ABSURDITY AS THE SOURCE OF EXISTENTIAL ANXIETY
A CRITIQUE O F TERROR MANAGEMENT THEORY

by

TRAVIS PROULX

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Department of _____ I IS G D _____

The University of British Columbia
Vancouver, Canada

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Abstract

Pyszczynski, Solomon and Greenberg's 'Terror Management Theory' presents itself as an empirically grounded psychological framework that satisfactorily explains existentially anxiety. More than this, Terror Management theory claims to account for *all* cultural constructs, *all* meaning oriented behaviour, and *all* related affect, as deriving from existential anxiety. According to TM, a human being's desire for meaning essentially reduces to existential anxiety. This is to say, all human beings are fundamentally anxious about their mortality, and meaning, *all manner of meaning*, is our means of quelling this anxiety. We both construct and adhere to meaning frameworks as a means of dealing with our largely unconscious, lingering awareness that someday, we are going to die.

This is a rather ambitious claim, and the evaluation of this claim will form the central thrust of this thesis. Is TM correct in asserting that every meaning framework, the world over, is constructed and adhered to insofar as it eases our existential anxiety, where existential anxiety itself reduces to our fear of death? Or is it the case that our meaning frameworks are constructed independently of the fear of death, where the fear of death may itself reduce to a thwarted need for meaning?

It will be the aim of this thesis to not only challenge TM's chain of reductions, but to propose our own, less ambitious series of reductions, whereby our fear of death can be seen as a manifestation of existential anxiety, which itself reduces to anxiety in the face of meaninglessness, or what Camus terms 'the absurd'. We will attempt to outline a line of thinking whereby our *need for meaning* exits, super-ordinate to any need to avoid mortal thoughts, and where this need for meaning, if not met, can provoke its own anxiety. Ultimately, we will

suggest that much of the anxiety associated with the fear of death is actually the anxiety produced when death thwarts our need for meaning.

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Introduction

Pyszczynski, Solomon and Greenberg's 'Terror Management Theory' presents itself as an empirically grounded psychological framework that satisfactorily explains existentially anxiety. More than this, Terror Management theory claims to account for *all* cultural constructs, *all* meaning oriented behaviour, and *all* related affect, as deriving from existential anxiety. According to TM, a human being's desire for meaning essentially reduces to existential anxiety. This is to say, all human beings are fundamentally anxious about their mortality, and meaning, *all manner of meaning*, is our means of quelling this anxiety. We both construct and adhere to meaning frameworks as a means of dealing with our largely unconscious, lingering awareness that someday, we are going to die. All of human civilization, its laws, its art, its philosophy and religion, all of this is an attempt to diminish the latent anxiety that arises once we reflect on the finite nature of our existence.

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meaninglessness, or what Camus terms 'the absurd'. We will attempt to outline a line of thinking whereby our *need for meaning* exits, super-ordinate to any need to avoid mortal thoughts, and where this need for meaning, if not met, can provoke its own anxiety.

Ultimately, we will suggest that much of the anxiety associated with the fear of death is actually the anxiety produced when death thwarts our need for meaning. What we *will not* be claiming, unlike TMT, is that all culturally oriented behaviour reduces to a single drive, be it the need for meaning, or any other fundamental human impulse. This is the case, even if it can be suggested that the need for meaning is the strongest human drive.

<u>Overview</u>

TMT is not the first theoretical framework that has attempted to reduce vast domains of human behaviour to a central drive or need. In *The Irrational Man*, William Barrett suggests that even Nietzsche, a great critic of grand, reductive theories, eventually gave in to the impulse to posit some aspect of the human psyche as the most basic, primal impetus for all behaviour, "meaningful" or otherwise. Barrett (1958) describes a scene where

> During the Franco-Prussian War, when Nietzsche was a hospital orderly, he saw one evening his
> old regiment ride by, going into battle and perhaps to death, and it came to him then that 'the
> strongest and highest will to life does not lie in the puny struggle to exist, but in the Will to war,
> the Will to Power'. (p.176)

This passage is pertinent insofar as Nietzsche's thinking seems to immediately differ from two central TMT assumptions presented thus far. First, Nietzsche does not see matters relating to the "the puny will to exist" as playing the central role in our lives. If TMT theorists see mankind as

driven by the 'Will to Avoid Death Anxiety', Nietzsche sees our 'Will to Power', our desire to conquer and control our environment, in and of itself, as our greatest need.

Yet more importantly, and despite Barrett's assertion, Nietzsche *is not* attempting to reduce all human endeavours to our Will to Power. He is not, at least in this passage, claiming a causal chain whereby all human needs have their origin in one greater need. He is not claiming that the will to exist is a mere manifestation of the Will to Power. He is merely claiming that one need is *stronger* than all the others, stronger even than our will to exist, and this need is the Will to Power.

Whether or not Nietzsche was justified in claiming the Will to Power as mankind's strongest drive is not the matter at hand. What's important is that Nietzsche leaves open the possibility that, while some drives are stronger than others, it is not necessarily the case that all drives must reduce to the strongest drive. He is not claiming, as Freud once did, that all human endeavour stands as sublimated Eros, nor does his claim mirror Pyszczynski, Solomon and Greenberg's own assertion that all human endeavour is sublimated anxiety at the thought of our own demise

Once again, TMT claims that all of culture, and all of the meaningful behaviours that comprise it, can be reduced to a single, innate drive- the desire to avoid the negative affect associated with an awareness of our own mortality. It is a grand, reductive system that is meant to bring order to psychology's 'wild west' of competing frameworks. Finally, an elegant, *unifying* solution to the question "Why do human beings think and behave in the ways that they do?" The answer? Not only to avoid dying, but and to avoid *thinking about dying*. But why should we avoid thinking about dying? What is it about the thought of death that is so

frightening? Is the thought of death frightening because…it's scary? Doesn't that beg the question?

