

Thirteen Universal Assessments Which May Contribute to the 'Good Life'

Jeremy D. W. Clifton

University of Pennsylvania

A Capstone Project Submitted

In Partial Fulfillment of the Requirements for the Degree of

Master of Applied Positive Psychology

Advisor: James O. Pawelski

August 1, 2013

Thirteen Universal Assessments Which May Contribute to the ‘Good Life’

Jeremy D. W. Clifton

jer.clifton@gmail.com

Capstone Project

Master of Applied Positive Psychology

University of Pennsylvania

Advisor: James O. Pawelski

August 1, 2013

Abstract

Beliefs matter. This paper examines the “biggest” of all possible beliefs, universal assessments (UAs), which consist of our “take” on the whole universe. UAs are a subset of worldview, which is in turn a subset of schema. After discussing the development of *Weltanschauung* in continental philosophy and the capacity of schemas to generate expectancy, three previously researched UAs are identified (universal benevolence or safety, universal meaningfulness, and belief in a just world). All have been shown to influence life outcomes, but three is only a beginning. Moreover, the focus of research thus far has been on alleviating the ‘miserable life,’ so we do not yet know which UAs lead to the ‘good life.’ A speculative analysis is conducted which identifies thirteen UA continuum opposite pairs that might influence the ‘good life,’ defined here as the development of strengths and positive emotions. The thirteen pairs include is the universe good/bad, beautiful/ugly, interesting/boring, malleable/unchangeable, improving/declining, safe/dangerous, just/unjust, comprehensible/incomprehensible, subject-centric/not subject-centric, and intentional/mindless, as well as should it be accepted/changed, explored/avoided, and experienced with others/alone? This list, though only preliminary and based on the intuitions of the author, can be a point of departure for what comes next. A call is made for a coordinated and systematic UA classification program that would catalyze future research.

Table of Contents

Part I: The Development of UA-related Theory and Research	3
<i>Weltanschauung</i>	3
<i>Schemas</i>	3
<i>Conceptualizing UAs</i>	3
<i>Previously Researched UAs</i>	3
<i>Positive Psychology</i>	3
Part II: Thirteen Universal Assessments	3
<i>An Exercise in Hypothesis Generation</i>	3
<i>Thirteen UA Pairs Which May Affect the 'Good Life'</i>	3
<i>Next Steps</i>	3
Summary & Conclusion	3
References	3
Appendix A: Analysis Summary	3
1: <i>The Universe is Good vs. The Universe is Bad</i>	3
<i>The Negativity Bias</i>	3
2: <i>The Universe is Interesting vs. The Universe is Boring</i>	3
3: <i>The Universe is Beautiful vs. The Universe is Ugly</i>	3
4: <i>The Universe Can Change vs. The Universe Cannot Change</i>	3
<i>Universal Assessments and Optimism</i>	3
5: <i>The World is Getting Better vs. The World is Getting Worse</i>	3
6: <i>The Universe is Safe vs. The Universe is Dangerous</i>	3
7: <i>The Universe Should be Explored vs. The Universe Should be Avoided</i>	3
<i>Universal Assessments and Travel Habits</i>	3
8: <i>The Universe is Comprehensible vs. the Universe is Incomprehensible</i>	3
9: <i>I am not the Center of the Universe vs. The Universe Revolves Around Me</i>	3
10: <i>The Universe has Intentionality vs. The Universe is Mindless</i>	3
11: <i>The Universe is Best Experienced with Others vs. the Universe is Best Experienced Alone</i>	3
12: <i>The World is as it Should Be vs. the World Needs Change</i>	3
13: <i>The World is Just vs. The World is Unjust</i>	3
Appendix B: Analysis Notations — Strengths & UAs	3
Appendix C: Analysis Notations — Positive Emotions & UAs	3
Appendix D: The Leaf Exercise	3

Part I: The Development of UA-related Theory and Research

Beliefs matter. Beliefs can motivate or discourage (Maddux, 2009), fight depression or cause it (Carifoa & Nasser, 2012), and affect goal-setting (Locke, 1996). Dweck (2006) has found that beliefs about where intelligence and talent come from and develop plays a profound role in human development. General beliefs may even lead to danger-seeking behavior among motorcyclists (Christakis, 2004). Reivich and Shatte (2002) assert that, “in most situations, our beliefs cause our feelings and behaviors” (p. 67). The assumption of cognitive behavioral therapy is that beliefs drive our emotional responses to events, which translate into behavior (Ellis & Ellis, 2011; Beck & Weishaar, 1989). Beliefs which matter may concern any number of objects—our self, spouses, parents, colleagues, school, church, soda, etc.—and they have potentially enormous ramifications for how we interact with those objects and create the content of our lived existence.

This paper focuses on beliefs regarding the biggest of all possible objects, the entire universe, and these beliefs are referred to as “universal assessments” (UAs). UAs are judgements of what the world is like as a whole—our ‘take’ on everything (I will use the term world and universe interchangeably). A hypothesis will be put forward that humans may hold universal assessments which affect daily life and the likelihood of having a ‘good life.’ For example, is this universe a horrible prison, a realm of wonder, both, or something in between? Should we hunker down and endure life, or grab a snack and go exploring? Answers might be tied to life outcomes.

Ultimately, a goal of UA research could be to answer a deliberate series of nine empirical questions. First, what universal assessments do people actually hold, who holds them, and what do the distributions look like? Second, how are they held (implicitly or explicitly, compulsorily

or freely, strongly or weakly, etc.)? Third, can certain UAs be tied to specific life outcomes, such as depression, divorce, subjective well-being, longevity, health, strengths, or even travel habits? Fourth, what is the causal relationship between UAs and life outcomes? Fifth, which UAs are most conducive to holistic human flourishing? Sixth, where do UAs come from, and at what age are they typically formed? Seventh, can UAs change? Eighth, can interventions be developed which change UAs into those most likely to generate positive life outcomes? Ninth, can these interventions be administered at scale?

In short, I am interested in changing the world by examining and then potentially changing our beliefs about it. This paper, however, is exploratory and conceptual. It will not address any of these empirical questions directly. However, it will move the discussion in that direction.

The first half of the paper will be divided into five sections. The first section will trace the development of the concept of worldview from its origins in German philosophy to its establishment as an important idea in psychology and broader society. The second section will introduce the concept of schemas and articulate how they shape life by creating expectancy. The third section will define UAs as a subset of worldview and worldview as a subset of schemas, as well as identifying four types of UAs. The fourth section will review three UAs which have received research attention, namely belief in a just world (BJW), universal meaningfulness, and universal benevolence, and summarize findings indicating they play an important role in human life. For instance, people high in belief in a just world (BJW), which is the view that people, in general, get what they deserve and deserve what they get, are more likely to make long-term goals, strive for their realization, and expect their work to be rewarded (e.g. Otto & Dalbert, 2005). They are generally disposed to be less suspicious towards others (Furnham, 1995) and

expect to be treated fairly (Tomaka & Blascovich, 1994). They also make better employees as they are more likely to trust the organization they work for and enjoy their work more (Otto, Glaser, & Dalbert, 2009). Though the work which has been done so far on these three UAs is important and helpful, a gap is revealed; the three UAs that have been studied are potentially only a handful of the UAs that we hold which play an important role in human life.

Additionally, though true of BJW to a lesser extent, these UAs have been identified in pursuit of alleviating the effects of trauma and fighting depression. Researchers have focused on how these UAs affect struggling populations.

Section five will introduce the relatively new field of positive psychology and discuss one of its insights. A focus on alleviating suffering does not necessarily bring life satisfaction. This is because human wellbeing is not merely the absence of pain, and effective strategies for treating disease are not necessarily useful for developing strengths and increasing positive emotion. Additional strategies are required. UAs, therefore, that prevent the ‘miserable life,’ may not be the same UAs that lead to the ‘good life.’ Together these sections on German philosophy, schemas, UA conceptualization, researched UAs, and positive psychology, suggest the need for a positively oriented approach to identifying and researching UAs.

The second half of the paper documents an exercise in hypotheses generation designed to identify a preliminary list of UAs that may encourage the ‘good life.’ Thirteen UAs are recommended as candidates for future research, and next steps are discussed. In particular, the author recommends a systematic effort within the academic community to provide a conceptually coherent list of all UAs which may play an important role in human life.

Weltanschauung

In the 19th and 20th century, several continental German philosophers developed the concept of *Weltanschauung*. *Welt* is German for 'world' and *Anschauung* means 'outlook' or 'view.' Humboldt had used the term *Weltansicht* (or 'world-sight') earlier to describe how linguistic communities embed meaning and ways of sensorially experiencing the world into language (Naugle, 2002). In *Critique of Judgement* (1790/1987), Kant first used *Weltanschauung*, but not to refer to philosophies and ideologies which describe a general view of the universe and the human role within it as later philosophers would. Similar to Humboldt's *Weltansicht*, Kant's *Weltanschauung* was more grounded in the sensory experience. In *Worldview: The History of a Concept* (2002), Naugle asserts that after minimal treatment by Kant, *Weltanschauung*

“...evolved rather quickly to refer to an intellectual concept of the universe from the perspective of a human knower. Kant's Copernican revolution in philosophy, with its emphasis on the knowing and willing self as the cognitive and moral center of the universe, created the conceptual space in which the notion of worldview could flourish. The term was adopted by Kant's successors and soon became well ensconced as a celebrated concept in German and European intellectual life.” (Naugle, 2002, p. 59)

For example, just two years after *Critique of Judgement* (1790), Fichte, in *An Attempt at a Critique of All Revelation* (1792), speculates on the nature of the divine *Weltanschauung* (God's worldview) and alludes to the notion that *Weltanschauung* provides a way of synthesizing felt tensions created by experiencing contradictory sense-data regarding human freedom and causality. Hegel expanded on and popularized *Weltanschauung*, but uses it primarily as a way of describing the shared view of a nation at a specific time. The 'spirit of the age' is often expressed through art (McCarthy, 1978). Worldview is created and maintained, Hegel observed,

in the context of the nation-state which has common ethnic, linguistic, governmental, and historical ties. Later, Nietzsche would claim that worldviews are so powerful and variable that they make cross-cultural communication nearly impossible (Naugle, 2002).

Echoing Hegel's use of *Weltanschauung* in lectures on aesthetics (1818/1975), later philosophers such as Schaeffer (1973) assert that an "artist makes a body of work and this body of work shows his world view" (p. 37). Consider music. Merrick (1987), for example, a 20th century music critic, describes a key difference between the music of Liszt (1811-1886) and of Wagner (1813-1883). "For Liszt," he says, "the 'reality' is the divine vision; for Wagner the 'reality' is a cruel world" (Merrick, 1987, p. 308). A composer's *Weltanschauung* can be expressed via tonality, rhythm, and timbre. Furthermore, across artistic disciplines, art that is positive or uplifting in nature is often criticized as unrealistic (Potkay, 2013; Pawelski & Moores, 2013). For instance, in his later years, Renoir painted touching home and family scenes with warm colors, and "Late Renoir" is considered by many to be scathingly unrealistic (Lucy, 2012). In an example from literature, the story of "Neighbor Rosicky" by Willa Cather (1932/2010) is about the death of a man whose life is full and meaningful. Critics often disparage Cather's story as unrealistic in favor of narratives such as *The Death of Ivan Ilych* (1886/2010) by Tolstoy in which a man lives a meaningless life and dies a meaningless death. Meaninglessness, ostensibly, is "realistic," and this same critique cuts across many artistic mediums. But what is realistic? For Hegel, what is realistic depends on one's *Weltanschauung* (Naugle, 2002).

After Hegel, *Weltanschauung* became an increasingly important notion in continental philosophy. As a historian, Ermath (1978) asserts that "much of German intellectual history in the modern period may be said to center upon the properties and perplexities of the notion of world-view" (p. 323). *Weltanschauung* also spread outside of Germany. In America, for

example, Ralph Waldo Emerson (1844/1949) asserts that all humans see their world in an active and creative way. Emerson comes to believe that opinions, values, and temperaments create a lens through which we see the world. He foreshadows later work on schemas when he asks, “Does the universe wear our color?” (p. 303), suggesting that our beliefs regarding objects create expectancy that is self-fulfilling.

In Scandinavia, Kierkegaard throughout his life developed his ideas on *Weltanschauung*'s sister-construct *livsanskuelse*, or “life-view” in English, which is the human understanding of the self especially in regards to conditionality, human freedom, and meaning (McCarthy, 1978; Naugle, 2002). As opposed to Hegel, Kierkegaard preferred the existential notion of *livsanskuelse* which must be created individually rather than *Weltanschauung* which, at the time, was dominated by Hegel's view that it is a group construct determined by the dialectic of big history.

Dilthey, who inherited Hegel's Chair in Philosophy at the University of Berlin, is considered by some to be the most important philosopher in the second half of the 19th century (Ortega y Gasset, 1946) and contributed greatly to the development of *Weltanschauung*-related ideas. Dilthey was the first to classify worldviews into three types (Naugle, 2002). First, “naturalism” maintained that humans are determined by natural causes. Second, subjective idealists, along with Kant and Schiller, assert that humans are separated from nature by free will. The mind is distinct and independent from the rest of reality in important ways. Third, like Hegel, Spinoza, Bruno, and others, objective idealists believe in a synthesis of the others. The very independence that freewill offers according to the subjective idealists is cast across the universe, and the author of the system, the individual objective idealist, animates all things with his or her values and ideas (Naugle, 2002). Though philosophically oriented, Dilthey's three

worldviews were an early attempt to define different psychological orientations towards the world. Similar to Hegel, Dilthey also believed that the three types of *Weltanschauungen* are blended by the idiosyncratic history of groups and individuals in potentially infinite permutations (Ermath, 1978). Worldviews, which are numerous, wildly diverse, and mutually exclusive, become attempts to understand the vast swirl of contradictory information an individual takes in. Naugle (2002) puts Dilthey's orientation this way, "Out of the whirlwind of experience, human beings form attitudes toward life and the world by necessity, and eventually universal attitudes or moods are established" (p. 86). These worldviews are unified in structure because they are confined to the human mind, but vary wildly in content and thus compete with each other for dominance in the general population. Dilthey wrote most of his work after Darwin published *The Origin of Species* in 1859, though the author does not know how heavily the theory of natural selection affected Dilthey's thinking. Worldviews, according to Dilthey, can fluctuate internally by changing, adding, and/or subtracting beliefs often in a contradictory fashion, in the relentless pursuit of more adaptive results, which in his view are primarily stability and security for the organism. In this pursuit, according to Dilthey, no specific worldview appears to be winning (Naugle, 2002).

Husserl (1910/1981) disagreed strongly with Dilthey regarding the historical roots of worldview. Forming increasingly superior and adaptive worldviews matter, Husserl asserts. With evangelical passion, he argues that the historically relative *Weltanschauung* described by Dilthey, which focus on what is pragmatic and of personal utility, should be abandoned for a philosophical science which eschews idiosyncratic for cold scientific clarity. Holmes (1967) says that in place of competing *Weltanschauung*, "Husserl wants a perennial philosophy possessing timeless validity, a rigorous descriptive science rather than an exercise in historical

empathy” (p. 335). Husserl’s (1910/1981) rebuke led to an important epistolary argument, the “Dilthey-Husserl Correspondence,” which pitched Husserl’s phenomenological agenda against Dilthey as the alleged ‘father of worldview theory’ (Husserl, 1910/1981).

In this debate, Nietzsche joins against Husserl and argues against any notion of “immaculate perceptions,” to borrow a Nietzschean phrase from *Thus Spoke Zarathustra* (1892/1969, p. 233). Instead, according to Nietzsche, all worldviews are fictions born out of the valid need to interpret. In *The Will to Power* (1901/1964) Nietzsche writes, “Truth is that kind of error without which a certain species of living [human beings] cannot exist” (p. 13). Nietzsche may describe *Weltanschauung* as bullshit in the technical sense Frankfurt (2005) identifies — bullshit is any assertion past the point of knowledge—but still maintains that worldviews are essential for human life and derived from the inescapable need for interpretation.

Naugle (2002) believes the documented disagreements between Nietzsche, Dilthey, and Husserl is remarkable because it reveals the extent to which *Weltanschauung* held sway in the intellectual life of the times. Indeed, soon before his death, Husserl (1936/1970) would write that his dream of scientific philosophy had been vanquished by the general predominance of *Weltanschauung* thinking.

Therefore, when psychiatrist and philosopher Karl Jaspers published *Psychologie der Weltanschauung* (1919), he did so in an environment keenly interested in the concept of *Weltanschauung* and the ongoing discussion among philosophers.

At the very moment when the question concerning the original *Weltanschauung* arose, the magnificent tradition of the thinkers who had developed this kind of psychology, sometimes not at all under the name of psychology, came to light. Hegel’s *Phenomenology of Mind*, then above all Kierkegaard, whom I had been studying since

1914, and secondly Nietzsche, struck me as revelations. They were able to make communicable a universal and at the same time quite concrete insight into every corner of the human soul and to its very deepest sources. (Jaspers, 1957, p. 26)

In *Psychology of Worldviews* (1919), Jaspers begins the process of operationalizing the construct of *Weltanschauung* in what he will later consider to be the most important work in his life (Jaspers, 1957). He defines worldviews as frames of reference in which mental life takes place and categorizes *Weltanschauung* as 1) attitudes or 2) world pictures. Attitudes are approaches through which humans experience the world. According to Jaspers, “the first and the very last question concerning *Weltanschauung* is whether one says Yes or No to life as a whole” (Jaspers, 1919, p. 289, as translated by Kaufmann, 1957, p. 414). This view parallels Nietzsche’s focus on ‘yes-saying’ and ‘no-saying,’ a theme which runs through all his published works (Kaufmann, 1957). An example statement can be found in *Thus Spake Zarathustra* (1886/1969):

“But tell me, my brothers, what can the child do that even the lion cannot? Why must the preying lion still become a child? The child is innocence and forgetfulness, a new beginning, a game, a self-propelling wheel, a first motion, a sacred Yes. Yes, a sacred Yes is needed, my brothers, for the game of creation: the spirit now wills its own will, the spirit sundered from the world now wins its own world.” (p. 55)

Nietzsche is describing an “attitude” in Jaspers’ classification of *Weltanschauung*. Both men considered ‘yes or no’ the central question determining attitudes toward the world. World pictures, on the other hand, are mental representations of the world that we create in our heads as we experience the world in the contexts of these attitudes. Attitudes and world pictures are fluid and interact with each other in various ways.

Jaspers' (1919) work received serious attention from philosophers dealing with *Weltanschauung*. For example, Heidegger (1919) wrote an article in response that same year. Also, from 1919 onward, the concept of *Weltanschauung* becomes increasingly prominent in psychology and popular society. Examples include Freud's lecture on "The question of *Weltanschauung*" (1934/1989) and Carl Jung (1928/1998), who borrows the notion that *Weltanschauung* is a product of historical factors from Dilthey and notes that *Weltanschauung*, "sanctified by custom and historical tradition" (p. 38), plays a key role in the formation of personality dispositions towards life. Examples of more popular figures who championed the importance of worldview include British journalist, popular author, and social critic, G. K. Chesterton and American philosopher William James. In his introduction to *Heretics* (1905/2007), Chesterton writes:

"There are some people—and I am one of them—who think that the most practical and important thing about a man is still his view of the universe. We think that for a landlady considering a lodger, it is important to know his income, but still more important to know his philosophy. We think that for a general about to fight an enemy, it is important to know the enemy's numbers, but still more important to know the enemy's philosophy.

We think the question is not whether the theory of the cosmos affects matters, but whether, in the long run, anything else affects them." (Chesterton, 1905/2007, p. 8)

In order to be fully equipped in the age-old activity of predicting human behavior, whether it be the behavior of potential lodgers or enemy generals, humans are interested in other people's beliefs about the world. We cannot 'get inside' another person's head until we know their particular sense of the universe (James, 1910/2011). William James starts his famous Lowell lectures of 1906-1907 by quoting Chesterton as above and then stating:

“I think with Mr. Chesterton in this matter. I know that you, ladies and gentlemen, have a philosophy, each and all of you, and that the most interesting and important thing about you is the way in which it determines the perspective in your several worlds. You know the same of me....For the philosophy which is so important in each of us is not a technical matter; it is our more or less dumb sense of what life honestly and deeply means. It is only partly got from books; *it is our individual way of just seeing and feeling the total push and pressure of the cosmos.*” (James, 1910/2011, p. 9, emphasis added)

Chesterton and James are speaking generally about one’s worldview. Since Kant originally mentioned it in *Critique of Judgement* (1790/1987), understanding, discussing, analyzing, and cataloguing worldviews and components of worldviews had become, one might say, the intellectual spirit of the times in the Hegelian sense. This is not to say that there were not other perspectives. Indeed, the above Chesterton quote is in the context of a reaction to what he perceives as the growing *laissez-faire* attitude in the British public that manifested itself as apathy towards opinions that he believed truly matter.

Nevertheless, *Weltanschauung* was an important part the intellectual climate and contributed to developments in numerous domains. Before dealing in the next section with psychology and the development of schema, I will mention three books from this time period that applied *Weltanschauung* thought to advance other domains. First, in *The Protestant Ethic and The Spirit of Capitalism* (1921/1958), Weber, who taught economics at the universities in Freiburg, Heidelberg, and Munich, argued that the Reformation created specific worldviews in Protestant sects that encouraged and even sanctioned the quest for prosperity in ways that made the emerging capitalist system possible. He attempts to detail the dialectic of real history in which a worldview—the ‘spirit of the times’—plays out to form a specific synthesis. The second

example is Kuhn's *The Structure of Scientific Revolutions* (1962/1996), in which he coins the now widely used term "paradigm shift" to describe the process in which a scientific community abandons worldviews and adopts new ones. Scientists, Kuhn argues, rely on a common paradigm that allows for progress by providing a sophisticated set of common assumptions. Among others, Kuhn credits Piaget, Gestalt psychologists, and B. L. Whorf's "speculations about the effect of language on worldview" (Kuhn, 1962/1996, p. viii) for playing an important role in the development of his ideas. Finally, Hitler's *Mein Kampf* (1925/1999) contains both an articulation of his worldview (Foxman, 1999) and a strategy for using it to achieve power. The book details policies regarding German unification, aggressive war, non-compromise, genocide, forced sterilization, censorship, rule by dictatorship, his own personal infallibility, "a highly bred racial stock" (Hitler, 1925/1999, p. 405), etc. But Aryan dominance was only half the agenda. He sought to exalt a worldview that he repeatedly refers to as the "philosophy of life" (e.g. pp. 380, 381, 384, 405, 443, 455). For instance, the stated purpose of government is creating and advancing "a community of physically and psychically homogenous creatures" (p. 393) with one "infallible" philosophy (p. 455). For Hitler, "This transformation of a general, philosophical, ideal conception of the highest truth [the philosophy of life] into a definitely delimited, tightly organized political community of faith and struggle, unified in spirit and will, is the most significant achievement, since on its happy solution alone the possibility of *the victory of an idea* depends" (p. 381, emphasis added). Therefore, where Weber applied *Weltanschauung* to socio-economics and Kuhn to the structure of scientific development, Hitler looked at power politics. His story offers two lessons. First, rather than asking followers to adopt a handful of party principles or a specific leader skilled in the art of compromise, he demanded total commitment to a comprehensive worldview. His success may indicate the utility of *Weltanschauung* as a

strategy for gaining power and, perhaps, serve as a warning for others, including the author, who have interest in the utility of worldview. Secondly, the existence of *Mein Kampf* (1925/1999) “denies the free world the excuse of ignorance,” and the lesson is vigilance (Foxman, p. xxii). We may be wise to give attention to specific content within stated worldviews whether we are considering a lodger, as Chesterton might say, or foreign leaders.

In this section, a complex story has been briefly outlined. *Weltanschauung*, the German concept of worldview, was initiated with Kant and Humboldt, expanded by Fichte, popularized by Hegel who applied it to art and the nation-state, equipped with a lens metaphor by Emerson, examined as *livsanskuelse* (life-view) by Kierkegaard, grudgingly accepted by Nietzsche, classified and historically situated by Dilthey, fought by Husserl, and established as a serious psychological construct by Jaspers. At this point in the middle of first half of the 20th century, an orientation towards worldview thinking is in some ways dominant and affecting the course of psychology, other academic disciplines, and perhaps even world history. In this context, the concept of schemas developed.

Schemas

Seven years after Jaspers published *Psychology of Worldviews* (1919), Piaget, whose lifelong goal was understanding the acquisition of knowledge, first used the term “schema” in *The Language and Thought of the Child* (1926). Previously, Piaget had studied the natural sciences and philosophy in Neuchatel, Zurich (under Carl Jung) and Paris (Jean Piaget, 2013). Bartlett notably developed the concept of schemas, and it remains an influential idea in psychology literature (Brewer, 2000).

Still, definitions of “schema” vary and sometimes contradict each other (van der Veer, 2000). Piaget (1926) originally defined schemas as a representative mental image that allowed one to understand how facts fit together or a mental pattern which prescribed action. Schemas can also be thought of as mental structures which allow us to easily process information (Brewer, 2000), “a data structure for representing the generic concepts stored in memory” (Rumelhart, 1980, p. 34), “detailed scripts used by humans to organize, interpret, simplify and understand information” (Nash, 2013, p. 15), or “mental representations of general categories of objects, events, or people” (Bernstein, Roy, Skrull, & Wickens, 1991, p. 321). The latter definition is the most relevant to the universal assessment discussion. UAs are “mental representations,” or “world pictures” as Jaspers (1919) would put it, of an object, and that object happens to be the entirety of existence. UAs are one important category of schemas (Reivich, 2013, February; Saltzberg-Levick, personal communication, June 13, 2013).

Schemas stand at the interplay between old knowledge and what is becoming known. For example, if I am narrating a conversation and note the setting as a Manhattan apartment, I access my audience’s schema of what this specific context entails, which may include a small, crowded space, with the possibility of street noise wafting through windows. The Manhattan apartment schema functions like all schemas in that it “enables the ability of individuals to develop an expectancy about what will occur” (Nash, 2013, p. 26).

As schemas, universal assessments generate expectancy. For example, if José believes that “the world is out to get me,” then José might organize new information in a way that connects with this paradigm, and he will likely find evidence within the universe’s enormous data set to support his schema. Like José’s life, a narration of the Manhattan apartment is now confined by the schema an audience holds in regard to Manhattan apartments. If my Manhattan

apartment narration then includes, let's say, a fierce bengal tiger suddenly springing from a bamboo thicket, this information will be difficult to process and the story will begin to lose its grip on an audience. Fantasy and science fiction writers like Tolkien, Jordan, Asimov, and Lewis intuitively understand how schemas matter. Fantasy author Penny Ehrenkranz (2001) writes:

Creating your fantasy world means building a world based upon reality and making sure that your reader knows the rules of that world. Your characters must remain true to those rules throughout your story. For your readers to accept and continue reading your story, they have to believe in your world and accept what is happening to your characters. (sec. 1.1-1.2)

In fiction, readers will not accept incongruence between old ideas and new information.

Typically, when new information does not fit the world as we think the world should be, we call it 'unrealistic,' like how some critics react to positively oriented art, and move on. As schemas, universal assessments suggest parameters of what is likely or even possible.

Many research studies have found that humans can, and often, reject information that does not fit a schema (Brewer, 2000). However, sometimes details that do not fit one's schema are more memorable. Bartlett observed this phenomena in the context of his pictorial experiments, in which he prompted individuals to redraw pictures (Brewer, 2000). In general, there was "a strong tendency to preserve apparently trivial or disconnected detail of a non-representative character or in a non-representative setting" (Bartlett, 1932, p. 185). Therefore, some details of our lives may stand out because they violate our UAs. The fearful person who sees the world as malevolent might be amazed by the unexpected kindness of a stranger. A soldier who affirms the world's goodness may be overwhelmed with the tragedies of combat. In

fact, Kaler (2009) asserts that a few UAs are so closely held that they are usually only questioned when confronted with “stimulus of seismic proportions” (Kaler, 2009, p. 2). Later in the paper, research on UAs will be discussed and identified as primarily oriented towards trauma. This is because trauma of all types are seismic stimuli which put pressure on assumptions about the world and can result in their abandonment (Janoff-Bulman, 1992). In some cases, trauma, which is always an exception to ‘normal life’ in some way, may be so memorable precisely because it does not fit one’s schema. Janoff-Bulman (1992) believes that trauma victims are not only healing physically and emotionally, but also healing as a result shattered schemas.

Schemas are not only used to process new information. They rewrite history through the active process of memory reconstruction. The second half of this section will address the relationship between schema and memory and why this relationship contributes to the discussion of UAs.

Memory is an important area of psychological research. In the past the old and pervasive “storehouse” metaphor dominated the discussion. In this metaphor, memories are placed in storage containers of some type and remembering involves a relatively simple process of retrieval (Wagoner, 2011). In the *Theaetetus* (360 B.C./n.d.), Plato describes *mneme* (memory) as a wax tablet on which humans inscribe memories. In *An Essay Concerning Human Understanding* (1690/2003), John Locke famously asserted that humans are born as a *tabula rasa* (blank slate), and our teacher (experience) inscribes it with our nature. Ebbinghaus (1885/1913) used the “storehouse” metaphor when he called for further study of memory. Today, human memory is often compared to computer memory. Danziger (2008) observes that the “storehouse” metaphor has commanded the Western understanding of memory for the last 250 years.

However, in the 20th century, schema models prompted psychologists to abandon the “storehouse” metaphor (Wagoner, 2011). Bartlett was the first. Instead of being a static storehouse, Bartlett thought that memory is best understood as an activity—remembering—which he called in many places an “effort after meaning” (1932). In this process, one is “striving to connect something given with something other than itself” (Bartlett, 1916, as cited by Wagoner, 2011). This theory of memory is called “construction.” Though I am not aware if Bartlett made this connection, his view of remembering has its roots in a second metaphor that Plato proposed in the *Theaetetus* (360 B.C./n.d.). In addition to a wax tablet, Plato compared a *mneme* (memory) to a bird in an aviary. Possessing knowledge somewhere in one’s head is, according to Plato, like having a bird somewhere in an aviary. The act of remembering, however, requires an energetic process of finding and grasping that bird with one’s hands. According to Bartlett (1932), this means piecing together memories from bits of information *and* how we think it should make sense based on our biases and schemas. Grabbing a *mneme* in an aviary, therefore, is a messy and active, but also adaptive, process.

