or compulsive aspect to it, but the person realizes that it is an internal fantasy world and does not confuse the fantasy with external reality" (Ross, Ridgway, & George, 2020, p. 53). Research has found that maladaptive daydreaming is most often comorbid with attention hyperactive deficit disorder and anxiety disorders.

[256] I am imagining a case in which the veteran currently believes himself to be back in a warzone. There are many cases of veterans who have significant involuntary physiological responses to fireworks because of their wartime trauma but who are still aware they are in an otherwise peaceful situation. It is not clear to me that this latter case is one of dissociation because one is still aware of their current environment, though their physiological response is grounded in an initial experience of dissociation.

in the present. In this way the veteran's first-person subjective viewpoint is disconnected from reality. Furthermore, his disconnection persists even when others try to intervene. Dissociation of the self from the external world explains why many trauma therapists attempt to ground[257] their patients during flashbacks and anxiety attacks by attempting to help the patient focus on key physiological process like heart rate or breathing.[258] These techniques are meant to help the PTSD patient to recognize that they, themselves, are experiencing physiological changes.

Conceiving dissociation as a separation of the self from what one would normally associate with the self, also coheres with contemporary neurological observations. Robyn Bluhm et. al. conducted a study of 17 female subjects who suffered from chronic PTSD. They compared the fMRI observations of these subjects to the fMRI observations of 15 control subjects. The researchers concluded, "The present evidence suggests that PTSD is characterized by altered connectivity in a robust neural network previously associated with self-referential processing in the resting state" (Bluhm, et al., 2009, p. 192). Self-referential processing refers to the neurological processes responsible for processing information relevant to oneself (Zhao, Uono, Li, Yoshimura, & Toichi, 2018, p. 1). Thus, PTSD is characterized by altered connectivity in the neurological processes responsible for integrating one's experiences with one's self concept.

Dissociation, then, is a pyschological process that isolates the interpretation of one's experience from the rest of one's psychological framework, particlularly one's identity

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[257] "Grounding" is an attempt at bringing a patient back into cognitive contact with reality. Often this is attempted through sensory experience. Therapists may advise their patients to focus their attention on their breathing or on something else in the room.

[258] For instance, Bessel Van der Kolk writes of his experience treating Marilyn. "I began to teach Marilyn calming techniques, such as focusing on breathing deeply—in and out, in and out, at six breaths a minute—while following the sensations of the breath in her body. This was combined with tapping acupressure points, which helped her not to become overwhelmed. We also worked on mindfulness: Learning to keep her mind alive while allowing her body to feel the feelings that she had come to dread slowly enabled Marilyn to stand back and observe her experience, rather than being immediately hijacked by her feelings" (van der Kolk, 2014, p. 132)

framework. The American Psychological Association defines dissociation as "a defense mechanism in which conflicting impulses are kept apart or threatening ideas and feelings are separated from the rest of the psyche" (dissociation, 2022). I hypothesize that the mental record of one's experience is being kept apart from the rest of one's psychological framework because the interpretation of one's experience conflicts with one's identity to such a great extent that it cannot be accepted.

Often, though, our experiences affect how we construct our self-understanding. For instance, we might think of a former police officer who was convicted of assaulting inmates. When he is tried and the verdict read that he was found guilty, it is plausible to think that he experiences a change in self-concept. Previously, he considered himself one who enforced the law and now he is one who has broken the law and is now a criminal. His experience of hearing his verdict being read now alters his self concept to include being a criminal. Note, though, that for his self-concept to change, the former officer must recognize the verdict he hears is about himself. During trauma, the meaning of one's experience conflicts so significantly with one's identity that one does not alter one's identity to accommodate the meaning of the experience. This is because trauma targets identity beliefs that are central to one's psychological framework through which they can make sense of reality. To accommodate the meaning of the traumatic event during a traumatic context is to threaten one's ability to make sense of themselves and/or their place in the world. Thus, traumatic dissociation is a way of protecting one's overall psychological framework by quarantining one's experience from challenging one's identity.

6.9 Belief and Acceptance

I have asserted that trauma occurs when one's emotional experience provides unignorable evidence for a belief that conflicts with one's established identity beliefs. This creates a

paradoxical situation in which one forms two conflicting beliefs but one dissociates themselves

from the new evidence underlying the belief formed during trauma. Thus, one holds conflicting

beliefs but distances oneself from the belief formed during trauma through dissociation. I will

argue that dissociation is evidence that one does not accept what they believe to be true.

Jonathan Cohen makes a helpful distinction between belief and acceptance. He defines

the two concepts this way,

> [T]o accept that *p* is to have or adopt a policy of deeming, positing, or postulating that *p*---
> -that is, of going along with that proposition (either for the long term or for immediate
> purposes only) as a premiss in some or all contexts for one's own and others' proofs,
> argumentations, inferences, deliberations, etc., Whether [*sic*] or not one assents and
> whether or not one feels it to be true that *p*…Belief that *p*, on the other hand, is a
> disposition to feel it true that *p*, whether or not one goes along with the proposition as a
> premiss. (Cohen, 1989, p. 368)

Thus, one might believe something to be true, but not accept it because they do not adopt this

belief as a premise in their reasoning processes. Cohen proposes an example of a juror to

illustrate this distinction (*Ibid*, p. 370). Jurors are instructed to rely solely on evidence they have

been presented in the courtroom to render their verdict regarding those accused of crimes. They

may have formed beliefs about the accused from information they have acquired outside of the

courtroom (i.e., news reports, celebrity opinions, etc.), but extra-courtroom beliefs are not to be

used as premises in adjudicating the guilt or innocent of the accused. In this way, jurors are

instructed to *accept* only the evidence presented in the courtroom regardless of whether they

have formed beliefs on the basis of extra-courtroom evidence.

Ostensibly, belief and acceptance are often correlated. We often accept what we believe

to be true. If I look out the window and form the belief "it is raining" I may demonstrate my

acceptance of the belief by using my belief "it is raining outside" as a premise in the decision

process of deciding whether to wear a raincoat. "[H]aving a belief that *p* could normally be taken to be some at least prima facie reason for accepting that *p*, even though it may well not be the only, or the best reason, or even a sufficient one" (Cohen, 1989, p. 369). My belief "it is raining outside" serves as a reason for adopting "it is raining outside" as a premise in my reasoning process.

The last major distinction Cohen makes between belief and acceptance is that acceptance is a matter of one's will whereas belief is not.

> But acceptance that *p*, in the relevant sense of 'acceptance' is voluntary. It is decidable at will, while belief that *p* is not. You may decide to believe a friend, that is, to trust his word. You may even decide to believe *in* him, that is, to have confidence in his abilities. But you cannot decide to believe *that* it will rain tomorrow, or to believe *that* it will not. You can decide only to accept that it will, or to accept that it will not: the belief may then ensue, but it may not. Acceptance occurs at will, because at bottom it executes a choice-the accepter's choice of which propositions to take as his premises. But belief is not normally achieved at will because it is caused in each kind of case by something independent of the believer's immediate choice: factual beliefs are the believer's willy-nilly feelings about physical or mental reality, moral beliefs are the welcome or unwelcome dictates of his conscience, intuitive beliefs are the immediate, unreflective, and untutored deliverances of his intellect, and so on. (Cohen, 1989, pp. 369-370).

Whether belief is voluntary or involuntary is not central to my case. What I need for my model of trauma is simply that people have beliefs, specifically ETWIBs. I do believe, however, it will be illuminating to think about whether acceptance is voluntary.

On Cohen's view, acceptance is voluntary because one can choose which premises to use during one's reasoning process. This appears plausible in the case of explicit reasoning processes, but what about subconcious reasoning processes? People often subconciously form beliefs, even beliefs that conflict with their stated worldview, and these subconcious beliefs are used in other reasoning processes.

It may seem odd to think that one's worldview could produce a belief that conflicts with one's worldview. After all, beliefs are formed against the backdrop of one's interpretive framework of reality (one's worldview). Yet, it could be the case that when one makes meaning of an experience, this meaning is judged to be unacceptable. One way this could happen is when someone holds two inconsistant worldview beliefs that one does not realize are inconsistent. This could be because one has not thought through the implications of such beliefs or it could be that one has not evaluated both beliefs together. For instance, I might affirm that all persons have intrinsic value but also believe that the homeless persons are worthless bums. Thus, when I see a homeless person on a street corner, I form the belief that "this homeless person is a worthless bum" even though this belief conflicts with my belief "all persons have intrinsic value." More to the point, I think it plausible that one could hold the belief that "terrible things sometimes happen to good people" and the belief "terrible things do not happen to me because I am a good person."