Interestingly, TMT's desire to construct a reductive, unifying framework, and their inability (unwillingness) to explain *why* death is something we avoid thinking about, actually embodies a 'Will', 'drive', or 'need' that exists independently of any desire to avoid the negative affect associated with the awareness of our own mortality. We would suggest that the desire for meaning, or more specifically, the desire for *a singular, unified meaning system*, in and of itself, can be seen as existing independently of the aforementioned TMT drive, and that a wealth of western literature, philosophical and psychological, makes a case for this 'alternative' drive. Existential philosophers in particular, from Kierkegaard to Camus to Heidegger, have made the case that death itself is not the source of our existential anxiety, rather, we fear death insofar as it implies that we have failed to construct a unified system of relations of which we see ourselves as a part. Thinking about death is thinking about what death represents- *the absence of meaning*- the Void, nothingness, the Absurd.

In a sense, this existentialist position might be viewed as the equal and opposite of the TMT position, where 'Desire to Avoid Death Anxiety' and 'Desire for a Unified Meaning System' have switched places in the causal chain, yet the reductionist tendency persists. This would be true if the general thrust of existential theory aimed at establishing 'Desire for a Unified Meaning System' as the ultimate drive which underlies all others – a highly debatable assertion. The less strident claim, and the claim I wish to make as the ultimate response to TMT, is that our desire to construct, and feel connected to a singular unified system of meaning is not sub-ordinate to a desire to avoid thinking about death.

It is not the case that all meaning systems are *a response* to our fear of death. The need to construct and adhere to unified meaning frameworks is, at the very least, a need that stands independently of our need to avoid mortal thoughts, and that underlies a great deal of our death-related apprehensions. And while there can be little doubt that human beings engage in meaning construction\adherence in response to mortal thoughts, this process itself suggests that *meaning* is that which is most disrupted by death to begin with, and that when we are reminded of our own mortality, we feel compelled to re-construct and more strongly adhere to our former frameworks which have been challenged by what death can represent- the absence of meaning.

The overview, as it has been presented thus far, contains clusters of terms which are used interchangeably (Will, need, drive, desire- for instance) though their meanings are not entirely synonymous, nor are they clearly defined. Before we continue to summarize the specific content of this thesis, it would be wise to clarify what is generally meant by two of the key concepts upon which the argument will rest. This is a challenging task, for while these and other terms possess a great deal of intuitive overlap, the various authors I will be working from throughout the course of this thesis often use these expressions interchangeably, *without themselves clearly defining them*. Yet an intuitive overlap remains.

With regards to the previously mentioned cluster- Will, need, drive, desire- what we will take to be the most general though-line across these terms is that they are all associated with some manner of positive affect and negative affect, where we *feel good*, in some sense, when the desire is met, and *feel bad*, in some sense, when it is not. The manner in which this affect is thought to be experienced once again varies from author to author, where for some it can be relatively intense and conscious, and for others it is unconscious and pervasive. For the most

part, the authors we will be examining focus on negative affective consequences, generally labelled 'existential anxiety', where these consequences are fundamentally different than the 'animal fear' provoked by life-threatening situations.

The other somewhat nebulous expression being tossed around is 'meaning' itself. What does meaning *mean*? The answer to this question is one that we could not hope to answer over the course of a lengthy text, let alone a few paragraphs. Once again, a very general working definition will have to do. In *Meanings of Life*, Roy Baumeister (1991) suggests that a "rough definition would be that meaning is shared mental representations of possible relationships among things, events, and relationships. Thus, meaning *connects* things"(p. 15). As we make our way through the authors to come, many different expressions –paradigms, scripts, schemas, narratives, meaning frameworks, domains of the known, assumptive worlds- will be employed that embody what we see as the same general notion: ordered relations –be they causal, categorical, logical or teleological- amongst and between ourselves and what we perceive - predictable connections, both discovered and imposed, that allow us to both perceive and manipulate our environment.

If meaning is *connecting*, then any need or 'Will' to meaning would be a need or 'Will' to *connect*, which is what we will be proposing. In the most general sense, human beings possess a "nostalgia for unity"(Camus, 1955, p. 13), a desire to connect, to establish relations, to unify elements of the world around them, and imbed themselves within this unity. This need, we would suggest, is innate and irreducible, not the apparent manifestation of some still 'deeper' need, and is flexible enough in its application to utilize any number of relational modes, beyond what has been presented above. Furthermore, I would suggest that working towards this 'unity' generates positive affect, while thwarted connections prompt negative emotions. The Absurd,

The Void, meaninglessness- these are the lurking reminders that our stable connections may be mere fiction, that our established relations are bound by illusion, and that paradox, disruption, and contradiction infest the worldviews that we often struggle to maintain. The negative affect that results of the awareness of profound *disconnection*, of *meaninglessness*, this is *existential anxiety*.

If this were true, it would present serious difficulties for the TMT claim that any desire for meaning in our lives itself derives from a desire to avoid the negative affect associated with thinking about death. Even if it can be argued that a 'Will to Meaning' is adaptive in avoiding death, this is not the same as suggesting such a will is derived from any conscious or unconscious drive/need/desire to avoid death. Presumably, TMT would not assert that *all* behaviour that promotes survival is sublimated existential anxiety, for then even eating when we are hungry could be seen as a manifestation of our desire to avoid the negative affect associated with reminders of our mortality. For TMT's claim to remain viable, they must close the door on the possibility that a 'Will to Meaning' exists independently of a 'Will to Avoid Death Anxiety', and it will be the goal of thesis to show that, not only is this not the case, but a case can be made that much of the negative affect associated with mortal thoughts actually arises insofar as death disrupts the connections in our most fundamental meaning frameworks.

The first section of this thesis will be concerned with providing a general overview of the theory we are meaning to critique- Terror Management Theory. Rather than evaluating every proposed application of their theory, or their vast body of empirical work, we will be focusing on their arguments reducing all meaning oriented behaviour to a response to our latent awareness that we are all going to die. We will be presenting the views of those critics of TMT who also take issue with TMT's reductive scheme, though none of these critics question the TMT claim

that existential anxiety reduces to fear of death, nor do they suggest that an independent drive for meaning may be the true source of existential anxiety.