“So-called ‘literal,’ or accurate, recall is an artificial construction of the armchair, or of the laboratory. Even if it could be secured, in the enormous majority of instances it would be biologically detrimental. Life is a continuous play of adaptation between changing response and varying environment. Only in relatively few cases—and those mostly the production of an elaborately guarded civilization—could the retention [of a memory] unchanged of the effects of experience be anything but a hindrance.” (Bartlett, 1932, p. 16)

Though Bartlett’s theory of memory construction is now generally accepted, the process is also maligned as a human sin because it leads to all sorts of memory errors (Bartlett, 1932; Hyman,

1999). Obviously, if remembering consists primarily of recreating events based on what we think is true of, for instance, Manhattan apartments, we will sometimes change what happened to fit our ideas. Much research has drawn attention to this ostensible deficit in memory (Wagoner, n.d.).

Fortunately, according to Barlett, the the part of a memory that matters is gist, which can be defined as an overall understanding of what transpired, and gist has enduring qualities (Hyman, 1999). People can lose many specific details of an event while retaining what was important about it. Bransford and Franks (1971), for instance, found through a number of experiments that memory construction altered details but “preserve[ed] the basic idea and in that sense can be seen as correct” (Hyman, 1999, p. 231). Across studies, the essence of a situation was considered more important than the details (Ost & Costall, 2002).

This discussion of how humans process old and new information by filtering through schemas reveals UAs as levers for profound personal transformation. UAs do not only build expectancy for information we encounter as we explore the real and fictional worlds of the future, they also transform how we construct our history. UAs matter, in other words, because of their reach across the lifespan in both directions. For instance, if Jillian were to change a UA from “the world is boring” to “the world is fascinating,” her life would theoretically change in two ways. First, she would approach all new experiences with the expectation that things will be interesting. Secondly, the process of remembering would construct memories more in line with her new schema. Past moments of boredom might be seen as tigers in Manhattan apartments—a bit unrealistic—and would tend to disappear from stories whose gist could be preserved without those details. In addition, having fewer memories containing moments of boredom and creating new experiences with the expectation of fascination may result in more moments of fascination

and the perception of more moments of fascination. This might propel the new UA “the world is interesting” into a positive feedback loop. In theory, therefore, assuming that some UAs are found to be more adaptive than others and that people attempt to optimize their UAs, some successful UA interventions might only require a limited initial time investment after which the UA could perpetuate itself, potentially encouraging adaptive behaviors across a lifetime.

Conceptualizing UAs

So far this paper has briefly defined UAs, explored the philosophical development of worldview, defined schemas, and noted the powerful role they play via generating expectancy. This section will discuss how UAs, worldview, and schemas fit together, what major beliefs may comprise a worldview, define the “universe” that UAs deal with, and identify four types of UAs. This section is oriented towards research considerations.

UAs, worldviews, and schemas are categories of beliefs, but how do they relate to each other? As can be seen in figure 1, schemas are the most inclusive. In addition to all beliefs that could add up to a worldview, including all UAs, schemas can concern everything from Manhattan apartments to art, bengal tigers to the *USS Enterprises*’ warp core engines. Potentially, humans can have schemas which develop expectancy around any object. Nash’s (2013) dissertation, for instance, examines schemas about technology and how to optimize software to fit human expectations of, for instance, what should be where on the computer screen. There are many schemas, they vary in importance, and many are not typically considered to be part of one’s worldview.

Worldviews are a subset of schemas. They include one’s values, perspective on life, the sweep of history, religious views, ethnic loyalties, attitudes and world picture (Jaspers, 1919),

concepts of determinism and freewill (Dilthey), and many other beliefs. Of particular importance is likely Kierkegaard's notion of *livsanskuelse* or "lifeview" and views regarding the nature of humanity. Trauma-specialist Janoff-Bulman (1992) believes that three basic views are at the core of each individual. They concern the self, others, and the world. However, sometimes in the literature "the world" is defined as the natural world that stands apart from human beings (the self and others), and sometimes "the world" is general and includes the self and others. For the sake of clarity, the author proposes distinguishing the two. The four core elements of worldview might involve beliefs concerning 1) the self, 2) other human beings, 3) the natural world, and 4) the universe as a whole. The purpose here is not to propose a new or comprehensive way of understanding worldview. Indeed, this is only a small departure from Janoff-Bulman (1992). Rather, divisions are made in order to highlight how and where UAs fit into worldview. UAs comprise the fourth category and are therefore a subset of beliefs related to worldviews, which are, in turn, a subset of schemas. These relationships are summarized by figure 1.

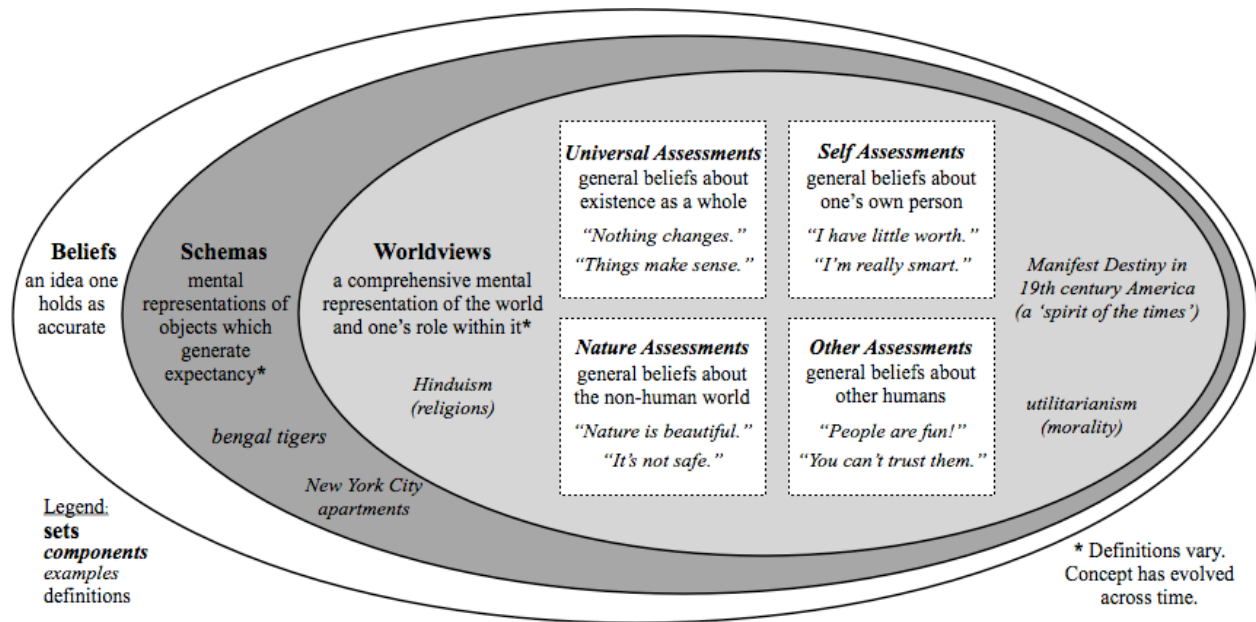


Figure 1. Locating universal assessments. This diagram categorizes belief types in order to visualize where UAs fit. Schemas are the largest subset; they consist of beliefs regarding any number of objects and object types, some of which can be composite. For example, a schema regarding New York City apartments might incorporate specific schemas about component parts, such as New York City bedrooms and balconies. Because *the world* is an exceptionally large composite object, worldview is a schema with a large number of sub-schemas regarding component parts, the four most important of which are assumed to be the self, other people, the natural world, and existence as a whole (UAs). Finally, please note that because worldviews are comprehensive, no complete examples can be provided. Nonetheless, religions, historical narratives, and moral philosophies are examples of traditions or voices that can at times effectively describe much of a worldview or its major components.

Which core beliefs are more important? Though the author will argue that UAs likely play an important role in human life, it is not clear if they are more or less important than other components of worldview. Kierkegaard, for instance, makes compelling arguments about the importance of life-view (McCarthy, 1978), and several studies have shown that various beliefs about the self play an important role (e.g. Maddux, 2009 regarding self-efficacy; Dweck, 2006 regarding intelligence). However, UAs may be more important because they generate expectancy for the self, others, and the natural world, and these core components of worldview not likely to influence each other without being mediated by a UA change. Still, UAs could be completely dependent on their component beliefs regarding the self, others, and nature. Like any encompassing object, a universe is never experienced; it is a wide country traversed via specific moments of time with certain local elements. The empirical research summarized in the next section indicates that UAs might be very influential, but all components of worldview need to be identified and studied before a hierarchy could emerge. Thus far, it seems that particular attention has been paid to beliefs concerning the self (e.g. Maddux, 2009 regarding self-efficacy; Dweck, 2006 regarding intelligence); less, but still substantial, attention has been given to beliefs about others; and likely the least amount of energy has been devoted to understanding beliefs about both the natural world and the universe as a whole.

What universes do UAs assess? UAs likely concern *subjectively-defined* and *UA-relevant* worlds. Universes are “subjectively-defined” because they include what the individual believes to exist or could exist. For example, for some individuals, their subjectively-defined worlds include spiritual beings like angels while for others, they do not. Additionally, different scopes of the universe matter for different UAs. This is what I mean by “UA-relevant.” For instance, “the universe is safe vs. dangerous” is a UA which mainly applies to the places in the

universe where humans live or travel. In the technical sense, the universe is overwhelmingly lethal because humans can only survive in a tiny portion. However, this universe is not relevant to the intention of the UA, which has more to do with experiences involving meeting strangers, going out of town, trying out snorkeling for the first time, trusting others, crossing a street, being emotionally vulnerable, or having a baby, etc. The universe that is relevant to these experiences may be quite physically small. Meanwhile, the UA “the universe is fascinating vs. boring” is likely much bigger in scope. Furthermore, just because a universe is subjectively-defined does not mean that the parameters of the universe are cognitively determined. Feelings may play a bigger role than thoughts. For instance, most healthy adults assent to the reality of outer space, but astrophysicists, NASA engineers, or dedicated Star Trek fans, may *feel* the reality of space to a greater degree than those who never think about it. Indeed, the world is simply too big to pay attention to everything. A general finding across positive psychology is that what we choose to focus on matters because of the role it plays in defining our reality and our experience of it (e.g. Csikszentmihalyi & Nakamura, 2010). Certainly, outer-space is no less real than paying taxes, but it may seem that way. Therefore, future UA research will need to take into account how universes vary based on UA-relevance, particular beliefs, and a sense of what’s real.

Though UAs are beliefs and beliefs can be changed (Reivich & Shatte, 2002), beliefs are not purely voluntary. Thus, UAs might not be easily changed, even in the context of external or internal pressure to adopt certain UAs. Attempting UA change through sheer will could be poor strategy. Instead, one might identify those aspects of the universe which support the desired UAs and design attention so that those aspects are increasingly felt to be real. One example is the Leaf Exercise (in Appendix D) which brings attention to the beauty of leaves, employs savoring techniques to internalize their reality, and then attempts to introduce the individual to

the sheer vastness of all leaves that exist. The Three Blessings Exercise, in which one purposely and consistently focuses on what is going right in life and gives thanks for it, is a similar exercise which has been shown to contribute to a number of desirable life outcomes such as increased wellbeing (Sheldon & Lyubomirsky, 2006; Emmons & McCollough, 2003; Froh, Sefick, & Emmons, 2008). Future research might study how benefits of this exercise might be mediated by UA change. More importantly, it might explore the possibilities for UA change through intentional universe redefinition.

Though this paper does not attempt to explore where UAs come from, how they arise, or how they are maintained—a task more appropriate for a later research stage—a general assumption must be noted. UAs may form via two general processes. In the first, one cognitively engages in rational decision-making based on data. This type of process is consistent with “rational choice theory,” which is the view that people are constantly attempting to seek accuracy and maximize utility. In the second option, UAs are formed by instinct, a feeling, or gut-level response to the universe. In various places, Haidt (2006) and Schwartz (2004) champion the role of our initial emotional response in opinion formation. Then, we “hire” our cognitive abilities as a lawyer and send it out to defend our intuitive judgements with rational arguments. This distinction has important implications. For instance, if UAs are formed by an initial emotional response, it may happen early in human development. Because of confirmation bias, the widely accepted human tendency to interpret evidence in ways partial to existing beliefs and expectations (Nickerson, 1998), an initial inkling from childhood may have repercussions that echo throughout a lifetime. Future research could explore when UAs form or harden in the course of human development. For the purposes of this paper, however, I adopt a middle course which assumes that UAs are partly calculated while intuitions weigh heavily. I expect that

nobody's calculus is sophisticated enough to capture the data set that is the entirety of existence. Additionally, inaccuracy may be a minor concern in UA formation. Even if we could calculate UAs, we might not care to do so.

This paper will often discuss utilitarian calculus for ease of expression. Future research, however, should consider the distinction between formation processes for a few reasons. For example, calculated UAs may rely more on a cognitively defined universe, and intuited UAs may rely more on the subjectively experienced reality. UA formation style, in other words, may moderate the effects of UAs and the opportunities for changing them.

Universal assessments are not simply any opinion one has about the universe. They must be *overall* judgements of what the universe is like. For example, the statement "the universe is good," can mean at least three different things. First, the *entire* universe is characterized by goodness and nothing is bad. Second, there is *some* unknown measure of goodness in the world. Third, the universe is mostly good in some way. The latter understanding is preferable. In a word, UAs are gist.

Clearly, there is vast suffering and pain in this world. Consider, approximately 870 million people in the world do not get enough food to eat (Food and Agriculture Organization of the United Nations, 2012), the debt of all national governments combined is a crushing \$51 trillion (The Economist, 2013), and recently the weather has been poor where I live.

At the same time, there are vast positive aspects of existence. I expect that there are billions of people for whom the weather has been good recently. Based on current worldwide population figures, one might note that approximately 6.2 billion people have enough food to eat (United States Census Bureau, 2013). Also, for every dollar of global governmental debt there are approximately 5.9 billion stars in the known universe (300 sextillion divided by 51 trillion;

van Dokkum & Conroy, 2010). Assuming that each star has some degree of beauty or worth, as these stanza's from *To the Stars* by 19th century American poet William B. Tappan suggest, their quantity might mean something.

*Fair stars! upon the brow of night
Ye look, from yonder fields of blue,
Where ye, 'mid melody of light,
Bright wheeling worlds! your way pursue.
Ye never tire, --pure diadems,
The marshaled sentinels on high,
Ye shine, and ever shine, the gems
That fringe the curtain of the sky. (Tappan, 1834, p. 14)*

Obviously, the universe is a huge data set with both immense positive and negative aspects. Most people would not be willing to deny the existence of one or the other. The differentiating question more likely speaks to proportion. What side is bigger, more weighty, or more numerous? At the heart of a UA is some sort of balance point. There is a threshold which must be achieved before a given aspect of an object becomes characteristic of that object. In forming UAs, therefore, we treat existence as a single thing and assess its defining qualities.

Universal assessments might be organized into four types. The first comes from Jaspers' (1919) notion of world pictures. These world pictures can be described by numerous adjectives such as beautiful, dangerous, constantly changing, fascinating, etc. One can call these statements "universal characteristic assessments" (UCAs) and use the formula "the world is (insert adjective here)." Presumably, no one has an identical world picture to anyone else, but, by describing world pictures with discrete UCAs, researchers can compare world pictures.

A second and third type of UA comes from Jaspers' (1919) notion of attitude, or general approach, which one can adopt towards the world. I call them "universal policy assessments" (UPAs). According to Merriam-Webster.com, a policy is "a high-level overall plan" or "a definite course or method of action selected from among alternatives and in light of given conditions to guide and determine present and future decisions." UPAs are based on the "given conditions" of the universe which are described by UCAs. However, UPAs take it one step further by turning description in prescription. They can fit the formula "the universe is best experienced by doing X." Though questions seeking information ("what is the world like?") may logically precede questions of utility ("what should I do with it?"), the latter may be more important. In addition to human policies towards the world (object-oriented UPAs), the universe might also be seen as having policies towards the self, others, or nature (subject-oriented UPAs). Examples include "the world is out to get me" and "Fat has destined me for greatness."

The fourth type of UA includes paradigmatic assessments which take into account everything one thinks or feels about the universe and articulates a synthesis judgement of quality. One might call these "universal meta-assessments" (UMAs). While UCAs and UPAs are specific and numerous, UMAs speak to a general quality, and there are only a handful. I have identified four, as follows: 1) Is the world good? 2) Is the world worthwhile? 3) Do *I* like it? 4) Do I say yes or no? The first is a paradigmatic UCA. The second is like a UCA, but speaks to a counterfactual. The third gauges emotional response. Finally, the fourth is a paradigmatic UPA concerning what Nietzsche (1886/1969) and Jaspers (1919) thought was the most general and important attitude one can adopt towards the universe: yes or no? What is one's overall attitude towards life? Of these four, "Do I like the universe?" may be causally primary. However, "Is

the world good?" may be the best way to summarize all of them as the other three questions require more constructs.

Assessing UMAs may be difficult. For instance, some people could feel inauthentic articulating an opinion at that level of abstraction. Also, Kantians and some religious populations may find personally liking irrelevant. The point is to do one's duty. However, UMAs may be the most influential type of UA. For example, consider spouses. Both an individual's spouse and the universe have immense bad and good dimensions. He or she can be enormously aggravating and gratifying. The question is, what is more defining? What is bigger, more weighty, or more numerous? It seems possible that views regarding overall characteristics of one's spouse, such as intelligence or beauty, are very important, but what is more important is an overall appreciation, such as "Is she good?" "Do I like him?" "Is she worthwhile?" and "Do I say 'yes' to him?" Indeed, such overall disposition may define the quality of the spousal relationship. Franiuk, Cohen, and Pomerantz (2002) found that seeing your partner as 'perfect' correlated with relationship health. Troll (1969) found several benefits tied to strong positive approval of one's spouse, including low interpersonal conflict. Thomas, Albrecht, and White (1984) observed that a major determinant of marital quality in dual-career couples was "positive regard for spouse" (p. 518), which is also one of nine major factors of marital happiness identified by Lewis and Spanier (1979). Overall regard for spouse is an example of an overall assessment that matters. Of course, this does not mean that all UAs matter, or that UMAs matter. Spouses are certainly not the same as universes. However, this example of the power of overall disposition suggests that UMAs are worthy of further investigation.

I have outlined four types of UAs, but for what purpose? Typologies tend to increase the temptation to become mired in the endless task of cataloguing. We must resist. UAs are often

composite constructs with constituent ideas that differ in type, so they cannot be cleanly classified. We could clean them up, but meaningfulness is often messy and composite. Some UCAs may be so inextricable from UPAs that they are practically the same thing while others may be simply better communicated in combination. Cataloguing should not be a priority. Rather, the primary utility of understanding the distinction between UCAs, object-oriented UPAs, subject-oriented UPAs, and UMAs is found in how they illuminate the scope of inquiry and provide a heuristic for further research. Types split up an otherwise enormous mass into searchable regions. The following question might be used as a snapshot: how many UAs have been studied and are we missing any major UCAs, object-oriented UPAs, subject-oriented UPAs, or UMAs?

Previously Researched UAs

Depending on how one counts, a total of three UA pairs have received substantial attention from researchers: is the world just/unjust, safe/unsafe (called “universal benevolence” which at times seems to include other elements such as intentionality), and meaningful/meaningless. This section will discuss these three UAs and the context within which they were identified and examined.

Belief in a just world (called BJW in the literature) is the universal assessment which holds that the universe is a place where people, in general, get what they deserve and deserve what they get. Lerner (1965) initially proposed the idea that people are generally motivated to believe that the world is just. Later, Lerner (1980) develops a widely cited theory that BJW allows for planning and long-term goals because people expect their lives to be orderly and controllable. This hypothesis was confirmed by several studies (e.g. Otto & Dalbert, 2005).

Lerner also hypothesized that high BJW promoted mental health, and BJW has been linked to several wellbeing indicators, such as increased positive affect (Dalbert, 1998) and optimism (Littrell & Beck, 1999). Those high in BJW are generally disposed to be less suspicious towards others (Furnham, 1995), cope better because they expect to be treated fairly (Tomaka & Blascovich, 1994), enjoy lower levels of depression (Ritter, Benson, & Snyder, 1990), are less lonely (Jones, Freemon, & Goswick, 1981), and behave with more kindness towards others even in times of stress (Zuckerman, 1975). They also make better and more satisfied employees as they are more likely to trust the organizations they work for and enjoy work more (Otto, Glaser, & Dalbert, 2009).

But BJW is also potentially destructive. If the world is a place where people get what they deserve, one will tend to blame victims for being victimized. Lerner and Miller (1978) hypothesized that the need to believe in a just world drives the process of 'blaming the victim.' Those high in BJW exhibit prejudice towards a number of groups, including unemployed persons (Reichle, Schneider, & Montada, 1998), refugees (Montada, 1998), those sick with AIDS (Connors & Heaven, 1990), the elderly (Lipkus & Siegler, 1993), and the poor (Furnham & Gunter, 1984). In particular, attention has been given to how "deservingness heuristics," affect attitudes towards welfare recipients; are they lazy or unlucky (Gilens, 1999; Van Oorschot 2000; Peterson, Slothuus, Stubager, & Togeby, 2011)? In addition, in the United States belief in an *unjust* world has been tied to support for preferential hiring practices (affirmative action) for African Americans and women (Wilkins & Wenger, n.d.).

In an effort to understand these positive and negative outcomes connected to BJW, Lipkus, Dalbert, and Siegler (1996) made a distinction between BJW-self (I feel I get what I deserve) and BJW-others (I feel others get what they deserve) and found only a modest

correlation between them. A number of studies confirm the independence of these forms of BJW, including Nudelman's (2013) meta-analysis. For example, Sutton and Douglas (2005) found that BJW-self is tied to psychological health and life satisfaction while BJW-others has no relationships to life-satisfaction while connecting to condemning attitudes towards the poor. The adaptiveness of BJW-self may explain why BJW-self scores are generally much higher than BJW-others scores (Bègue, 2002; Bègue & Bastounis, 2003).

In summary, there is a substantial amount of literature which points to an important role BJW plays in human life. For a review of research since 1980, see Furnham (2003). Though BJW researchers have shown clear interest in well-being and positive aspects of life, Nesbit, Blankenship, and Murray (2012) believe that the original construct was developed out of an interest in victimhood, blame, racism, and BJW's negative consequences in general. For example, Montada and Lerner edited an important book in the literature entitled *Responses to Victimization and Belief in a Just World* (1998), and Hafer (2000) explores the threat that innocent victims pose to the belief in a just world. However, "though much of the literature on BJW has focused on negative outcomes, there are some positive correlates as well" (Nesbit et al, 2012, p. 390). This is partly a function of the sheer quantity of research as well as BJW's robust relationship to a variety of life outcomes.

The other two UAs that have been studied are part of a separate research tradition on the "assumptive world" that has received notable attention in recent years (Janoff-Bulman, 1989, 1992; Kauffman, 2002; Kaler, 2009). The term was first used by Parkes (1971). Research into the assumptive world seeks to identify a "strongly held set of assumptions about the world and the self which is confidently maintained and used as a means of recognizing, planning, and acting" (Parkes, 1975, p. 132). UAs, therefore, are a subset of beliefs that comprise the

assumptive world. The other objects of belief in the assumptive world are the self and others as identified by Janoff-Bulman (1992). She believed that people cope by taking on three specific beliefs within this assumptive world, namely the universe is benevolent (or safe), the universe is meaningful, and the self is worthy. For example, Irwin (2003) found that supernatural beliefs aided believing that the world is benevolent and meaningful. Janoff-Bulman (1992) theorized that the assumptive world creates an “illusion of invulnerability” (p. 51) that most people live with most of the time. But events that reveal vulnerability change a benevolent (safe) and meaningful world to a sinister (unsafe) and meaningless one. Eventually, however, restoring positive views of universal meaning restores healthy mental function. Viktor Frankl (1963), a holocaust survivor, would likely agree with Janoff-Bulman’s (1999) emphasis on meaning (though perhaps not universal benevolence). Frankl saw meaning as an essential factor when coping with trauma.

Because basic world assumptions are cognitive schemas, and cognitive schemas often go unquestioned unless they interact with a traumatic event that forces a re-appraisal, research into basic world assumptions has focused on trauma and depression (Kaler, 2009). Janoff-Bulman is an experienced trauma specialist and was interested in the destruction that is unleashed when assumptions are shattered. Her work, including her important book on the assumptive world, *Shattered Assumptions* (1992), is focused on trauma. Related research has continued in this vein. For instance, in a dissertation entitled “Killing in Combat and Basic World Assumptions” (2208), McDonner uses Janoff-Bulman’s (1992) concept of the assumptive world to explore the traumatic effects of killing another human being. Matthews and Marwit (2004) found that parents with children who died as a result of homicides or accidents experienced more fracturing within their assumptive worlds than parents whose children died as a result of illness. World

assumptions predicted grief intensity where as the amount of time that had elapsed since the death did not. Wickie and Marwit's (2001) earlier research on the same topic indicated that compared to parents whose children died in accidents, parents of children who were murdered showed more negative views of universal benevolence. However, there was no difference in regards to universal meaningfulness. The role of the assumptive world has also been studied in physically disabled populations (e.g. Tedeschi & Calhoun, 1988). Assumptive world research focuses on populations struggling with significant loss and mitigating the affects of trauma (e.g. Harris, 2011). The author cannot find any example of the World Assumptions Scale being used separately from a study of trauma. However, though still focused on trauma victims, recent work on post-traumatic growth has received attention from researchers and is positive in its orientation (Janoff-Bulman, 2004). According to Tedeschi & Calhoun's (2004) summary of post-traumatic growth, many victims of trauma eventually experience benefits such as improved relationships, greater dynamism in their view of the future, higher self-efficacy, more zest for life, and greater spiritual development. This might be the result of altering "religious, spiritual, and existential components of philosophies of life (Tedeschi & Calhoun, 2004, p. 407).

Similarly negative in focus, Beck's (1967; 1979) cognitive theory of depression, which has been validated by several studies and continues to be seen as having explanatory power today, asserts that depression is primarily the result of the activation of a triad of beliefs that form a schema. This triad consists of negative views about the self, negative views about the world, and negative views about the future. This schema affects how one interprets information, potentially resulting in a series of cognitive errors, such as overgeneralizing the negative, magnifying the negative, and minimizing the positive. Beckham and colleagues (1986) developed the Cognitive Triad Inventory (CTI) according to Beck's theory. Items were phrased

both positively and negatively and individuals responded on a 7-point Likert scale. The CTI supposedly asks a number of questions regarding UAs, but, according to the copy of the CTI reproduced by Pössel (2009), of the thirty six statements the only one that clearly concerns a UA is “the world is a very hostile place” (p. 243). Two other statements may implicitly measure UAs regarding the universe’s future but only through the lens of the self (“the future holds a lot of excitement for me” and “there is nothing to look forward to in the years ahead” p. 243). This UA has already been studied in the context of the assumptive world.

Three important observations stand out from this review of existing research on UAs. First, only a handful of UAs, namely BJW, universal benevolence, and universal meaningfulness, have been seriously studied. Of course, depending on how one counts, a few more might be included or existing UAs could be split into component UAs. Still, we might ask, “how many UAs have been studied and are we missing any major UCAs, object-oriented UPAs, subject-oriented UPAs, or UMAs?” At this point, some categories have not yet been touched. Because so few UAs have been researched or identified, human life may be in part defined by a relationship that has been largely neglected, the one between the individual and the universe as a whole. However, some important strides have been made and progress can be based on them. For example, Kaler (2009) developed the “World Assumption Questionnaire” to measure “beliefs about the predictability of life events, beliefs about the controllability of the world, beliefs about the safety of the world, and beliefs about the nature of people” (Kaler, 2009, p. 13). Predictability and controllability relate to BJW, but some other UAs could be teased out of Kaler’s questionnaire and identified as having received some attention.

Secondly, empirical study indicates that all three of the UAs studied play an important role in human life. BJW is an especially striking example of the potential power of a UA. It is

possible and even likely, therefore, that UAs which have yet to be identified may play an important role in life as well. Also, the relationship which exists between BJW, BJW-self, and BJW-others reveals 1) the independence of worldview components according to Dilthey's view and 2) the primacy of UAs over other "lesser" beliefs. A metaphor may be useful. Rievich and Shatte (2002) describe schemas as "iceberg beliefs" because, though they look small, they have a huge effect 'under the water' of our consciousness by influencing other schemas. Confirming speculations in the previous section of this paper, the literature surrounding these three UAs points to the likelihood that UAs apply a bias that affects composite objects within the universe such as self and others. For these reasons, UAs may be a particularly important element within a worldview. Indeed, of Janoff-Bulman's (1992) three central assumptions that make up the assumptive world, two concern the universe, one concerns the self, and none relate to others or nature.

Third, so far UA research has been negatively oriented. All three UAs were identified and examined in the context of solving miseries. Populations most commonly studied were struggling with rape, murder, death, violence, depression, suicide or other serious problems. However, this is distinctly less typical of BJW research than assumptive world research.

The research on these three UAs is admirable and helpful in a variety of ways and for a number of deserving populations. The work on the assumptive world, for example, has helped many people who are struggling with trauma. However, the above observations indicate that 1) so far psychological research has failed deliver on the promise of the 19th, 20th, and 21st, century development of *Weltanschauung* and schemas and 2) it is possible that *most* of the important UAs which comprise a worldview have yet to be studied.

Looking at the world with only three UAs seems to leave unanswered many fundamental questions regarding the characteristics of one's world picture (UCAs), attitudes towards the universe (subject-oriented UPAs), the universe's attitudes towards the self (object-oriented UPAs), and ultimate dispositions towards the universe (UMAs). Even if one assumes that the three UAs which have been studied are the only UAs which play a major role in alleviating misery, we still have the question of which UAs help build the 'good life.'

The insight of positive psychology, the field of psychology concerned with the 'good life,' strengths, and positive emotions, is that a focus on treating disease looks fundamentally different than a focus on fostering health. Along these lines, we may ask which UAs are adaptive for non-traumatized populations and conducive to human flourishing. A systematic effort to identify a comprehensive list of important UAs which may contribute to the 'good life' has not yet been attempted. Yet, until these UAs have been articulated and studied, many of the intuitions which were expressed by Hegel, Dilthey, Husserl, Nietzsche, Emerson, Jaspers, Williams, Chesterton and others will be left largely unexamined.

The next section will discuss the new field of positive psychology in more detail. Particular attention is paid to how one might proceed in a search for UAs that could contribute to the 'good life.'

Positive Psychology

Since World War II, the overwhelming focus in psychology has been on disease, recognizing symptoms, and treatment (Seligman & Csikszentmihalyi, 2000). The primary goal was to help the mentally ill become functional, or, as Freud put it, transform "hysterical misery into common unhappiness" (Breuer & Freud, 1891/1955, p. 305). Recently however, especially

since Martin Seligman was president of the American Psychological Association in 1998 and called for its study, the field of positive psychology has grown rapidly (Rusk & Waters, 2013). Instead of focusing on disease, positive psychology seeks to identify the symptoms of strengths and behaviors that foster them. Instead of focusing on helping the mentally ill function, positive psychology seeks to help all people thrive. Indeed, even for the mentally ill, focusing on what is going right in life can be more effective than contemplating all the various causes of one's neuroses (Valiant, 2012, September).