Part of the reason I find this is plausible is that these two beliefs can be formed in two different ways and they can be held at two different levels of consciousness. One might form the belief "terrible things sometimes happen to good people" because one has read news stories and heard testimony from others that this does indeed sometimes happen. Therefore, on the basis of testimony, one infers this belief. On the other hand the belief "terrible things do not happen to me because I am a good person" is formed subconsiously in the way someone is raised. They learn through habit that if they follow the rules they will not receive punishment from parents or other authority figures. This belief can be assumed without one being aware they are holding this belief. If one is not aware they hold a belief, one cannot examine the belief or compare this to

other conflicting beliefs they may have.[259] Eugene Subbotsky notes that research indicates many

adults in cultures saturated with scientific beliefs still retain beliefs in magic (Subbotsky, 2011).

This often even holds true even when these adults affirm scientific beliefs that contradict one's

belief in magic. He hypothesizes that magical beliefs survive because they "go underground"

into one's subconcious as one is growing up in a modern society. To test his hypothesis,

Subbotsky believes we should be able to observe seven effects:

> First, in modern industrial cultures, preschool children endorse magical beliefs to the same extent that they endorse the belief in physical causality…Second, in modern industrial cultures, children's involvement in activities with magical content enhances children's cognitive abilities…Third, in modern industrial cultures, magical explanations disappear from the verbal accounts of school children about the causes of physical effects; however, these explanations can easily be reactivated if unexplained causal effects that assert magic are shown to them…Fourth, when asked to explain unusual causal phenomena that assert magic, educated adults living in modern industrial cultures will deny magical explanations of such phenomena, even if these phenomena are repeatedly shown to them…Fifth, when confronted with magical intervention in their lives, either in the form of witnessing 'magical' phenomena or in the form of a sorcerer trying to exert influence with the help of magic, educated adults living in modern industrial cultures will resist such interventions…Sixth, when psychological defenses against magical influence are relaxed or lifted…educated adults in modern industrial cultures will retreat to magical behavior and explicitly acknowledge that they believe in magic…Seventh, in contrast to educated adults in modern industrial cultures, uneducated adults in developing cultures will endorse magical beliefs both in their verbal explanations of 'magical' effects and in their nonverbal behavior. (*Ibid*, pp.128-129)

Subbotsky goes on to cite previous empirical work to support each of these seven effects. He

concludes that "Consciously, an individual can consider himself or herself to be a completely

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[259] I think Immanuel Kant hints at something like this when discussing his universalization principle. We might think that we want a moral principle to be universally obligatory, but we find ourselves acting in ways that contradict this belief. "If we think about what goes on in us whenever we transgress a duty, we find that we do not actually *will* that our maxim should become a universal law, since it is impossible for us to do so; rather, we will that the opposite of our maxim should stay in place as a general law, and instead take the liberty of making ourselves, or (again just this once) the gratification of our inclinations, an *exception* to it. Consequently, if we considered everything from one and the same point of view, namely that of reason, we would find a contradiction in our own will---namely, that a certain principle be objectively necessary as a universal law on the one hand, and yet on the other hand subjectively should not hold universally, but admit of exceptions" (Kant, Groundwork for the Metaphysics of Morals, 2019, p. 38). To be fair, Kant does not think this is an actual contradiction, but he recognizes there is at least tension.

rational person and deny that he or she is a believer in magic; subconsciously, the person can still

harbor the belief in magical causality" (*Ibid*, p. 137). He believes this can happen through a

"reaction of participation."

> The way participation works is as follows: if the idea is suggested to an individual, it is
> adopted on a subconscious level and acted upon at that level even though the individual's
> rational judgment may indicate that the idea is untrue or contrary to his or her personal
> interest. For example, suggesting that an individual becomes ill after a magic curse is cast
> on him or her (the idea) can indeed have the effect of influencing the person's
> mental/physical state. The important characteristic of the reaction of participation is that a
> recipient unconsciously adopts the agent's message while consciously disagrees with the
> message and rejects it. In other words, the participation-based behavior is observed when
> two criteria are met: (1) individuals willingly act or feel in accord with the suggested idea
> and (2) they are aware that the idea is wrong and/or is of no personal benefit to them.
> (*Ibid*, p. 138)

Subbotsky's work gives evidence to support my view that we can hold two conflicting beliefs,

one belief that is affirmed and in accord with one's reason, and also hold another belief

subconciously that conflicts with one's affirmed belief. This is observed when otherwise rational

people affirm a scientific worldview and also subconciously affirm magical causation. In

addition, Subbotsky provides reason to think that these two kinds of beliefs are formed in

different ways. One learns scientific principles during their education and these beliefs are

affirmed by cultural institutions and other individuals.[260] Furthermore, many scientific beliefs are

the product of rational deliberation. Yet, magic beliefs appear to be caused through reaction of

participation.

    While this provides evidence to think that we can have conflicting beliefs, some of which

are conscious and some of which are subconcious, it does not identify which of these beliefs

(scientific causation or magical causation) are more psychologically central. I have already

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[260] We might plausibly think that these beliefs are formed, at least in part, on account of our experiences with other
persons and institutions.

proposed that core beliefs ground more beliefs than more peripheral beliefs. Thus, one could

hold beliefs affirming magical causation and these beliefs not form a core part of their

worldview. If magical causation beliefs only ground beliefs about what caused an outlier event,

magical causation beliefs would not be part of the core of one's worldview. *Mutatis mutandis*

one's magical beliefs could form a core part of their worldview and scientific beliefs form a

more exterior part of one's worldview. However, if one's subconcious magical beliefs ground

the majority of one's beliefs about how the world operates, and these beliefs are connected to

emotional experiences, magical beliefs would be more foundational to one's worldview. In

addition, one's scientific beliefs may ground the majority of their beliefs about how the world

works and these beliefs may be associated with emotional experiences, and yet one still hold

some subconcious magical beliefs. Thus, one's magical beliefs are more peripheral and conflict

with one's more central (worldview) beliefs. Because this is the case, I argue that one's magical

beliefs are not integrated. Likewise, it might be the case that one holds the belief "terrible things

sometimes happen to good people" and this belief forms a core part of their worldview. One

might also hold the subconcious belief "terrible things don't happen to me because I am a good

person."

To illustrate how one's subconcious beliefs can be acceptances, let us suppose that Zeke

is explicitly committed to egalatarianism in legal decision-making. More specifically, Zeke

explicitly affirms that black men are not inherently more dangerous than white men. However,

subconsciously, Zeke holds the belief that large black men are more inherently dangerous. This

belief is evidenced by some of Zeke's responses like establishing more physical distance or

exhibiting a heightened sense of alertness when around large black men. Zeke is chosen to be on

a jury deciding whether a large black man assaulted another person. During the trial, Zeke

arrives at the conclusion that the defendant is guilty, at least partially based on his subconcious belief that large black men are inherently more dangerous than other people. That is, Zeke's racist belief influences his deliberation by skewing Zeke's understanding of the base probability of the defendant's guilt. Zeke starts his deliberation with the assumption that the defendant is more likely guilty than not because the defendant is inherently more dangerous. When confronted by another juror that his subconcious belief, unbeknownst to him, was part of his deliberative process, Zeke feels mortified that anyone would think he held such a belief and sincerely protests that this was not the case and condemns the belief that large black men are more dangerous than other people.

I have framed the Zeke example in terms of a belief Zeke holds. But the example also appears to be a case of acceptance. In this example Zeke appears to be using his subconscious racist belief as a premise in his reasoning process, although he sincerely disavows such a belief. In this case it is not clear that Zeke consciously accepts the racist belief, though at some level, he seems to accept "large black men are inherently more dangerous than other people." Zeke's sincere emotional response and verbal denial of the belief indicate that Zeke explicitly rejects such a belief. One might argue that Zeke accepts his racist belief at a subconcious level because the subconcious belief informs his reasoning but rejects it in explicit reasoning because he rejects the belief as an explicit premise. One way this might happen is that Zeke's subconcious acceptance of the racist belief shapes his emotions and his emotions then shape his explicit reasoning process. If this is the case it is possible for people to accept beliefs at one level and reject them at another level.