The second section of this thesis will be concerned with undermining TMT by gradually laying the groundwork for a opposing possibility- that people seek out meaning independently of any desire to avoid mortal thoughts, and that a good deal of our latent anxiety in the face of death arises insofar as death shatters the meaningful frameworks we have established throughout the course of our lives. A series of relevant texts from the philosophical and psychological literature will be juxtaposed to one another such that a cursory outline will appear where certain claims are repeated in one form or another.

First and foremost, need to establish meaning, or a unified relational network –one that accounts for all of reality, and our place within it- is a basic human need, not itself reducible to some greater need. If this need is not met, we experience some manner of negative affect. The manner in which we go about making meaning can be described in general terms. Finally, the source of the negative affect we experience when we think about death lies in the awareness of the absurd, not in death itself. This is existential anxiety.

The first text we will draw from to outline this alternative account is a quintessentially existential work, Camus' essay "An Absurd Reasoning". Given that Pyszczynski, Solomon and Greenberg consider themselves to be 'Existential Psychologists', and claim to have definitively accounted for existential anxiety, it may be wise to begin the evaluation of these claims by actually looking to the existential philosophical literature. We are not beginning with this particular text because Camus was the first thinker to conceptualize the absurd or postulate an innate need for meaning. Kierkegaard had wrestled with the absurd a century before, and in the

text "Repetition" (1843/2000), as well as "Either/Or" (1843/2000), he had made a case for our need to establish stable and predictable connections in both our perception of, and interaction with reality. Nietzsche had also placed special emphasis on 'the Void', and in that most memorable passage from "The Gay Science" (1887/1982), presented the anxiety one may experience in the face of an existence made meaningless by the discovery that "God is dead". Even Freud had outlined the odd discomfort we feel in the face loosened relations and relational disjunction, where the aesthetic critique found in his essay "The Uncanny" (1919/1990) underscores the anxiety we may feel when we are exposed to artistic works characterized by their fundamental irrationality.

We begin with Camus' "An Absurd Reasoning" because Camus, among the existentialists, makes the clearest psychological claim regarding an essential need to unify our perceptions of reality, and ourselves within this reality, where this need can be seen across multiple domains of human endeavour. Camus postulates an innate "nostalgia for unity", and claims that some manner of anxiety results when this need is thwarted, or we become aware that our previous efforts in this regard have been futile. This anxiety in the face of meaninglessness *is* existential anxiety, and while it may not necessarily be triggered by death, it can actually cause the *longing for death*. As well, Camus sets up a dynamic relationship between unity and disunity, where the absurd lies in the incommensurable rift that divides them.

We will follow this by jumping from existentialism into another domain of philosophical thought, examining relevant portions of Thomas Kuhn's *Structure of Scientific Revolutions*. While this text deals explicitly with the formation and relations between scientific paradigms, it can also be viewed as an extension of Camus' unity\disunity dynamic, where Kuhn presents a general theory of how connections are made, revised, or abandoned in the attempt to construct

internally consistent relational frameworks. Kuhn also touches on a desire described by Camus-the desire for one, unified, inter-connected relational matrix that links all aspects of our perceived reality, where anxiety is aroused when our relational matrix falls apart. Kuhn is particularly significant in this discussion as he is not averse to citing empirical psychological studies that seek to explore the ways in which we maintain these relational frameworks in the face to disruptions, contradictions, and unexpected counterfactuals, studies that offer empirical evidence that supports our alternative account of the origins of existential anxiety.

From Kuhn, who attempts to bridge the disciplinary gap between philosophy and psychology (perhaps somewhat ironically), we move to two psychological theorists, both of whom adopt a Kuhnian model of paradigm shift to elaborate their systems of meaning acquisition and maintenance. Both of these theorists argue for an innate need for a stable relational matrix that accounts for reality and their place within it. Both of these theorists suggest that anxiety results when this need is thwarted.

In *Shattered Assumptions*, Ronnie Janoff-Bulman outlines the damage done to an individual's meaning frameworks in the face of intense personal trauma. Working from a variety of philosophical and psychological sources, Janoff-Bulman claims human beings operate from within 'assumptive worlds' that we have created -fundamental, unconscious, automatized schemas that comprise the sum total of our expected relations, both within the external world, and in our relation to this world. Particular attention is paid to causal and teleological relations, whereby traumatic events challenge our sense of predictability, control, and personal value.

In *Maps of Meaning: the Architecture of Belief*, Jordan Peterson also works from a Kuhnian model in his description of how 'Domains of the Known' are generated and structured

by individuals as implicit networks of relations and connections that tell us what we can expect from the world. While the dynamics of how this 'Domain of the Known' is revised or abandoned is similar to Kuhn's model of paradigm dynamics, Peterson goes a step further in asserting a neuro-biological origin to all meaning-making activities, claiming that, in a sense, we are 'hard wired' to establish a stable system of relations between elements of our external reality and ourselves, and we that we do this without any reference to our undeniable fear of death, or anxiety at the mere thought of death. Meaningless, the Absurd, the 'Domain of the Unknown'- these provoke their own anxiety, at the neurobiological level.

Finally, we will end up where we began, in the existential philosophical literature. In *Being and Time*, Martin Heidegger rounds out our argument against TMT by suggesting that human beings are meaning makers, and that challenges to this meaning provoke some manner of negative affect and attempts to repair, or 'cover over' these ruptures in our relational matrixes. More importantly, Heidegger makes the most explicit case so far that our existential anxiety in the face of mortal thoughts *is itself a fear of meaninglessness*, that death represents the greatest breach in our relational whole insofar as it represents a major paradox at the heart of our being, and insofar as it radically separates us from the rest of existence. If meaning is relation, death is the ultimate *nonrelation*.

Terror Management Theory- A Series of Reductions

In this section, we will briefly connect the dots which make up the central through-line of Pyszczynski, Solomon and Greenberg's Terror Management theory of existential anxiety. Rather than attempting to summarize every individual hypothesis, or their vast body of empirical work, we will be focusing on the specific propositions that are the target of our analysis and criticism -

the chain of *reductions* that begin with all cultural meaning frameworks, and ends with the desire to avoid the anxiety that arises when we contemplate our own mortality.