Critical to the present purpose, positive psychology assumes that strengths and positive emotions are not merely the absence of the negative. For example, joy is not the result of a simple lack of sadness and hope is not the mere absence of fear. Rather, both the positive and the negative can be present in abundance, or both can be absent. Furthermore, each has a unique physiological signature and psychological effects that do not simply mirror each other. In other words, strengths and positive emotions deserve study in their own right because they have their own quality. This should mean, among other things, commensurate funding and attention from our institutions. Peterson and Seligman (2004) note that the National Institute of Mental Health might be called "The National Institute of Mental Illness" since only a small portion of its budget is devoted to researching positive emotions or strengths.

Traditionally, therefore, psychology has had little to say to functional people. The foundational psychological text has been the *Diagnostic and Statistics Manual for Mental Disorders* (1994), called the DSM, which is a catalogue of illnesses. It includes everything from eating disorders to schizophrenia. Readers are typically academics, health professionals, insurance companies, or the mentally ill. *Character, Strengths, and Virtues: A Handbook and Classification* (2004), otherwise known as the CSV, was developed by Peterson and Seligman as

a counterweight to the DSM. They, along with forty contributors and thirteen board members, all leading psychologists, created a classification of twenty-four strengths. For each strength, Peterson and Seligman include a consensual definition and what is known regarding theoretical traditions and measures, correlates and consequences, developmental factors, enabling and inhibiting factors and gender, cross-national, and cross-cultural aspects. Also included is a list of studied interventions, a discussion of what is not known, and suggested articles and books. In short, the CSV is intended as a “manual of the sanities” (Peterson & Seligman, 2004, p. 4).

Since the development of the CSV (2004), many studies have been done on the importance of strengths. In general, the more strengths one has, the stronger each is, and the more often they are used, the better (Seligman, 2011). Ruch and colleagues (2007) found that the higher score one achieves on all strengths in aggregate the more likely one is to have high life satisfaction. Being high in one strength does not mean one is low in another (Peterson & Seligman, 2004). Strengths are not zero-sum. In theory, therefore, causal factors such as UAs may exert a quantifiable influence that encourages or discourages the development of strengths in aggregate. This will hold even if causal factors create a mix of positive and negative effects.

Fredrickson is commonly seen as the foremost scholar on positive emotions (Seligman, 2011). She maintains that positive emotions are the single most important factor in a flourishing life (Fredrickson, 2009). Her “broaden and build” theory of positive emotions holds that positive emotions *broaden* perspective and the capacity for creativity and *build* personal emotional resources for future resilience (Fredrickson, 2009). In addition to just feeling good, positive emotions change our physiology, open us up to new possibilities altering our future, curtail negativity and its undesirable consequences, and can be increased (or decreased) through interventions. It is commonly understood that ‘good moods’ and ‘bad moods’ are self-

perpetuating. Fredrickson's work supports this intuition (e.g. Fredrickson et al, 2008; Fredrickson & Branigan, 2005; and especially Fredrickson & Losada, 2005). If so, staying positive may be, in part, a numbers game. Maintaining a threshold of 2.9 positive emotions to one negative emotion seems to allow for a virtuous cycle to take hold in the mind which has numerous positive effects across domains. (However, it should be noted that in recent months, this ratio, often called the "Losada Ratio," has been heavily criticized [Brown, Sokal, & Friedman, 2013].) Fredrickson (2012, September) argues that positive emotions are not just an indicator of well-being, they mediate behaviors and beliefs.

Positive psychology has shown great interest in worldview, especially in regards to beliefs concerning the self (e.g. Maddux, 2009; Dweck, 2006), while little attention has been spared for UAs. Still, there may be a strong underlying interest. As mentioned earlier, they have been classified as a type of "iceberg belief," which are schemas about how the world is and ought to be, and considered to be crucial for building resilience (Reivich & Shatte, 2002; Reivich, 2013, February). In some of Fredrickson's recent work, she and others examine how positive emotions may be in a causal relationship with BJW (Van Cappellen et al, n.d.) and mediate the relationship between BJW and the development of a strength (spirituality). Finally, in *Authentic Happiness* (2002), Martin Seligman summarizes his life's work as an attempt to understand the fourth UMA question. He joins Nietzsche (1886/1969) and Jaspers (1919) in emphasizing the prime importance of the "yes and no" distinction in creating a guiding policy towards life (UPA). He is discussing the importance of limiting the usage of the word "no" when caring for young children.

"In a commencement address to a Canadian girls' school, Robertson Davies asked, 'As you come up to accept your diploma, what is the word in your heart? Is it "no," or is it

“yes”?’ The last twenty years of my work are summed up by this question. I believe there is a word in your heart, and that this is not a sentimental fiction. I don’t really know where this word comes from, but one of my guesses is that it forms drop by drop from the words we hear from our parents. If your child hears an angry “no” at every turn, when she approaches a new situation she will be anticipating a “no,” with all the associated freezing and lack of mastery. If your child hears an abundance of “yes,” as E. E. Cummings sings: ‘yes is a world / & in this world of / yes live / (skillfully curled) / all worlds.’” (Seligman, 2002, p. 216)

“The word in one’s heart” is a powerful poetic summary of the universal meta-assessment. The draw towards UAs demonstrated by Seligman, Fredrickson, and Reivich suggest that positive psychologists have an underlying interest in UAs. The second half of this paper will conduct initial explorations of this opportunity through a positively-oriented, systematic attempt to identify UAs that matter.

Part II: Thirteen Universal Assessments

So far, this paper has revealed an opportunity for important future research on UAs but has not yet taken advantage of it. The section entitled “*Weltanschauung*” traced a story of the development of the construct of worldview in German philosophy. “Schema” identified the profound influence they exert through generating expectancy. “Conceptualizing Universal Assessments” situated UAs as a subset of worldview which is in turn a subset of schema, defined “universe,” and noted four types of UAs that may affect life outcomes. “Previously Researched Universal Assessments” discussed three UAs which have received serious attention. Each leads to a variety of life outcomes. However, three is too few and the research too oriented towards

struggling populations to represent a complete contribution to understanding the effects of worldview. Positive psychology provides a suggestion on how to proceed; instead of looking at which UAs are important in the context of tragedy or mental illness, we might look at which UAs are important in the context of the ‘good life.’ There are many theories about what constitutes the ‘good life.’ However, for the purposes of this paper, the ‘good life’ will be defined as 1) the development of strengths and 2) the presence of positive emotions. This definition is an admitted approximation, but it facilitates the goal of this paper, to identify UAs that might contribute to the ‘good life.’ The remainder of this paper, therefore, is an exercise in hypothesis generation.

An Exercise in Hypothesis Generation

What role do universal assessments play in forming strengths and positive emotions? Fredrickson (2009), provides a clue when she says that experiencing positive emotions or not “depends vitally on how you think. Positive emotions—like all emotions—arise from how you interpret events and ideas as they unfold.” (p. 49) How we interpret events depends in part on our expectations and the story we tell over the universe. But what are these UAs specifically and what do they tell us?

To answer this question, the author performed a conceptual analysis, considering possible causal connections between specific UAs and the 24 strengths in the CSV (Peterson and Seligman, 2004) as well as ten positive emotions identified by Fredrickson (2009). The goal was to identify UAs that may be conducive to the ‘good life’ which could serve as prime candidates for future research. An exhaustive list of UAs was not desirable. UAs and permutations of UAs that characterize word pictures or policies in the human mind are potentially as numerous as the

human population. Instead of trying to find them all, an attempt was made to capture those UAs likely to be the most important for the good life. To that end, the author employed eight criteria.

First, UAs had to show potential for causally contributing to the development of *multiple* strengths and positive emotions. Some UAs were dropped, for instance, because their perceived relevance did not extend beyond a handful of strengths or emotions. Second, weight was given to UAs that offered especially obvious and *strong* potential causal connections to specific strengths and positive emotions. In other words, a UA's causal relevance should have both breadth (the first criterion) and depth (the second criterion). Third, a preference was shown for general UAs. Unlike Peterson's and Seligman's (2004) work on a classification of strengths, the author did not seek what Rosch, Mervis, Gray, Johnson, and Boyes-Braem (1976) call a "natural" level of categorization, which is the balance between abstraction and specificity that allows for everyday utility. Instead, the author sought encompassing UAs that may or may not be broken down at later research stages. Similar UAs were often combined. For instance, included in the UA about safety is both physical safety and emotional safety. Fourth, UAs must be distinct from each other. They cannot be simply a combination or subcategory of other identified UAs. Fifth, UAs should be simple and understandable. Specialized or philosophical language was avoided whenever practicable and priority given to UAs that, in the opinion of the author, could be stated or understandable by everyday people. Sixth, some preference was shown for UAs that could open promising lines of research. For example, "the universe is intentional vs. mindless" might be the foundation for many subject-oriented UPAs (beliefs we have about the universe's policies towards the self, others, or nature). Seventh, UAs should have wide appeal. "Pet" UAs, those particular to small communities, were avoided. Finally, UAs had

to emerge directly from the process outlined below. For example, potentially rich external sources of UAs, such as religious or philosophical texts, were not consulted.

The analysis included six steps. First, an initial sweep of the strengths and positive emotions literature was conducted for language that the authors used that would indicate a UA connection. Oftentimes, UAs were clearly identified by the authors themselves. For instance, Fredrickson (2009) writes, “Deep within the core of hope is the belief that things can change” (p. 43). The statement “things can change” seems to concern an overall view and is schema-like in nature. Do individuals approach the universe expecting malleability or expecting fixedness? Thus, universal malleability emerges as an important area for UA research, with connections to the positive emotion of hope. Several UAs emerged from the analysis in this way, most of which had not surfaced in previous UA literature.

The second step involved an imaginative enterprise that was focused on strengths and positive emotions. It included reading the material, reflecting on definitions, reading vignettes, being immersed in the mindset of exemplars of each particular emotion or strength (e.g. role-playing), and forming hypotheses regarding what UAs this exemplar might hold. For instance, when considering the strength of love, which the CSV (Peterson & Seligman, 2004) defines as the ability and desire to be intimately connected with others, one can imagine a number of different types of intimate relationships and notice a commonality among them. Soldiers, for instance, who develop very intimate connections in a war theater—a highly adverse context—may be aided in their relationships by the belief that the universe is bad, which would serve as a driving force in reaching out to others. After all, misery loves company. Therefore, it was important to capture the UA “Is the world a miserable place or not?” and not only “Is the world a good or pleasurable place or not?”

While the first two steps involved collecting candidate UAs for further analysis, the third step involved taking that list of all the UAs identified thus far and analyzing them for conceptual coherence. The first two steps had generated approximately 30 UA statements. They took the form of yes/no questions, open-ended questions, fill-in the blank statements, poetic quotes, 'A/not-A' statements, categories of ideas, and opposite pairings of various types. In this stage, markedly similar UAs were combined and others were dropped as derivative of combinations of other UAs (the fourth criterion). For instance, "the world is out to get me" was deemed a combination of "the world is bad," "I am the center of the universe," and "the world is intentional." Other UAs were folded into each other through reframing or being paired as opposites. Others were abandoned because they did not promise to be relevant to strengths and positive emotions beyond the one from which it originally emerged (the first criterion).

A major concern in the third step was how to form UAs. Because the goal was UA identification and expression rather than creating an assessment tool, UAs were ultimately paired in non-standardized continuum opposites. [See Pawelski (2013) for a discussion of opposites.] This means that the thirteen UAs referred to throughout the paper are in fact twenty-six representative statements along thirteen continua. The continua are mutually exclusive, so any given individual would only have thirteen UAs or less, since one may not have an opinion. Many of the polar statements are not true contradictions, however. Thus all statements had to be cross-referenced individually with strengths and positive emotions. Finally, paired statements were meant to be expandable in order to capture degrees. For example, is the world on the whole very good, good, ok, evenly both, not great, bad, or very bad? The reader might notice that "bad" is not the same as "not-good." Thus, the UA may use either the "X vs. not-X" or the "X vs. Y" format because not all of the beliefs isolated had simple or meaningful contradictory

opposites. However, even though not all pairs were purely exclusive concepts, *they were paired in order to identify a continuum on which they are mutually exclusive*. Also, these continua capture the content of belief only. Certainty of belief or emotional involvement may have to be captured in future assessment tools as they may moderate the effects of a UA.

In the analysis, paired statements were identified as either “positive” or “negative.” In this context, these terms refer to the content of the belief itself rather than the possibility that the UA is adaptive. A statement was defined as positive or negative depending on whether the situation it described is a situation which most people would prefer on face value. For example, “the world is beautiful” is positive and “the world is ugly” is negative. However, this delineation was not equally meaningful or useful for all pairings. In some, neither painted a picture that was ostensibly preferable.

After the first two steps identified candidate UAs and the 3rd step scrutinized them, the fourth step examined the utility of those UAs in the context of developing each strength and positive emotion. For example, as mentioned above, universal malleability was identified as being important to hope in step one. Thus, in step four, the role that opposite UAs “the universe can change” and “the universe cannot change” might play in developing the other nine positive emotions and twenty-four strengths was considered. Possible causal connections through which UAs engender strengths and positive emotions emerged. *To qualify as connecting, at least one empirical study, salient idea, and/or theory had to indicate meaningful potential for causation*. Initially, an attempt was made to record the rationale and form hypotheses regarding the approximate power of the causal relationship (in line with the second criterion). Indeed, connections seem to vary from very strong to quite weak. However, this level of detail was abandoned as an overly speculative yet onerous way of capturing what ultimately amounts to the

intuitions of the author. The goal of cross-referencing the twenty-six statements with thirty-four strengths and positive emotions (884 relationships in total) was, after all, primarily to identify candidate UAs and not to assess relative importance, which can only be done through empirical research. However, in the expanded results discussion (Appendix A), examples are provided detailing ways in which each of the twenty-six UAs connect to strengths and positive emotions via salient theories and relevant studies.

The fifth step of analysis re-examined the literature for any missing, potentially critical UAs, in particular the three UAs that had received previous research attention in the context of misery alleviation. One UA pair had already emerged capturing belief regarding the universe as a safe place. Other aspects of universal benevolence were discarded or included in additional UA pairings such as “the world is intentional vs. mindless.” “The world is meaningful” and BJW, however, did not emerge from the initial analysis. Nevertheless, in light of the literature, their connections to the ‘good life’ were explored to determine if they should be included. Regarding universal meaningfulness, connections seemed somewhat few and weak, and this UA was abandoned. However, several of the most important elements of “the world is meaningful” had been captured by other UAs, such as “the world is interesting vs. the world is boring.” BJW was ultimately included in the list of thirteen final UA pairs because universal deservingness and undeservingness was seen to have the potential of interacting with strengths and positive emotions in a variety of ways previously unaccounted for.

Finally, an iterative process of reanalyzing steps three through five refined the list of UA pairs. Each time a change was considered to one of the twenty-six UAs, the statement was crosschecked with the thirty-four strengths and positive emotions to ensure this change did not alter connections previously identified.

Thirteen UA pairs emerged from this analysis along with hypotheses regarding hundreds of potential connections to various strengths and positive emotions. Before providing brief descriptions of these UA pairs and a discussion of insights gathered, a number of important limitations must be recognized. First, this is a speculative exercise based on the intuitions of the author. Second, as mentioned above, while quantifying potential causal connections between UAs and strengths and positive emotions, this analysis does not approximate their strength. Conceivably, a UA could connect with every strength and positive emotion without any connection being strong. Third, the analysis was specifically focused on causal connections in which UAs served to *strengthen* strengths and positive emotions, not discourage them. This is a considerable limitation. Hypothetically, a UA may encourage the development of 12 strengths and discourage the development of 12 strengths, but my analysis would only reveal the ways in which it was conducive. Fortunately, this risk is mitigated to an extent by examining the potential conduciveness of each UA's opposite. Despite these limitations, the analysis was a useful exercise in hypotheses generation—the first step in the scientific process. If the results are treated with appropriate skepticism, it succeeds in its aim of identifying candidate UAs for future research.

Thirteen UA Pairs Which May Affect the ‘Good Life’

This section briefly defines all thirteen UA pairs that were identified by the above analysis and then summarizes a few general observations. They are listed in no particular order. See Appendix A for more detailed discussion.¹

¹ Appendix A includes longer descriptions of each UA pair, illustrative quotes and comic strips, and each of the 434 causal connections hypothesized, noting those which seem especially strong and why. Additionally, Appendix A includes sections discussing a few psychological concepts of particular relevance including the negativity bias, appreciative intelligence, and optimism.

1. **The universe is good vs. the universe is bad.** What is one's overall disposition towards the world? It may be defined by how one thinks regarding 1) the worthwhileness of existence, 2) the overall moral valence of the world (its goodness), 3) if one likes the world at a gut-level. The UPA "yes or no" was not included.
2. **The universe is interesting vs. the universe is boring.** As one approaches new things, does one expect to find them fascinating, amusing, intriguing, eye-catching, intoxicating, gripping, meaningful, fun, surprising, dramatic, or engaging, or does one expect to be bored by monotony or meaninglessness? This UA pair involves attraction, but not necessarily goodness. One can find evil interesting (see comments on the "Tyranny of the Interesting" in Appendix A).
3. **The universe is beautiful vs. the universe is ugly.** This UA pair concerns aesthetics, but not necessarily attraction. Potentially, one can believe the universe to be characteristically beautiful without falling in love with it in the same way one can believe that Picasso's paintings are beautiful while still feeling they are not one's "cup of tea." However, in general, judgement of aesthetics seems likely to correlate with desire to engage.
4. **The universe can change vs. the universe cannot change.** Can individual or collective efforts bring real change? Is the universe dynamic and responsive or fixed in its trajectory? This UA pair relates to BJW, since in a just world effort should result in change, as well as pessimistic and optimistic styles of explaining adversity.
5. **The world is getting better vs. the world is getting worse.** This opposite is intended to capture beliefs about the world's story, especially regarding current trajectory and how one thinks the world will end. Endings matter (Rozin & Stellar,

2009; Kahneman & Wakker, 1997), stories matter (Tomasulo & Pawelski, 2012), and one's view of how 'all of this' ends may affect how one lives in the present.

6. **The universe is safe vs. the universe is dangerous.** In general, should a new thing be approached like a hungry grizzly bear in an Alaskan wilderness, or a cute puppy in a suburban backyard? This paired opposite not only refers to physical safety, but social and emotional safety as well. For instance, one danger can be failure to achieve one's goals. Having been previously researched, this UA pair may be one of the few which are highly relevant to both alleviating the 'miserable life' and building the 'good life.'
7. **The universe should be explored vs. the universe should be avoided.** This opposite is meant to capture what Dilthey called an "attitude" toward the world (Naugle, 2002) and is a clear example of an object-oriented UPA. Obviously, one cannot avoid the universe entirely. However, we can have a general policy towards the universe regarding how much we want to engage it. Does one believe that traipsing around is the best approach, or should life be more of an "indoor" sport? This opposite relates to UAs regarding safety, beauty, and interestingness. See Appendix A, for further speculations on ties to travel habits.
8. **The universe is comprehensible vs. the universe is incomprehensible.** Universal comprehensibility entails three component questions, as follows: 1) is the universe ultimately a rational place governed by reasons and causes, 2) can I personally understand the universe, and 3) regardless of understandability, is the universe more characterized by chaos or order? UAs affirming some types of incomprehensibility

- may be surprisingly conducive to the good-life because they instill an adaptive sense of mystery and wonder.
9. **I am not at the center of the universe vs. the world revolves around me.** These UAs may or may not concern moral selfishness, but rather with attention and the extent of one's universe. The process of human development can be characterized in part as the process of expanding one's world and displacing oneself from the center. How far along is one in that process or has one gone too far? To what extent does one overemphasize or underemphasize one's impact on or relevance to events? This may mean taking too much blame/credit for events or not taking enough.
 10. **The universe has intentionality vs. the universe is mindless.** Do things happen on purpose? Does the universe have a sense of humor, preferences, or anger issues? UAs concerning universal intentionality may be affected by religious views as well as belief in fate or destiny.
 11. **The universe is best experienced with others vs. the universe is best experienced alone.** Sarte (1946/1989) may assert that "hell is other people" but a belief that the world is best experienced alongside others may lead to more strengths and positive emotions than its opposite. Future research would have to explore UAs regarding which types of other people or communities make the best "adventure/bunker buddies."
 12. **The world is as it should be vs. the world needs change.** When we approach new things, do we expect that it is flawed and probably needs changing or that it has good reason for being the way it is and likely needs to be accepted. In addition to looking

at the ‘good life,’ future research on UAs related to this pair may be connected to political affiliation and the liberal/conservative divide.

13. **The world is just vs. the world is unjust.** This opposite pairing deals precisely with BJW, discussed above. Future research might explore the possibility that holding BJW-self may be important for strengths and positive emotions. BJW is also a model for how all the composite opposites might be best divided up into more discrete and measurable continua of belief.

Several UA pairs emerged through analysis of the ‘good life’ that have not in the context of depression or trauma. This includes the “the world is interesting vs. boring,” “the world is beautiful vs. ugly,” “the world is as it should be vs. needs change,” “the world is best experienced with others vs. alone,” “the world does not revolve around me vs. it does,” and “the universe should be explored vs. avoided.” Perhaps all of these may seem relatively unimportant in the face of rape, murder, suicidal thoughts, drug addiction, or major depression. Still, they may be key to the development of the ‘good life,’ and, like some other insights from positive psychologists that emerged from considering the ‘good life,’ perhaps they will prove useful for mitigating the ‘bad life’ as well.

Figure 2 summarizes the 434 connections identified between the thirteen UA pairs and thirty-four strengths and ten positive emotions. Taken together, positive UAs may encourage the development of strengths with 2.7 times as many connections between negative UAs and strengths. The UA with the most connections to strengths was “the universe is good,” which connected to every strength except prudence. The average number of connections to strengths per UA was 17.0. The two positive UAs with the fewest connections to strengths were “the universe is as it should be” (4) and “the universe is interesting” (9). It should be noted however,

that of the nine connections between “the universe is interesting” and strengths, several appeared to have the potential to be quite strong (e.g. the connection to curiosity and love of learning).

	Positive UA	# of connections to		Negative UA	# of connections to	
		Strengths	Emotions		Strengths	Emotions
1) The universe is	good	23	9	bad	11	5
2) The universe is	interesting	9	9	boring	1	0
3) The universe is	beautiful	19	8	ugly	4	0
4) The universe	can change	14	7	cannot change	5	1
5) The universe is	getting better	18	9	getting worse	8	3
6) The universe is	safe	21	10	dangerous	11	3
7) The universe should be	explored	17	10	avoided	7	1
8) The universe is	comprehensible	20	4	incomprehensible	7	4
9) I am...of the universe	not the center	20	6	at the center	6	3
10) The universe	has intentionality	20	10	is mindless	3	0
11) The universe is best experienced	with others	15	10	alone	3	1
12) The universe	is as it should be	4	5	needs change	11	6
13) The world is	just	21	5	unjust	5	2
Total Connections		221	102		82	29
Average # of connections per UA		17	7.8		6.3	2.3

Figure 2. The 434 connections between 26 UAs and 24 strengths and 10 positive emotions.

Most positive UAs were connected to nearly all positive emotions. Notable exceptions which connected to half or less than half of the positive emotions include “the universe is comprehensible,” “the universe is as it should be,” and “the world is just.” Positive UAs that were the most conducive to both strengths and positive emotions were “the universe is good” (23 and 9), and “the universe is safe” (21 and 10).

Negative UAs did not have as many connections to strengths or positive emotions. This leads me to expect that positive UAs are, in general, more conducive to the ‘good life’ than negative UAs. Some negative UAs were especially unhelpful in engendering the ‘good life.’ “The universe is boring” was strikingly unconnected. “The universe is mindless” and “the universe is best experienced alone” may also be particularly unhelpful at encouraging the ‘good life.’

However, though these results point to the possibility that positive UAs are more adaptive than negative UAs, some negative UAs have clear potential for providing benefits. “The world is bad,” “the world is getting worse,” “the world is dangerous,” “the world is incomprehensible,” and “the world needs change” are top candidates for negative UAs which may be adaptive. However, it is unlikely that they are more adaptive than their opposite. The one exception is “the world is as it should be vs. the world needs change.” If this analysis holds true, perhaps a general belief that things need to be different (the negative UA) drives the development of the ‘good life’ marginally more than believing things should stay the same (the positive UA).

UA pairs appeared important to strengths and emotions to wildly varying degrees. Accounting for part of this variation may be the fact that some strengths and positive emotions have more to do with other core elements of a worldview (self, others, and the natural world) than the universe as a whole. Humility and fairness, for example, seemed more related to self

assessments and assessments of humanity. However, every strength was connected to at least eight UAs (out of twenty-six). Indeed, some strengths and positive emotions seem obviously and even utterly dependent on some UAs. For example, a prerequisite for curiosity might be a powerful sense that “the world is interesting.” UAs might also play an especially important role in the development of hope and gratitude. With curiosity, these are three of the five strengths Park, Peterson, and Seligman (2004) identify as having a consistent and robust relationship to life satisfaction. If so, certain UAs might be tied to life satisfaction. The other two strengths, zest and love, did not appear as likely to be affected by these thirteen UA pairs.

Some UA opposites seemed to reinforce the same strength. For example, both “the world is bad” and “the world is good” might engender the emotion of gratitude through different causal mechanisms. If the world is good, then, because of confirmation bias (Nickerson, 1998) and schema-generated expectancy (Bartlett, 1932), one might tend to focus on and notice what is right about life which would reinforce gratitude. However, if the world is bad, then one might consider herself lucky to have what she has, especially if others are worse off, which would strengthen gratitude through a different causal mechanism, downward social comparison (Wills, 1981). Because UA opposites can activate different causal mechanisms, empirical research is needed to identify an overall effect that UAs have on various strengths and positive emotions. This seems likely to result in the vindication of the hypothesis that positive UAs are more adaptive than negative UAs because, though it was not quantified, connections between negative UAs and the ‘good life’ seemed generally weaker than connections between positive UAs and the ‘good life.’

Throughout the process, it became increasingly apparent that families of UAs may cluster forming profiles that describe substantial portions of the population. Worldview, after all, is a

system of beliefs that 'hang together' in a self-reinforcing way. Understanding, therefore, what those UA families are and how UAs support each other might be key for changing them—which UA is the first domino? The two families of UAs most easily identifiable as clusters may consist of the positive UAs and the negative UAs. However, others may emerge. For example, a mixed profile may include “the world is dangerous,” “the world should be avoided,” and the “the world is best experienced with others.” Through studying these profiles, future UA research may find that in addition to predicting behaviors and life outcomes, beliefs influence personality generally.

In summary, this analysis leads to the hypothesis that positive UAs are more conducive to the 'good life' than negative UAs. Additionally, UAs that are important for alleviating misery may not be the only UAs that impact life outcomes. Important exceptions, however, seem likely. Future research studying the adaptability of UAs should contain surprises.

Next Steps

The usefulness of this analysis will be determined by what comes next. The hope is that it serves as a springboard for further research. As mentioned earlier, UA research might ultimately seek to answer a series of nine empirical questions: What UAs do people hold? How are they held? Can UAs be tied to life outcomes? What is the nature of the causal relationship between UAs and life outcomes? Which UAs are most conducive to holistic human flourishing? Where do UAs come from? Can UAs change? Can we develop interventions? Can interventions be administered at scale? However, before these can be addressed, additional work is needed.

Researchers require a coherent and widely respected classification of UAs which are thoughtfully delineated from each other—a foundation. From this list, discrete UAs can be

selected and understood via independent research—building blocks. There are three critical stages that constitute a systematic effort to identify all the important UAs that may be important to the ‘good life.’

In stage one, the above thirteen UA pairs can be used to jumpstart a discussion of which UAs are conducive to the ‘good life.’ First, this will involve engaging a core group of scholars around the question of UAs and how to proceed. Several scholars are already being individually contacted and their input solicited regarding this list of thirteen UAs. They include Ronnie Janoff-Bulman, James Pawelski, Tayyab Rashid, Jonathan Haidt, Martin Seligman, Adam Potkay, Ellen Charry, Karen Reivich, Chris Stewart, Benjamin Lipscomb, Carlton Fisher, Ken Pargament, Shirley Mullen, Ron Oakerson, and others. This engagement may lead to the formation of a defined advisory group. This group would 1) identify leadership and resources, 2) prioritize academic areas in which to conduct literature reviews that would be relevant to UAs, such as psychology, philosophy, political science, anthropology, religious studies, and history, 3) agree on a tentative list of UAs to share broadly, 4) decide whether the goal should be identifying UAs specific to the ‘good life’ or life in general, 5) decide if the goal should be to develop a classification of UAs, a typology, or something else, and 6) provide general direction for future research.

Stage two will consist of engagement and research. The tentative list of UAs should be presented at conferences and widely shared with scholars all over the world. Input would be sought and independent research projects encouraged and engaged. At this point if not earlier, staff and funding would be required as a great amount of research and information gathering would be necessary. In addition to the literature review and engagement with scholars, a variety of sources identifying UAs would be sought out. A vast bank of “real-world” UAs would be

collected across time, cultures, and creeds. These would include Hallmark cards, pop music lyrics, literature of all types, movies, religious texts, political speeches, histories, and many more diverse sources.² Eventually, this real-world UA-bank would be grouped, analyzed, and distilled to a manageable list of appropriate granularity as defined by the core group of scholars. Potentially this list would be a classification that would provide a common language to facilitate future UA research. It would be published for peer review. In this way, independent researchers could select UAs from a comprehensive framework and build brick by brick towards an understanding of which worldviews are especially adaptive.

In stage three, in addition to independent research, the core group of scholars would triage this list of UAs and identify resources for future research. Assessment tools would be created and studies conducted.

However, assuming limited interest from the wider-community, a systematic effort to identify UAs that matter to the 'good life' might be postponed. If so, the five next steps are as follows:

14. Validate this list through a process of scholarly engagement to the extent possible.
15. Identify three UA pairs which seem to have likely emerged because of the context of the "good life" and are most likely to produce large effect sizes. I would suggest "the world is interesting vs. boring," "the world is good vs. bad," and "the world is as it should be vs. needs change."
16. Develop their definitions, conduct a literature review, triage, and select one.

² A few real-world UAs can be seen in Appendix A. For instance, many excellent expressions of UAs are found in the *Calvin & Hobbes* comic series by Bill Watterson.

17. Develop an assessment tool and conduct studies. Add the assessment tool to authentichappiness.org or some other website which would allow results to be correlated with many different life outcomes and variables.
18. Publish results for peer review, re-engage, and re-assess direction.