Acknowledging that beliefs can be accepted at a subconcious level challenges Cohen's notion that acceptance is voluntary, or at least intentional. It is questionable whether someone

like Zeke, who sincerely espouses egalatarian beliefs, has accepted his racist belief as the result

of deliberation. More likely, Zeke rejects this belief as the result of deliberation. The more

probable scenario is that Zeke has come to such a belief through growing up in an environment

that implicitly (or even explicitly) reinforced such a belief. Yet, I tend to agree with Cohen that

there is something willful about acceptance because accepting is not a logical entailment of

forming a belief nor is it guaranteed that one will accept one's belief.

Raimo Tuomela offers a couple of distinctions I think will be helpful moving forward.

First, he distinguishes between wide and narrow acceptance. Wide acceptance is "the common-

sense notion of acceptance which [is] concerned with acceptance of something as good or as

satisfactory" (Tuomela, 2000, p. 122). This includes cases of pragmatic acceptance where one

might thoroughly believe a proposition to be false but adopt it for some other pragmatic purpose.

Narrow acceptance, on the other hand only refers to cases where one accepts something as true.

> [T]he notion of acceptance under discussion is the notion of sincerely accepting
> something as true. This is to be distinguished from acceptance of a sentence in the sense
> of the acceptor's inferring and acting *as if* the sentence were true" (*Ibid*, p. 130).

Tuomela still distinguishes acceptance from belief in a similar way to Cohen, though. When one

accepts a proposition as true, they are disposed to use that proposition for reasoning in relevant

contexts.

> If something is accepted, it is in the acceptance box, and the person is disposed to use it
> in relevant circumstances. Acceptance – regarded as a result of one's having accepted – is
> a dispositional state: the person is disposed actually to use one of the premises in the
> acceptance box when the situation at hand so requires. (*Ibid*, p. 127)

Another observation Cohen makes is that acceptance is often intentional, but need not be so.

> Acceptance is typically voluntary or intentional, unlike belief. However, acceptance can
> also be non-intentional, *viz.*, it can be a process or state which is *not* arrived at or held

fully *on purpose*. The mental state of acceptance based on one's having accepted a proposition and in which one is when one continues to accept the proposition accordingly need not be an intentional "state-keeping" action, although that seems often to be the case. (Tuomela, 2000, p. 126)

Thus, one can non-intentionally accept a proposition by thinking a proposition to be true and being disposed to using that proposition in relevant contexts. Non-intentional acceptance seems to be able to explain the Zeke case. Zeke accepts his racist belief because he uses it as a premise in reasoning, but he does not do so on purpose. That is, Zeke does not form intentions to use the racist belief in this way.

[N]on-intentional acceptance is assumed to be a state in which the agent continues to accept p, *viz.*, to be disposed to use p as a premiss, to think that p is the case, and to act on the truth of p. (*Ibid*, p. 129)

Lastly, both Cohen and Tuomela agree that belief can be held in degrees but acceptance is "an all or nothing matter" (Tuomela, 2000, p. 124).[261] That is, either one accepts or one does not accept a proposition to be true. There are no degrees of acceptance. I will remain agnostic as to whether acceptance admits of degrees because degreed acceptance is not immediately relevant to my account.

To summarize our acceptance discussion so far, belief is the disposition to think that a proposition is true. Acceptance is the disposition to use one's belief as a premise for reasoning in other contexts. Acceptance is often intentional but can be non-intentional. Last, acceptance may or may not admit of degrees. I believe this belief/acceptance paradigm to be helpful in thinking about one's beliefs formed because of traumatic experience and it's relation to one's identity.

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[261] Though Cohen agrees with this sentiment, this section of Tuomela's paper refers to another paper by Pascal Engel (1998). Thus, Cohen, Tuomela, and Engel all agree on this point.

I have argued that during trauma one is confronted with an event that deeply conflicts with one's established identity. One's experience causes one to form a belief about oneself that is opposed to one's established identity beliefs potentially resulting in the collapse of one's worldview. One is disposed to think that both contradictory beliefs are true, but one rejects the traumatic belief. By reject, I meant to say that one non-intentionally refuses to use the traumatic belief as a premise in any reasoning process. Specifically, one refuses to incorporate their traumatic belief into their worldview so that their traumatic belief forms a premise in reasoning about themselves or their place in the world. In this way, the traumatic belief is isolated from the rest of one's belief structure. The sexual assault victim both believes that she is the kind of person that only sexually expresses herself to worthy persons and also that she is the kind of person who sexually expresses herself to unworthy persons. However, she refuses to use her belief that she sexually expresses herself to unworthy persons as a premise in reasoning about the world. That is, she refuses to adopt her traumatic belief as part of the beliefs that she uses to interpret herself and the world. In this way, traumatic beliefs remain detached from one's reasoning processes. Because one cannot have a traumatic experience without forming the associated traumatic belief, one's psyche quarantines not only the belief, but the memory of the event itself. Thus, one's emotional experience is isolated from one's reasoning processes involved in establishing and informing ones identity.

6.10 Trauma and Virtue

Previously, I asserted that Mary's trauma could motivate her to virtuous acts.[262] Because of her own trauma, she recognizes the harm she has suffered and desires that this harm not

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[262] Section **6.5 Emotions as hindrances or contexts for virtue**

happen to others. Mary lobbies her state legislature to legislate effectively. Because Mary's advocacy coheres with her deliberation to act on behalf of other victims and Mary's emotions motivate her to advocate on behalf of other victims, Mary acts virtuously because of her trauma, even though the trauma is a condition of psychic disharmony. I believe we can explain why Mary advocates virtuously by thinking about how she has begun to integrate her experience with her reasoning, that is, accepted her experience as informing her identity. We might think of this happening in at least one of two ways. First, Mary might have reinterpreted her experience so that she does not form a negative belief about herself (i.e., she does not form the belief that she deserved to be assaulted). Instead, she may have come to believe that her experience demarcates her as a psychologically strong person who has survived a horrendous evil. There are other ways Mary may have reintrpreted the meaning of her experience, but the reinterpretation of her experience is one way she might be able to integrate her experience with her self-concept. Second, Mary might have augmented her identity in light of her experience in such a way as to accommodate her interpretation of her experience. For instance, Mary's may interpret her experience to mean that sometimes she might experience horrendous evils when she does not deserve them. She is able to accept this about herself because she believes in some kind of ultimate justice and restoration. Or she might come to accept this about herself because she believes her experience means that she can advocate for others who might be in similar situations. Her experience becomes a way of identifying with others who have endured a similar horrific experiences. Her identification with others provides motivation for her to advocate on their behalf. Thus, she has begun to accept her traumatic experience as part of her identity because she identifies as one who has had that kind of experience. She comes to accept, at least to some degree, that she is a now a rape survivor, but this survival also means that she is an

advocate in ways that non-surivors cannot be, namely she has unique understanding of the

experience that non-survivors do not have. Because she has begun to integrate her emotional

experience with her identity, she can reason that advocating for change is good and also be

motivated by a relevant emotion (i.e., anger at the injustice, empathy for survivors, etc.). Thus,

there is at least some harmony between her reasoning and emotion when engaging in activism.

6.11 Trauma and proper function

In the last chapter, I discussed both Plato's and Aristotle's theories of the proper function

of parts of the soul and human proper functioning. On Plato's account each part of the soul

(*reason*, *spirit*, and appetite) have a proper function. When each of the part of the soul in

functioning in the way it ought, there is harmony (justice) in the soul. This is a virtuous state of

the soul. Plato believed a harmonious soul condition allowed a person to be (1) more

autonomous, (2) experience a distinct pleasure of the soul, namely the pleasure derived from a

harmonious state of the soul.[263]

Aristotle thought that the proper function of a thing was what that thing was particularly

well suited to do. A pencil is particularly well-suited to write on paper. Thus, the proper function

of a pencil is to be used to write on paper. A pocket calculator is particularly well-suited to

compute basic arithmetic functions. Thus, a pocket calculator's proper function is to compute

basic arithmetic functions. This notion of proper function coheres well with Plato because it

predicts that the proper function of *reason* is to engage in rational mental processes, the proper

function of *spirit* is to emote and motivate, and the proper function of the appetites is to attune

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[263] See the end of section 5.8 Psychic harmony.

one to their bodily needs. In addition, Aristotle argued that humans have a proper function because of their ability to reason. Korsgaard argued that the reasoning is the proper function of humans not just because it is their unique ability but because it is the ability to reason that transforms all of the other human capacities. Thus, human reason transforms the kind of life humans live. I argued that proper human function, at the very least, requires psychich harmony and must include interpersonal relating. In this last section, I want to briefly discuss the nature of trauma and how it relates to both the proper function of one's *psyche* and also how it relates to proper human function.