In addition, we will be summarizing some of the critical analyses of TM that have come before, with the aim of demonstrating that, until now, no one has criticized TM for ignoring the possibility that our fear of death may itself reduce to a more fundamental anxiety –the fear of meaninglessness.

Let's begin by asking *what is existential anxiety?*

Intuitively, an innate fear of death is shared by all animals, human or otherwise. Cats flee from angry dogs; mice flee from hungry cats. Put even the most domesticated animal into a potentially life threatening situation and the animal becomes 'afraid'. Anxious. Aroused. Fight or flight. It's instinct. Granted, we can never *know* the mental state of an animal (or person), but this doesn't stop us from inferring their emotional state, based on our own state when we display similar 'fearful' behaviour.

If existential anxiety is fear of death then w*hy do we fear death?*

Again, everyday experience provides an intuitive answer: fearing death helps keep us alive. In stark evolutionary terms, fearing death is adaptive -species that associate life-threatening situations with intense negative affect will tend to avoid those situations. The behaviours that correspond to this negative affect are conducive to escaping life-threatening situations when they are encountered. Species which attempt to avoid, or successfully escape

from life-threatening situations are more likely to have their genes passed on into subsequent generations. Natural selection has 'programmed' us to fear death.

So there you have it.

A: Existential Anxiety is fear of death.

B: Fear of death is the acute, instinctual terror all animals experience in the face of potentially deadly situations.

C: We fear death because it has been naturally selected as an adaptive trait.

Remember that scene at the end of *The Seventh Seal* (Bergman, 1957). where Death arrives to lead our protagonists in a dance to oblivion? Remember the look on their faces; a kind of cold dread mixed with resignation? We can now account for this response, given our evolutionarily innate fear of death, and the 'fight or flight' reflex that it triggers.

Remember the end of *For Whom the Bell Tolls* (Hemingway, 1940, p.312)where Robert Jordan, realizing he is about to die, concludes that "It's a beautiful world and it's worth fighting for." It's surprising that Hemingway could so fundamentally misrepresent an individual's inevitable response to such a situation. Like a snared ferret, Jordan would be gripped by animal terror, squealing and writhing in his own urine. Although in hindsight, we might forgive Hemingway, as it's unlikely he kept up with the Behaviourist journals of his day.

To begin with, Pyszczynski, Solomon and Greenberg wish to immediately distance themselves from this kind of crude accounting, where existential anxiety is reduced to some kind of stimulus\response relationship between immediate threats to our life and visceral fight or flight panic.

> Terror management theory is about how humans cope, not with the imminent threat of extermination, but with the awareness that such threats are ubiquitous and will eventually succeed: Death will be our ultimate fate….Terror management theory is essentially a theory about the effect of death on our lives. (Pyszczynski, Solomon and Greenberg, 2003, p.8)

Terror management theory is about dealing with death. Not the visceral, animal terror triggered by a direct assault on our being. Not the immediate threat of death. What we have to deal with is the *idea* of death –the awareness of an event that has yet to take place, and of which we have no direct experience. More often than not, our fears relate to harms that we have previously endured, or harms very much like them –most fear is the result of direct experience. Unless one has died, however, death can never be anything more than an abstraction; we have seen others die; we know that we are mortal, and therefore, that we too will die, sooner or later.

While a good deal of death anxiety stems from the uncertain and unavoidable nature of our death –we can't precisely predict the when and the how, but it *will* happen –TMT cannot assume that the fear of death reduces to this unpredictable and unavoidable nature, for presumably, these aspects of mortality wouldn't trouble us if death itself wasn't something we already feared. Nor can TMT theory claim that our fear of death reduces to the fear of the physical pain or discomfort we associate with death, for if this were the case, TMT would

'essentially be a theory about the effect of pain on our lives', rather than death itself. For Pyszczynski, Solomon and Greenberg, the fear of death reduces no further than to the expectation of death *the event*, where "death entails the permanent annihilation of the self." (p.22) This, in and of itself, makes us anxious. Very anxious.

> The continuous awareness of the circumstances with which we live, faced with inevitable death...makes us humans vulnerable to potentially overwhelming terror at virtually any given moment. Yet people rarely experience this existential terror directly. (p.16)

Thus 'existential terror', for Pyszczynski, Solomon and Greenberg, *is* the fear associated with an awareness of our 'inevitable death.' It is not so much that existential terror reduces to the fear of death- existential terror *is* the fear of death.

What then keeps us from experiencing this fear of death directly, as they claim is the case?

> What saves us is culture. Cultures provide ways to view the world -worldviews that 'solve' the existential crisis engendered by the awareness of death. Cultural worldview consist of humanly constructed beliefs about the nature of reality shared by individuals in a group. (p. 16)

TMT is therefore working from the broadest possible perspective, making the scope of its reductionist claims truly massive. TMT is not intending to account for some domain of culture, a specific religious precept, a philosophical school of thought, or an artistic movement. Nor is it making a distinction between cultures. What is being accounted for is *Culture*, the world-over, and all the worldviews that may comprise it.

> All perceptions of time, place, name, meaning, and significance are based entirely on my
> immersion in a culturally constructed fictional framework for organizing thoughts and sensations.
> (p. 17)

Cultural worldviews therefore account for essentially all human perception and cognition, thought and sensation, from our must basic perceptions of space and time, to our most abstract understandings of 'meaning and significance', be it scientific, religious, philosophical, artistic etc. etc. etc. But what else do these cultural worldviews provide us?

> Faith in a culturally derived worldview imbues reality with order, stability, meaning and permanence. (p.1)

And why should we want reality to appear ordered, stable, meaningful, and permanent? What, therefore, is the *ultimate function of culture*, and the worldviews that comprise it?