Summary & Conclusion

Look up, friend. The world is too beautiful for my eyes alone. — Anonymous

This paper has argued that overall beliefs about the universe matter. The concept of *Weltanschauung*, birthed by Kant and developed by Hegel, Dilthey and others, ultimately created a strong orientation in Europe towards the importance of worldview. Jaspers (1919) was a transitional figure who made worldview central in the psychological discussion. In this context psychologists, most notably Piaget and Bartlett, developed the notion of schema. Schemas play a powerful role in human life by generating expectancy that alters future decisions and what is remembered about the past. Universal assessments (UAs), which are beliefs about the entire universe, along with other beliefs regarding the self, other people, and the natural world, are a subset of worldview and thus also generate expectancy. The author suggests that UAs 1) concern universes that are subjectively-defined and UA-relevant, 2) are not entirely voluntary, and 3) might be divided into four types based on Jaspers' (1919) distinction between attitudes and world pictures. This typology can be used for assessing the progress of UA-research.

The author identified three UAs which have received serious attention from psychologists, namely belief in a just world, beliefs about safety, and beliefs about universal

meaningfulness, all of which influence a variety of life outcomes. This work, especially the BJW literature, demonstrate that UAs can and do matter. However, the author believes that three is too few, and entire categories of UAs remain unexplored. Also, because these UAs have been identified and researched with a heavy orientation towards struggling populations, there is a gap in the research; we do not know which UAs are conducive to the 'good life.'

Csikszentmihalyi (2009) often describes the field of positive psychology as inquiry with a "metaphysical orientation toward the positive." Strengths and positive emotions, for example, have their own qualities that do not simply mirror the qualities of weakness and negative emotions. By adopting a positive orientation, this paper provides a new lens with which to approach universal assessments.

At this point, the paper became an exercise in hypothesis generation. The goal was to identify a preliminary list of UAs that may be most conducive to the 'good life,' as defined by having well-developed strengths and high positive emotion. A preliminary analysis is conducted of thirty-four character strengths and positive emotions. The process involved 1) identifying UAs in the literature, 2) identifying UAs through imagination and immersion, 3) analyzing and sorting UAs for conceptual clarity, appropriate granularity, and meaningfulness, 4) identifying potential for causal connections between twenty-six preliminary UAs and thirty-four strengths and positive emotions, with over 884 relationships considered, 5) further literature review in the possibility of adding UAs overlooked in earlier steps, and 6) repeating steps three through five in an iterative process.

This analysis identified twenty-six UAs forming thirteen continuum opposites that may play a role in the 'good life. They concern beliefs on whether the universe is good or bad, beautiful or ugly, malleable or unchangeable, improving or declining, safe or dangerous, just or

unjust, comprehensible or incomprehensible, revolving around the subject or not, intentional or mindless, needing to be accepted or changed, needing to be explored or avoided, and best experienced with others or alone. In conclusion, positive UAs on the whole were seen as having more potential for being conducive to the ‘good life’ than negative UAs. As an example, “the universe is getting better” was identified as having potential to encourage twenty-seven strengths and positive emotions while “the universe is getting worse” was connected to eleven.

This analysis has serious limitations and is only useful as a means of generating hypotheses and not forming conclusions. The major limitations follow: 1) Though connections were usually formed in relation to some relevant empirical study, they rely on speculation and reflect the thinking of only one person. 2) The definition of the ‘good life’ may be incomplete. 3) While quantifying potential causal relationships between UAs and strengths and positive emotions, this analysis does not speak to the power of those relationships. Conceivably, UAs could connect with every strength and positive emotion without any large effect.

However, if treated with appropriate skepticism, this analysis is worthwhile as a point of departure for future research. In 1932, Freud gave a lecture on *Weltanschauung* in which he discussed the fierce disagreements between some philosophers, especially Husserl and Dilthey, regarding the modernist dream of a worldview based entirely in science. Freud (1932) ultimately dismisses this notion, declaring, “scientific thought is still in its infancy” (final paragraph). Eighty years later, psychologists may be right to remain skeptical. It is difficult to see how science can deliver a “true,” unassailable, and comprehensive worldview. However, science *can* develop an understanding of the effects of worldview. The proposed list of thirteen UA pairs can help catalyze that effort.

One of the key concepts in positive psychology is self-efficacy. A lack of self-efficacy can cause problems, such as depression, anxiety, and avoidance behavior, while strong self-efficacy can have many benefits including improved physical health. Maddux (2009) concretizes self-efficacy by pointing readers to the little engine that could and the power of his self-talk, “I think I can. I think I can. I think I can” (p. 335). Self-efficacy theory asserts that “thinking you can” in any given domain is one of the most powerful determinants of human behavior and flourishing. Without self-efficacy, we do not even try. If nothing else, I hope this paper has built self-efficacy (or collective efficacy) around what science can accomplish, not by proving that the world is good or interesting but by demonstrating that it may be adaptive to think so.

Finally, I suggest that beliefs may be a strategic lever for positive change. A great deal of new psychology research has identified dozens of beneficial behaviors, such as persistence (e.g. Duckworth et al, 2007), optimism (e.g. Carver et al, 2009), pro-social behaviors (e.g. Gable & Gosnell, 2011), pursuing more complex tasks and having fun (e.g. Csikszentmihalyi, 2009), as well as beneficial emotions Fredrickson (2009) and strengths (Peterson & Seligman, 2004). Understandably, this has resulted in a popular push to optimize behavior, develop strengths, and increase positive emotions as quickly as possible. But efforts may produce few results, or only short-term results, when self-regulated behavioral change fades and an underlying and unaddressed structure of causal factors re-asserts itself. In their work on cognitive behavioral therapy and rational emotive therapy which was designed to alleviate depression, Ellis (Ellis & Ellis, 2011) and Beck (Beck & Weishaar, 1989) argued that emotions and behaviors are driven by a puppet-master behind the scenes: beliefs. Positive psychology, therefore, might consider a focus on optimizing beliefs for building the good life (several are already doing this in various

ways, especially in regards to beliefs about the self), and UA-research may be a critical part of that. In concert with efforts to change how we act, we might give particular attention to changing how we think. What is our approach to the universe? As Seligman, Nietzsche, and Jaspers might ask, is it an attitude that says “yes” or “no”? Indeed, the power of that single word “is not a sentimental fiction” (Seligman, 2002, p. 216) but is perhaps “the most interesting and important thing about you” (James, 1910/2011, p. 9).

References

- American Psychiatric Association, & American Psychiatric Association. Task Force on DSM-IV. (1994). *Diagnostic and statistical manual of mental disorders: DSM-IV*. American Psychiatric Pub Inc.
- Bartlett, F.C. (1916). Transformations arising from repeated representation. *St. Johns Fellowship Dissertation*.
- Bartlett, F.C. (1932). *Remembering: A study in experimental and social psychology*. Cambridge: Cambridge University Press.
- Barton, Y. A., Miller, L., Wickramaratne, P., Gameroff, M. J., & Weissman, M. M. (2013). Religious attendance and social adjustment as protective against depression: A 10-year prospective study. *Journal of Affective Disorders, 146*(1), 53-57.
doi:<http://dx.doi.org/10.1016/j.jad.2012.08.037>
- Baumeister, R. F. (1997). *Evil: Inside human cruelty and violence*. New York: W. H. Freeman.
- Baumeister, R. F., & Alquist, J. L. (2009). Self-regulation as a limited resource: Strength model of control and depletion. *Psychology of self-regulation: Cognitive, affective, and motivational processes*, 21-33.
- Baumeister, R. F., Bratslavsky, E., Finkenauer, C., & Vohs, K. D. (2001). *Bad is stronger than good*. *Review of General Psychology, 5*(4), 323-370. doi:<http://dx.doi.org/10.1037/1089-2680.5.4.323>
- Beck, A. T., & Weishaar, M. E. (1989). Cognitive therapy. In *Current Psychotherapies* (4th ed.) (pp. 285-320) Itasca, IL: F. E. Peacock Publishers. Retrieved from <http://search.proquest.com/docview/617669796?accountid=14707>

- Beckham, E. E., Leber, W. R., Watkins, J. T., Boyer, J. L., & Cook, J. B. (1986). Development of an instrument to measure Beck's cognitive triad: The cognitive triad inventory. *Journal of Consulting and Clinical Psychology, 54*(4), 566-567.
doi:<http://dx.doi.org/10.1037/0022-006X.54.4.566>
- Bègue, L. (2002). Beliefs in justice and faith in people: Just world, religiosity, and interpersonal trust. *Personality and Individual Differences, 32*(3), 375-382.
doi:[http://dx.doi.org/10.1016/S0191-8869\(00\)00224-5](http://dx.doi.org/10.1016/S0191-8869(00)00224-5)
- Bègue, L., & Bastounis, M. (2003). Two spheres of belief in justice: Extensive support for the bidimensional model of belief in a just world. *Journal of Personality, 71*(3), 435-463.
doi:<http://dx.doi.org/10.1111/1467-6494.7103007>
- Benson, P., & Spilka, B. (1973). God image as a function of self-esteem and locus of control. *Journal for the Scientific Study of Religion, 12*(3), 297-310. Retrieved from <http://search.proquest.com/docview/615915594?accountid=14707>
- Bermant, G. (2012, October). Buddhism. *MAPP Onsite #2*. Lecture conducted from the University of Pennsylvania, Philadelphia, PA.
- Bernstein, D. A., Roy, E., Skrull, T. K., & Wickens, C. D. (1991). *Psychology*. Boston: Houghton Mifflin Company.
- Biswas-Diener, R., & Diener, E. (2001). Making the best of a bad situation: Satisfaction in the slums of Calcutta. *Social Indicators Research, 5*, 329-352.
- Bloom, P. (2009). What is it like to be a baby: The development of thought (lecture 3). *Open Yale Courses*. Retrieved from iTunes U.
- Bransford, J.D., & Franks, J.J. (1971). The abstraction of linguistic ideas. *Cognitive Psychology, 2*, 331-350.

- Brewer, W. F. (2000). Bartlett's concept of the schema and its impact on theories of knowledge representation in contemporary cognitive psychology.. In A. Saito (Ed.) *Bartlett, Culture and Cognition*. (pp. 69-89). Hove, England. Psychology Press. Retrieved from <http://search.proquest.com/docview/619493121?accountid=14707>
- Breuer, J. & Freud, S. (1955). Studies on hysteria. *A philosophical essay on probabilities*. (J. Strachey, Trans.). New York, NY: Basic Books. (Original work published 1891).
- Brown, N. J. L., Sokal, A. D., & Friedman, H. L. (2013). The complex dynamics of wishful thinking: The critical positivity ratio. *American Psychologist*. Advance online publication. doi:<http://dx.doi.org/10.1037/a0032850>
- Carifio, J., & Nasser, R. (2012). Belief in a just world and depression in elderly nursing home residents. *Work: Journal of Prevention, Assessment & Rehabilitation*, 43(3), 303-312. Retrieved from <http://search.proquest.com/docview/1220366016?accountid=14707>
- Carver, C. S., Scheier, M. F., Miller, C. J., & Fulford, D. (2009). Optimism. In S. J. Lopez & C. R. Snyder (Eds.), *Oxford handbook of positive psychology* (pp. 303-311). New York, NY: Oxford University Press, Inc.
- Cather, W. (2010). "Neighbor Rosicky." In *Obscure destinies* (pp. 1-38). Oxford, UK: Oxford City Press. (Original work published in 1932).
- Cheney, D. L., & Seyfarth, R. M. (2012). *The evolution of a cooperative social mind*. New York: Oxford University Press, New York, NY.
- Chesterton, G. K. (2007). *Heretics*. Radford, Virginia: Wilder Publications. (Originally published in 1905)

- Christakis, N. (2004). Beliefs and motorcycling. *Psychology: The Journal of the Hellenic Psychological Society*, 11(1), 53-64. Retrieved from <http://search.proquest.com/docview/620685688?accountid=14707>
- Clifton, J. D. W. (n.d.). *Therefore joy: A positive theology for the next generation*. Unpublished manuscript.
- Cohen, B., Jinks, D. (Producers), & Mendes, S. (Director). (1999). American beauty [Motion picture]. United States: DreamWorks Pictures. Retrieved from <http://www.imdb.com/character/ch0002024/quotes>
- Connors, J., & Heaven, P. C. L. (1990). Belief in a just world and attitude toward AIDS sufferers. *Journal of Social Psychology*, 130(4), 559. Retrieved from <http://search.proquest.com/docview/1290731515?accountid=14707>
- Cooperrider, D. L., Whitney, D., & Stavros, J. M., (2008). *Appreciative inquiry handbook: For leaders of change*. Brunswick, OH: Crown Custom Publishing, Inc.
- Csikszentmihalyi, M. (2009). *Creativity: Flow and the Psychology of Discovery and Invention*. New York: HarperCollins.
- Csikszentmihalyi, M., & Nakamura, J. (2010). Effortless attention in everyday life: A systematic phenomenology. In B. Bruya (Ed.), *Effortless attention: A new perspective in the cognitive science of attention and action* (pp. 179-189). Cambridge, MA: MIT Press. Retrieved from <http://search.proquest.com/docview/754033381?accountid=14707>
- Dalbert, C. (1998). Belief in a just world, well-being, and coping with an unjust fate. In L. Montada & M.J. Lerner (Eds.), *Responses to victimizations and belief in a just world* (pp. 87-105) New York: Plenum Press. Retrieved from <http://search.proquest.com/docview/619348172?accountid=14707>

- Daniels, J. P., & von, d. R. (2010). Trust in others: Does religion matter? *Review of Social Economy*, 68(2), 163-186. doi:<http://dx.doi.org/10.1080/00346760902968447>
- Danziger, K. (2008). *Marking the mind: A history of memory*. Cambridge: Cambridge University Press.
- Davenport, D. S. (1991). The functions of anger and forgiveness: Guidelines for psychotherapy with victims. *Psychotherapy: Theory, Research, Practice, Training*, 28(1), 140-144. doi:<http://dx.doi.org/10.1037/0033-3204.28.1.140>
- Day, L., & Maltby, J. (2003). Belief in good luck and psychological well-being: The mediating role of optimism and irrational beliefs. *Journal of Psychology: Interdisciplinary and Applied*, 137(1), 99-110. doi:<http://dx.doi.org/10.1080/00223980309600602>
- Dostoevsky, M. D. (1981). *The brothers Karamazov*. (A. R. MacAndrew Trans.) New York: Bantum Books. (Original work published in 1880).
- Duckworth, A. L., Peterson, C., Matthews, M. D., & Kelly, D. R. (2007). Grit: Perseverance and passion for long-term goals. *Journal of Personality and Social Psychology*, 92(6), 1087-1101. doi:<http://dx.doi.org/10.1037/0022-3514.92.6.1087>
- Dunbar, R. (1996). *Grooming, gossip, and the evolution of language*. Cambridge, MA: Harvard University Press.
- Dweck, C. S. (2006). *Mindset: The new psychology of success* Random House, New York, NY. Retrieved from <http://search.proquest.com/docview/621347768?accountid=14707>
- Ebbinghaus, H. (1885/1913). *Memory: A contribution to experimental psychology*. New York, Dover.
- The Economist. (2013). [the global debt clock June 17, 2013]. World debt comparison. Retrieved from http://www.economist.com/content/global_debt_clock

- Ehrenkranz, P. (2001). Creating a realistic fantasy world. *Writing-World*. Retrieved from <http://www.writing-world.com/sf/world.shtml>
- Einstein, A. (1952, March 11). Letter to Carl Seelig. Retrieved from <http://einstein.biz/quotes.php>
- Ellis, A., & Ellis, D. J. (2011). *Rational emotive behavior therapy* American Psychological Association, Washington, DC. Retrieved from <http://search.proquest.com/docview/851235581?accountid=14707>
- Emmons, R. A., & McCullough, M. E. (2003). Counting blessings versus burdens: An experimental investigation of gratitude and subjective well-being in daily life. *Journal of Personality and Social Psychology*, 84(2), 377-389. doi:<http://dx.doi.org/10.1037/0022-3514.84.2.377>
- Emerson, R. W. (1949). *Selected Essays*. Chicago: People book Club. (Original work published in 1844).
- Ermath, M. (1978). *Wilhelm Dilthey: The critique of historical reason*. Chicago: Chicago University Press.
- Fichte, J. G. (1978). *Attempt at a Critique of all revelation*. (G. Green, Trans.). Cambridge: Cambridge University Press.
- Food and Agriculture Organization of the United Nations. (2012). *The state of food insecurity in the world*. Rome: United Nations. ISBN 978-92-5-107316-2. Retrieved from <http://www.fao.org/docrep/016/i3027e/i3027e00.htm>
- Foxman, A. (1999). Introduction to *Mein kampf*. Boston, MA: Houghton Mifflin.
- Frankl, V. E. (1963). *Man's search for meaning: An introduction to logotherapy*. New York: Beacon Press.

- Frankfurt, H. G. (2005). *On bullshit*. Princeton, NJ: Princeton University Press.
- Franiuk, R., Cohen, D., & Pomerantz, E. M. (2002). Implicit theories of relationships: Implications for relationship satisfaction and longevity. *Personal Relationships, 9*(4), 345-367.
- Fredrickson, B. L. (2009). *Positivity: Groundbreaking research reveals how to embrace the hidden strength of positive emotions, overcome negativity, and thrive*. New York: Crown Publishers/Random House.
- Fredrickson, B. L. (2012, September). Positive Emotions. *MAPP immersion week*. Lecture conduction from the University of Pennsylvania, Philadelphia, PA.
- Fredrickson, B. L., & Branigan, C. A. (2005). Positive emotions broaden the scope of attention and thought–action repertoires. *Cognition and Emotion, 19*, 313–332.
- Fredrickson, B. L., & Losada, M. F. (2005). Positive affect and the complex dynamics of human flourishing. *American Psychologist, 60*(7), 678-686.
- Fredrickson, B. L., Cohn, M. A., Coffey, K. A., Pek, J., & Finkel, S. M. (2008). Open hearts build lives: Positive emotions, induced through loving-kindness meditation, build consequential personal resources. *Journal of Personality and Social Psychology, 95*(5), 1045-1062. doi:<http://dx.doi.org/10.1037/a0013262>
- Freud, S. (1989). Lecture XXXV: The question of a Weltanschauung. In P. Gay (Ed.), *The Freud Reader* (pp.783–797). New York: W.W. Norton. (Original work published 1934).
- Froh, J. J., Sefick, W. J., & Emmons, R. A. (2008). Counting blessings in early adolescents: An experimental study of gratitude and subjective well-being. *Journal of School Psychology, 46*(2), 213-233. doi:<http://dx.doi.org/10.1016/j.jsp.2007.03.005>

- Furnham, A. (1995). The just world, charitable giving, and attitudes to disability. *Personality and Individual Differences*, 19, 577–583.
- Furnham, A. (2003). Belief in a just world: Research progress over the past decade. *Personality and Individual Differences*, 34, 795–817.
- Furnham, A., & Gunter, B. (1984). Just world beliefs and attitudes towards the poor. *British Journal of Social Psychology*, 23, 265-269. Retrieved from <http://search.proquest.com/docview/1036441737?accountid=14707>
- Gable, S. L., Gonzaga, G. C., & Strachman, A. (2006). Will you be there for me when things go right? Supportive responses to positive event disclosures. *Journal of Personality and Social Psychology*, 91(5), 904-917.
- Gable, S. L. & Gosnell, C. L. (2011). The positive side of close relationships. In K. M. Sheldon, T. B. Kashdan and M. F. Steger (Eds.) *Designing positive psychology: Taking stock and moving forward* (pp. 265 – 279).
- Gable, S. L., Reis, H. T., Impett, E. A., & Asher, E. R. (2004). What do you do when things go right? The intrapersonal and interpersonal benefits of sharing positive events. *Journal of Personality and Social Psychology*, 87(2), 228-245. doi: <http://dx.doi.org/10.1037/0022-3514.87.2.228>
- Geisler, F. C. M., & Weber, H. (2010). Harm that does not hurt: Humour in coping with self-threat. *Motivation and Emotion*, 34(4), 446-456. doi:<http://dx.doi.org/10.1007/s11031-010-9185-6>
- Gilens, M. (2009). *Why Americans hate welfare: Race, media, and the politics of antipoverty policy*. Chicago: University of Chicago Press.

- Green, G. P., & Goetting, A. (2010). *Mobilizing communities: Asset building as community development strategy*. New York: Temple University Press.
- Hafer, C. L. (2000). Do innocent victims threaten the belief in a just world? Evidence from a modified Stroop task. *Journal of personality and social psychology*, 79(2), 165.
- Haidt, J. (2006). *The happiness hypothesis: Finding modern truth in ancient wisdom*. New York: Basic Books.
- Harris, D. L. (2011). Meaning making and the assumptive world in non-death loss. In D. L. Harris (Ed.) *Counting our losses: Reflecting on change, loss, and transition in everyday life*, 239-246. New York: Routledge.
- Harvey, M., Novicevic, M., Leonard, N., & Payne, D. (2007). The role of curiosity in global managers' decision-making. *Journal of Leadership & Organizational Studies*, 13(3), 43-58. Retrieved from <http://search.proquest.com/docview/203134375?accountid=14707>
- Hegel, G. W. F. (1975). *Aesthetics: Lectures on fine art*. (T. M. Knox, Trans.). Oxford: Clarendon Press. (First of the original lectures were given in Heidelberg in 1818).
- Heidegger, M. (1919). Anmerkungen zu Karl Jaspers' Psychologie der Weltanschauungen. *Recensión redactada entre los años 1-44*.
- Hejmadi, A., Rozin, P., & Siegal, M. (2004). Once in contact, always in contact: Contagious essence and conceptions of purification in american and hindu indian children. *Developmental Psychology*, 40(4), 467-476. doi:<http://dx.doi.org/10.1037/0012-1649.40.4.467>
- Hitler, A. (1999). *Mein kampf*. (R. Manheim, Trans.). Boston, MA: Houghton Mifflin. (Original work published in 1925).
- Holmes, A. (1967). Phenomenology and the relativity of world-views. *Personalist* 48, p. 335.

- Husserl, E. (1970). *The crisis of European sciences and transcendental phenomenology: an introduction to phenomenological philosophy*. (D. Carr, Trans.). Evanston, Illinois: Northwestern University Press. (Original work published in 1936).
- Husserl, E. (1981). Philosophy as rigorous science. In P. McCormick & F. A. Elliston (Eds.) *Husserl: Shorter Works*. Notre Dame, Indiana: University of Notre Dame Press. (Original work published in 1910).
- Hyman, I. E. Jr. (1999). Creating false autobiographical memories: Why people believe their memory errors. In E. Winograd, R. Fivush and W. Hirst (Eds.), *Ecological approaches to cognition: Essays in honor of Ulric Neisser* (pp. 229-252). Mahwah, NJ: Lawrence Erlbaum.
- International Fund for Agricultural Development. (2011). *Rural poverty report 2011*. Rome, Italy. Retrieved from <http://www.ifad.org/rpr2011/>
- Irwin, H. J. (2003). Paranormal beliefs and the maintenance of assumptive world views. *Journal of the Society for Psychical Research*, 67(870), 18-25. Retrieved from <http://search.proquest.com/docview/619995779?accountid=14707>
- James, W. (1967). The moral equivalent of war. In J. J. McDermott (Ed.), *The writings of William James* (pp. 660-671). New York: Random House.
- James, W. (2011). *Pragmatism: A new name for some old ways of thinking*. London: Watchmaker Publishing. (Original work published in 1919).
- James, W. (2011). *The will to believe and other essays*. London: Watchmaker Publishing. (Original work published in 1896).
- Janoff-Bulman, R. (1992). *Shattered assumptions: Towards a new psychology of trauma*. New York: Free Press.

- Janoff-Bulman, R. (2004). Posttraumatic growth: Three explanatory models. *Psychological Inquiry, 15*(1), 30-34.
- Jaspers, K. (1919). *Psychologie der weltanschauungen*. Berlin, Germany: Verlag von Julius Springer.
- Jaspers, K. (1957) Philosophical autobiography. In P. A. Schilpp (Ed.) *The philosophy of Karl Jaspers* (pp. 3-94). New York: Tudor Publishing Company.
- Jean Piaget. (2013). The Biography Channel website. Retrieved from <http://www.biography.com/people/jean-piaget-9439915>.
- Joffe, C. H. (Producer), & Allen, W. (Director). (1977). *Annie Hall* [Motion picture]. United States: United Artists. Quote retrieved from <http://www.imdb.com/character/ch0007846/quotes>
- Johnson-Laird, P. (1983). *Mental models: Towards a cognitive science of language, inference, and consciousness*. Cambridge, MA: Harvard University Press.
- Jones, W. H., Freemon, J. E., & Goswick, R. A. (1981). The persistence of loneliness: Self and other determinants. *Journal of Personality, 49*(1), 27. Retrieved from <http://search.proquest.com/docview/1296635299?accountid=14707>
- Jung, C. G. (1998). Psychological types. In C. L. Cooper & L. A. Pervin (Eds.), *Personality: Critical concepts in psychology* (pp. 28-39). New York: Routledge. (Original work published in 1928).
- Kahneman, D. (2003). A perspective on judgment and choice. *American Psychologist, 58*, 697-720.
- Kaler, M. E. (2009). The world assumptions questionnaire: Development of a measure of the assumptive world. (Order No. 3371864, University of Minnesota). *ProQuest*

- Dissertations and Theses*, 123. Retrieved from
<http://search.proquest.com/docview/304937853?accountid=14707>
- Kant, I. (1987). *Critique of judgement: Including the first introduction*. (W. S. Pluhar, Trans.). Indianapolis: Hackett. (Original work published in 1790).
- Kaufmann, W. (1957) Jaspers' relation to Nietzsche. In P. A. Schilpp (Ed.) *The philosophy of Karl Jaspers* (pp. 407-436). New York: Tudor Publishing Company.
- Kelly, W. E. (2002). An investigation of worry and sense of humor. *The Journal of Psychology*, 136(6), 657-66. Retrieved from
<http://search.proquest.com/docview/213833630?accountid=14707>
- Kelman, H. C. (1988). Nationalism, national sentiment, and international conflict. *Workshop on Nationalism and International Conflict*. Washington, DC: National Academy of Sciences.
- Kierstead, R. (2011). Herodotus and the invention of history. *Reed Magazine*, 90(3). Retrieved from
http://www.reed.edu/reed_magazine/september2011/articles/features/classiclecture/classiclecture3.html
- Krieglmeyer, R., Deutsch, R., De Houwer, J., & De Raedt, R. (2010). Being moved: Valence activates approach-avoidance behavior independently of evaluation and approach-avoidance intentions. *Psychological Science*, 21(4), 607-613.
doi:<http://dx.doi.org/10.1177/0956797610365131>
- Kuhn, T. S. (1996). *The structure of scientific revolutions* (3rd ed.). Chicago, IL: University of Chicago Press. (Original work published in 1962).

- Lane, K. A. (n.d.) The web of social preferences: Insights into implicit ethnocentrism. (Order No. AAI3245160) *Dissertation Abstracts International: Section B: The Sciences and Engineering*, 7428. Retrieved from <http://search.proquest.com/docview/622019871?accountid=14707>.
- Langston, C. A. (1994). Capitalizing on and coping with daily-life events: Expressive responses to positive events. *Journal of Personality and Social Psychology*, 67(6), 1112-1125. doi: <http://dx.doi.org/10.1037/0022-3514.67.6.1112>
- Lench, H. C. The relation of approach and avoidance goals to persistence, affective judgments and health. (Order No. AAI3271324, *Dissertation Abstracts International: Section B: The Sciences and Engineering*, , 4888. Retrieved from <http://search.proquest.com/docview/621715486?accountid=14707>. (prod.academic_MSTAR_621715486; 2008-99020-481).
- Lerner, M. J. (1965). Evaluation of performance as a function of performer's reward and attractiveness. *Journal of Personality and Social Psychology*, 1(4), 355-360. doi:<http://dx.doi.org/10.1037/h0021806>
- Lerner, M. J. (1980). *The belief in a just world: A fundamental delusion*. New York: Plenum Press.
- Lerner, M. J., & Miller, D. T. (1978). Just world research and the attribution process: Looking back and ahead. *Psychological Bulletin*, 85(5), 1030. Retrieved from <http://search.proquest.com/docview/1296920967?accountid=14707>
- Lewis, P. H. (2011). The role of acceptance in coping with daily hassles. (Order No. 3491617, Alliant International University, San Francisco Bay). *ProQuest Dissertations and*

- Theses*, 163. Retrieved from
<http://search.proquest.com/docview/914711688?accountid=14707>
- Lewis, R. A., & Spanier, G. B. (1979). Theorizing about the quality and stability of marriage. In W. R. Burr, R. Hill, F. I. Nye, & I. L. Reiss (Eds.), *Contemporary Theories about the Family: Research-Based Theories* (Vol. 1) (pp. 286-293). New York: The Free Press,
- Liebniz, G. (2003). *Discourse on metaphysics* (R. N. D. Martin & S. Brown, trans.). In F. E. Baird and W. Kauffman (Ed.), *From Plato to Derrida* (pp. 612-639). Upper Saddle River, NJ: Prentice Hall. (Original work published in 1690).
- Lipkus, I. M., Dalbert, C., & Siegler, I. C. (1996). The importance of distinguishing the belief in a just world for self versus for others: Implications for psychological well-being. *Personality and Social Psychology Bulletin*, 22(7), 666-677. Retrieved from
<http://search.proquest.com/docview/618857833?accountid=14707>
- Lipkus, I. M., & Siegler, I. C. (1993). The belief in a just world and perceptions of discrimination. *Journal of Psychology*, 127(4), 465. Retrieved from
<http://search.proquest.com/docview/1290703153?accountid=14707>
- Littrell, J., & Beck, E. (1999). Perceiving oppression: Relationships with resilience, self-esteem, depressive symptoms, and reliance on god in african-american homeless men. *Journal of Sociology and Social Welfare*, 26(4), 137-158. Retrieved from
<http://search.proquest.com/docview/61606526?accountid=14707>
- Locke, E. A. (1996). Motivation through conscious goal-setting. *Applied & Preventive Psychology*, 5, 117-124.