On Korsgaard's view, to adequately explain the proper function of something, we must be able to explain what something does and how it does this.[264] I have spent a great deal of space discussing the concept of "worldview" and arguing for its place in explaining what trauma is and I believe the concept to be central to thinking about proper function. One's worldview is one's set of attitudes and beliefs that make up the interpretive framework through which one can make sense of reality. One may be consciously aware of parts of one's worldview, but very often, much of one's worldview remains subconcious.[265] One's worldview allows one to interpret (make sense of) the world and to compile and organize one's experiences into a single narrative.

I have also argued that some of one's idenity beliefs (ETWIBs) form a core part of one's worldview. One's identity is the way one views oneself and their place in the world. One's identity functions to unify one's experiences. In defining identity the American Psychological Association writes,

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[264] Korsgaard's view is more fully examined in 5.7 Sub-psychic ends."

[265] That much of one's worldview remains in one's subconscious seems to be a common view. For instance, William Cobern writes, "Worldview refers to the culturally-dependent, generally subconscious, fundamental organization of the mind. This conceptual organization manifests itself as a set of presuppositions that predispose one to feel, think, and act in predictable patterns" (Cobern, 2005).

> Identity involves a sense of continuity, or the feeling that one is the same person today that one was yesterday or last year (despite physical or other changes). Such a sense is derived from one's body sensations; one's body image; and the feeling that one's memories, goals, values, expectations, and beliefs belong to the self. (American Psychological Society, 2022)

Thus one's identity functions to unify one's beliefs and experiences as belonging to the same first-personal subjective point of view. One's identity changes over time, but one's identity refers the same first-person subjective point of view that endures those changes. Thus, one's identity functions to unify one's experiences and beliefs by associating those beliefs and experience with an enduring first-personal perspective. One's identity thus allows one to attribute certain psychological states and experiences as belonging to "me." One's identity also allows one to distinguish themselves from other selves. Thus, I argue that the proper function (or a proper function) of one's identity is to unify one's psychological states by associating one's psychological states with the same first-person perspective that endures through time.

By attributing various experiences to the same first-person perspective, one is able to construct beliefs and attitudes about themselves. For instance, I might walk out onto the observation deck of the Empire State Building and look down. Looking down causes me to be afraid. One's self-concept allows one to unify the sensory experiences of standing on the observation deck, the visual experience of looking down, and the emotional experience of feeling afraid. Thus, *I* am standing on the observation deck, *I* am looking down, and *I* am afraid.

One's general concept of self provides a psychologically unifying function, but one's specific concept of self provides a way to evaluate one's experiences. Let us think about another example. Let us assume that I am walking down the hall at my place of employment and a person who I recognize sees me and gives me a hug. If my identity includes a belief that I am close friends with the person hugging me, I may view the act of hugging as an expression of

love. If my identity does not include the belief that I am close friends with this person, I may believe the situation to be awkward. More seriously, if my identity includes the belief that I have been the victim of this person's sexual advances, I may view the hug as intimidating, infuriating, or disrespectful. Thus, one's specific identity functions to allow one to evaluate one's experiences in light of who one believes themselves to be.

6.12 The self and other selves

In addition to arguing for proper functions of consituent elements of the soul, I have also argued that if humans have a proper function, that proper function must at least include interpersonal relating. This is because when persons relate to other persons as persons (i.e., friendships, political relationships) they are functioning as only human beings can and are thereby behaving in distinctively human ways. In addition, to be properly functioning means that a person must be functioning well. Thus, if interpersonal relating is a function of human beings that marks a distinctly kind of human life, a person is properly functioning when they are relating well to other persons. There are many ways we might think that trauma, particularly traumatic effects, negatively impact relationships. Persons who experience sudden intrusive flashbacks or experience traumatic anxiety will tend to have more difficulty maintaining relationships because these PTSD symptoms present themselves in ways that are not under the direct control of the individual. PTSD symptoms can inhibit one from functioning as non-traumatized people function and thus persons with PTSD do not meet common social expectations (e.g., enjoying a fireworks display, not being upset by seemingly mundane events or acts). Thus, non-traumatized people are less likely to accommodate persons who experience persistent tramautic effects. In addition, the phenomenology of trauma is unique and intense and therefore difficult, if not impossible, for a non-traumatized person to relate to. Instead of investigating the effects of trauma on

relationships, however, I would like to think about how trauma itself disrupts one's self-concept and how this disruption influences one's relationships. In what follows, I will argue that trauma undermines one's Self-Concept Clarity and thereby undermines an important and increasingly well-studied, component of interpersonal relationships.

Recent empirical work has investigated the role of one's "Self Concept-Clarity" (SCC). The often cited study by Jennifer Campbell and colleagues offers a concise summary of SCC. "SCC is defined as the extent to which the contents of an individual's self-concept (e.g., perceived personal attributes) are clearly and confidently defined, internally consistent, and temporally stable" (Campbell, et al., 1996, p. 141).[266] The authors state that there is a distinction between the content of one's self-concept and the structure of one's self concept. SCC refers to the structure of one's SCC beliefs. Stated slightly differently, "Individuals with high self-concept clarity have more consistent self-beliefs, are less likely to change their self-descriptions over time or endorse mutually exclusive self-descriptive traits such as careless and careful" (Lewandowski Jr., Nardone, & Raines, 2010, p. 418). These results suggest two conclusions. First, because persons with high-concept clarity are less likely to change their self-descriptions over time, it might be the case that persons with high-concept clarity are more prone to trauma because trauma presents one with evidence contrary to one's established identity. Because one is less-likely to modify their identity, they are more resistant to accomodating experiences that give evidence contradicting one's established identity.

> A longitudinal study found that individuals high in self-concept clarity were more likely to be perfectionists who had inflexible and specific requirements for the self (Campbell & Di Paula, 2002). Perfectionism has been associated with increased stress, depression,

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[266] Campbell, et al., set out to determine whether SCC can be measured through self-reports and whether it was relatively stable over time. They found that self-reporting was an accurate indicator of one's SCC. Also, it is not exactly clear what the authors mean by "stable", but it appears to be something like "not undergoing major changes in short periods of time."

unrealistically high self-standards, and self-punishment when one has not achieved goals (Hewitt & Flett, 1993). This may be especially problematic due to perfectionism's negative correlation with dyadic adjustment[267] (Flett, Hewitt, Shapiro, & Rayman, 2003). (*Ibid*)

Thus, persons with high SCC are more likely to be perfectionists and thus more likely to be motivated to not accept evidence that indicates their self-concept is inconsistent with reality. Whether persons with high SCC are more likely to be traumatized is an empirical question and could provide interesting direction for future research.

Yet it is helpful to remember that SCC is composed of at least three dimensions. The measurement of one's SCC is a combination of how clear one's self concept is, how consistent one's self-concept is, and how stable or resistant to change one's self-concept is. It is conceivable, then, that one could maintain a high level of clarity, consistency, and yet a low or moderate resistance to change (stability). It makes sense that one would want to maintain high levels of clarity and consistency. The clearer my self-concept is, the more accurately I can understand who I am and my place in the world. Relatedly, the more consistent my self-identity, the less cognitive dissonance I experience from conflicting beliefs. However, we might think about the most beneficial range of self-concept stability as approaching something like an Aristotelian mean, rather than being very high or very low. If one's stability is very high, one is much less likely to accommodate new beliefs brought on by new experiences or new awarenesses of oneself.[268] If it is too low, one will be more likely to change their self-concept because of negative social and environmental influences that do not accurately reflect oneself.