> Cultural worldviews…function to mitigate the horror and blunt the dread caused by knowledge of the
> reality of the human condition, that we all die. Psychologically then, the function of culture is not to
> illuminate the truth but rather to obscure the horrifying possibility that death entails the permanent
> annihilation of the self. (p. 22)

The sole function of culture, according to TMT, is to provide a framework for all perception and cognition, such that reality is filtered in such that we may avoid thoughts of our own mortality. TMT theory, which means to completely account for the relationship between mortal thoughts and culture, is therefore the grand, unifying paradigm that psychology has been waiting for –TMT provides the unifying principle that underlies all psychological phenomena, both at the level of the individual subject, and the societies that we collectively comprise. Existential anxiety *is* fear of death. Fear of death is *the* psychological phenomenon that underlies

all other cognitive phenomena and that that instigates the construction of culture. TMT is *the* psychological framework that explores this relationship.

For Pyszczynski, Solomon and Greenberg, the most obvious manner in which culture buffers us from death anxiety is insofar as "Cultural worldviews set up a path to immortality, to transcendence of one's own death." (p. 19) Culture achieves this by holding out the hope of some kind of immortality- "literal immortality involving an afterlife and symbolic immortality through enduring social connections and cultural contributions."(p.20) Thus culture may promise and eternal life, as we ascend to Nirvana or Heaven or are reincarnated, yet the more subtle and pervasive manner in which culture promises immortality lies in a culture's ability to convince us of our *symbolic immortality*, or the belief that even if we should perish as individuals, the society to which we have contributed will continue to exist, and thus, in a sense, so will we.

Pyszczynski, Solomon and Greenberg see this desire for symbolic immortality as the seemingly universal need for some kind of *purpose* to our reflected-upon existence. Whether based on the metaphysical dictates of a supreme being, or the values of our social order, people seem to want to feel as though their life has some connection to, or serves some purpose with regards to something that will outlive them, as

> safely tucked away in death transcending worldviews is enduring personal significance....in this way we live as valued participants in a culturally based symbolic vision, rather than as vulnerable animals fated only for death and decay. (p.17)

According to TMT, all cultures possess values, generated by the individuals who comprise culture, which in turn imparts these values on the individuals that comprise it. These values provide specific kinds of meaningful worldviews, where these

> meaningful worldviews make one significant –no longer a purposeless, transient animal, one is now an eternally significant contributor to a great nation that represents eternal values….simply believing in cultural worldviews does not, in and of itself, generate immortality…individuals must perceive themselves as valuable and significant participants in the cultural drama to which they subscribe in order to qualify for the security providing sense of death transcendence. (p.19)

To the degree that individuals perceive themselves as embodying these values, thus perceiving themselves as valuable and significant cultural participants, they attain a sense of *self-esteem*.

For TMT, "self-esteem the belief that one is a person of value in a world of meaning." (p.22) The manner in which self-esteem manifests itself may vary greatly from culture to culture, as the values which determine self-esteem may vary both within and between cultures. Nonetheless, TM theorists assert that all cultures have values, and to the degree that individuals feel they embody these values, that is self-esteem. Self-esteem, therefore, is the primary means by which we buffer ourselves in the face of death anxiety, as self-esteem is our subjective sense that we embody odour enduring culture's values, and are therefore guaranteed some manner of symbolic immortality.

Overall, TMT is a long series of reductions - culture reduces to the cultural worldviews which comprise it, these worldviews reduce to a need for a stable, coherent and predictable reality, which reduces to a need to avoid existential anxiety, which reduces to fear of death. Many of the stable, predictable, and coherent worldviews that ultimately reduce to fear of death

do so via a series of intermediary reductions, whereby these worldviews reduce to systems of stable values, which reduce to a need for self-esteem, which reduces to a need for symbolic immortality, which reduces to a need to avoid existential anxiety, which reduces to fear of death.

Given the general TMT hypothesis that cultural worldviews reduce to a need to avoid the anxiety that results from awareness of our own mortality, we would expect that "reminders of death should lead people to increase their defence of their cultural worldviews." (p.27) The entire empirical enterprise of TM is tailored to explore this very hypothesis. Over 200 empirical studies carried out by Pyszczynski, Solomon, Greenberg and their colleagues set out to make individuals aware of their latent death anxiety, prompting behaviours that could be interpreted as showing greater adherence to the cultural values which comprise their cultural worldviews and therefore reinforce their sense of symbolic immortality.

For instance, judges who are reminded of their mortality set higher parole bonds for hypothetical criminals. (Rosenblatt, Greenberg, Solomon, Pyszczynski & Lyon, 1989) Students reminded of their mortality will more vigorously agree with texts that praise their culture, and more vigorously disagree with texts that condemn it. (Greenberg et al., 1990) If you're collecting money for charity, do so in from of a funeral home; you'll collect a good deal more. (Pyszczynski et al., 1996) And just as TMT would predict, all of these relationships are affected by the self-esteem of the individuals participating in the study –this is to say, if individuals are given feedback that indicates they fully embody their culture's values, they appear to be inoculated against the against the anxiety that reminders of their own mortality would normally provoke. (Harmon-Jones et al. 1997)

Since TMT has no means of measuring this 'mortality salience' anxiety directly, they must infer that this anxiety has been reduced insofar as high self-esteem subjects don't cling to their cultural worldviews as strongly in the face of reminders of their own mortality. Presumably, their sense of value, and therefore of *symbolic immortality*, is strong enough that they do not need to augment it with further increased identification with their cultural worldview. Self-esteem therefore appears to 'buffer' against their existential anxiety, allowing them to feel as though they embody the values of the culture which will presumably outlive them, providing them with the symbolic immortality they require to at least partially quell their existential dread.

Criticisms Of Terror Management Theory

When we look to established criticisms of TMT, we find few claims that these empirical findings, in and of themselves, are dubious. Most psychologists are impressed by the empirical body of work established by TMT that shows some causal relationship between mortal thoughts, self-esteem and adherence to the values of their cultural worldviews. Not surprisingly, however, most psychologists are unimpressed by TMT's theoretical attempt to reduce all human motivation and all cultural constructs to a single need or drive, nor are they satisfied that the program of work carried out by TMT, however successful in it's own right, offers support for their grandest reductive claims.