- Locke, J. (2003). An essay concerning human understanding. In F. E. Baird and W. Kauffman (Ed.), *From Plato to Derrida* (pp. 554-608). Upper Saddle River, NJ: Prentice Hall. (Original work published in 1690).
- Loewenstein, G., Adler, D., Behrens, D., & Gillis, J. (1992) *Why Pandora opened the box: Curiosity as a desire for missing information*. Unpublished manuscript, Department of Social and Decision Sciences, Carnegie Mellon University, Pittsburgh, PA.
- Lucy, M. (2012). Grappling with Renoir's modernism in the collection of Dr. Barnes. In J. House & M. Lucy (Ed.) *Renoir in the Barnes Foundation* (pp. 21-45). New Haven: Yale University Press.
- Maddux, J. E. (2009). Self-efficacy: The power of believing you can. In C. R. Snyder & S. J. Lopez (Eds.), *Oxford handbook of positive psychology*, 2nd ed. (pp. 335-343). New York: Oxford University Press.
- Matthews, L. T., & Marwit, S. J. (2003). Examining the assumptive world views of parents bereaved by accident, murder, and illness. *Omega: Journal of Death and Dying*, 48(2), 115-136. doi:<http://dx.doi.org/10.2190/KCB0-NNVB-UGY6-NPYR>
- McCarthy, V. A. (1978). *The phenomenology of moods in Kierkegaard*. Boston: Martinus Nijhoff.
- McDonner, J. (2008). Killing in combat and world assumptions. (Order No. 3345315, Indiana State University). *ProQuest Dissertations and Theses*. Retrieved from <http://search.proquest.com/docview/304631241?accountid=14707>
- Merrick, P. (1987). *Revolution and religion in the music of Liszt*. Cambridge, UK: Cambridge University Press.

- Montada, L. (1998). Belief in a just world: A hybrid of justice motive and self-interest? L. Montado & M. J. Lerner (Eds.), *Responses to victimizations and belief in a just world* (pp. 217-246). New York: Plenum Press. Retrieved from <http://search.proquest.com/docview/619349122?accountid=14707>
- Montada, L., & Lerner, M. J. (Eds.). (1998). *Responses to victimization and belief in a just world*. Chicago: Springer.
- Morrissey, B. (2009). On *North* [CD]. Lyrics retrieved from http://www.traditionalmusic.co.uk/folk-song-lyrics/Its_Dangerous_Out_Here.htm
- Nash, K. (2013). Mental schema accuracy: Investigating the impact of schemas on human performance and technology usability. *Dissertation Abstracts International: Section B: The Sciences and Engineering*. Retrieved from <http://search.proquest.com/docview/1348795759?accountid=14707>. (1348795759; 2013-99040-116).
- Naugle, D. K. (2002). *Worldview: The history of a concept*. New York: Eerdmans Publishing.
- Nemeroff, C., & Rozin, P. (1994). The contagion concept in adult thinking in the United States: Transmission of germs and of interpersonal influence. *Ethos*, 22(2), 158-186.
- Nesbit, S. M., Blankenship, K. L., & Murray, R. A. (2012). The influence of just- world beliefs on driving anger and aggressive driving intentions. *Aggressive Behavior*, 38(5), 389-402. doi:<http://dx.doi.org/10.1002/ab.21439>
- Nickerson, R. S. (1998). Confirmation bias: A ubiquitous phenomenon in many guises. *Review of General Psychology*, 2(2), 175-220. doi:<http://dx.doi.org/10.1037/1089-2680.2.2.175>
- Niebuhr, R. (1943). The serenity prayer. *Bulletin of the Federal Council of Churches*.

- Niemiec, R. M., (2013, January). Character strengths: Using the VIA in applied settings. *MAPP onsite 1*. Lecture conducted from the University of Pennsylvania, Philadelphia, PA.
- Nietzsche, F. (1964). *The will to power*. (A. M. Ludovici, Trans.). In O. Levy (Ed.) *The complete works of Fredrich Nietzsche* (Vol. 15.) New York: Russell and Russell. (Original work published in 1901).
- Nietzsche, F. (1969). *Thus spake Zarathrustra*. New York: Penguin Books. (Original work published in 1896).
- Nudelman, G. (2013). The belief in a just world and personality: A meta-analysis. *Social Justice Research*. doi:<http://dx.doi.org/10.1007/s11211-013-0178-y>
- Ortega y Gasset, J. (1946). *Concord and liberty*. (H. Weyl, Trans.). New York: Norton.
- Ost, J., & Costall, A. (2002). Misremembering bartlett: A study in serial reproduction. *British Journal of Psychology*, 93(2), 243-255. doi:<http://dx.doi.org/10.1348/000712602162562>
- Otto, K., & Dalbert, C. (2005). Belief in a just world and its functions for young prisoners. *Journal of Research in Personality*, 39, 559–573.
- Otto, K., Glaser, D., & Dalbert, C. (2009). Mental health, occupational trust, and quality of working life: Does belief in a just world matter? *Journal of Applied Social Psychology*, 39(6), 1288-1315. doi:<http://dx.doi.org/10.1111/j.1559-1816.2009.00482.x>
- Pargament, K. I. (2002). The bitter and the sweet: An evaluation of the costs and benefits of religiousness. *Religion and Psychology*, 13, 168-181.
- Park, C. L. (2005). Religion as a meaning-making framework in coping with life stress. *Journal of Social Issues*, 61(4), 707-729. doi:<http://dx.doi.org/10.1111/j.1540-4560.2005.00428.x>
- Park, N., Peterson, C., & Seligman, M. E. P. (2004). Strengths of character and well-being. *Journal of Social & Clinical Psychology*, 23, 603-619.

- Pawelski, J. O. (2013). Happiness and its opposites. Editor for seven-chapter section on “Philosophical approaches to happiness.” In S. David, I. Boniwell, & A. Conley Ayers (Eds.), *Oxford handbook of happiness* (pp. 326-329). Oxford, UK: Oxford University Press.
- Pawelski, J. O. (2003). William James, positive psychology, and healthy-mindedness. *The Journal of Speculative Philosophy (New Series)*, 17, 53-67.
- Pawelski, J. O., & Moores, D. J. (Eds.). (2013). *The eudaimonic turn: Well-being in literary studies*. Madison, NJ: Fairleigh Dickinson University Press.
- Petersen, M. B., Slothuus, R., Stubager, R., & Togeby, L. (2011). Deservingness versus values in public opinion on welfare: The automaticity of the deservingness heuristic. *European Journal of Political Research*, 50(1), 24-52.
- Peterson, C., & Seligman, M. E. P., (2004). *Character strengths and virtues: A handbook and classification*. Oxford, UK: Oxford University Press.
- Peterson, C. (1993). *Learned helplessness*. New York: John Wiley & Sons.
- Piaget, J. (1926). *The language and thought of the child*. Oxford, England: Harcourt, Brace, Oxford. Retrieved from <http://search.proquest.com/docview/614920920?accountid=14707>
- Plato. (n.d.) Theaetetus. (B. Jowett, Trans.). *MIT Classics*. (Original work published 360 BCE). Retrieved from <http://classics.mit.edu/Plato/theatu.html>
- Pössel, P. (2009). Cognitive triad inventory (CTI): Psychometric properties and factor structure of the german translation. *Journal of Behavior Therapy and Experimental Psychiatry*, 40(2), 240-247. doi:<http://dx.doi.org/10.1016/j.jbtep.2008.12.001>

- Potkay, A. (2013). The career of joy in the 20th century. In J. Pawelski and D. J. Moores (Eds.), *The eudaimonic turn: Well-being in literary studies* (pp. 247-265). Madison, NJ: Fairleigh Dickinson University Press.
- Potkay, A. (2007). *The Story of Joy: From the Bible to Late Romanticism*. Cambridge, UK: Cambridge University Press.
- Reichle, B., Schneider, A., & Montada, L. (1998). How do observers of victimization preserve their belief in a just world cognitively or actionally? Findings from a longitudinal study. In L. Montada & M.J. Lerner (Eds.), *Responses to victimizations and belief in a just world* (pp. 55-64) New York: Plenum Press. Retrieved from <http://search.proquest.com/docview/619346177?accountid=14707>
- Reivich, K., & Shatte, A., (2002). *The resilience factor: 7 Essential skills for overcoming life's hurdles*. New York, NY: Broadway Books.
- Ritter, C., Benson, D. E., & Snyder, C. (1990). Belief in a just world and depression. *Sociological Perspectives*, 33(2), 235. Retrieved from <http://search.proquest.com/docview/60745375?accountid=14707>
- Rosch, E., Mervis, C. B., Gray, W., Johnson, D., & Boyes-Braem, P. (1976). Basic objects in natural categories. *Cognitive Psychology*, 8, 382-439.
- Rosmarin, D. H., Pirutinsky, S., Cohen, A. B., Galler, Y., & Krumrei, E. J. (2011). Grateful to god or just plain grateful? A comparison of religious and general gratitude. *The Journal of Positive Psychology*, 6(5), 389-396.
doi:<http://dx.doi.org/10.1080/17439760.2011.596557>

- Rozin, P. (1999). Preadaptation and the puzzles and properties of pleasure. In D. Kahneman, E. Diener, & N. Schwarz (Eds.), *Well being: The foundations of hedonic psychology* (pp. 3-25). New York: Russell Sage.
- Rozin, P., & Stellar, J. (2009). Posthumous events affect rated quality and happiness of lives. *Judgment and Decision Making*, 4, 273-279.
- Rudd, M., Vohs, K., & Aaker, J. L. (n.d.) Awe expands people's perception of time, alters decision making, and enhances well-being. *Psychological Science*, Forthcoming.
Available at <http://ssrn.com/abstract=2083257>
- Rush, W., Huber, A., Beermann, U., & Proyer, R. T. (2007). Character strengths as predictors of the "good life" in Austria, Germany and Switzerland. In Romanian Academy, "George Barit" Institute of History, Department of Social Research (Ed.), *Studies and researches in social sciences (Vol. 16)*. Cluj-Napoca, Romania: Argonaut Press, 123-131.
- Rusk, R. D., & Waters, L. E. (2013). Tracing the size, reach, impact, and breadth of positive psychology. *The Journal of Positive Psychology*, 8(3), 207-221.
- Rumelhart, D. E. (1980). Schemata: The Building Blocks of Cognition. In R. Spiro, B. Bruce & W. Brewer (Eds.), *Theoretical Issues in Reading Comprehension* (Vol. 1, pp. 33-58.). Hillsdale, NJ: Erlbaum.
- Saltzberg-Levick, J. (2013, April). Savoring. *MAPP Onsite #5*. Lecture conducted from the University of Pennsylvania, Philadelphia, PA.
- Sartre, J. P. (1946/1989). *No exit and other plays*. New York: Vintage International.
- Schachter, S. (1959). *The psychology of affiliation*. Palo Alto, CA: Stanford University Press.
- Schaeffer, F. A. (1973). *Art and the Bible*. Downers Grove, Illinois: InterVarsity Press.

- Schwartz, B. (2004). *The paradox of choice: Why more is less*. New York: HarperCollins Publishers.
- Sheldon, K. M., & Lyubomirsky, S. (2006). How to increase and sustain positive emotion: The effects of expressing gratitude and visualizing best possible selves. *The Journal of Positive Psychology, 1*(2), 73-82. doi:<http://dx.doi.org/10.1080/17439760500510676>
- Seligman, M. E. P. (2002). *Authentic happiness: Using the new positive psychology to realize your potential for lasting fulfillment*. New York: Free Press.
- Seligman, M. E. P. (2011). *Flourish: A visionary new understanding of happiness and well-being*. New York: Free Press.
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist, 55*(1), 5-14.
- Stephens, J. P., Heaphy, E., & Dutton, J. E. (2012). *High-quality connections*. New York: Oxford University Press.
- Sutton, R. M., & Douglas, K. M. (2005). Justice for all, or just for me? More evidence of the importance of the self-other distinction in just-world beliefs. *Personality and Individual Differences, 39*(3), 637-645.
- Tappan, W. B. (1834). *The poems of William B. Tappan*. Philadelphia: Ashmead and Company Printers. Retrieved from <https://play.google.com/store/books/details?id=JQMIAAAAMAAJ>
- Tedeschi, R. G., & Calhoun, L. G. (1988, August). *Perceived benefits in coping with physical handicaps*. Paper presented at the annual meeting of the American Psychological Association, Atlanta, GA.

- Tedeschi, R. G., & Calhoun, L. G. (1996). The posttraumatic growth inventory: Measuring the positive legacy of trauma. *Journal of Traumatic Stress, 9*(3), 455-471.
- Tedeschi, R. G., & Calhoun, L. G. (2004). A clinical approach to posttraumatic growth. In P. A. Linley & S. Joseph (Eds.) *Positive psychology in practice* (pp. 405-419). Hoboken, NJ: John Wiley & Sons Inc.
- Thomas, S. P., Albrecht, K., & White, P. (1984). Determinants of marital quality in dual-career couples. *Family Relations: An Interdisciplinary Journal of Applied Family Studies, 33*(4), 513-521. Retrieved from <http://search.proquest.com/docview/617252006?accountid=14707>
- Tolstoy, L. (2010). *The death of Ivan Ilych*. New York: SoHo Books. (Original work published in 1886).
- Tomaka, J., & Blascovich, J. (1994). Effects of justice beliefs on cognitive appraisals of and subjective, physiological, and behavioral responses to potential stress. *Journal of Personality and Social Psychology, 67*, 732-740.
- Tomasulo, D. J., & Pawelski, J. O. (2012). Happily Ever after: The Use of Stories to Promote Positive Interventions. *Psychology, 3*(12A), 1189-1195.
- Tracey, T. J. G. (2002). Development of interests and competency beliefs: A 1-year longitudinal study of fifth- to eighth-grade students using the ICA-R and structural equation modeling. *Journal of Counseling Psychology, 49*(2), 148-163. doi:<http://dx.doi.org/10.1037/0022-0167.49.2.148>
- Troll, L. E. (1969). Approval of spouse in middle age. *Proceedings of the Annual Convention of the American Psychological Association, 4*, 719-720. Retrieved from <http://search.proquest.com/docview/615619230?accountid=14707>

- Trungpa, C. (1987). *Cutting through spiritual materialism*. Boston: Shambhala.
- United States Census Bureau. (2013). [U.S. and world population clock June 17, 2013].
Retrieved from <http://www.census.gov/popclock/>
- Valiant, G. (2012, September). Positive Emotion for MAPP. MAPP Fall Onsite 2. Lecture conducted from University of Pennsylvania, Philadelphia, PA.
- Van Cappellen, P., Saroglou, V., Iweins, C., Piovesana, M., & Fredrickson, B. L. (n.d.). Self-transcendent positive emotions increase spirituality through basic world assumptions. Unpublished manuscript.
- van der Veer, G. (2000). Mental models of incidental human-machine interaction. Retrieved April 10, 2009, from <http://www.cs.vu.nl/~gerrit/mmi9910-report1.doc>
- van Dokkum, P. G., & Conroy, C. (2010). A substantial population of low-mass stars in luminous elliptical galaxies. *Nature*, 468 (940-942). Retrieved from <http://www.nature.com/nature/journal/v468/n7326/abs/nature09578.html>
- Van Oorschot, W. (2006). Making the difference in social Europe: deservingness perceptions among citizens of European welfare states. *Journal of European social policy*, 16(1), 23-42.
- Wagoner, B. (2011). Meaning construction in remembering: A synthesis of Bartlett and Vygotsky. In: J. Stenner, J. Cromby, J. Motzkau, J. Yen & Y. Haosheng (Eds.), *Theoretical Psychology: Global Transformations and Challenges* (pp. 105-114). Toronto: Captus Press.
- Wagoner, B. (n.d.). Bartlett's concept of schema in reconstruction. To appear in *Theory and Psychology*.

Washington, B. T. (2000). *Up from slavery: An autobiography*. New York: Bartleby.com.

(Original work published in 1901). Retrieved from <http://www.bartleby.com/1004/>

Watkins, P. C., Woodward, K., Stone, T., & Kolts, R. L. (2003). Gratitude and happiness:

Development of a measure of gratitude and relationships with subjective wellbeing.

Social Behavior and Personality, 31, 431–451.

Watterson, B. (a). *Calvin and Hobbes*. Retrieved from

<http://kingofheartscorazone.blogspot.com/2010/11/calvin-and-hobbes-nature-strips.html>

Watterson, B. (b). *Calvin and Hobbes*. Retrieved from [http://www.180360720.no/wp-](http://www.180360720.no/wp-content/uploads/2012/03/calvin-and-hobbes-history.jpg)

[content/uploads/2012/03/calvin-and-hobbes-history.jpg](http://www.180360720.no/wp-content/uploads/2012/03/calvin-and-hobbes-history.jpg)

Watterson, B. (c). *Calvin and Hobbes*. Retrieved from [http://bestofcalvinandhobbes.com/wp-](http://bestofcalvinandhobbes.com/wp-content/uploads/2011/10/calvin-wants-more-enemies.png)

[content/uploads/2011/10/calvin-wants-more-enemies.png](http://bestofcalvinandhobbes.com/wp-content/uploads/2011/10/calvin-wants-more-enemies.png)

Watterson, B. (d). *Calvin and Hobbes*. Retrieved from [http://bestofcalvinandhobbes.com/wp-](http://bestofcalvinandhobbes.com/wp-content/uploads/2012/02/final-calvin-and-hobbes.png)

[content/uploads/2012/02/final-calvin-and-hobbes.png](http://bestofcalvinandhobbes.com/wp-content/uploads/2012/02/final-calvin-and-hobbes.png)

Watterson, B. (e). *Calvin and Hobbes*. Retrieved from

http://4.bp.blogspot.com/_zRSvuGbL2L0/TGvDFwKzFLI/AAAAAAAAAsc/7zHVYHZ

[xe98/s1600/Calvin+and+Hobbes+4-19-92.jpg](http://4.bp.blogspot.com/_zRSvuGbL2L0/TGvDFwKzFLI/AAAAAAAAAsc/7zHVYHZ)

Watterson, B. (f). *Calvin and Hobbes*. Retrieved from

http://sancharib.files.wordpress.com/2012/02/calvin_and_hobbes_on_ritalinevilalternativ

[erealityfinalstrip.gif?w=402&h=511](http://sancharib.files.wordpress.com/2012/02/calvin_and_hobbes_on_ritalinevilalternativ)

Watterson, B. (g). *Calvin and Hobbes*. Retrieved from

http://24.media.tumblr.com/tumblr_lfjehpLYaB1qbw6b9o1_500.gif

Watterson, B. (h). *Calvin and Hobbes*. Retrieved from

<http://caelumetterra.files.wordpress.com/2011/09/02-06-94.png>

Weber, M. (1958). *The Protestant work ethic and the spirit of capitalism*. (T. Parsons, Trans.).

New York: Charles Scribner's Sons. (Original work published in 1921).

Wilkins, V. M., & Wenger, J. B. (n.d.). Belief in a just world and attitudes toward affirmative action. Unpublished manuscript. University of Georgia.

Wills, T. A. (1981). Downward comparison principles in social psychology. *Psychological Bulletin*, 90(2), 245-271. doi:<http://dx.doi.org/10.1037/0033-2909.90.2.245>

World Health Organization. (2011). The top ten causes of death. Retrieved from <http://www.who.int/mediacentre/factsheets/fs310/en/index.html>

Zuckerman, M. (1975). Belief in a just world and altruistic behavior. *Journal of Personality and Social Psychology*, 31(5), 972. Retrieved from <http://search.proquest.com/docview/1295961911?accountid=14707>

Appendix A: Analysis Summary

Appendix A is a more in-depth discussion of the analysis results than what is provided in the body of the paper. It includes longer descriptions of each UA, illustrative quotes and comic strips, lists the 434 connections that were made between UAs and strengths, provides rationale for 1-5 examples for each of the 26 UAs, and notes connections which seemed especially strong and why. Additionally, Appendix A includes sections discussing a few psychological concepts of particular relevance to UAs. Please refer back to the section entitled “An Exercise in Hypothesis Generation” for details regarding how the analysis was conducted.

1: The Universe is Good vs. The Universe is Bad

God saw all that he had made, and it was very good.

— Genesis 1:31a (NIV)

As discussed in the body of the paper, universal meta-assessments (UMAs) concern our overall sense of the universe. It does not include any specific qualities, such as aesthetic quality or mutability. Rather it is our gut response to the following four questions, 1) is the world good?, 2) is the world worthwhile?, 3) do I like it?, and 4) do I approach the world with “yes” or “no?” This first UA served as a proxy for all four of these questions.

Analysis revealed connections between the “the world is good” and 23 of the 24 VIA strengths, more connections than any other UA. The only strength to which the positive UMA did not seem particularly relevant was prudence. Examples of highly relevant strengths include zest, gratitude, hope, and appreciation of beauty and excellence. Peterson and Seligman (2004)

mention that those high in hope believe that goodness is more potent than evil. Appreciation of beauty and excellence (or simply *appreciation*) refers to the ability to find, recognize, and take pleasure in the existence of goodness in the physical and social worlds” (p. 537). In general, we will chase what we think can be caught (Maddux, 2009). Therefore, the belief that there is more to appreciate may lead to more appreciation and the development of appreciative skills.

Gratitude seems very likely to correlate with a positive UMA. Though this strength is articulated primarily as a response to gifts from other people, statements that those high in gratitude will likely endorse include, “It is important to appreciate each day that you are alive” and, “Around every corner is another gift waiting to surprise us” (p. 554). This view is more likely if one thinks that the world is wonderful; it is not a privilege to be alive in a horrible world. Additionally, a predisposition to be grateful for what is unknown is difficult to explain without the presence of beliefs that apply to the universe generally, including everything that is currently outside of one’s knowledge.

The negative UMA, “the world is bad,” was connected to 11 strengths: creativity, bravery, love, kindness (compassion), social intelligence, teamwork (citizenship), prudence, self-regulation, gratitude, humor, and spirituality. These are predominately weaker connections, but they have interesting qualities. For example, citizenship might be connected to the negative UMA because thinking that the world is bad might lead people to “hunker down” in their own group or tribe. Kelman (1988) theorizes that in every nation, for instance, there is a felt need for safety and self-transcendence. If either one is threatened by a hostile or otherwise disliked universe, this may encourage teamwork, loyalty, and citizenship by increasing in-group bias. Humor has an element of negativity (Peterson and Seligman, 2004), can be a coping mechanism (Geisler & Weber, 2010), and might become a default approach to the world as a defensive

reaction to an upsetting universe. Nonetheless, I doubt humor will be tied to the negative UMA for several reasons. In one study, worry and humor had an inverse relationship (Kelly, 2002).

Out of 10 positive emotions, the positive UMA was connected to nine. The only positive emotion which did not connect to the positive UMA was pride. Additionally, the connections between positive emotions and the positive UMA seemed very strong, especially in regards to joy, gratitude, serenity, interest, hope, and awe. With gratitude there is a sense that it is a privilege to be alive (Fredrickson, 2009). In the discussion of serenity, a story is told where a four-year old, after creating a piece of art which he loved, sat back in his seat and said with a smile, "I just love everything" (p. 42). This may be an example of where positive emotions may cause UAs to form rather than the other way around. In Fredrickson's (2009) discussion of awe, she spoke about "goodness on a grand scale" (p. 46). Seeing this goodness might be connected to the belief that it is there, and it exists on a grand scale.

The negative UMA was connected to 5 positive emotions: inspiration, pride, love, amusement, and gratitude. Like humor, amusement can potentially have a darker side and function as a coping mechanism. Pride, the feeling that what you do matters and that one measures up, may be benefited by an unflattering view of the rest of the world, which is what one is measuring him or her self against.

The Negativity Bias

Appreciative inquiry (Cooperrider, Whitney, & Stavros, 2008), which has swept the business world in recent years, as well as appreciative trends in other sectors, such as asset-based development in the context of poverty alleviation and community development (Green & Goetting, 2010), may be most successful when accompanied by the idea that the world is a good.

Indeed, (most) believers in a good world are likely not blind. They are fully aware of starvation, disease, and genocide; the downside of existence is enormous. Therefore, the only way to believe in a good world is to take the view that the positive side of existence is on an even grander scale. Appreciative inquiry requires the belief that massive opportunity and potential, as well as beauty and goodness, are all around us. It is there to be discovered. Believing it is out there may lead to thinking you are capable of finding it (Maddux, 2009), thinking you can find it may lead to actually looking for it, and looking for it actively and across time will lead to the development of appreciative intelligence, which is the talent for seeing what is right in life (Cooperrider, Whitney, & Stavros, 2008). This talent, of course, may lead to an enormous amount of positive affect which counteracts the built-in negativity bias that humans share. The key is recognizing this potential and building on what is right in life. If so, then encouraging positive UAs may be good business strategy.

But humans demonstrate a well-documented negativity bias across domains. It is visible in human and animal psychology and makes us feel that “bad is stronger than good” (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001, p. 323). We react more quickly, strongly, and persistently to bad things. For example, Kahneman won the Noble prize in economics in 2002 for his work in prospect theory which describes how humans are more risk-averse than gain-seeking (for more on prospect theory, see Kahneman, 2003). The negativity bias blinds us to the good in the world (gains) and sensitizes us to what is wrong with it (what we might lose). Because it pulls us in the opposite direction of our appreciative abilities, it is worthy of some review in in the context of the UMA.

Haidt (2006) employs a mind experiment wherein one imagines designing the mind of a fish. Would one make the fish equally sensitive to pleasure and pain, danger and safety,

predators and prey? No. Fish can find more prey, but if they fail to recognize and respond quickly to a predator even once, they will die. If they fail to identify their food as poison once, they will die. So the negativity bias helps animals stay alive, but makes the pleasures of the universe less profound than pain.

There are two motivational systems: an approach system which triggers positive emotions and a withdrawal system which triggers negative emotions (Haidt, 2006). Both systems are always on and their relative balance determines human and animal preference. However, the withdrawal system is faster, stronger, and less malleable. This advantage over the approach system exists in part because the withdraw system physically receives information faster (Haidt, 2006). Human eyes and ears send information to the thalamus first, where the amygdala dips into unprocessed information and issues orders (almost) unilaterally when it senses danger. Our approach system gets information later, after the information is sent from the thalamus to sensory processing areas in the cortex. From there information is relayed to the frontal cortex and then integrated into higher level processing and mental consciousness. After this, the danger must be identified, a plan of action created, and orders issued. So, while it takes approximately 1/9th of a second for the withdrawal system to respond to danger, the approach system takes an entire second—ten times slower. This is why we jump when someone barges into the room, but not when we are ‘startled’ with glee. “The brain has no equivalent ‘green alert’ system to notify you instantly of a delicious meal or a likely mate” (Haidt, 2006, p. 31). The negative bias is built into our physiology.

Humans go through life jumping in fright so that in the 0-1 times that a real killer barges into a room, the extra 9/10ths of a second might help. When this happens, the amygdala affects our emotions, activities, and attitude, not just our heart rate. After being startled, we scan our

environment for other threats and threats only. Our attention narrows (Fredrickson, 2009). We ignore positive information to focus on potential dangers. Across time, our negativity bias may change how we view the world by increasing our negative affect. It is like a grandfather clock that startles us every few hours and chirps, "Life is dangerous. Please be fearful. Look around you and stop being cheerful."

Haidt (2006) believes that our negativity bias pushes us to believe for a variety of reasons that evil stalks the land, and thus we watch news programs to that effect, which reinforces our belief, which makes us think that evil stalks the land, which leads to more negative programming, etc. The negativity bias drives what I call a "Tyranny of the Interesting," because, on balance, negative things can be easier to pay attention to than positive things. This leads to a skewed view of the nature of the universe by affecting where we choose to focus our attention. Traffic accidents, for example, are interesting. They involve carnage, blood, drama, and garner attention along the side of the road. Diarrhea is not interesting. It involves solitary individuals, poop, and effects aversion. However, according to the World Health Organization (2011), worldwide, traffic accidents account for 1.21 million deaths a year while diarrhea accounts for 2.46 million, or over twice as many traffic deaths. We may come to think that traffic-related deaths are more common, but that may just be because they get our attention more easily (and the media's attention more easily). Haidt (2006) inadvertently applies the Tyranny of the Interesting to the academic world by making fun of research findings that he thinks should be published in the "Journal of Incredibly Obvious Results" (p. 63). Psychologists love to come up with surprising findings that show how humans are stupid and immoral. Studies could be done asking two strangers to share an ice-cream cone to see how many get into a fight, but studies showing how great the universe is, or the benign cooperation of human nature, are not

considered to be interesting. Generally, negative things attract our attention. This affects our judgements, such as our UAs.

The negative UMA may be driven by the belief that there are many evil people in the world. However, Haidt (2006) believes there few genuinely bad people driven primarily by sadism and greed. Baumeister (1997) asserts that sadism accounts for virtually no violence, and greed/ambition accounts for little. The real killers, it seems, are high self-esteem and moral idealism. Violence, in other words, may be primarily a result of having too much of a good thing. However, though adopting a view that “people are good” (a core component of worldview) might make the world look like a better place, it can also potentially look more depressing. For instance, war, though tragic, can be seen as laudable and even magnificent when it pits humans against evil goblins. But if that story is wrong, if war is essentially a misunderstanding or confusion between good well-meaning people, than conflict becomes a family butchering themselves.

Gossip is another excellent example of the negativity bias at work. As human settlements and tribes grew to 150 and above, language likely evolved not only to bond people more efficiently than the time-consuming practice of grooming, but to help limit free-riding behavior (Haidt, 2006). It is advantageous to share your food with others in your group, because when you lack food they might share with you. However, free-riders can take advantage of this cooperative spirit. Language allowed for gossip, which let the community identify free-riders and ostracize them in larger and larger societies where people did not know each other as well (Dunbar, 1996). As a result, gossip has utility as a smear machine. In fact, for every one uplifting story that is relayed through gossip, approximately ten more stories are about the moral failings of others. In addition to its function as a way to identify free-riders, gossip makes us feel

powerful, allows us to enter into a comfortable shared view of right and wrong, and bonds us in other ways. Scandal, in particular, “is great entertainment because it allows people to feel contempt, a moral emotion that gives feelings of moral superiority while asking nothing in return” (Haidt, 2006, p. 60). When angry, you feel called to right a wrong. When fearful or disgusted, you might flee. With contempt, no action is required. “And best of all, contempt is made to share....Tell an acquaintance a cynical story that ends with both of you smirking and shaking your heads and voila, you’ve got a bond” (Haidt, 2006, p. 60). Gossip serves an important function of relaying information, but feeds our negativity: it is no surprise we tend to think there are lots of bad people if we tell and hear ten times the number of positive stories than negative stories. I speculate that for many in the developed world, the news media may function as a constant re-assuring presence in the home which emotes and relays gossip, bonds with us, and creates a shared experience.

Finally, many people may judge life as not worth living not because their *own* life is not worth living, but because *other* people’s lives are not worth living, which makes all of existence in some way not worth it. This is a manifestation of the negativity bias. If one person has a bad life, how many people would have to have a good life for that bad life to be worth it? Regardless of one’s answer, it might be wrong to assume that a large amount of other people live lives they hate. Robert Biswas-Diener has travelled the world interviewing thousands of people. He has found that most people are more satisfied than dissatisfied with life (Biswas-Diener, & Diener, 2001). He compared satisfaction among college students and prostitutes in Calcutta and found that, though college students appreciated their life more, prostitutes expressed satisfaction with their lives as well. They had close friends, family, and other mental, social, and spiritual resources. Many felt that life was meaningful.