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[267] Dyadic adjustment refers to the process an individual goes through in adjusting to living together with another person in a marital relationship. "Dyadic adjustment is a process with consequences that can be identified with the rate of couple's problematic conflicts, interpersonal tensions, individual anxiety, marital satisfaction, coherence integrity, and collaboration about important problems" (Ghaffari, 2016, p. 1).

[268] Too high stability could also lead one to not develop cognitive interdependence. I will discuss cognitive interdependence and its importance later in this section.

For instance, a school bully might pick on a classmate by repeatedly labeling the other student "stupid." The other student could very well be highly intelligent, but if their self-concept is too malleable, they will be easily influenced by the bully's remarks and come to include "stupid" in their self-concept. In this instance, it would be beneficial to have higher self-concept stability.

Second, trauma appears to be inimical to developing one's SCC. As I have argued, trauma occurs when one endures an event that presents unignorable evidence that conflicts with one's established identity (self-concept).[269] The conflict is so great that one does not accept the belief formed on the basis of the evidence and dissociates themselves from the experience quarantining the mental record of the experience so as to not be included in any other reasoning processes. Yet, physiological and emotional traces of the trauma often remain and evidence themselves as symptoms like flashbacks and overwhelming anxiety. Low SCC is linked to psychosis which is a severe form of dissociation. According to the National Institute of Mental Health,

> The word psychosis is used to describe conditions that affect the mind, where there has been some loss of contact with reality. When someone becomes ill in this way it is called a psychotic episode. During a period of psychosis, a person's thoughts and perceptions are disturbed and the individual may have difficulty understanding what is real and what is not. (What is Psychosis?, 2022)

Moreover,

> There is emerging evidence that SCC is important in relation to psychosis. A series of recent studies found that high aberrant salience and low self concept clarity interacted to predict psychosis-like experiences (Cicero et al., 2013). In another study investigating SCC and psychosis-like experiences in the general population, SCC accounted for significant variance in delusional beliefs, hallucination proneness, impulsive non-conformity and unusual experiences; these relationships were partially mediated via

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[269] It might be helpful to remind the reader what I mean by "unignorable evidence." I have argued that trauma occurs when one must pay attention to the event causing trauma (because of threat-confirming belief bias). The experience of this event presents one with evidence that conflicts with their identity. By dissociating oneself from one's experience, it might appear they are ignoring the evidence of their experience. However, on my view of trauma, one forms a belief based on the evidence from their experience. If one forms a belief about something, they are not ignoring it in the sense I mean here.

> depression and anxiety…It is suggested that trauma disrupts the development of an integrated self-concept, leading to increased vulnerability to psychosis. (Preston, 2008). (Evans, Reid, Preston, Palmier-Claus, & Sellwood, 2015, p. 627).

These studies do not firmly establish a causal relationship between low SCC and dissociative states. However, if I am right about trauma, we would expect trauma to contribute to a lower SCC because one holds conflicting beliefs about their identity but does not accept some of those beliefs thus introducing instability and inconsistency within one's view of themselves.

I have argued that one does not accept their traumatic experience, meaning they do not use the belief formed from their experience in other reasoning processes, especially as part of reasoning processes associated with one's identity. If one's self is dissociated from one's traumatic experience, how might this introduce instability into their identity? After all, because the experience is not accepted, it does not become part of one's self concept. However, emotional and physiological remnants of the event (e.g., flashbacks, anxiety, autoimmune disorders[270]) indicate that one's body, mind, or both retain some trace or memory of the event. Whenever this memory is retrieved, one experiences the kind of cognitive dissonance (between their experience and their identity) they experienced during the initial trauma. If a person retains some kind of record of their experience, they retain something which causes instability and/or inconsistency by subconsciously, or sometimes even consciously, when recalled. Thus, the initial trauma destabilizes one's identity because of unignorable evidence that challenges one's identity and subsequent recalling of the event produce more instances of destabilization. One's identity is destablized because one's identity clarity and consistency is diminished.

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[270] For evidence that autoimmune disorders are linked to trauma see footnote 44.

Moreover, if trauma engages one's identity in the way I have described, we have a plausible explanation for how it affects one's SCC. Trauma introduces inconsistency into one's self-concept. Even though one may not accept one's belief formed as a result of one's experience, their identity is still confronted by a contradictory belief. One's identity clarity diminishes because of the process of dissociation. During dissociation, one distances one's self-concept from the rest of one's psychology, and even from one's physiology.

> Cognitively, individuals who have experienced trauma are often tormented by thoughts that reflect intensely negative core beliefs about themselves, which can include, "I will never be able to feel normal emotions again,' 'I feel like an object, not like a person,' 'I do not know myself anymore," or, "I have permanently changed for the worse" (Cox, Resnick, & Kilpatrick, 2014; Foa, Tolin, Ehlers, Clark, & Orsillo, 1999)… Moreover, participants with PTSD report somatically-based alterations in relation to self-experience, including feelings of disembodiment and related identity disturbances, revealed by reports like, "I feel dead inside," "I feel as if I am outside my body," "I feel like my body does not belong to me," or, "I feel like there is no boundary around my body" (Bernstein & Putnam, 1986; Foa et al., 1999; Briere & Runtz, 2002; Frewen & Lanius, 2015; for a review, see Frewen et al., 2008, 2020). (Lanius, Terpou, & McKinnon, 2020, p. 2)

However, it is not clear whether trauma diminishes or raises one's self-concept's temporal stability. If one dissociates oneself from their experience, they do not modify their self-concept in light of environmental or social factors, and thus, their self-concept remains stable.

Gavin Evans and colleagues set out to investigate whether there was a link between childhood trauma (CT), psychosis, and low SCC. Evans et al., administered questionaires about childhood trauma, SCC, and dissociation to participants aged 18-36. The participants of this study had all experienced a psychotic episode within the past three years and were part of an early intervention group. Researchers concluded, "The current research therefore supports the suggestion that: 'Possibly, fragmentation in the self develops as a function of early trauma, neglect and abuse'" (Evans, Reid, Preston, Palmier-Claus, & Sellwood, 2015, p. 630). One difficulty with interpreting this study is that researchers are not clear on what they classify as

"childhood trauma." The text of the study seems to indicate that childhood trauma is defined as a kind of event that often produces trauma, a definition which is different from the way I have defined trauma. Thus, it is not clear whether all of the participants in the study experienced traumatic dissociation. I hypothesize that if trauma was defined in the way I have suggested, the link would be even stronger. Yet, even so, in this study childhood trauma appeared to still be connected to low SCC because the way trauma was defined in the study would include those who experienced traumatic dissociation, even if not all of them experienced dissociation.

One's SCC plays a significant role in making and maintaining interpersonal relationships. Interpersonal relationships require persons to establish at least some small degree of cognitive interdependence. The American Psychological Association defines cognitive interdependence as,

> the tendency of individuals in close, committed relationships to think of themselves less in individual terms and more as partners in a dyadic relationship… Cognitive interdependence is thought to reflect mental processes that stem from the meshing of perspectives, goals, and identities that characterizes committed relationships and is most commonly observed in romantic relationships such as marriage. (American Psychological Association, 2022)

Persons in relationships must share cognitive elements like common goals, common thoughts, or even common emotions. The greater the cognitive interdependence, the closer a relationship tends to be.

> One of the primary means of measuring cognitive interdependence is through inclusion of the other in the self. This is a form of relationship closeness that focuses on the extent to which one's self-concept is interconnected or overlaps one's partner's self-concept (Aron, Aron, & Smollan, 1992). In cases of high inclusion of other in the self, the overlap is so great that partners have a difficult time distinguishing between their own traits and their partner's traits (Mashek, Aron, and Boncimino, 2003)." (Lewandowski Jr., Nardone, & Raines, 2010, p. 417)

"Including the other in the self" refers to the process by which someone modifies their self-concept so as to include at least some of another person's self-concept into their own self-

concept. Yet cognitive interdependence is a condition where one also considers oneself in

relational terms, that is, cognitive interdependence requires one to think of themselves as being

in relationship with another person (Agnew & Etcheverry, 2006, pp. 279-280). Not only does

cognitive interdependence require defining oneself as being in a relationship, it requires one to

define oneself as being in relationship with another self, complete with its own self-concept, and

to accept at least some of another person's self concept as being part of one's own self-concept.

Christopher Agnew and Paul Etcheverry argue that there are two primary consequences of high

level interdependence in relationships.