A cursory review of the literature turns up very similar responses.

In "Grave Matters", a critique of TMT as a whole, social psychologist Robin R. Vallacher (1997) writes that

On balance, Pyszczynski et al. have made a reasonably compelling case that the problem of death is a source of anxiety that mobilizes people to protect their self-esteem, and shore up their worldviews and belief systems. (p. 50)

But he remains highly sceptical of

The rather bold claim that terror management is the source of all motives. As noted, their arguments on this score are interesting, sometimes ingenious, but open to dispute and therefore not very convincing. (p50)

In a similar critique, psychological theorist Roy Baumeister (1997) takes issue with TMT's claim that

all other motives derive from self-preservation, which they call the 'master motive'. We can readily agree that some behaviour is oriented toward staying alive. But *all*? There is a large gap between the empirical findings reported by Pyszczynski et al. and their theoretical claims. Their studies, of which we are both admirers, have shown in many ways that reminding people of death can alter their behaviour. But these findings fall far short of justifying the sweeping assertion that all motivation is derived from the fear of death. (p. 37)

In yet another TMT critique, social psychologist Melvin Lerner (1997) finds that

The research that Pyszczynski, Solomon and Greenberg have done, stimulated by their 'Terror Management Theory' (TMT), is unquestionably very impressive. However, the scope of their integrating theoretical speculations is *so* encompassing as to be difficult for me, and possibly for others, to accept. (p. 29)

These sentiments are also echoed in social psychologist Brett Pelham's (1997) article "Human Motivation has Multiple Roots"

> Pyszczynski, Solomon and Greenberg propose an integrative model of human motivation. Their thesis is
>
> that the primary human motives explored in previous research are all rooted in the more fundamental
>
> motive to minimize the existential terror that is brought about by the realization that one will someday die.
>
> Although I applaud both the empirical research on terror management, and the author's theoretical goal of
>
> providing an integrative theory for understanding human motivation, my interpretation of the existing
>
> research on terror management is that a convincing case has not been made for the author's position. It
>
> seems unlikely that the management of existential terror is the quintessential human motive. (p. 44)

There are two general strategies for attacking TMT's reductionist claims. The first is to

point out that until TMT can truly put its money where its mouth is, that is to say, actually

examine the effect of 'mortality salience' on *all* human behaviour with regard to *all* meaning

systems and *all* facets of culture, their reductionist claims shouldn't be made to begin with. As

Lerner suggests,

> A convincing demonstration that the management of terror is at the top of the hierarchy of human motives
>
> would involve a demonstration that mortality salience manipulations have a more dramatic effect on all
>
> kinds of defensive reactions than do any other meaningful kinds of threat. This, of course, is a very tall
>
> order. (p.32)

Yet even in lieu of such a global demonstration of TMT, other critics question the face validity

of any theory that attempts to reduce all human motivation to a single drive, particularly a drive

to avoid existential anxiety, where we can immediately cite examples of behaviours and

motivations that seem unlikely to be rooted in a desire to avoid the negative affect that results

from awareness of our own mortality. Pelham points out that intuitively, human beings are

involved in myriad behaviours that are difficult, if not impossible to account for in TMT terms.

People commit suicide, engage in unsafe sex, snort cocaine, smoke tobacco, drink and drive, skydive, scuba dive, and even eat foods high in sugar and cholesterol. Presumably, people engage in these potentially self-destructive behaviours because doing so fulfills basic needs and desires that are independent of, and sometimes antithetical to, the desire to avoid existential anxiety.

(p. 45)

On the face of it, suicidal behaviour seems to pose the greatest challenge to TMT's radical reduction, for as Lerner suggests,

How basic can the fear of death be if so many people have had serious fantasies of ending their miseries by ending their lives, and if so many of them have acted on those fantasies? (p. 30)

Certainly there are eventualities we fear more than death, fates so terrible that death is in fact a preferred means of avoiding these sufferings. As C. R. Snyder (1997) points out in "Control and Application of Occam's Razor to Terror Management Theory",

In instances when the attempts at alleviating suffering are unsuccessful or unavailable, people may rationally seek to end their lives actively or passively. For the person with a terminal illness who is racked with abject pain, the ultimate horror is not the loss of life suggested by TMT, but its continuation. (p. 49)

Few would deny that individuals have chosen to die rather than live on if their existence is characterized by hopeless torment. Yet it makes little sense to suggest, as TMT must, that anyone has committed suicide to avoid the terror that results from the awareness that we are going to die. As Baumeister suggests,

To commit suicide as an escape from emotional distress only makes sense if the root of that distress is something other than death. In short, the case of suicide is alone sufficient grounds to question and

probably to reject the claims of TMT that self-preservation is the master motive toward which all behaviour oriented and to which all other motives are subservient. (p. 37)

Are there other psychological torments, other anxieties that may prompt suicidal behaviour? Has it ever been the case that an individual has committed suicide in the face of a *meaningless* existence, for example? The prospect of meaninglessness, in general, is something that is not dealt with by any of the critics of TMT. While all of these theorists question the reduction that sees all human endeavour collapsed into the desire to avoid existential anxiety, none of these theorists address the reduction that sees *existential anxiety reduced to fear of death*. None of these theorists develop the possibility that meaning-making, however it is defined, can be thought of as a drive independent of the drive to avoid thinking about our own death, and it is therefore the case that none of these theorists consider the possibility that any fundamental need for meaning may actually play a substantial role in generating the anxiety we feel in the face of our own mortality.

Once again it may be pointed out that the central claim of TMT, the fundamental assumption upon which its explanatory claims are based, is that there is a central drive, a fundamental need which underlies all human behaviour, and is the well-spring of human civilization. This drive is not Eros, or Thanatos. It is not the Will to Power. It is, in essence, the desire to avoid existential anxiety, which is itself the drive to avoid the negative affect that arises when our mortality is made salient.