Still, the negativity bias is so powerful, that one bad thing may spoil everything. Consider, when disgusting food comes into contact with edible food, it is never the disgusting food that becomes appetizing, but the edible food becomes disgusting (Rozin, 1999). Additionally, the edible food which is now inedible, stays inedible even when no longer in contact with the disgusting food. “Once in contact always in contact” is the principle behind the contagion concept (Rozin, 1999, p. 124; Hjmadi, Rozin, & Siegal, 2004; Nemeroff & Rozin, 1994). One sterilized leg of a cockroach can forever spoil an otherwise refreshing cup of juice, even if it is only dipped in the juice for a moment (Hjmadi, Rozin, & Siegal, 2004).

In Dostoevsky’s *The Brothers Karamazov* (1880/1981), the character Ivan is struggling with whether or not he can reconcile himself with God’s choice to make this world. Finally, he rejects the notion that the earth can be redeemed and everything put right. After telling a traumatic story of a beautiful little girl he says,

“And while there is still time, I want to dissociate myself from it all: I have no wish to be a part of their eternal harmony. It’s not worth one single tear of the martyred little girl who beat her breast with her tiny fist, shedding her innocent tears and praying to ‘sweet Jesus’ to rescue her in the stinking outhouse. It’s not worth it, because that tear will have remained unatoned for. And those tears must be atoned for: otherwise there can be no harmony. But what could atone for those tears?” (Dostoevsky, 1880/1981, p. 295).

Our negativity bias has a powerful effect on how we think about the worthwhileness of existence. Do the tears of one little girl spoil the entire cup of juice that is the entire universe (negativity bias)? And, once the girl cries, can it ever be undone (contagion)? Maybe. It is hard for good actions to ‘make up’ for bad actions (Haidt, 2006). For instance, someone would have to risk their own life to save others twenty-five times in order to ‘make up’ for having murdered

one person (Haidt, 2006). It makes sense, then, to think the world as full of bad people and suffering when evil screams and kindness whispers.

To conclude this section, the negativity bias affects how we form the UMA by directing our attention towards what is wrong with the world and valuing what is wrong more than what is right. Across domains, humans show bias which values and gives more attention to badness than goodness. Though adaptive, it pushes us think negatively about the world and leads to negative inquiry (what is wrong here?) as opposed to appreciative inquiry (what is right here?). The negativity bias is built into our physiology; the withdrawal system is physiologically faster, stronger, and less malleable than the approach system which does not have the equivalent ability to 'startle' us with glee. It is also reinforced through gossip and negative media, which can make us think that evil walks the land, people are bad, and life is overwhelmingly miserable for most people, though none of these statements are particularly accurate. Finally, the negativity bias may mean that one desperate child's tear, or one cockroach leg, is potent enough to spoil an entire existence. Indeed, did the holocaust ruin the worthwhileness of existence for all time even even if our ancestors one day achieve an idyllic world? I do not know, but if so, I likely do not value the positive and negative equally. Woody Allen describes the negativity bias best through the character of Alvy Singer in *Annie Hall* (Joffe & Allen, 1977), "I can't enjoy anything unless everybody is. If one guy is starving someplace, that puts a crimp in my evening."

2: The Universe is Interesting vs. The Universe is Boring

I have no special talents. I am only passionately curious. — Albert Einstein (1952)

Figure 3. Bill Watterson (a)



Objects, such as movies, college classes, and cars, can be interesting or boring. This spectrum goes from intense fascination to mind-numbing dullness. The extreme of boring does not need to be necessarily revulsion, unless one finds tedium to be terrible. It must merely be “blah.” This UA pair, the first UCA pair to be discussed, incorporates a vast array of different adjectives to describe the quality of being interesting. This world might be considered amusing, intriguing, eye-catching, intoxicating, gripping, fascinating, fun, surprising, dramatic, etc. All relate to being interesting. Generally, this UA may have an enormous affect on how we approach the universe. People who espouse that the world is interesting are open to new knowledge and new experiences because they expect them to be interesting and worth the effort.

The “universe is interesting” was connected to nine strengths: creativity, curiosity, judgement, love of learning, zest, leadership, appreciation of beauty and excellence, gratitude, humor, and spirituality. Curiosity, love of learning, and appreciation of beauty and excellence are potentially strong connections. Peterson and Seligman (2004) include excitement, novelty-seeking, and openness to experience as part of curiosity. Indeed, curiosity can be curtailed if there is an ability to appreciate the value of knowledge that one does not yet possess (Loewenstein et al., 1992). Indeed, knowledge which is currently unknown can have few

subjectively understood qualities except what we think the universe is like generally. The connection to creativity is similar. The desire to come up with new ways of doing things which are better than old ways may be fueled by the belief that what has not been thought of or done yet is worth thinking about or doing. Finally, if believing that universal interestingness increases curiosity, it might also lead, perhaps unexpectedly, to increased leadership skills. Harvey (2007) found that successful leaders are markedly curious people.

“The universe is boring” was connected to self-regulation only and this connection seems weak. Baumeister and Alquist (2009) argue that repeated use of self-regulation will make it stronger. I speculate that fascination may have frenzied qualities that impinge on this process. In general, however, belief in a boring universe seemed without any utility.

The UCA “the universe is interesting” was connected to 9 of 10 positive emotions. The only one to which there was no obvious connection was hope. Of course, the strongest connection is interest, which is caused by the belief that the universe is fascinating, interesting, or surprising (Fredrickson, 2009). When we experience this emotion we are being “pulled to explore” (p. 43). Other strong connections were amusement and awe.

The “universe is boring” was connected to no positive emotions. In other words, if one seeks to experience more positive emotions, then this belief is of no use. Perhaps it could lead to fewer negative emotions, but this was not part of the analysis. Future research may explore the possibility that there may be only upside to thinking the world is extremely interesting.

3: The Universe is Beautiful vs. The Universe is Ugly

Look up, friend. The world is too beautiful for my eyes alone. — Anonymous

Is the world beautiful? This UA pair has to do with aesthetics only and does not include how we choose to engage the world. Inherent to the idea of beauty is the idea of attraction, which makes it similar to the UA pair “the world is interesting/boring.” However, repulsive ugliness can still be interesting (Potkay, 2013) and the ugly bias is a form of the negativity bias and can draw our attention (Saltzberg-Levick, 2013, April). In forming this UA, we may think that the world may be beautiful because it is dominated by beautiful objects instead of ugly ones. We also might believe that the universe weaves beautiful and ugly aspects to create a powerful overall affect—the tapestry metaphor. Either way, this UA pair is concerned with whether or not one sees the world as characteristically beautiful or characteristically ugly.

The “universe is beautiful” was connected to 19 strengths: curiosity, judgement, love of learning, bravery, persistence, honesty, zest, love, kindness, leadership, forgiveness, humility, appreciation of beauty and excellence, gratitude, hope, humor, and spirituality. Obvious connections include appreciation of beauty and excellence, zest, and gratitude. For example, people low in appreciation go “about daily life as if wearing blinders to that which is beautiful and moving, taking little pleasure in the scenes which pass by” (Peterson & Seligman, 2004, pp. 537-538). Gratitude also might be engendered by seeing and responding to beauty. The assumption here is that believing the world is beautiful might help one to see its beauty, or at least pay attention to it.

“The universe is ugly” was connected to 4 strengths: persistence, love, self-regulation, and humor. Humor, as discussed, can be an effective coping mechanism (Peterson and Seligman, 2004).

“The universe is beautiful” was connected to eight positive emotions: joy, gratitude, serenity, interest, hope, inspiration, awe, and love. Fredrickson (2009) asserts that beautiful things trigger serenity, such as beaches or a cup of tea.

“The universe is ugly” was connected to zero positive emotions. Therefore, while this negative UCA might be conducive to building a handful of strengths, it has no foreseen benefit for building any positive emotions.

In the context of this UA pair about universal beauty, a brief discussion of UAs' relevance to the arts is worthwhile, particularly the fundamental shift that is taking place in the realm of art criticism. As discussed in the first section in the context of Hegel's work on *Weltanschauung*, if the world is defined by beauty and goodness, positive art may be more realistic than tragedy. In fact, D. J. Moores (Pawelski & Moores, 2013) believes that as part of the “eudaimonic turn,” a cross-disciplinary trend that is placing focus on the positive, some literary critics are moving away from a hermeneutic of suspicion, “an interpretive paradigm in which anything other than suspicion becomes the antonym of informed, sophisticated reading” (Pawelski & Moores, 2013, p 30). Instead of reading neurosis into a piece of literature, literary critics might, for example, consider how a piece is an expression of the authors strengths and joyfulness. Adam Potkay (2013; 2007) describes the history of joy touching on everything from the Star Wars films, hymns, concentration camp slogans, romance novels, nonfiction writers like Francis Fukuyama, and Joy laundry detergent. Based on these diverse sources, Potkay traces a narrative of changing attitudes about joy. It is becoming respectable again. Though he does not address this in his chapter directly, Potkay joins Moores in the belief that there is a fundamental shift, a eudaimonic turn, happening across disciplines (personal communication, March 2013). It is driven, in large part, by “disenchantment with disenchantment” (Pawelski & Moores, 2013, p

30). In the spirit of Potkay's use of wide-ranging sources, I have included a few examples of Calvin and Hobbes by Bill Watterson in this appendix in an effort to deepen our understanding UAs and to make a point: "funny" mediums can be speak to the fullness of life and be deadly serious in its light-heartedness.

4: The Universe Can Change vs. The Universe Cannot Change

*God, grant me the serenity to accept the things I cannot change,
The courage to change the things I can,
and the wisdom to know the difference. — Reinhold Niebuhr (1943)*

Do our efforts matter? While our answer has much to do with our view of our self (Maddux, 2009), it also concerns our views on universal malleability. This UA pair is about dynamism and responsiveness versus closed rigidity. Individuals high on universal malleability may believe he or she can change the world and societal problems can be solved. Those low on malleability may think that genuine change in the world is out of reach, societal problems are what they are and always have been. However, this UA pair is indifferent to the *type* of change that is occurring, it might be good change or it might be bad change. The universe relevant to this UA may be small; it unlikely includes distant stars and galaxies. Changeability relates to our spheres of influence, what we can control, our perception of how big that world is, and what that world is like generally. Indeed, childhood development is in part the process of discovering what we can and cannot change; pushing a button can make a sound! As we grow, we form an understanding, a principle, an expectation, about the extent of what can be accomplished through

individual and group efforts (Bloom, 2009). Like others who have studied the assumptive world (e.g. Janoff-Bulman, 1992), I think that the belief in the possibility of change is important, and this bears out in the present analysis.

“The universe can change” was connected to 14 strengths: creativity, love of learning, perspective, persistence, zest, teamwork, fairness, leadership, forgiveness, prudence, self-regulation, gratitude, hope, and spirituality. Notable connections include creativity, persistence, and hope. People high in creativity are looking for new solutions (Peterson & Seligman, 2004). They see the world as open and full of possibilities. Persistence includes the belief that adversity can be overcome; when I push on the world, the world might give way. It also relates to explanatory style (how one explains negative events) and learned helplessness. Believing that a bad future is inevitable is not likely to lead to greater persistence, whereas expectation of a positive future leads to action and resolve (Peterson & Seligman, 2004). For more research, see Peterson (1993).

“The universe cannot change” might aid the development of 5 strengths: perspective, honesty, humility, humor (as a coping mechanism), and spirituality. Indeed, the ability to accept what one cannot change can be adaptive (Lewis, 2011). If that ability is aided by a belief that the world in general does not change, there may be some benefit to believing the world as a whole cannot change. However, it seems likely that one can both believe that the world is generally dynamic and full of possibilities, and believe that there are many exceptions, and thereby experience the benefits of both. This holds true for other negative universal assessments too.

“The universe can change” was connected to seven positive emotions: joy, interest, hope, pride, inspiration, awe, and love. It seems strongly connected to hope for “deep within the core

of hope is the belief that things can change” (Fredrickson, 2009, p. 43). Pride, also, involves the belief that “one can make a difference in the world” (p. 44). The expectation generated by a schema of universal malleability provokes action and the feeling of pride.

“The universe cannot change” was connected to one positive emotion: serenity. It is possible that a lack of universal malleability might engender calm acceptance. Important religious traditions emphasize acceptance, such as Buddhism (Bermant, 2012, October). Hinduism and Judaism are typically non-evangelical as they are not trying to spread their religion like Islam or Christianity who seek actively to convert and change the world (Bermant, 2012, October). However, regardless of religious views, there is a common sentiment that serenity demands some degree of acceptance. The poem that started this section was written in 1943 by Reinhold Niebuhr, a protestant pastor and theologian of great influence, and has been popularized in self-help books and 12-step recovery programs ever since. It is often called the “Serenity Prayer.” Serenity can be fueled by the acceptance of one’s finitude and lack of power to change things.

In sharing this paper with colleagues, it has been pointed out to me that belief in universal rigidity or fixedness may be a source of joy and other positive emotions. An example might be Calvinist Protestants, who take comfort from their belief that salvation is determined by a compassionate God whose will for the future is unalterable.

Universal Assessments and Optimism

In the context of the UA pair above, the world is malleable, and the one that follows, the world is getting better, it may be worth touching on the way that UAs connect with optimism. The benefits of optimism are numerous and many have been well-documented (Carver, Scheier,

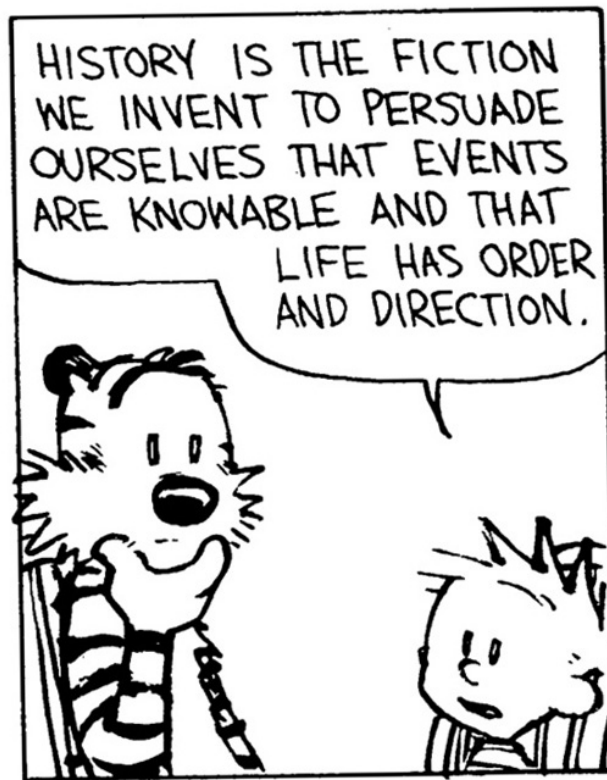
Miller, & Fulford, 2009). For example, optimism correlates with higher subjective well-being, more stable coping tendencies, and often better health. For a very simple definition, “Optimists are people who expect good things to happen; pessimists are people who expect bad things to happen” (Carver, Scheier, Miller, & Fulford, 2009, p. 303). These dispositions, almost by definition, are universal assessments. After all, is this universe a place where good things happen or bad things happen? However, optimism and pessimism may not entirely correlate with that UA pair because it is possible to imagine an individual who thinks the universe is a place where bad things happen, but he or she is lucky and good things will keep happening personally.

While Carver, Scheier, Miller, and Fulford (2009) focus on optimism as a disposition regarding the future, Peterson and Steen (2009) focus on a different type of optimism which involves how people explain the causes of events. An optimist will tend to respond to a negative event by thinking that is not their fault, it does not always have to happen, and it does not happen for everything. A pessimist, on the other hand, will tend to think that the negative event is 1) their fault, 2) will inevitably keep happening, and 3) will affect everything (called “global”). Universal assessments affect all three aspects of explanatory style. For instance, if one believes that the universe is malleable (the UA pair discussed above), than one is less likely to catastrophize; a negative trends can be circumvented and its’ influence mitigated. Also, if one believes that the world is getting worse (the UA pair discussed below), than a merely unlucky event is more likely to be identified as part of an expected trend (pessimistic explanatory style). Indeed, in both Carver’s et al (2009) and Peterson and Steen’s (2009) definition of optimists and pessimists, optimists seem much more likely to hold the positive UA “the world is getting better,” than the negative UA “the world is getting worse.” If the world is getting better, than

one is likely to adopt both a positive disposition towards the future and explain adversity with an optimistic explanatory style.

5: The World is Getting Better vs. The World is Getting Worse

Figure 4. Bill Watterson (b)



Tomasulo and Pawelski (2012) note how “the stories we tell ourselves are related to health and happiness” (p. 1192). Though they focus on the personal narrative, they believe that other types of stories may be important to positive psychology. This UA concerns what is essentially the story of existence. Where are we headed? Where are we going? Is existence a tragedy or a comedy? Will the world be renewed, or does it decay and we eventually destroy

ourselves? Endings matter. Peak-end theory maintains that the last few moments of an experience, or a human life (Rozin & Stellar, 2009), tend to define the entire experience (e.g. Kahneman & Wakker, 1997). Therefore, how we imagine the end of the world matters for us now. We create our meaning “pro-retrospectively” (looking forward to look back). There are conveniently predefined terms for this UA pair. A “meliorist” asserts the positive UA, that the world is getting better. A “pejorist” asserts the negative UA, that the world is getting worse. This UA pair is different than universal malleability. After all, movement through time towards improvement or decline might be inexorable. In other words, a pejorist can believe in unstoppable *or* preventable decline.

Sometimes, meliorism or pejorism presents itself as part of a complex story. For example, many Christians believe that the world is presently declining, but God will come back and the universe will end well (e.g. Romans 8:20-21). Other people might believe in human progress and look at how in the last decade 350 million people have been lifted out of extreme poverty (International Fund of Agricultural Development, 2011). Thus, this UA pair may refer to two spectrums of belief. First, it is asking if the story ends with “happily ever after” or “and then they all died.” Second, it is concerned with present trajectory. Even if down the road the world is redeemed, what is the trajectory now? In future research, these two ideas may be treated separately.

“The world is getting better” was connected to 18 strengths: creativity, curiosity, love of learning, bravery, persistence, honesty, zest, love, teamwork, forgiveness, humility, prudence, self-regulation, appreciation of beauty and excellence, gratitude, hope, humor, and spirituality. Noted connections were hope and persistence. Both are deeply concerned with the future and rely on a positive outlook. Individuals high in hope endorse a list of 10 statements (Peterson &

Seligman, 2004). For our purposes, four are worth noting. First, “I expect the best” (p. 570). Second, “I always look on the bright side” (p. 570). Third, “Despite challenges, I always remain hopeful about the future” (p. 570). Fourth and most strikingly, “I believe that good will always triumph over evil” (p. 570). For hopeful people, therefore, good is strong, and all that is good might be stronger than all that is bad; a sterilized cockroach leg does not leave the universe in ruins.

“The world is getting worse” was connected to 8 strengths: perspective, bravery, love, teamwork, prudence, self-regulation, humor, and spirituality. The strongest connections are likely love, humor, and spirituality. As mentioned earlier, bonds of love might be strengthened by a negative view of the world and humor may be used as a coping mechanism. ‘Eat, drink, and be merry, for tomorrow we may die’ (popular paraphrase of Isaiah 22:13b) might be an example of coping via merriment.

“The world is getting better” was connected to all positive emotions save pride. Strong connections may include hope and serenity. Serenity, as mentioned earlier, includes an element of acceptance and a positive universal story is easier to accept and a sense of peace is easier to attain if the world is not ‘going down the tubes.’ As William James (1896/2011) observed, “The desire for a certain kind of truth here brings about that special truth’s existence” (p. 24).

“The world is getting worse” was connected to 3 positive emotions via familiar themes: gratitude through downward social comparison, amusement as a coping skill, and love by creating common misery.

6: The Universe is Safe vs. The Universe is Dangerous

*There's nothing you can say
That could get me up today
Nothing you have ever said
That can drive me from this bed
You can call me lazy, crazy
Call me stupid I don't care
I ain't getting up
It's dangerous out there.*

*There's a hunter from New Jersey
In my kitchen drinking beer
There's a Texan out my window
With a chain saw and a leer
I can take a walk around the block
To shake me from my slumber
But there's student drivers out today
And one has got my number*

— Chorus and 2nd verse of *It's a Dangerous World* by folk musician Bill Morrissey
(1991)

The ability to recognize and respond to danger in the environment is a basic function critical to the health, life, and procreative potential of any organism (Krieglmeyer, Deutsch, De Houwer, & De Raedt, 2010). This ability can error by being insensitive and failing to respond to

danger or oversensitive and responding to everything thus taxing physical and mental resources. My hypothesis is that believing the universe is generally a safe place allows one to avoid oversensitivity while still being aware of and responding appropriately to dangers.

It is worth noting that modern life can be stressful, but the stresses that most people deal with in the developed world are not associated with the same sort of dangers that humans evolved to handle. For instance, a performance review at work may or may not result in a promotion involving an annual increase of \$7,000 in income and two more days of vacation. In contrast, how one performs the task of finding water in a desert, hunting game, or reacting quickly to dangerous wild animals may mean life or death. The modern human finds his or herself, generally speaking, in a safer world, with police, fireman, governments, and grocery stores. Therefore, we may have evolved to be more fearful than the modern environment warrants. The fear response may help us flee a predator, but it generally does not help us navigate the stressors of modern life, such as taking an exam or appearing at ease during a job interview.

In general, how dangerous is the world? Should the universe be approached like a bear in the wild, a puppy on a street, or an estranged lover? Indeed, this UA pair, like universal benevolence which has been well-studied in the context of trauma, is not just concerned with physical safety, but social and emotional safety as well. For instance, one danger can be failure to achieve one's goals. Lench (n.d.) studied the effects of striving to obtain success, which one might do in a safe world, versus seeking to avoid a failure, which one might do in a world defined by danger, as it pertains to persistence and emotions. She found that those who sought success remembered more positive emotions, and those who sought to avoid failure remembered more intense negative emotions. Additionally, those who sought success and did not attain their goals were more able to cope than those that sought to avoid failure and did not make it. This

points to the importance of 1) goals which seek success and 2) not allowing the fear of failure, which can be paralyzingly powerful due to the human negativity bias, to define life.

Additionally, this UA includes a sense of feeling at home, that the world is not bizarre, strange, weird, or alien. Instead, it is familiar, recognizable, and there may even be a sense of belonging. This feeling is more than the absence of felt danger. It includes the presence of peace and the sense that “it’s gonna be OK.”

Believing that “the universe is safe” may engender 21 strengths: creativity, curiosity, judgment, love of learning, bravery, persistence, honesty, zest, love, kindness, teamwork, fairness, forgiveness, humility, self-regulation, appreciation of beauty and excellence, gratitude, hope, humor, spirituality, and prudence. Notable connections include prudence, creativity, curiosity, love of learning, persistence, fairness, and forgiveness. The assumption here is that believing that the universe is a safe place may lead to feeling safer and trying new things, which activates the approach system (Haidt, 2006). Creativity, curiosity, and love of learning involve trying new things (Peterson & Seligman, 2004). Persistence requires, at times, a heroic self-generated feeling of safety as one struggles to get a job, find the right life partner, lose weight, or improve a societal problem. Also, it is easier to forgive, show kindness, and be fair to others when one does not feel under threat. For example, feelings of safety allow victims to move on with their lives (Davenport, 1991). Finally, on face value, prudence would seem like a strength developed by the chronic expectation that things will go wrong. However, Peterson and Seligman (2004) speculate that the growth of prudence may be stunted if the environment is seen as so unsafe or unpredictable that long-term planning is pointless.

Believing that “the universe is dangerous” was connected to the formation of 11 strengths: bravery, love, social intelligence, teamwork, fairness, leadership, prudence, self-

regulation, gratitude, humor, and spirituality. Inherent to bravery is the recognition that one is in danger (Peterson & Seligman, 2004). A lifetime of danger, which may cause this UA or be caused by it, may push one to develop the ability to act despite danger. In regards to social intelligence, the ability to cooperate with others and to get what you want from others is an important survival skill with numerous benefits, (Chen & Seyfarth, 2012). If survival hangs on one's ability to see, for example, when an abusive father is getting drunk to the point of violence, one might be driven towards developing the skill of detecting and forecasting emotional states.

Believing that “the universe is safe” may attribute to the formation of all 10 positive emotions. Of particular interest is joy and serenity, both of which Fredrickson (2009) describes as requiring a sense that surroundings feel “safe and familiar” (p. 40 and p. 42). Inspiration, also, is a “choice about whether your heart is open or closed” (p. 46), and it is difficult to be open when feeling fear. Indeed, all positive emotions (save hope) seem predicated on the idea that there is no need to scan the horizon for threats.

Figure 5. Bill Watterson (c)



Believing that “the universe is dangerous” was connected to three positive emotions: love, awe, and interest. “Although a form of positivity, awe at times sits so close to the edge of safety that we get a whiff of negativity as well. Awe mixes with fear when we’ve witnessed a

tornado or seen the World Trade Center towers collapse” (Fredrickson, 2009, p. 46). Terrorism causes awe. Images of atomic blasts causes awe. A world defined by danger and violence would engender awe. Finally, the world might be more interesting if you live in a dangerous world. Drama requires antagonists. As figure 5 illustrates, perhaps enemies put some spice into life, and engender interest.

7: The Universe Should be Explored vs. The Universe Should be Avoided

Figure 6. Bill Watterson (d)



What is the best way to experience the universe? By traipsing around in it, or should life be more of an “indoor” sport? This UA pair is related to others, such as “the world is safe/dangerous,” “the world is interesting/boring,” and “the world is beautiful/ugly.” The

difference between them is that this UA does not attempt to describe the world itself, but how the universe is best enjoyed. In future research, it may be discarded as redundant, but I am interested in some important permutations of this UA. Like an uninspired painting, the world might be safe and beautiful, yet boring, and the world should not be explored. Like a hurricane, the world could be beautiful, interesting, yet unsafe, and best enjoyed from a distance. Finally, like a treadmill in a basement, the world could be safe, boring, and uninteresting, and should still be explored if only for the purpose of physical exercise. I am interested in what people believe should be their default action when dealing with the universe: explore or avoid? Of course, it is impossible to avoid the world entirely. Those who adopt the negative UA believe the “the world should be avoided” as much as is possible.

Believing that “the universe should be explored” was connected to 17 strengths: creativity, curiosity, open-mindedness, love of learning, perspective, bravery, persistence, honesty, zest, love, kindness, social Intelligence, teamwork, fairness, leadership, forgiveness, humility, prudence, self-regulation, appreciation of beauty and excellence, gratitude, hope, humor, and spirituality. Obvious connections are curiosity, zest, appreciation of beauty and excellence, and persistence. Two of the components of curiosity are novelty-seeking and openness to experience (Peterson & Seligman, 2004). Novelty-seeking in particular may be aided by the belief that the world, and one’s life, should be approached as an adventure. Persistence includes resilience in the face of adversity. Reivich (2002) makes the point that resilience is not reactive only. Resilience is also enhanced by the degree to which we “reach out” (p. 15). Individuals who reach out keep trying new experiences and are more resilient because of it. They keep engaging people, even when they are burned. Zest “at a deeper level...refers to feeling alive” (Peterson & Seligman, 2004, p. 274) and is antithetical to feeling

lost or aimless. Zest may be encouraged by the prospect of exploring the world and could be the result of actually exploring it too. Zestful people are characterized by infectious energy and aliveness (Peterson & Seligman, 2004). They feel peppy and full of spirit. Unlike gratitude and other strengths which could be described as a state of mind, zest is less cognitive and more of a behavior. Nonetheless, zest might be tied to UAs if it can be shown that zest can manifest itself as a behavioral response to having certain notions about the world such as “the world is fun.” Finally, appreciation of beauty and excellence may pull us to get outdoors, to experience new things, and to explore what we consider to be beautiful.

Believing that “the universe should be avoided” may encourage the formation of 7 strengths: love, teamwork, humility, prudence, gratitude, humor, and spirituality. Prudence involves skillful and careful management of one’s personal resources, whether they be emotional, financial, or social, for the pursuit of long term goals (Peterson & Seligman, 2004). One may be driven to be more resourceful if he or she seeks to avoid as much as possible contact with and/or reliance on the outside world.

Believing that “the universe should be explored” may lead to all 10 positive emotions. When one experiences interest, for instance, “you can literally feel your horizons expanding in real time, and with them your own possibilities. The intense pull of interest beckons you to explore, to take in new ideas, and to learn more” (Fredrickson, 2009, p. 43). In general, approaching life as an adventure may increase the likelihood of experiencing positive emotions.

Believing that “the universe should be avoided” may lead to only one positive emotion: gratitude. One can be grateful for being able to avoid exploring the universe because one feels that they have all that they need. Their knowledge, possessions, and relationships might be all

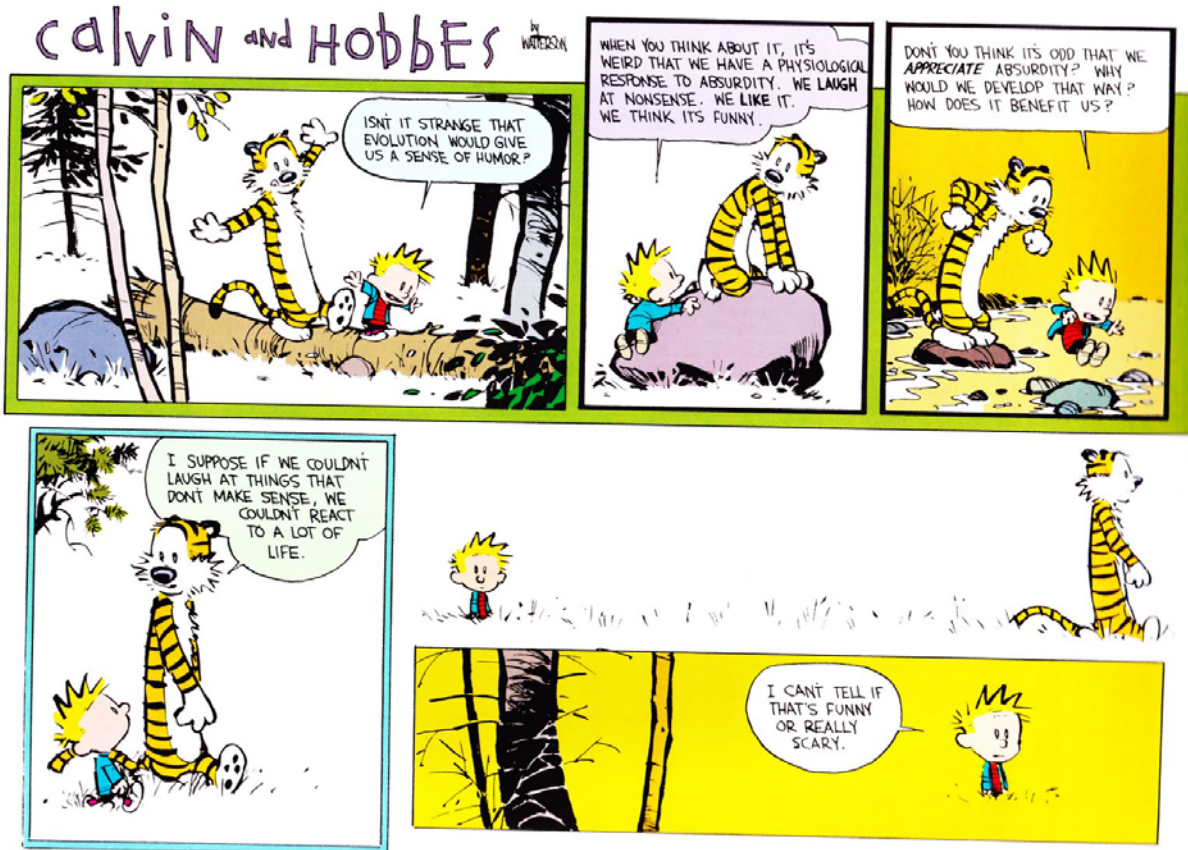
the knowledge, possessions, and relationships that, in their minds, are worth having. This may present as explicit or implicit ethnocentrism (Lane, 2007).