> First, the interdependence of the relationship will begin to express itself in the
> development of cognitive, affective, and behavioral structures that are unique to a
> relationship partner and to the relationship. A hallmark of an interdependent relationship
> and dependence on a partner will be the importance ascribed to the relationship and the
> unique relationship motives and structures developed to assist in interaction within the
> relationship. Second, interdependence of a relationship and correspondence of outcomes
> in the relationship will lead to consciously considering the self as part of the relationship,
> interconnected with the relationship partner, in a manner that minimizes the distinctions
> between the individual self and the self in the relationship. (*Ibid*, pp. 276-277)

Thus, as two people grow in cognitive interdependence, their own self-concepts incorporate

more of each other's self-concepts into their own identity. This allows for two people to more

closely align in their motives and goals.

Cognitive interdependence appears to be latent in Aristotle's account of a virtuous

friendship. In the virtuous friendship, both friends' self-concept includes "goodness." "Perfect

friendship is the friendship of men who are good, and alike in virtue; for these wish well alike to

each other *qua* good, and they are good in themselves" (Aristotle, The Nicomachean Ethics,

2009, 1156b). Not only does each person's self-concept include goodness, but they recognize the

other's self-concept as including goodness as well. Furthermore, the virtuous friendship is

committed to pursuing the good of both himself and his friend. To pursue the good of another

person requires one to identify at least some of the particular ends of a person which in turn requires one to have some kind of grasp as to that person's particular motives and goals. Perhaps more interestingly, Aristotle considered friendship to be a relationship with another "self."

> For (1) we define a friend as one who wishes and does what is good, or seems so, for the sake of his friend, or (2) as one who wishes his friend to exist and live, for his sake; which mothers do to their children, and friends do who have come into conflict. And (3) others define him as one who lives with and (4) has the same tastes as another, or (5) one who grives and rejoices with his friend; and this too is found in mothers most of all…Therefore, since each of these characteristics belongs to the good man in relation to himself, and he is related to his friend as to himself (for his friend is another self), friendship too is thought to be one of these attributes, and those who have these attributes to be friends. (*Ibid*, 1166a)

The virtuous friend is one who desires the good of the other, at least in part, for the other's sake.

One way to think about how people might pursue the goods of other people is to think about how persons might pursue "common projects." Robert Adams considers pursuing virtuous common projects to be an excellence of character. Adams argues that engaging in a common project is one way in which we can be for another's good. This is because the other person's engagement in the project is for their own good and thus if I work together with them, I am pursuing their good because the development and/or completion of the project promotes the good of the other person. Interestingly, Adams writes,

> To be allied with other people is in some measure to embrace their ends; and embracing their ends is also, as I have argued, a way of being *for them*…Much of our practical interest in other people's virtue is an interest in them as potential, or at least imagined, friends and allies---allies in good projects. (p. 93)

When we engage in common projects with others we take on some of their goals (the goals that are relevant to the project) as our own. Thus, we come to identify in some way as being part of a common project with another self committed to the same goals we have. The more cognitively interdependent two people are the more they are able to align their motives and goals. Thus,

cognitive interdependence promotes pursuing good common projects, particularly those projects that develop as an outgrowth of a virtuous friendship.

Yet the degree of self-concept clarity one has impacts the degree to which one can engage in cognitive interdependence. Thus, persons with lower SCC are more inhibited from forming close relationships than those with higher SCC. In addition,

> A person with high self-concept clarity should experience greater relationship satisfaction and commitment, in part, because of inclusion of other in the self. Individuals with greater self-concept clarity who hold a clear and consistent view of the self should be more stable and should present the self more clearly to others; characteristics that have been associated with lower levels of neuroticism (Campbell et al., 1996). Further, research also suggests that partners who are less neurotic (i.e, more stable) are more desirable (Figueredo, Safcek, & Nelson, 2006).

Because trauma diminishes SCC it diminshes one's ability to form relationships with others, particularly close relationships with others.

In addition, one's level of relational-interdependent self-construal (RISC)[271] may put one at greater risk for experiencing trauma. RISC is the tendency of persons to define themselves in terms of their relationships. In section 5.11 Virtuous relationships, I argued that higher levels of RISC are more conducive to forming and maintaining interpersonal relationships, at least up to a point. If one has high RISC, it is likely that one will have more relationship ETWIBs. This is because RISC is not necessarily a measurement of the number of relationship beliefs one incorporates into their self-concept. Instead, it is a measurement of how central these relationship beliefs are to one's self-concept. In section 4.4 Worldview and identity, I argued that ETWIBs are our most central beliefs. Thus, it seems more likely that persons with high degrees of RISC will be more susceptible to trauma, at least in cases where one is confronted with an event that

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[271] I briefly introduced this concept in section **5.11 Virtuous relationships**.

challenges one's beliefs about their relationships. This is because persons with higher RISC have

more ETWIBs about their relationships Thus, higher degrees of RISC, which seem to be more

conducive to human flourishing, also appear to put one more at risk for trauma, at least trauma

that includes beliefs about one's relationships. Whether persons with higher degrees of RISC are

correlated with an increased risk of trauma is an important empirical question I hope future

research will attempt to address. Because forming and maintaining interpersonal relationships are

at least part of what it means to flourish as a human being, trauma negatively impacts one's

ability to flourish by decreasing one's SCC thereby inhibiting the ability of one to establish

cognitive interdependence. In addition, having a higher level of RISC seems to be conducive to

maintaining interpersonal relationships,[272] but it also seems to make one more susceptible to

trauma.

I think it important to note that the negative impact of trauma I am discussing is notably

different than general concerns about PTSD and personal relationships. The US Department of

Veterans affairs writes,

> The symptoms of PTSD can cause problems with trust, closeness, communication, and
> problem solving. These problems may affect the way the survivor acts with others. In
> turn, the way a loved one responds to him or her affects the trauma survivor. A circular
> pattern can develop that may sometimes harm relationships. (U.S. Department of
> Veterans Affairs, 2022)

Much of these relationship problems can be attributed to the traumatic symptoms associated with

PTSD. Thus, if someone is traumatized and does not experience PTSD it may not readily appear

as if their relationships are affected. "Many trauma survivors do not develop PTSD. Also, many

people with PTSD do not have relationship problems" (*Ibid*). My argument does not depend on

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[272] See section **5.11 Virtuous relationships**.

whether one experiences lasting symptoms. Rather, I argue that the inherent characteristics of trauma reduce one's SCC and thus reduce their ability to develop cognitive interdependence and close relationships. More specifically, trauma diminishes how well defined one's self-concept is and how consistent one's self-concept is. This does not mean trauma survivors cannot ever develop close relationships. Instead, it means that trauma is a barrier to developing close relationships, and thus a barrier to human flourishing. All other things being equal, one who is being traumatized has a lower SCC than one who is not being traumatized. Thus, the person who is being traumatized faces an additional barrier to human flourishing than the non-traumatized person.

If my view is correct, though, a traumatized person might overcome the barrier of trauma by developing their SCC through accepting their experience and its implications for their identity. I am not a psychiatrist or psychologist so I am not sure what this kind of therapy would look like, but I would like to suggest a possible direction. Persons might be able to find alternative ways to interpret their experience so as to more easily accept their experience. For instance, someone who was raped may initially interpret her experience to mean that she is a dirty, immoral person. However, later because she is in the right kind of environment, she is able to reflect on her experience and interpret it differently. Instead of interpreting her experience as indicating her disvalue, she comes to interpret it as showing that she is psychologically resilient because she survived a horrific experience. Thus, she comes to now accept, at least to a degree, her experience because her interpretation better coheres with her established identity. Thus, unlike an approach that seeks to build tolerance to one's physiological and emotional symptoms alone, this approach targets one's cognitive processes responsible for interpreting and accepting

an event. Thus, the goal is not merely tolerance of the physiological and emotional aspects of an experience, but acceptance of the experience in light of who one believes one to be.