As we have already suggested, this grand claim would be most undermined if it could be shown that another drive existed that was even more fundamental to human motivation, a drive that was not merely more powerful than the desire to avoid mortal thoughts, but was itself

responsible for our desire to avoid mortal thoughts. While we would not be denying that human beings possess a desire to avoid 'mortality salience', and that we engage in meaningful behaviour to satisfy this desire, we would be suggesting that the desire to avoid mortal thoughts is merely a specific instantiation of a still more fundamental desire, the ultimate source of existential anxiety, which fuels our desire to avoid mortality salience, not unlike craving a turkey sandwich is itself a specific instantiation of the more general drive to avoid hunger.

Does such a drive exist? Is there an 'iceberg model' where our desire to avoid mortality salience barely crests the ocean of our unconscious, supported by a vast foundation, largely submerged? Many theorists have suggested that this in the case, and the 'base of the iceberg' is our *need for meaning*- our fundamental drive to establish and maintain a stable associative network that predictably links all elements of perceived reality, where we may ultimately enmesh ourselves within this reality. Considered in turn, these thinkers develop various aspects of this claim, representing different lines of sight on the same basic proposition- human beings are driven to seek out signals in the noise, patterns of relations which make the world familiar, along with our place in it. When these patterns are challenged or disrupted, as it the case when we are confronted with our own mortality, we experience a latent unease that may be seen as the source of all existential anxiety.

Camus and "An Absurd Reasoning"

Camus begins "An Absurd Reasoning" with that issue most often cited by critics of TMT as its Achilles heel – the matter of suicide. "There is but one truly serious philosophical problem, and that is suicide." (Camus, 1955, p. 4) Why is it that a healthy, respectable middle-class individual, living a life that is seemingly devoid of acute stressors, should choose to end their

own life? If we were to apply a TMT's reductive explanatory framework, we would be forced to suggest that, somehow, the decision to end their own life was a response to the latent anxiety that resulted from an awareness that they were going to die –an explanation that, as we have seen, is not a particularly intuitive or satisfying for many.

While Camus would certainly agree that suicidal behaviour is a response to some manner of existential anxiety, the source of this anxiety would not be the awareness of our own mortality, but the awareness of a similarly potent and unnerving possibility. Camus (1955) writes

> Of an apartment building manager who had killed himself I was told that he had lost his daughter five years before, that he had changed greatly since, and that the experience had undermined him.
> (p.4)

Since five years had passed since the loss of his daughter, it seems reasonable to assume that the apartment manager's suicide was not in response to an initial wave of acute grief and loss. Camus implies that the death of the daughter, in and of itself, was not the source of the anxiety that drove him to take his own life. Rather, it was something far more gradual, more insidious- it was an awareness of what, upon thoughtful reflection, the death *implied* that undermined him, whereby "beginning to think is beginning to be undermined." (Camus, 1955, p. 4)

Perhaps Pyszczynski, Solomon and Greenberg would suggest that it's simply the case that his daughter's death prompted the apartment manager to reflect upon the implications for his *own* mortality, thus, insofar as her death made his own mortality more salient, he was gradually overcome with anxiety. Unfortunately, this explanation forces us to employ the same seemingly paradoxical reasoning that suicide can be explained as a response to the anxiety that results from

the awareness that we are going to die. While the often paradoxical nature of human motivations does not preclude this possibility outright, Camus offers a different and perhaps more compelling explanation.

The expression 'undermined' gives us a clue as to what it was about the death of his daughter that caused the apartment manager to experience existential anxiety, an anxiety so great that he lost the will to live. 'Undermined' implies a destabilization of sorts, a weakening of foundations, an erosion of the 'Archimedean point' upon which he felt that he had securely rested. If we can assume that mankind shares a fundamental need for some domain of certainty, of reliable connection and stable association, then we can assume that anything which undermines this domain would be a genuine shock to the system.

It is here that Camus begins to propose that such a desire exists, whereby this desire represents our most fundamental need.

> The mind's deepest desire, even in its most elaborate operations, parallels man's unconscious feeling in the face of the universe. It is an insistence upon familiarity, an appetite for clarity.
> (Camus, 1955, p.13)

Camus (1955) sets forth his own candidate for a drive that prompts a good deal of human behaviour, "the nostalgia for unity, that appetite for the absolute illustrates the essential impulse of the human drama" (p. 13) where this nostalgia represents a "desire for unity…a need for clarity and cohesion." (p. 28) Cohesion is perhaps the most important element of this need, this desire for a unified reality whose elements cohere with one another in relations which are stable and durable. Whether the associations be causal, temporal, logical or teleological, they all serve

the desire to establish unified, internally consistent, and predictable relational matrix that encompasses reality and establishes us a place within it.

Over the course of "An Absurd Reasoning", Camus outlines various domains of human knowledge and inquiry, from the empirical sciences, to ethics, to metaphysics, claiming a tacit through-line insofar as all these domains of understanding, regardless of their mode of inquiry, or the object of their inquiry, seek out some *unifying principle*, some absolute relation that binds our knowledge together, establishing an absolute context from which we can make all judgements.

> If thought discovered in the shimmering mirror of phenomena eternal relations capable of summing them up and summing themselves up in a single principle, then would be seen an intellectual joy of which the myth of the blessed would be a ridiculous imitation....To understand is, above all, to unify. (Camus, 1955, p.13)

Unfortunately, we are continually bombarded with perceptions that suggest that reality is not as relationally unified as we would hope, and that the stable associations we perceive may actually be imposed rather that discovered. The simmering chaos that bubbles beneath our ordered impositions become apparent upon reflection, for

> So long as the mind keeps silent in the motionless world of its hopes, everything is reflected and arranged in the unity of its nostalgia. But with the first move this world cracks and tumbles, and infinite number of shimmering fragments is offered up to the understanding. (Camus, 1955, p.14)

It may become uncomfortably clear that

> The universal reason, practical or ethical, that determinism, those categories that explain everything are enough to make a decent man laugh. (Camus, 1955, p.16)