Universal Assessments and Travel Habits

Future research might correlate this UA pair to travel habits because travel is a way of reaching out to the world and being open to experience. An illustration might prove useful here. During one scene in the *The Lord of The Rings* (Tolkien, 1954/1994), an elf who loves the sea is talking to a hobbit traveler who has found himself far from home. The elf realizes joyfully that the hobbit lives near the sea and begs the hobbit to tell him all about it. The hobbit replies, “I cannot. I have never seen [the sea]. I have never been out of my own land before. And if I had known what the world outside was like, I don’t think I should have had the heart to leave it” (p. 339). Presumably, the hobbit had left his own land because he thought the world was a safe and good. His universal assessment have changed, and he now feels confident he never would have left home if he had known the truth. The elf disputes the hobbit’s newfound belief and says, “The world is indeed full of peril, and in it there are many dark places; but still there is much that is fair, and though in all lands love is now mingled with grief, it [love] grows perhaps the greater” (p. 339). This is a beautiful articulation of a number of universal assessments. First, traveling to beautiful places is worth braving great dangers (the world should be explored). Second, there are many dark places and much peril (the world is unsafe). Third, much is still fair (the world is beautiful). Fourth, light and love is more characteristic of the world than darkness and grief (the world is good). These beliefs, according to the elf, should make one want to travel. It is also an empirically falsifiable hypothesis. If certain universal assessments are indeed found to correlate with travel habits, this might affect travel industry business strategy.

8: The Universe is Comprehensible vs. the Universe is Incomprehensible

Figure 7. Bill Watterson (e)



April 19, 1992

In a word, this UA pair is about about understandability. Does the universe have the ability to be understood? There are three components. The first concerns basic causality. Could a perfect intelligence understand the world by understanding all its component parts? Do things make sense, even if one thinks nobody is actually smart enough to make sense of it? The second component is a subjective assessment of how much a given individual is able to understand the world. Obviously, one half of this is self-assessment (how smart am I?) but the other half is a universal assessment (how difficult are things to understand?). The third component includes a

general subjective feeling regarding how chaotic or predictable the world may be. Note that a sense that the world is chaotic may correlate to the feeling that the world is not safe.

Believing that “the world is comprehensible” may be tied to 20 strengths: creativity, curiosity, love of learning, perspective, bravery, persistence, honesty, zest, love, kindness, social intelligence, teamwork, fairness, leadership, forgiveness, humility, prudence, self-regulation, appreciation of beauty and excellence, gratitude, hope, humor, and spirituality (all save honesty, kindness, social intelligence, and open-mindedness). Strong causal mechanisms may connect this UA to strengths which require a sense of assurance, such as fairness or persistence, and to strengths which relate to learning, such as love of learning and curiosity. Learning can be tied to self-efficacy (e.g. Tracey, 2002) because self-efficacy, the belief that one can accomplishing something, is critical to pursuits of all types, including learning (Maddux, 2009). The belief that the world can be understood leads to the possibility that one may choose to try and understand it. Because some people may learn that understanding is possible within certain domains, future research may consider that people who think that the world is an understandable place may have the ability to switch fields and acquire new skills. That may translate into resilience in a changing job market and may correlate with income.

Believing that “the world is incomprehensible” may be tied to 7 strengths: open-mindedness, perspective, humility, prudence, appreciation of beauty and excellence, humor, and spirituality. Open-mindedness includes the ability to think that you could be wrong (Peterson & Seligman, 2004). This demands humility; the world might not be as understandable as you think. Also, the upside to believing that the world is hard to understand is a belief in the mysterious, which may induce awe. This may lead to developing the capacity of appreciating mystery (appreciation of beauty and excellence).

“The most beautiful emotion we can experience is the mysterious. It is the fundamental emotion that stands at the cradle of all art and science. He who can no longer wonder and stand rapt in awe, is as good as dead, a snuffed out candle.” (Einstein, 1930, as cited in Valiant, 2012, September)

Believing that “the world is comprehensible” was connected to 4 positive emotions: serenity, interest, awe, and amusement. Awe can happen when we come across, and comprehend, “goodness on a grand scale” (Fredrickson, 2009, p. 46).

Believing that “the world is incomprehensible” was connected to 4 positive emotions: interest, pride, amusement, and awe. As mentioned above, awe may be a response to experiencing the mysterious on a grand scale. Interest, also, is a response to a “sense of possibility or mystery” (Fredrickson, 2009, p. 42). The feeling of pride may come when the universe is difficult to understand, but one nonetheless manages a modicum of understanding. Finally, as figure 7 illustrates, humans have the ability to appreciate absurdity and to approach it with humor potentially for fun and perhaps as a coping mechanism.

9: I am not the Center of the Universe vs. The Universe Revolves Around Me

Figure 8. Bill Watterson (f)



To what degree am I at the center of the universe? This may or may not have to do with moral selfishness, rather it has to do with attention and the extent of our universe. Piaget argued that babies lack object permanence, which is the ability to understand objects as having their own reality beyond your perception of them (Bloom, 2009). In other words, when you remove a toy away from a baby's sight, they cry not only because you took away their toy but also because they think it ceases to exist. In this extreme example from early development, the world revolves around you so tightly that if you can't see an object or if it is out of mind, then it is no longer real. The process of growing up, therefore, is the process of expanding one's universe and displacing yourself at its center. Arguably, some never get there and most of us never do

entirely. Adults can fall into thinking traps wherein we jump to conclusions without sufficient data (Reivich & Shatte, 2002). Personalization, for instance, involves blaming oneself when it may have nothing to do with you. Personalization can also involve taking credit for things we have no business taking credit for. This UA may be difficult to measure, since few adults would consciously place themselves at the center of their universe. Instead, it is a matter of degrees: to what degree do I overemphasize or underemphasize my impact or relevance to the events? This may mean taking too much blame for events or not taking enough. Another manifestation involves how much an individual imagines other people think about them.

Believing that “I am not at the center of the universe” may be tied to 20 strengths: curiosity, open-mindedness, love of learning, perspective, bravery, persistence, honesty, zest, love, kindness, social intelligence, teamwork, fairness, leadership, forgiveness, humility, appreciation of beauty and excellence, gratitude, humor and spirituality. Fundamental to appreciation and curiosity is the pursuit of something other; those high in these strengths perceive that which has not yet been seen. Humility, obviously, requires the belief that the world is not all about you. Open-mindedness is based on the idea that one could be wrong about one’s beliefs. This implies a strong sense that the world is what it is regardless of what one thinks about the world; reality is not subject to one’s assertions. Those who think that they are not at the center of the universe are also less likely to think that the world is out to get them in some particular way, and thus are more likely to press on in the face of adversity (persistence). Finally, one of the statements that those with the strength of kindness are likely to affirm is the positive UA itself: “I am not the center of the universe” (Peterson & Seligman, 2004, p. 326).

Believing that “I am at the center of the universe” was connected to 6 strengths: creativity, bravery, persistence, zest, leadership, and spirituality. All of these strengths (save

zest) can include a sense of self-importance. Finding a new way of doing things (creativity), stepping up in the face of danger (bravery), and persisting in the face of obstacles (persistence), may be strengthened if one thinks that the world in some way hangs in the balance and it is up to the individual to do something.

Believing that “I am not the center of the universe” was connected to 6 positive emotions: joy, gratitude, serenity, inspiration, awe, and love. Strong connections may be gratitude, inspiration, and love. Assuming that displacing oneself from the center of one’s universe takes humility, gratitude will increase as one is getting what they might not necessarily deserve. Certainly, the belief that “I am the most important person in the world” would raise expectations for how the world should treat you. Inspiration requires looking at other people, allowing their goodness to touch your heart, and letting yourself be moved. “It’s a form of positivity that pulls us out of our shell of self-absorption” (Fredrickson, 2009, p. 46). This shell may be thinking that the world revolves around you. Fredrickson notes that if one is unable to extract themselves from the center of their universe, they may respond to seeing excellence in others with envy instead of inspiration. Finally, love, the ability to share all the positive emotions in the context of another person, happens when someone can make room in their world for someone else. This may require making room at the center of the universe for someone else.

Believing that “I am at the center of the universe” may be tied to 3 positive emotions: hope, joy, and pride. All of them are aided by a sense that one is accomplished, important, and that things will work out. However, these connections seem weak. If one thinks of themselves as overly important, the positive emotion of pride might be elusive as the world refuses to grant recognition and praise that is believed to be deserved. Still, as mentioned earlier, one may fall

figure 9. Intentionality in combination with other UAs create different types of beliefs about the world. For example, “the world revolves around me,” “the world is intentional,” and “the world is unsafe,” amounts to the UA, “the world is out to get me.” Likewise, “I’m lucky” is the product of thinking that the “world is intentional,” “the world revolves around me,” and “the world is good.” Day and Maltby (2003) found that belief in one’s own good luck correlates with optimism. If so, then perhaps these three UAs correlate with optimism.

Believing the “the universe has intentionality” was connected with 20 strengths: creativity, curiosity, love of learning, perspective, bravery, persistence, honesty, zest, love, kindness, social intelligence, teamwork, fairness, leadership, forgiveness, appreciation of beauty and excellence, gratitude, hope, humor, and spirituality. Obviously, spirituality is a likely connection. Peterson and Seligman (2004) describe those high in spirituality as affirming statements such as, “I believe there is a sacred force” and “God is in control” (p. 600). If there is a supreme deity behind the universe, then events happen on purpose and for a reason. In the film *American Beauty* (Cohen, Jinks, & Mendes, 1999), the character of Ricky Fitts explains his passion for beauty while talking about what he believes is the most beautiful thing he has ever captured on video. He says,

It was one of those days when it's a minute away from snowing and there's this electricity in the air, you can almost hear it. Right? And this bag was just dancing with me. Like a little kid begging me to play with it. For fifteen minutes. That's the day I realized that there was this entire life behind things, and this incredibly benevolent force that wanted me to know there was no reason to be afraid, ever. Video's a poor excuse, I know. But it helps me remember [pause] I need to remember [pause] Sometimes there's so much

beauty in the world, I feel like I can't take it, and my heart is just going to cave in.

(Cohen, Jinks, & Mendes, 1999)

This passage illustrates the potency of intentionality. It can help create meaning in life, especially when accompanied by the UA “the universe is beautiful” or “the universe is good.” In more developed personifications of the force behind the universe (religion), viewing the universe as having intentionality can mean belief in a being which serves as a focus for our offerings of thanksgiving (gratitude). Many studies have shown that there is a strong relationship between belief in divine control and gratitude (e.g. Watkins, Woodward, Stone, & Kolts, 2003). Rosmarin and colleagues (2011) found in a study of 405 adults that were fairly evenly distributed among Judaism, Christianity, and atheism that religiosity was tied to increased gratitude. “By contrast, non-religious gratitude is constricted by the perception of physical agents, and thus can only occur in interpersonal contexts” (Rosmarin et al, 2011, p. 393). Potentially, belief in the intentionality of the universe turns every environment into an “interpersonal context.” Finally, I should note that the strength of teamwork/citizenship, which includes some loyalty to and identification with a group, may be encouraged by the belief in the universe’s intentionality especially when combined with the belief that “the universe revolves around my group.” Manifest destiny in 19th century America is a prime example.

Believing the “the universe is mindless” may correlate with 3 strengths: open-mindedness, persistence, and hope. Hope and persistence involve positive action in the face of negative events (Peterson & Seligman, 2004). But how we respond to adversity is driven by our beliefs about the adverse event, rather than adversity itself (Beck & Weishaar, 1989). Thus these two strengths benefit from the idea that the world is not intentionally sending adversity your

way. Instead of fate stopping you, which is the belief in a global unalterable trend (“the universe can/can’t change”), adversity is local and incidental.

Believing the “the universe has intentionality” may correlate with with all 10 positive emotions. Meanwhile, believing the “the universe is mindless” is likely to be connected to zero positive emotions. This may explain much of the benefit that has been associated with religion (Pargament, 2002). Obviously, if the world is dangerous or unjust, intentionality by a universal force is less likely to benefit emotional life.

Since conducting this analysis, colleagues have pointed out that I may have failed to identify how an intentional universe may “suck out” all the meaning in life. An omnipotent god, for instance, decides what is meaningful and good, and humans must either bow to that god’s purpose or rebel. However, if the world is without a mind, than perhaps meaning has yet to be created, and humans can fashion it themselves. And, if the world is seen as a bad place full of suffering, then it may be better to have no intentionality if the intentionality we do have is sinister. I am sympathetic to these arguments and believe that I should have made more connections between “the world is mindless” and positive emotions. However, I doubt accommodation would change the overall hypothesis: believing that “the world has intentionality” may be more adaptive than believing “the world is mindless.”

11: The Universe is Best Experienced with Others vs. the Universe is Best Experienced Alone

*You remember all we were told about the torture chambers, the fire and brimstone, the "burning marl." Old wives' tales! There's no need for red-hot pokers. Hell is—other people! — the character of Garcin, final lines of Jean-Paul Sartre's *No Exit* (1946/1989)*

Like “the universe is to be explored,” this universal policy assessment is concerned with the beliefs regarding the way the universe is best experienced. Is best played more like an individual sport like chess, or a team-sport like football (soccer)? One’s answer might be tied to a variety of outcomes especially through the mechanism of increased social connection. An example might be the Christian church, which usually puts a premium on all members participating in “the body” of Christ as one church. Perhaps as a result of that, religiousness and religious church attendance has shown to have psychological benefits, some of which can be explained by increased social connection (Barton & colleagues, 2013). This UA pair, however, is not meant to parallel the introvert/extrovert distinction. Introverts can live out pro-social UPAs and value intimate relationships and strong communities. Extroverts can enjoy other people but pursue life independently from community.

Believing that “the universe is best experienced with others” was connected to 15 strengths: curiosity, open-mindedness, zest, love, kindness, social intelligence, teamwork, fairness, leadership, forgiveness, appreciation of beauty and excellence, gratitude, hope, humor, and spirituality. This UA likely reinforces all strengths that are oriented towards social interaction, such as kindness, teamwork, and forgiveness. These strengths place value on other people and maintaining relationships. Assuming this UA engenders more relationships of higher quality, open-mindedness is likely encouraged as close relationships help one see other ways of

approaching an issue. I imagine that future research will tie this UA to an enormous range beneficial pro-social behaviors.

Believing that “the universe is best experienced alone” was connected to 3 strengths: creativity, appreciation of beauty and excellence, and spirituality. Appreciation could go both ways; it might be encouraged by pursuing connection to others, especially if one appreciates excellence in other people. However, if one’s strength of appreciation is driven by the recognition of beauty and excellence in non-human objects like nature, then believing that the world is best experienced alone may encourage application.

Believing that “the universe is best experienced with others” may connect to all 10 positive emotions. This could happen in a variety of ways, two of which I will mention. First, if one believes that the world is best experienced with others, he or she may be more likely to invest in acquaintances by showing attention and interest, thereby making high quality connections (HQCs), which are “short-term, dyadic positive interactions” (Stephens, Heaphy, & Dutton, 2012, p. 385). HQCs provide a range of improvements to physiological and emotional states, as well as performance, including increased group cohesion, interpersonal trust, psychological safety, and sense of loyalty and connectedness. Stephens, Heaphy, and Dutton (2012) identify other-awareness, the recognition that the ‘other’ is an important aspect of the environment, as a critical cognitive mechanism that allows for HQCs. I hypothesize that other-awareness is high in people high in the belief that the universe is best experienced with others.

Secondly, the UA “the universe is best experienced with others” may lead to increased capitalization, which is the process of sharing positive events with others (Langston, 1994; Gable & Gosnell, 2011). Capitalization brings numerous benefits. For example, it encourages positive affect, reinforces self-esteem, increases life satisfaction, decreases loneliness, and enhances

memory and the pleasure that memories engender (Langston, 1994). These effects become more pronounced when positive news is shared with more people. However, in one study, only 1.9% of recorded capitalization happened outside of very close relationships, while approximately one quarter of capitalization happened within dyads and three quarters in traditionally non-dyadic relationships such as friends, siblings, parents, roommate, and others (Gable et al., 2004). In other words, capitalization happens mainly within intimate relationships. Humans need companions on the road of life. Having more than one or two, having experiences with them, and capitalizing with them about experiences had apart, is potentially the single most important effect of any universal assessment. The very idea that we should “swap stories” and experience life together may be driven by a belief about the universe—it’s made to share.

Meanwhile, the analysis did not reveal any connection between believing that “the universe is best experienced alone” and any positive emotion except perhaps serenity. However, I expect that believing that life is best lived with others, and pursuing that, may result in the drama that is commonly understood to be associated with a life full of flawed human beings.

12: The World is as it Should Be vs. the World Needs Change

Neither can I approve the opinion of some scholastics who maintain boldly that what God has done is not absolutely perfect [creation], and that He could have done much better....To show that an architect could have done better is to find fault with his work.... It [the view of some scholastics] is based on our insufficient knowledge of the general harmony of the universe and of the hidden reasons for God’s conduct which lead us to the rash judgment that many things could have been done better.

— Gottfried Leibniz, *Discourse on Metaphysics*, (1686/2003, p.

613)

This UA pair describes the felt need for the world to be different from what it is. It can be described as a conservative/liberal spectrum as those terms are literally defined.

Conservatives wish to conserve and may be sympathetic to the following statements: 1) if it's not broke don't fix it, 2) things are what they are for a reason, and 3) look before you leap. Liberals wish to alter their environment and may be sympathetic to these statements: 1) new is better, 2) we are nowhere compared to where we can go, and 3) the world needs change. This UA creates assumptions that we bring to every new object that we encounter. Generally speaking, do things need to be fixed? Answering with "probably" or "probably not" might lead to different life outcomes. Also, I am fascinated by how big a role this UA pair might play in forming political parties, social movements, and changes in the general populations across time in response to major events such as the boom years of the 1920s or World War I's failure to make the world "safe for democracy."

Believing that "the world is as it should be" was connected to four strengths: perspective, humility, appreciation of beauty and excellence, and spirituality. Humility may be correlated to this UA, as a degree of humility is required if one is to assume that, although they do not know why something is the way it is, there may be a good reason for it.

Believing that "the world needs change" may lead to 11 strengths: creativity, perspective, bravery, persistence, teamwork, leadership, prudence, self-regulation, hope, humor, and spirituality. The bent towards creativity, for instance, which is finding new ways to do things, may be predicated on the initial inclination that there is likely a better way. If the world is as it

should be, then discovering new ways of doing things is unnecessary and even immoral. This may explain some of the visceral emotions that exist between political parties.

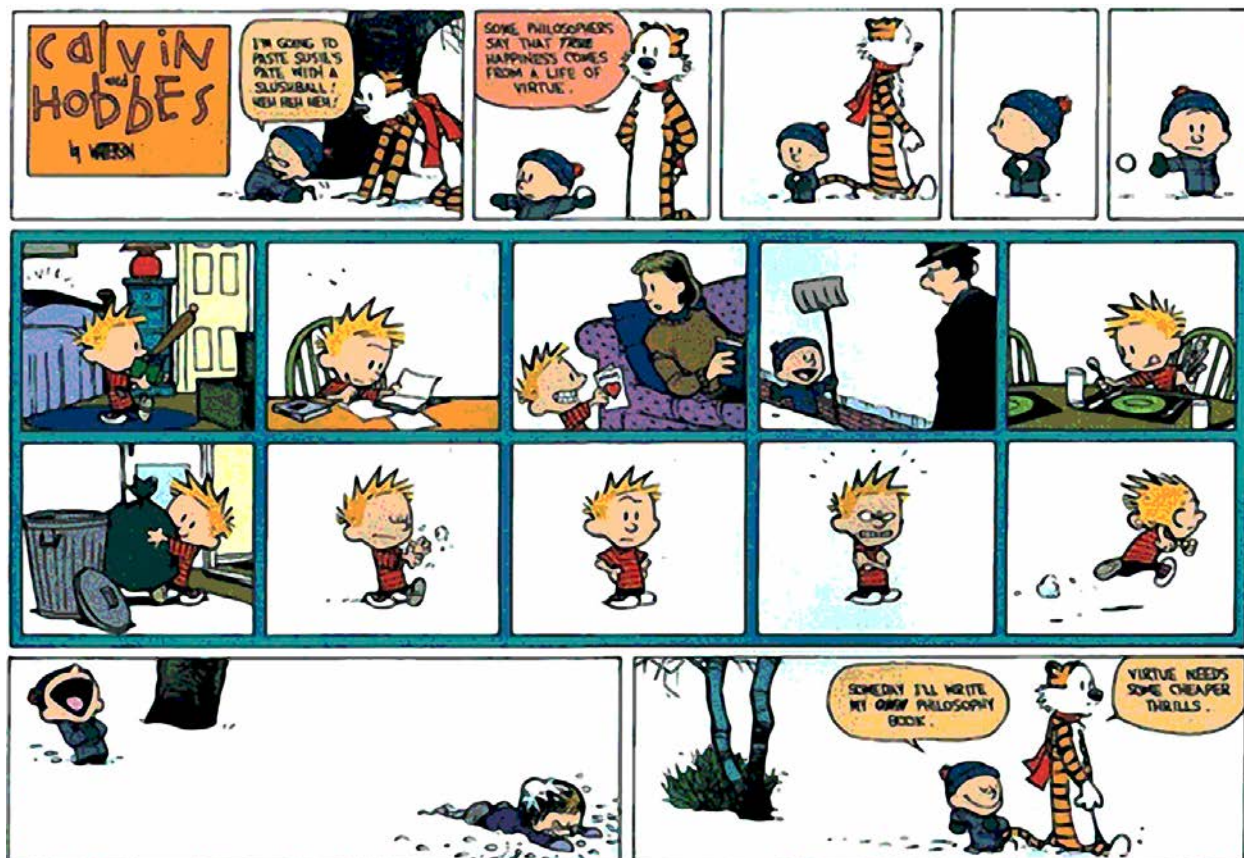
Believing that “the world is as it should be” may lead to five positive emotions: joy, gratitude, serenity, awe, and love. Gratitude is an obvious connection since it might be directly caused by the belief that things are the way they should be. If so, the present state of affairs is cause for thanksgiving. Also, joy includes the sense that things are going your way (Fredrickson, 2009) and is partly defined by Potkay (2013) as “desire at least temporarily laid to rest” (p. vii). This may be more likely within the general assumption that things are the way they should be.

Believing that “the world needs change” may lead to 6 positive emotions: hope, pride, amusement, inspiration, awe, and love. Pride, for instance, includes the feeling that one can change the world (Fredrickson, 2009). This is not something that one should necessarily be proud of unless the person has the view that the world is generally in need of change.

It should be noted that this (the world is as it should be) is the only positive UA to be potentially less useful to the development of strengths and increasing a range of positive emotions than the negative UA (the world needs change). There could be an advantage to having some level of assumed dissatisfaction with the universe and believing that change is usually necessary.

13: The World is Just vs. The World is Unjust

Figure 10. Bill Watterson (h)



“Some people may say that it was...good luck that brought to us this gift....No, it was not luck. It was hard work. Nothing ever comes to one, that is worth having, except as a result of hard work.”

— Booker T. Washington in *Up from Slavery* (1901/2000, sec. 12.22)

Like “the world is safe/dangerous,” belief in a just world (BJW) has been well-researched. It is also the only UA pair in this collection that did not emerge from my initial analysis of strengths and positive emotions. After reviewing the research in step 5, it seemed worth incorporating. BJW asserts that the universe is a place in which effort and virtue are rewarded and sloth and vice leads to punishment (Lerner, 1965). Those high in BJW are more

likely to make long-term goals and strive for their realization because they expect their work to be rewarded (e.g. Otto & Dalbert, 2005). They are less suspicious (Furnham, 1995; Tomaka & Blascovich, 1994) and make better employees, as they are more likely to trust the organization they work for (Otto, Glaser, & Dalbert, 2009). BJW allows individuals to see themselves not as victims of fate, but the authors of it. Investing in the future makes sense because they believe that actions will be rewarded.

In the analysis, BJW was connected to 21 strengths: creativity, open-mindedness, love of learning, perspective, bravery, persistence, honesty, zest, love, kindness, teamwork, fairness, leadership, forgiveness, prudence, self-regulation, appreciation of beauty and excellence, gratitude, hope, humor, and spirituality. Fairness and kindness rely on a strong sense of the importance of right and wrong and that behaving unfairly towards someone will be (and should be) punished in one way or another. Those with high fairness endorse the statement, “everyone should get their fair share” (Peterson and Seligman, 2004, p. 392), which is the definition of a just world. Also, because everyone gets their fair share, this may motivate the development of strengths which involve human striving such as bravery and persistence.

Belief in an unjust world was connected to 5 strengths: perspective, social intelligence, forgiveness, humor, and spirituality. Because people without BJW tend to be more suspicious (Furnham, 1995) and may build social intelligence because they desire to understand the potentially sinister motivations of others. Consistent attention to clues which reveal motivation may create social intelligence over time.

Belief in a just world was connected to 5 positive emotions: awe, inspiration, pride, serenity, and joy. Taking pride in one’s accomplishments, for instance, is easier and more likely

if one believes the self to be deserving. After all, achievements are always deserved in a just world. Joy also appears more likely in the face of people thinking they got what they deserve.

Belief in an unjust world may lead to two positive emotions: awe and gratitude.

Gratitude is interesting: if one always deserves they they get, then the only person to be thanked for what they get is themselves. Grateful people tend to say things like, “I often reflect on how much easier my life is because of the efforts of others” (Peterson & Seligman, 2004, p. 554).

Gratitude may be more likely when one feels that the blessings one has received are incommensurate with one’s own efforts.

Future research may also correlate BJW with reciprocity style, how people respond acts of kindness or unkindness. I am not sure if this has yet been attempted.

For a discussion summarizing general observations which resulted from this analysis. Please see the section entitled “Thirteen Universal Assessments.”

Appendix B: Analysis Notations — Strengths & UAs

Appendix B is color-coded.

24 Strengths	Potential UAs	Notes
<p><i>Key & Summary</i></p>	<p>The universe is good. (Maraschino) Analysis connects the positive UMA to 23 strengths and the negative UMA to 11 strengths. The universe is interesting. (Teal) Analysis connects the positive UCA to 10 strengths and the negative UCA to 1 strength. The universe is aesthetically good. (Asparagus) ...19 and 4... The universe can change. (Clover) ...14 and 5... The universe is getting better. (Grape) ...18 and 8... The universe is safe. (Mocha) ...21 and 11... The universe should be explored. (Strawberry) ...17 and 7... The universe is comprehensible or easy to understand. (Maroon) ...20 and 7... The universe does not revolve around me. (Tangerine) ...19 and 6... The universe has intentionality. (Blueberry) ...20 and 3... The universe is best experienced with others. (Plum) ...15 and 3... The world should not change. (Iron) ...4 and 11... The world is just. (Midnight) ..21 and 5...</p>	
<p>Creativity</p>	<ul style="list-style-type: none"> • What has not been thought of is worth thinking about. • The universe is open and full of possibilities. • The world can change. (I can change the world.) • The world is good. (positive and weakly negative) • The world is safe. • I am at the center of the universe. (negative) • The world should be explored. • The world is understandable. (I can understand it.) • The world is best experienced alone. • The world should be different, if it can be. • The universe is getting better and I can help it. • The universe has intentionality. There is purpose behind things. • The world is just. (New ways of doing things will be rewarded.) 	<p>Also, perhaps “the most powerful force in the world is ideas,” but that would perhaps relate more to other assessment.</p>
<p>Curiosity</p>	<ul style="list-style-type: none"> • The world is exciting. novelty-seeking, openness to experience • The world is safe. • The world is good. • The world is worth getting to know. • What I do not know will be interesting. • The world is understandable. (I can understand it.) • The world should be explored. • The universe is beautiful. • The universe is getting better and I can know it. • The universe has intentionality, and it makes the world more interesting. • The universe is best experienced with others. 	

24 Strengths	Potential UAs	Notes
<p>Key & Summary</p>	<p>The universe is good. (Maraschino) Analysis connects the positive UMA to 23 strengths and the negative UMA to 11 strengths. The universe is interesting. (Teal) Analysis connects the positive UCA to 10 strengths and the negative UCA to 1 strength. The universe is aesthetically good. (Asparagus) ...19 and 4... The universe can change. (Clover) ...14 and 5... The universe is getting better. (Grape) ...18 and 8... The universe is safe. (Mocha) ...21 and 11... The universe should be explored. (Strawberry) ...17 and 7... The universe is comprehensible or easy to understand. (Maroon) ...20 and 7... The universe does not revolve around me. (Tangerine) ...19 and 6... The universe has intentionality. (Blueberry) ...20 and 3... The universe is best experienced with others. (Plum) ...15 and 3... The world should not change. (Iron) ...4 and 11... The world is just. (Midnight) ..21 and 5...</p>	
<p>Open-mindedness/Judgement</p>	<ul style="list-style-type: none"> • The universe is what it is regardless what I think it is. • The universe is hard to understand. • It is easy to be wrong about the universe. • The universe is safe. • The universe is good. • The world is an adventure. • The world is surprising. • The world is best experienced with others and other people's perspective. • The universe is beautiful. • the universe lacks intentionality. (negative) • The world is just. Epistemic egotism will be punished. 	
<p>Love of Learning</p>	<ul style="list-style-type: none"> • The universe is interesting. • I like the universe. The universe is worthwhile. The universe is good. • Understanding the universe is possible or even easy. • The universe should be understand for its own sake. • What I do not know will be interesting. • The world can change. • I am not at the center of the universe. • The world should be explored. • The world is safe. • The universe is beautiful. • The universe is getting better and I can too. • The universe has intentionality. (may make things more interesting). • The world is just. Learning new things will be rewarded. 	