6.13 SCC and empathy

There is also emerging evidence that low-SCC is detrimental for a person's ability to empathize with others. This is because empathizing well, or empathizing in a way that motivates pro-social behavior, requires one to maintain a distinction between the self and the other person with which one is empathizing. Sonia Krol and Jennifer Bartz hypothesized that low SCC increases the probability that one will experience personal distress when empathizing with another and decreases the probability that one will respond with "empathetic concern" (Krol & Bartz, 2021). Empathic personal distress is the "tendency to experience self-oriented feelings of anxiety and unease when exposed to another's negative experience" while empathic concern is "the tendency to experience other-oriented feelings of sympathy and concern for the person in need) (*Ibid*, p. 4). This is due to one failing to distinguish one's self from the self with which on empathizing. Krol and Bartz conducted three studies to support this hypothesis. In all three studies participants completed an empathy self-report that included questions about both empathic personal distress and empathic concern. In the first study they had volunteers complete questionnaires including the standard survey scaling one's SCC. They found that persons with low SCC tended to experience more empathic personal distress and less empathic concern (*Ibid*, p. 6).[273] In the second study researchers utilized the Katie Banks' Need paradigm which informed participants of Katie Banks whose parents had died in a car crash and who was

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[273] Empathic personal distress refers to the psychological distress one experiences when empathizing with others. Empathic concern (also referred to as "compassion") refers to the state of feeling concern for the psychological state of another. Empathic concern "is more likely to promote other-oriented helping to alleviate the distress of the person in need" (Krol & Bartz, 2021, p. 1).

responsible for raising her siblings while finishing school. Participants were given an opportunity

to donate money to Katie. They predicted "that those low in SCC would be less likely to donate

money to help Katie (i.e., show less helping behavior)" (*Ibid*). The researchers' hypothesis was

confirmed. Krol and Bartz found that "low SCC is determemtal for helping behavior and that

empathic personal distress and empathic concern mediate this relationship. We also found that

excessive self-other merging underlies the association between SCC and vulnerability to

empathic personal distress" (*Ibid*, p. 9). To confirm their findings, Krol and Bartz conducted a

third study in which they manipulated participants' SCC and then presented these participants

with the Katie Banks Need paradigm. Particpants' SCC was manipulated in one of two ways:

confusion (identifying conflicting self-concept beliefs) and clarity (how one's self-concept is

implemented in everyday life). The third group was a control group. In this third study,

> Specifically, we show that participants assigned to the self-concept confusion condition
> experienced lower SCC which was subsequently associated with more empathic personal
> distress and less empathic concern compared with participants whose SCC was
> unaltered…Finally, we demonstrate that the lower SCC experienced by those in the self-
> concept confusion condition was associated with greater self-other merging, which, in
> turn, was related to higher empathic personal distress, a finding that is also consistent
> with Study 2. (*Ibid*, p. 13).

In other words, low SCC, particularly along the dimension of self-concept consistency, is linked

to more psychological distress and less empathic concern indicating those with lower SCC will

engage in less prosocial behavior. The researchers found that their work

> suggests that low SCC people have a tendency to get overwhelmed by their own distress
> when confronted with another's plight and react with less-other-oriented feelings of
> sympathy and concern. Of note, these effects held when controlling for self-esteem which
> was correlated with SCC. (*Ibid*, pp. 5-6)

Perhaps even more stunning is that the effects of low SCC appear to be even more

detrimental for those in close relationships.

> [O]ur work suggests that empathizing with individuals who are incorporated into the self-concept may be detrimental for low SCC individuals. Ironically, those low in SCC may show less care and helping toward the people they care about the most because their proclivity to merge with close others renders them vulnerable to experiencing empathic personal distress" (Krol & Bartz, 2021, p. 15)

This means that those who are more cognitively interdependent will experience more psychological distress in relationships with those close to them when they attempt to empathize with their relationships partners. This coheres with the testimony and research concerning persons with PTSD I have presented. If my hypothesis is correct and those who experience trauma experience diminished SCC, then trauma inhibits relationships by also inhibiting one's empathic concern for another. When one's empathic concern is diminished one is less motivated to act on behalf of another. Furthermore, trauma causes one to be more likely to experience psychological (empathic) distress when empathizing with another person. If empathy is necessary for at least some kinds of relationships, there are at least some kinds of relationships which will likely cause a traumatized person psychological distress instead of contributing to psychological flourishing.

Writing about the intersection of philosophical phenomenology and PTSD, MaryCatherine McDonald argues that we inhabit a complex web of social narratives that help us to understand and share our experiences with others. "Most of the funny, embarrassing, touching, and sometimes even the tragic experiences that we have are experiences that we can find relational homes for" (McDonald, 2019, p. 115). We find these "relational homes" by communicating our experience to others who in turn empathize with us. However, trauma is a response which often literally renders an event and/or one's experience of an event ineffable. Because one's emotional experience has been compartmentalized from one's sense of self and one's ability to deliberate, trauma survivors often find it difficult to express their experience in

language. If one cannot describe their experience, they cannot communicate this experience with others. This is one reason why so many trauma survivors feel isolated. "After trauma the world becomes sharply divided between those who know and those who don't. People who have not shared the traumatic experience cannot be trusted, because they can't understand it. Sadly, this often includes spouses, children, and co-workers" (van der Kolk, 2014, p. 18). Support groups are very important for traumatized individuals because they can be a part of a community that "gets it" even though they have difficulty communicating their own experience.

If my view is correct, it may go some way to explaining why traumatic experiences seem to be ineffable. To put words to an experience, one needs to interpret that experience. However, as I have described it, trauma conflicts with one's worldview in such a way that one cannot use one's worldview to interpret the experience. Yet, one's worldview is the psychological framework through which one *must* interpret the world. Thus, one finds difficulty verbally expressing their experience because their experience resists being interpreted through one's worldview framework.

In addition, the key to forming these relational homes is empathy. Aaron Simmons argues that full empathy contains a cognitive and an affective element. The cognitive element recognizes that someone is feeling an emotion and the affective element is feeling an emotion like what the other person is feeling. In addition, Simmons argues that full empathy requires one to experience another's purposes.

> When I fully empathize with another's concerns or purposes, I not only acknowledge that the other has purposes which are important to her, but I also *experience the other's purposes from her perspective*, seeing and feeling the other's purposes as she sees and feels them. The other experiences her purposes as worthwhile, important, meaningful, and mattering, as worthy of being fulfilled. (Simmons, 2014, p. 102)

Importantly, one must be able to distinguish oneself from another person to do this well. If I have low SCC and I experience empathic distress, it is likely that I am experiencing another's purposes from my own perspective and not theirs. Thus relational homes provide contexts for persons to share and experience each other's purposes and goals. When I know and experience another's purposes as distinct from my own, I am motivated by the emotion the other feels, but I am motivated to alleviate their distress as opposed to needing to eliminate my own psychological distress. Thus, empathy motivates me to fulfill the other person's goals and not my own. In this way one "is motivated to help others or not cause them harm because she believes it is good in itself---[one] cares for others' well-being for their own sake. [One] does not want to help others simply for ulterior motives" (*Ibid*, p. 108). Thus we find empathy to be a key component in flourishing friendships because flourishing friendships require us to seek the good of another person.

In this way trauma inhibits one's ability to empathize well because trauma diminishes one's SCC. When trauma diminishes one's SCC it diminishes one's ability to empathize well because persons who are traumatized are more likely to experience empathic distress instead of empathic concern. If one experiences empathic distress instead of empathic concern they are less motivated to behave in relationship deepening and relationship sustaining ways. Thus, trauma-diminished empathic ability inhibits one's ability to relate to others thereby inhibiting their flourishing.

6.14 Conclusion

In this chapter I have attempted to explain how trauma is an obstacle to proper human function. To do this, I have explained the role of worldview, specifically of one's identity, in trauma and how trauma acts as a defense mechanism protecting one's identity. I have argued that

trauma inhibits acting well because trauma causes a state of psychic disharmony when acting well requires a state of psychic harmony. Thus, psychic disharmony diminishes proper human function.

Moreover, I have attempted to show how belief conflict, more specifically, not accepting identity beliefs formed as a result of one's traumatic experience, lies at the heart of trauma. This belief conflict negatively affects one's self-concept clarity resulting in barriers to forming interpersonal relationships (i.e., diminished capacity to develop cognitive interdependence, diminished ability to develop empathic concern). In chapter five I argued that proper human function requires one to relate well to others. Thus, trauma inhibits proper human functioning because it inhibits relating well to other persons. In this way trauma diminishes human flourishing.

In closing this section, I would like to address an important worry. One might worry that assessing whether one can act virtuously (or act well) attributes moral responsibility to one who has been traumatized. In other words when I argue that one is inhibited from acting virtuously, one might assume that I am arguing one is acting wrongly, and thus viciously in these situations. In response, I want to clarify that I believe moral responsibility is not entailed by whether one is able to act virtuously or not. For instance, Aristotle believed that magnanimity was a virtue. However, one cannot act virtuously in this way unless one has a large sum of money. Many people live in poverty through no fault of their own and thus are not able to act magnanimously. Thus, the trauma survivor is often not responsible for their trauma but trauma causes harm in many ways, including inhibiting proper human function. I find it important to point out that trauma inhibits acting virtuously, inhibits forming virtue, and inhibits proper human function because these all appear to be harms that a traumatized person suffers. To be hindered from

proper human functioning and acting excellently is to be hindered from living a flourishing

human life.

Chapter 7: Conclusion

In this chapter I would like to summarize the primary arguments I have made in this dissertation. Once I have summarized the arguments I will briefly indicate how I believe my arguments contribute to the general field of philosophy and trauma studies. I will end by suggesting possible avenues for future thought.

Centrally, I have argued that psychological trauma hinders human flourishing by inhibiting psychic harmony and diminishing the ability to relate well to others. To this end, in chapter two I surveyed the empirical literature investigating PTSD to serve as a conceptual and observational background for this project. An aim of this dissertation was to think about trauma in a way that was broadly consistent with empirical evidence.

Also in chapter two I introduced major kinds of trauma like sexual trauma, war trauma, and childhood trauma. Obviously, these categories of trauma are not mutually exclusive and one may have experienced multiple kinds of trauma and/or one may have experienced trauma combining elements from multiple categories. However, even though different kinds of events produce trauma, many symptoms tend to be similar across trauma cases. Some of these effects are linked to symptoms of general anxiety disorders, though PTSD tends to stand out from general anxiety disorders due in part to the intensity and persistence of its symptoms like hypervigilance and flashbacks. In addition, I summarized three popular approaches to treating traumatic effects: trauma-focused cognitive behavioral therapy (CBT-t), Eye movement Desensitization and Reprocessing (EMDR), and neurofeedback. These therapies attempt to help persons cope with the effects of trauma.

In chapter three, given the ambiguity of the concept of "trauma" and how it tends to be used in both the empirical and philosophical literature I found it necessary to argue for a more

precise definition of trauma so that I could narrow my analysis. This was necessary because trauma is often assumed to describe an event, an experience, effects, or some combination of the three. After consulting several popular definitions of trauma, I argued that fundamentally, trauma is not an event, nor an experience, and it should not be conflated with the effects of trauma. Instead, trauma is an emotional response to a perceived horrifying event. This response is characterized by a disruption in the relationship between one's cognitive faculties responsible for integrating and evaluating one's experience within the rest of one's psychological framework. Events that result in this response may be said to be traumatic events. Persons who experience this response can be said to have had a traumatic experience and effects (like hypervigilance) that are a result of this response can be said to be traumatic effects.

With a clearer concept of trauma, I proceeded to more precisely understand the nature and causation of trauma. Understanding the nature and causation of trauma helps to delineate the specific ways trauma undermines normal human functioning. In chapter four I introduced the psychological concept of worldview and explored its role in our psychology. In addition, I argued for a causal mechanism for trauma whereby trauma is caused by one's experience wherein one is presented with evidence that conflicts with one's worldview, particularly evidence that conflicts with one's emotionally tagged worldview identity beliefs (ETWIBs). To protect one's worldview, one dissociates oneself from the experience. This explanation appears to broadly cohere with the most popular explanations for PTSD symptomology.

To proceed with arguing that trauma inhibits flourising, I needed to present a paradigm of human flourishing and demonstrate how trauma inhibited it. In chapter five, I argued that psychic harmony and relating well to others are necessary conditions for human flourishing. To make this point I explored and critiqued Plato's notion of the just soul to develop the concept of

psychic harmony. I also explored Aristotle's arguments for function, paying specific attention to proper human function, to develop an argument for how relating well to others is a necessary condition for human flourishing. Toward the end of this chapter, I summarized key concepts from Plato and Aristotle and argued for a way of modifying those concepts to fit with the research on worldview and trauma I had presented so far. I argued that there is not as clear cut a hierarchy between one's reasoning and one's emotions as Plato thought. Instead, for the just person, there is a balanced symbiotic relationship between one's reason and one's emotions whereby one's emotions can be shaped by one's reason but one's emotions also provide information with which to reason well. We might think that reason still "leads" the soul, however, because reason is what allows someone to be intentional about developing the necessary pyschological and interpersonal conditions for flourishing. To be intentional about developing the conditions for flourishing, one must reason against the backdrop of one's worldview.

I sought to bring this modified framework to bear on analyzing trauma. Thus, in chapter six, I described the normal function of worldview within one's psychology. I then explained how trauma interfered with the normal function of one's worldview. That is, trauma interferes with one being able to utilize their worldview to integrate one's traumatic experience within one's overall psychological framework. In addition, one cannot act from a state of psychic harmony during trauma because one's traumatic experience presents one with a psychological conflict that is unresolved. To preserve one's psychology, particularly one's worldview and identity, trauma includes the dissociation of oneself from one's experience. Thus, one might even believe the identity-conflicting evidence from one's experience, but one does not accept that evidence and instead quarantines one's experience from the rest of one's psychological framework. In this

way, trauma diminishes one's self-concept clarity (SCC) along at least two dimensions: consistency and transparency to one's introspection. The lower one's SCC the more difficult it becomes to form and maintain excellent relationships. Thus, trauma is a state of psychic disharmony that inhibits one's ability to relate well to others and thus hinders human flourishing.

I have already hinted at some ways I believe my analysis provides helpful contributions to the field of trauma research. First, I believe the section defining trauma can help to draw attention to the need to more clearly define psychological trauma. As I acknowledge in that chapter, many researchers have acknowledged the ambiguity of the concept but the clearer we can be about defining the concept, the better we can organize and target future research.

In addition, I have attempted to formulate a hypothesis about the causal mechanism leading to trauma. I argued that trauma results from an experience wherein someone is presented with evidence that conflicts with one's ETWIBs. Because of the nature of traumatic events, one's fight or flight response has been activated and one employs a threat-confirming belief bias which disallows one from utilizing normal strategies for protecting or accomodating one's worldview. I developed this hypothesis so as to be consonant with the most popular family of explanations of PTSD, cognitive/worldview explanations. Whether this explanation is viable will be a question for future empirical research to evaluate.

Lastly, the philosophical literature reflecting on trauma is relatively small but burgeoning. Up until this point, much of the philosophical literature engaging trauma has been a reflection of the effect trauma has in people's lives.[274] This is in contrast to my project which tends to focus more on analyzing trauma in itself. In addition, I have not encountered a

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[274] For instance, see (McDonald, 2019), (Freedman, 2006), (Stolorow, 2015), and (Panchuk, 2018). For examples not otherwise cited in this dissertation see (Brison, 2002) and (Burchard, 2019).

philosophical paradigm for thinking about the nature of trauma that is drawn from concepts traditionally associated with the virtue tradition. To this end, I have attempted to develop an original conceptual framework inspired by concepts found in the writings of Plato and Aristotle. I hope my work here contributes by highlighting unique conceptual nuances of trauma and providing an original evaluative framework.

In closing, I would like to suggest a couple potential avenues for future research. As I have already suggested, future empirical research will be needed to confirm the causal mechanism I have proposed. If my hypothesis is sound, it will be helpful to think about ways persons can develop psychologically in such a way as to minimize one's risk for being traumatized. What are the characteristics of an identity and/or worldview that resists trauma? Are these characteristics worth developing or might one have to sacrifice too many other psychological goods to develop such an identity/worldview?

Second, I have argued that trauma inhibits relating well to others. However, it appears that certain relationships play a vital role in helping trauma surivors cope and integrate their traumatic experiences. It would be helpful to think about the nature of this dilemma. One is hindered from relating well to others by trauma but recovering from trauma requires that the traumatized individual relate to others in beneficial ways. In addition, I hope that this discussion leads to developing specific ways in which persons who care for and care about trauma survivors can better assist and support survivors.

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