24 Strengths	Potential UAs	Notes
<p><i>Key & Summary</i></p>	<p>The universe is good. (Maraschino) Analysis connects the positive UMA to 23 strengths and the negative UMA to 11 strengths. The universe is interesting. (Teal) Analysis connects the positive UCA to 10 strengths and the negative UCA to 1 strength. The universe is aesthetically good. (Asparagus) ...19 and 4... The universe can change. (Clover) ...14 and 5... The universe is getting better. (Grape) ...18 and 8... The universe is safe. (Mocha) ...21 and 11... The universe should be explored. (Strawberry) ...17 and 7... The universe is comprehensible or easy to understand. (Maroon) ...20 and 7... The universe does not revolve around me. (Tangerine) ...19 and 6... The universe has intentionality. (Blueberry) ...20 and 3... The universe is best experienced with others. (Plum) ...15 and 3... The world should not change. (Iron) ...4 and 11... The world is just. (Midnight) ..21 and 5...</p>	
<p><i>Perspective/Wisdom</i></p>	<ul style="list-style-type: none"> • This universe is full of patterns. “I realize larger patterns, wider perspective...” (Peterson & Seligman, 2004, p. 182) • The universe cannot be understood. (positive & negative) • I am not at the center of the universe. • The universe should be explored. • The world is good. • The universe is made fuller by the perspectives of others. • The world should be better, or should be what it is. • The universe is beautiful. • The world can’t change. (positive and negative) • The universe is healing, and so can we. (positive and negative) • The universe has intentionality. I see the patterns. • The world is just or unjust (effort is not always rewarded). 	
<p><i>Bravery</i></p>	<ul style="list-style-type: none"> • The universe is safe/dangerous. (positive or negative) • The universe is good/bad. (positive or negative) • The universe is not my enemy or the universe is my friend. • The universe can be understood. • The universe does not revolve around me. Or, it is up to me. • The world should be explored. • The universe has prepared me for this moment. • The world should be different. Something must change. • The universe is beautiful. • The universe is getting better and I can help it. • The world is just. 	<p>Relates to other assessments like “other people matter.”</p>

24 Strengths	Potential UAs	Notes
<p>Key & Summary</p>	<p>The universe is good. (Maraschino) Analysis connects the positive UMA to 23 strengths and the negative UMA to 11 strengths. The universe is interesting. (Teal) Analysis connects the positive UCA to 10 strengths and the negative UCA to 1 strength. The universe is aesthetically good. (Asparagus) ...19 and 4... The universe can change. (Clover) ...14 and 5... The universe is getting better. (Grape) ...18 and 8... The universe is safe. (Mocha) ...21 and 11... The universe should be explored. (Strawberry) ...17 and 7... The universe is comprehensible or easy to understand. (Maroon) ...20 and 7... The universe does not revolve around me. (Tangerine) ...19 and 6... The universe has intentionality. (Blueberry) ...20 and 3... The universe is best experienced with others. (Plum) ...15 and 3... The world should not change. (Iron) ...4 and 11... The world is just. (Midnight) ..21 and 5...</p>	
<p>Persistence</p>	<ul style="list-style-type: none"> • The universe should be explored. • The universe can change. • The universe does not have intentionality: the universe does have intentionality. (In the first, the universe is not hindering on purpose. In the latter, the universe has intentions for you.) • The world is good. • I am not at the center of the universe. Or, I am at the center of the universe and it is up to me. • The world is safe. • The universe can be understood. • The world should be different. Something must change. • The universe is beautiful v. ugly. • The universe is getting better and things will change. • The world is just. 	
<p>Honesty/integrity/authenticity</p>	<ul style="list-style-type: none"> • The world is safe. The universe accepts me. I belong in the universe. The universe is home. • The universe is what it is, regardless of what I think it is. • The world is good. • The world should be explored. • The universe is beautiful. • The world can't change and neither can I. • The universe is getting better and I can be myself. • The universe has intentionality. (It dislikes phonies, falsehood, and immoral acts. p. 250) • The world is just. 	<p>Likely has more to do more with self assessment.</p>

24 Strengths	Potential UAs	Notes
<p><i>Key & Summary</i></p>	<p>The universe is good. (Maraschino) Analysis connects the positive UMA to 23 strengths and the negative UMA to 11 strengths. The universe is interesting. (Teal) Analysis connects the positive UCA to 10 strengths and the negative UCA to 1 strength. The universe is aesthetically good. (Asparagus) ...19 and 4... The universe can change. (Clover) ...14 and 5... The universe is getting better. (Grape) ...18 and 8... The universe is safe. (Mocha) ...21 and 11... The universe should be explored. (Strawberry) ...17 and 7... The universe is comprehensible or easy to understand. (Maroon) ...20 and 7... The universe does not revolve around me. (Tangerine) ...19 and 6... The universe has intentionality. (Blueberry) ...20 and 3... The universe is best experienced with others. (Plum) ...15 and 3... The world should not change. (Iron) ...4 and 11... The world is just. (Midnight) ..21 and 5...</p>	
<p>Zest</p>	<ul style="list-style-type: none"> • I belong in the universe. The universe is home. • The world is exciting. • The world is waiting to be explored. • The world is good. • The universe can be understood. • The world is open and full of possibilities. • I am at the center of the universe. (positive and negative) • The universe is best explored with others. • The universe is beautiful. • The universe is getting better! • The universe has intentionality. • The world is just. 	<p>Likely has more to do more with self assessment.</p>
<p>Love</p>	<ul style="list-style-type: none"> • The universe is best explored/endured with another. (positive or negative) • The world is good. (positive or negative) • The universe is full of people like me. (I belong here.) (positive or negative). • I am not at the center of the universe. • The world should be explored. (positive and negative) • The universe is beautiful. (positive or negative) • The universe can be understood. • The universe is getting better or worse. • The universe has intentionality. (romantic love) • The universe is best experienced with others. • The world is just. 	<p>Likely has more to do more with self assessment or other assessment.</p>

24 Strengths	Potential UAs	Notes
<p><i>Key & Summary</i></p>	<p>The universe is good. (Maraschino) Analysis connects the positive UMA to 23 strengths and the negative UMA to 11 strengths. The universe is interesting. (Teal) Analysis connects the positive UCA to 10 strengths and the negative UCA to 1 strength. The universe is aesthetically good. (Asparagus) ...19 and 4... The universe can change. (Clover) ...14 and 5... The universe is getting better. (Grape) ...18 and 8... The universe is safe. (Mocha) ...21 and 11... The universe should be explored. (Strawberry) ...17 and 7... The universe is comprehensible or easy to understand. (Maroon) ...20 and 7... The universe does not revolve around me. (Tangerine) ...19 and 6... The universe has intentionality. (Blueberry) ...20 and 3... The universe is best experienced with others. (Plum) ...15 and 3... The world should not change. (Iron) ...4 and 11... The world is just. (Midnight) ..21 and 5...</p>	
<p>Kindness</p>	<ul style="list-style-type: none"> • I am not the center of the universe. “I am not at the center of universe.” p. 326 • Other people matter. • The universe is best appreciated with others. • The universe is best endured with others. • The world is good. The world is bad. • The universe has intentionality and it is kind. • The world is safe. • The universe is beautiful. • The world is just. 	<p>Likely has more to do with other assessment. “Others are just as important to me” (Peterson & Seligman, 2004, p. 326). Other comments about how all humans are of equal worth. (Anti-social behaviors might correlate with solipsism.)</p>
<p>Social Intelligence</p>	<ul style="list-style-type: none"> • The world is a dangerous place. (negative) • The world is bad. • The universe is what it is regardless what I think it is. • The universe is best appreciated with others. • The universe is best endured with others. • The universe can be understood. • The universe has intentionality. (an effect) • The world is unjust. (People get away with things and maybe they should not be trusted.) 	<p>More likely has to do with other assessment.</p>

24 Strengths	Potential UAs	Notes
<p><i>Key & Summary</i></p>	<p>The universe is good. (Maraschino) Analysis connects the positive UMA to 23 strengths and the negative UMA to 11 strengths. The universe is interesting. (Teal) Analysis connects the positive UCA to 10 strengths and the negative UCA to 1 strength. The universe is aesthetically good. (Asparagus) ...19 and 4... The universe can change. (Clover) ...14 and 5... The universe is getting better. (Grape) ...18 and 8... The universe is safe. (Mocha) ...21 and 11... The universe should be explored. (Strawberry) ...17 and 7... The universe is comprehensible or easy to understand. (Maroon) ...20 and 7... The universe does not revolve around me. (Tangerine) ...19 and 6... The universe has intentionality. (Blueberry) ...20 and 3... The universe is best experienced with others. (Plum) ...15 and 3... The world should not change. (Iron) ...4 and 11... The world is just. (Midnight) ..21 and 5...</p>	
<p>Teamwork/ Citizenship</p>	<ul style="list-style-type: none"> • The world is a dangerous place. (positive allows the team to form, and negative) • The universe can change (via the group). “I have a responsibility to improve the world in which I live.” (Peterson & Seligman, 2004, p. 371) • The universe should be clean. (p. 371) • The universe is best appreciated with others. • The universe is best endured with others. • The world should be better. • I am not at the center of the universe. • The universe can be understood. • The world is bad. • The world has intentionality for your group. • The world is best stayed away from. • The universe is getting better. (positive and negative) • The world is just. 	
<p>Fairness</p>	<ul style="list-style-type: none"> • The world is just. • The universe can change. • The universe is best appreciated with others. • The universe is best endured with others. • The universe has intentionality. • I am not at the center of the universe. • The world can be understood. • The world is not safe. (Or it is safe and that allows me to be fair.) • The world is just. 	<p>More likely relates to other assessments. People are an end in and of themselves. (Peterson & Seligman, 2004, p. 393)</p>

24 Strengths	Potential UAs	Notes
<p>Key & Summary</p>	<p>The universe is good. (Maraschino) Analysis connects the positive UMA to 23 strengths and the negative UMA to 11 strengths. The universe is interesting. (Teal) Analysis connects the positive UCA to 10 strengths and the negative UCA to 1 strength. The universe is aesthetically good. (Asparagus) ...19 and 4... The universe can change. (Clover) ...14 and 5... The universe is getting better. (Grape) ...18 and 8... The universe is safe. (Mocha) ...21 and 11... The universe should be explored. (Strawberry) ...17 and 7... The universe is comprehensible or easy to understand. (Maroon) ...20 and 7... The universe does not revolve around me. (Tangerine) ...19 and 6... The universe has intentionality. (Blueberry) ...20 and 3... The universe is best experienced with others. (Plum) ...15 and 3... The world should not change. (Iron) ...4 and 11... The world is just. (Midnight) ..21 and 5...</p>	
<p>Leadership</p>	<ul style="list-style-type: none"> • The world can change. (I can change it. My group can change it.) • The world is good. • The universe is best experienced with others. • I am not the center of the universe. (positive and negative) • The universe is personal. The stars can align. • The world should be better. • The world should be explored. • The world can be understood. • The universe is beautiful. • The universe is interesting. • The world is not safe. • The world is just. 	<p>More likely relates to other and self assessment. CEOs and curiosity correlate.</p>
<p>Forgiveness</p>	<ul style="list-style-type: none"> • The universe can change. • The world is good. • The world is just. • The world will be ok (Adam Grant, give and take). • I am not at the center of the universe • The world is safe. • The universe is best experienced in good relationship to others. • The world can be understood. • The universe is beautiful. • The universe behaves personably towards you. • The universe is getting better and I can help it. • The world is just. 	<p>Relates conceptually to persistence (i.e., I will act despite...), but more likely has to do with other assessments, such as can people change, are they good, and do they deserve forgiveness.</p>

24 Strengths	Potential UAs	Notes
<p><i>Key & Summary</i></p>	<p>The universe is good. (Maraschino) Analysis connects the positive UMA to 23 strengths and the negative UMA to 11 strengths. The universe is interesting. (Teal) Analysis connects the positive UCA to 10 strengths and the negative UCA to 1 strength. The universe is aesthetically good. (Asparagus) ...19 and 4... The universe can change. (Clover) ...14 and 5... The universe is getting better. (Grape) ...18 and 8... The universe is safe. (Mocha) ...21 and 11... The universe should be explored. (Strawberry) ...17 and 7... The universe is comprehensible or easy to understand. (Maroon) ...20 and 7... The universe does not revolve around me. (Tangerine) ...19 and 6... The universe has intentionality. (Blueberry) ...20 and 3... The universe is best experienced with others. (Plum) ...15 and 3... The world should not change. (Iron) ...4 and 11... The world is just. (Midnight) ..21 and 5...</p>	
<p>Humility</p>	<ul style="list-style-type: none"> • I am not at the center of the universe. • The world is what it is regardless of what I think it is. • The world is safe (which allows us to be vulnerable) • The world is hard to understand. • The world should be what it is. • The world is good. • The universe is best understood, and appreciated, and made more beautiful by others. • The universe is beautiful. • The world can't change. • I am not up to taking on the world. • The universe is getting better. 	<p>Like involves other assessment, like 'other people matter,' and self assessment, like it is easy to be wrong. Also, the universe is made beautiful by many different things and different people.</p>
<p>Prudence</p>	<ul style="list-style-type: none"> • The world can change. (I can change it.) • The world is bad • The universe is difficult to understand, but also I can understand it. • The world is not safe. The world is safe: • The world should not be explored. (positive and negative) • The world should be different. • The universe is getting worse or better. • The world is just. 	<p>More likely to do with self-assessment.</p>
<p>Self-regulation</p>	<ul style="list-style-type: none"> • the world can change. (I can change it.) • The world is bad. (positive and negative. • The universe is safe. (positive and negative) • The universe can be understood. • The world should be different. • The world is not particularly fascinating. • The world is not that aesthetically pleasing. • The universe is getting better or worse. • The world is just. 	<p>More likely to do with self-assessment.</p>

24 Strengths	Potential UAs	Notes
<p><i>Key & Summary</i></p>	<p>The universe is good. (Maraschino) Analysis connects the positive UMA to 23 strengths and the negative UMA to 11 strengths. The universe is interesting. (Teal) Analysis connects the positive UCA to 10 strengths and the negative UCA to 1 strength. The universe is aesthetically good. (Asparagus) ...19 and 4... The universe can change. (Clover) ...14 and 5... The universe is getting better. (Grape) ...18 and 8... The universe is safe. (Mocha) ...21 and 11... The universe should be explored. (Strawberry) ...17 and 7... The universe is comprehensible or easy to understand. (Maroon) ...20 and 7... The universe does not revolve around me. (Tangerine) ...19 and 6... The universe has intentionality. (Blueberry) ...20 and 3... The universe is best experienced with others. (Plum) ...15 and 3... The world should not change. (Iron) ...4 and 11... The world is just. (Midnight) ..21 and 5...</p>	
<p>Appreciation of Beauty and Excellence</p>	<ul style="list-style-type: none"> • The world is good. • The universe is beautiful/excellent. • The world is getting better. • The universe should be explored/grasped. • I am not the center of the universe. It is out there. The world is what it is, regardless of what I think it is. • The world is fascinating. • The world is waiting to be explored. • The universe is easy to understood. (positive and negative) • The world has intentionality. • The world is best experienced with others. (positive and negative) • The world is safe. • The world should be what it is. • The universe is getting better. • The world is just. 	<p>Haidt's research is highly relevant. "The most beautiful emotion we can experience is the mysterious. It is the fundamental emotion that stands at the cradle of all art and science. He who can no longer wonder and stand rapt in awe, is as good as dead, a snuffed out candle." — Albert Einstein, 1930, mentioned by G. Valiant. Like corresponds to other assessments: people are good/beautiful/excellent etc.</p>

24 Strengths	Potential UAs	Notes
<p><i>Key & Summary</i></p>	<p>The universe is good. (Maraschino) Analysis connects the positive UMA to 23 strengths and the negative UMA to 11 strengths. The universe is interesting. (Teal) Analysis connects the positive UCA to 10 strengths and the negative UCA to 1 strength. The universe is aesthetically good. (Asparagus) ...19 and 4... The universe can change. (Clover) ...14 and 5... The universe is getting better. (Grape) ...18 and 8... The universe is safe. (Mocha) ...21 and 11... The universe should be explored. (Strawberry) ...17 and 7... The universe is comprehensible or easy to understand. (Maroon) ...20 and 7... The universe does not revolve around me. (Tangerine) ...19 and 6... The universe has intentionality. (Blueberry) ...20 and 3... The universe is best experienced with others. (Plum) ...15 and 3... The world should not change. (Iron) ...4 and 11... The world is just. (Midnight) ..21 and 5...</p>	
<p>Gratitude</p>	<ul style="list-style-type: none"> • The world is good. (It is a privilege to be alive in it.) • The world is bad. (downward social comparison and luckiness) • The world is fascinating. • The world is what it is, regardless of what I think it is. • The universe is a good gift. • The universe is to be explored. But we might also keep it at arms length and be grateful for the good we have. • The world is aware of me and personal. • The world is good to me. (I am lucky.) • The world is getting better. • The world is safe. (positive and negative) • The world can be understood. • The world should not be different. • The universe is beautiful. • The universe is getting better. • The world is best experienced with others. • The world is just. 	<p>Peterson and Seligman (2004) note personal and transpersonal gratitude, the later is “gratefullness to god, a higher power, or to the cosmos.” (p. 555)</p>
<p>Hope/optimism /future mindedness</p>	<ul style="list-style-type: none"> • The world can change. The world is getting better. • The world is good (“Good will always triumph over evil” Peterson & Seligman, 2004, p. 570) • The world is just. • The universe is safe. • The universe should be explored. • The universe is best experienced with others. • The world can be understood. • The world is just. • The world should be different. • The universe is beautiful. • The universe may or may not have intentionality. But it is not out to get me. • The universe is getting better. Important connection. • The world is just. 	<p>Note the difference between cognitive optimism, from Liebniz (good will triumph over evil) and pessimism from Shopenahuaer (suffering will out weigh happiness). p. 571 pessimism. Also, looking at measures might be useful.</p>

24 Strengths	Potential UAs	Notes
<p>Key & Summary</p>	<p>The universe is good. (Maraschino) Analysis connects the positive UMA to 23 strengths and the negative UMA to 11 strengths. The universe is interesting. (Teal) Analysis connects the positive UCA to 10 strengths and the negative UCA to 1 strength. The universe is aesthetically good. (Asparagus) ...19 and 4... The universe can change. (Clover) ...14 and 5... The universe is getting better. (Grape) ...18 and 8... The universe is safe. (Mocha) ...21 and 11... The universe should be explored. (Strawberry) ...17 and 7... The universe is comprehensible or easy to understand. (Maroon) ...20 and 7... The universe does not revolve around me. (Tangerine) ...19 and 6... The universe has intentionality. (Blueberry) ...20 and 3... The universe is best experienced with others. (Plum) ...15 and 3... The world should not change. (Iron) ...4 and 11... The world is just. (Midnight) ..21 and 5...</p>	
<p>Humor</p>	<ul style="list-style-type: none"> • The world is fascinating (funny/suprising) • The world is good (look at the bright side). And the world is not all bad. (positive and negative) • The world is hard to understand. (positive and negative) • The world is a wondrous place to be explored, or a scary place to keep at arms length. • The world has intentionality. • The world is best experienced with others. • The world is safe. (positive and negative). • The world should be different. • The universe is beautiful. (positive or negative) • The universe can't change. • The universe is getting better/ or worse. • The world is just or unjust. 	<p>Humor might serve as a coping mechanism for thinking that the world is bad. Peterson and Selgiman (2004) note the possibility of negative connotations in having strength in humor.</p>
<p>Spirituality</p>	<ul style="list-style-type: none"> • The universe is personal. "I believe there is a sacred force," and "God is in control" (Peterson & Seligman, 2004, p. 600). Also, God is great. • The universe is safe. The universe is not safe. • The universe is going somewhere. The universe can change. • The universe can't change. Accept it. • The world is fascinating. • The world is good, or sacred under Pargament's concept of spirituality. (positive and negative) • The world should be explored, or stayed away from. • The world can be understood, but it is also incomprehensible. • I am at the center of the universe. (positive and negative) • The world should be different. • The world should not be different. • The universe is beautiful. • The world is best experienced alone. The world is best experienced with others. • The universe is getting better/ the world is getting worse. • The world is just or unjust. 	<ul style="list-style-type: none"> •

Appendix C: Analysis Notations — Positive Emotions & UAs

Appendix C is color-coded.

10 Positive Emotion	Potential UAs	Notes
<p><i>Key & Summary</i></p>	<p>The universe is good. (Maraschino) Analysis connects the positive UMA to 9 positive emotions and the negative UMA to 4 positive emotions.</p> <p>The universe is interesting. (Teal) Analysis connects the positive UCA to 9 positive emotions and the negative UCA to 0 positive emotions.</p> <p>The universe is aesthetically good. (Asparagus) ...8 and 0...</p> <p>The universe can change. (Clover) ...7 and 1 ...</p> <p>The universe is getting better. (Grape) ...9 and 3...</p> <p>The universe is safe. (Mocha) ...10 and 2...</p> <p>The universe should be explored. (Strawberry) ...10 and 1...</p> <p>The universe is easy to understand. (Maroon) ...3 and 4...</p> <p>The universe does not revolve around me. (Tangerine) ...6 and 3...</p> <p>The universe is has intentionality. (Blueberry) ...10 and 0...</p> <p>The universe is best experienced with others. (Plum) ...10 and 0...</p> <p>The world should not change. (Iron) ...5 and 5...</p> <p>The world is just. (Midnight) ..5 and 2...</p>	
<p>Joy</p>	<ul style="list-style-type: none"> • The world is safe. “Your surroundings are safe and familiar.” (Fredrickson, 2009, p. 40) • The world has a relationship with you. • The universe is interesting. • The universe is good. • The universe is beautiful. • The universe can change. • The universe should be explored. • The universe does not revolve around me. • The universe does revolve around me. • The universe is best experienced with others. • The universe is getting better. • The world should not be different. • The world is just. 	
<p>Gratitude</p>	<ul style="list-style-type: none"> • The world is good (it is a privelege to be alive, etc.) • The world is gracious. • The world is bad. (downward social comparison) • The world has a relationship with you. • The universe is interesting. • The universe is beautiful. • The universe is safe. • The universe should be explored. Or be grateful for what you have. • The universe does not revolve around me. • The universe is best experienced with others. • The world should not be different. • The universe is getting better/ the world is getting worse. • The world is unjust. (entitlement) 	

10 Positive Emotion	Potential UAs	Notes
Serenity	<ul style="list-style-type: none"> • “Serenity enters when your surroundings are safe and familiar.” (Fredrickson, 2009, p.42). The world is safe. • The world is just. • The world is as it should be. “Serenity makes you want to sit back and soak it in.” (Fredrickson, 2009, p.42) • The world is beautiful Fredrickson’s examples have to do with beauty, beach scenes, cup of tea, etc. • The universe is good. “I just love everything” (Fredrickson, 2009, p. 42) • The universe is interesting. • The universe can’t change. • The universe should be explored. • The universe does not revolve around me. • The world has a relationship with you. • The universe is best experienced with others. • The world should not be different. • The universe is getting better. • The universe is easy to understand. • The world is just. 	
Interest	<ul style="list-style-type: none"> • The world can change (has possibility) • The world is personal. • I like the world. • The universe is interesting, fascinating, and suprising. We are “pulled to explore.” (Fredrickson, 2009, p. 43) • The universe is beautiful. • The universe is safe. (One cannot show interest unless one is not afraid.) And the world is unsafe and has enemies (and enjoyable drama). • The universe should be explored. • The universe is easy to understand. • The universe is hard to understand. There is a “sense of possibility or mystery.” (Fredrickson, 2009, p. 42) • The universe is best experienced with others. • The universe is getting better. 	
Hope	<ul style="list-style-type: none"> • The world is safe. (My situation is an exception and things will change.) • Things can change: “Deep within the core of hope is the belief that things can change.” (Fredrickson, 2009, p. 43) • The world is personal • The world is worthwhile. • The universe should be explored. • The universe revolves around me. • The universe is best experienced with others. • The world should be different. • The universe is beautiful. • The universe is getting better and I can help it. • The world is just. 	

10 Positive Emotion	Potential UAs	Notes
Pride	<ul style="list-style-type: none"> • The world can change “...make a difference in the world.” • The world is safe and I can thrive in it. • The universe is interesting. • The world is bad. • The universe is hard to understand. • The universe revolves around me. • The world has a relationship with you. • The universe is best experienced with others. • The world should be different. • The universe should be explored. (I am up to the task.) • The world is just. 	Has more to do with self assessment.
Amusement	<ul style="list-style-type: none"> • The world is best experienced with people. • The universe is amusing. • The universe is safe. • The world is bad. • The world is good. • The universe is easy to understand. • The world has a relationship with you. • The world should be different. • The universe is getting better/ the world is getting worse. • The universe should be explored. 	
Inspiration	<ul style="list-style-type: none"> • The world is inspirational (the world is good). The world is hard to live with. • The world is safe. “It’s a choice about whether your heart is open or closed.” (Fredrickson, 2009, p. 46) • The universe is interesting. • The universe is beautiful. • The universe can change. • The universe should be explored. • The world has a relationship with you. • The universe is best experienced with others. • The world should be different. • The universe is getting better and I can help it. • I am not the center of the universe. The world is what it is. • The world is just. 	

10 Positive Emotion	Potential UAs	Notes
Awe	<ul style="list-style-type: none"> • The world is good. “...goodness on a grand scale...” (Fredrickson, 2009, p. 46) • I am not the center of the universe. The world is what it is. • The world is not safe. “Although a form of positivity, awe at times sits so close to the edge of safety that we get a whiff of negativity as well. Awe mixes with fear when we’ve witnessed a tornado or seen the Worth Trade Center towers collapse.” (Fredrickson, 2009, p. 46) (negative) • The world can change (“It compels us to see ourselves as part of something much larger.” p. 46) • The universe is interesting. • The universe is beautiful. • The universe should be explored. • The universe is hard to understand. • The world has a relationship with you. • The universe is best experienced with others. • The world should not be different. • The world should be different. • The universe is getting better. The Universe is getting worse. • The world is just. The world is unjust. 	
Love	<ul style="list-style-type: none"> • The world should not be different. • The world should be different. • The universe is best experienced with others. • The world has a relationship with you. • The universe does not revolve around me. • The universe should be explored. • The world is good. • The world is bad. • The universe is interesting. • The universe is beautiful. • The universe can change. • The world is safe (positive and negative). • The universe is getting better or worse. 	

Appendix D: The Leaf Exercise

“Homeland tourism” is a subset of interventions in which you open your eyes to beauty that familiarity hides. Homeland tourism builds awe, alleviates existential angst, increases savoring skills, piques curiosity, encourages thankfulness, redirects focus, exercises self-regulation, and raises subjective well-being. Such interventions attempt to help one answer the question, “Is this universe a good place to live?” or the more blunt statement, “existence sucks.” Obviously, not everyone is interested with this concern, which is where person-positive-intervention fit comes in, but I believe more are troubled by this issue than those who take time to articulate it. Personally, I believe that the universe is crushingly beautiful and wondrous and individuals would benefit from a “right” view of the world and an attitude that is the natural response to amazement. To that end, I have designed the unimaginatively named “leaf exercise.”

1. Go to your nearest forest or neighborhood park. Find a low branch. Pluck a leaf.
2. Examine it. What do you see? What patterns? Look closer. Take a few moments. Is it beautiful? If so, consciously appreciate its beauty. Imagine what it would look like under a microscope. What would you see? Imagine what it looked like when it was young in the spring, verdant and fresh. How has it changed? Imagine it being dripped on by rain some days, blown by the wind on others, and soaking in the sun whenever it could.
3. Pick another leaf. How is it different? How is it the same? Imagine its history as well. What bugs might have crawled on it? What birds hid behind it or brushed past? Do you think any of the oxygen it has produced is the same oxygen that has kept you or your loved ones alive? What is your relationship to the leaf?

4. Take a step back and look at the tree your leaves came from. How many leaves does it have? Go ahead and guess. Is each one just as real and beautiful as this one? Is their beauty proportional to how much they have been appreciated? How do the leaves interact with each other? How do they look aesthetically with the blue sky and the darkness of the tree bark?
5. Now turn around and let yourself be overwhelmed by all the other trees. Leaves are everywhere! Feel inundated by vast beauty. Imagine all the trees you have seen your entire life, and then all the trees you have never seen, but still exist, and all their leaves. Reflect on the vast forests of Eastern Europe, the Amazon Jungle, and forests of Siberia - the largest in the world. How will anyone ever have time to look at all these leaves and appreciate them as fully as they deserve?
6. But look! Some are just left to lie on the ground and rot. How does that make you feel?
7. Take some moments and jot down your reflections.

My own thoughts ran thus: “Though we let leaves lie on the ground, though we walk on them, though we let them decompose into nothing, let us not miscalculate the extent of their beauty and their worth. Leaves have enormous worth. They are wonderfully beautiful things. If we were not swimming in a world full of leaves, each one would be mounted and displayed in places of honor. Let us not construe their abundance as anything less than abundant blessing. Truly, during every autumn in the north-eastern United States, the streets are paved with gold.”

Since this intervention is nothing more than guided reflection, it would be simple to administer. Defining the activity and writing the guided reflection would be less critical than priming people on what the point of the intervention might be. Some individuals may think it silly. I think an ideal audience would be monotheists who believed that God made this world on

purpose. They would be more likely to see their feelings towards the universe as something relevant to their opinion of God and perhaps their relationship to him.

Leaves require focused attention, the active ingredient of this intervention, to be heard. Otherwise, they are mute. Leaves are also ubiquitous. Ideally, the leaf exercise would improve an individual's relationship with a common object. Thinking about leaves might become an instant mood booster, increasing positive affect for years to come. In addition to the benefits already mentioned, homeland tourism interventions like the leaf exercise could result in more support for environmentally-friendly policies.

The effectiveness of this intervention could be validated in a host of ways. Obviously, it could be subjected to a randomized, controlled trial. By redirecting attention, this intervention would, among other things listed earlier, build awe. Rudd, Vohs, and Acher (2012) have found that awe's benefits alone include experiencing life as less busy, becoming less impatient, helping others, preference for experiences over material accumulation, and increased life satisfaction. They also developed awe scales that could be used. In addition to awe, a number of measurable benefits might be derived from the leaf exercise.