Perhaps it is the case that another 'universe' exists, one that lies in opposition to the domain of unity that we have told ourselves reflects the true nature of reality. Perhaps there is another "indescribable universe where contradiction, antimony, anguish or impotence reigns" (Camus, 1955, p.17)

Although ironically, to the extent than many thinkers have acknowledged this possibility, their nostalgia for unity remains strong enough that *chaos itself is universalized*, and radical non-relation is taken to be the unifying relation that binds reality. Camus (1955) summarizes the work of numerous theorists and philosophers, from Kierkegaard to Karl Jaspers, pointing out that in each case, "Nostalgia is stronger here than knowledge" (p.35), for these men are no more able to support their claim that all is chaos than men who claim it is entirely unified. This opposite extreme, this "proclamation that nothing is clear, all is chaos" (p.20) is itself an instantiation of the nostalgia for unity that drives even those who would explicitly claim that no such unity exists. Just as Plato points out in the Theaetetus that claiming that everything is relative is an 'absolute' claim (Plato, 369B.C.\1997), Camus points out that those who would claim that everything is chaos betray a need for unity, where all reality is summed up by the governing principle of absolute chaos.

Camus has therefore set out two extremes, two potential domains. One is characterized by perfect unity, stable relations, and ordered associations. The other is ruled by the random, the irrational, the disjointed and the arbitrary. One we may consider the Domain of Unity, the other, the Domain of Disunity. Reality, as we experience it, lies somewhere between the two, neither

wholly unified not utterly chaotic, and it is the disparity between these two extremes, these two opposite absolutes, that is the source of our existential anxiety. What troubles us is not merely the possibility that the Domain of Disunity is more 'real' than the Domain of Unity, for even the Domain of Disunity is comfortingly 'unified' in its claim that reality is uniformly chaotic. The true source of tension lies in the constant realization that reality is neither wholly stable, not wholly unstable, thwarting our desire to construct a unified theory of reality, whether the claim being made is that 'everything is unified' or its equal opposite.

There is a fundamental disjunction, and unbridgeable gap between these two domains, and it is at this fulcrum of incommensurability that Camus places 'the absurd', where the awareness of the absurd, however it is brought about, is the ultimate source of our existential terrors. The absurd *is* the disparity, *is* the gap, between absolute unity and absolute chaos, and therefore the gap between our need for a perfectly inter-relational domain, and the reality that no such domain exists. Camus (1955) writes that

> The absurd is essentially a divorce. It lies in neither of the elements compared. It is born of their confrontation...the irrational, the human nostalgia, the absurd is born of their encounter. (p. 23)

As Camus (1955) points out, "The feeling of the absurd, for all that, is not the notion of the absurd." (p.22) The feeling of the absurd is an emotional experience, not an explicit realization made by philosophy students in the most abstract terms. The gap between our need for a unified domain, and the impossibility of achieving such unity, is arrived at more often through concrete experiences of this daily disjunction, reminders of the "confrontation between the human need and the unreasonable silence of this world." (p.21) In more concrete terms, the subjective experience of the absurd is as *alienation*, a sense that we are fundamentally unrelated,

or disassociated from the rest of reality, whereby our nostalgia is thwarted in the most immediate way.

While we may be unnerved that elements of the outside world might not be as stable in their associations as we would like to believe, our nostalgia is most unsatisfied when we perceive ourselves to be aliens in our most familiar surrounding, or even in our own skin. That we may be permanently disassociated from a domain of unity (or even it's equal opposite, a domain of complete dis-unity), is the absurd writ large in our unconscious, and comes most often with the tacit realization that the tie that most often binds us to our world may be a mere invention. For Camus, this most common relational tie is *purpose*.

Purpose, the teleological bond that connects intentional beings to one another, may not be 'real'. That link that most binds us to the relational matrix that most concerns us, our social world, may be a sham, and that our existence is, in fact pointless. For Camus, the shock of a reality with no inherent purpose, and thus no real value, has little to do with symbolic immortality, as it does for TMT, but with the loss of a relational construct which tied so much of our reality together. While it might by argued that we only wish to be tied to our world so as to feel a part of something that will outlive us, Camus' focus on the nostalgia for unity as a primal psychological need precludes the possibility –at least for Camus- that this need to link with our world teleologically can reduce to a more basic need to avoid death. The anxiety we may feel in the face of a potentially pointless existence arises insofar as pointlessness triggers our awareness of the absurd, as it reminds us that one of the central 'ties that bind' is only in our minds, not in the world, and thus, apparently unable to satisfy our nostalgia for unity.

For Camus, we move through our daily lives, operating as if the values that are meant to tie us to our friends, our family, our society, our Gods, are taken for granted.

> But then on day the 'why' arises and everything begins in that weariness tinged with amazement 'Begins' – this is important…it awakens consciousness, and provokes what follows….the chain of daily gestures is broken, in which the heart vainly seeks the link that will connect it again, then it is as it were the first sign of absurdity….what follows is the gradual return into the chain, or it is the definitive awakening. (Camus, 1955, p.10)

While not the only manner in which the absurd makes itself apparent, this teleological disjunction provides us with our most common feeling of the absurd, where "there is a direct connection between this feeling and the longing for death." (Camus, 1955, p.5)

> Dying voluntarily implies that you have recognized, even instinctively, the ridiculous character of habit, the absence for any profound reason for living, the insane character of daily agitation, and the uselessness of suffering…at the end of this awakening comes, in time, the consequence: suicide or recovery. (Camus, 1955, p. 10)

Thus, when one 'feels' the Absurd, they may attempt to ignore this feeling, wilfully overlook the disjunction which prompted it, and 'gradually return into the chain', thereby re-establishing the links that have been challenged. One may also experience a 'definitive awakening' whereby the feeling of the absurd can not be ignored, and the shattered relations cannot be easily repaired. When this has taken place, a longing for death invariably follows, from which we ultimately recover, or to which we ultimately succumb.

So we may now return to the apartment manager who ended his life, 'undermined' by the death of his daughter. We may never know what is was about his daughter's death that caused this man to be undermined, but we may assume it was ultimately an encounter with the absurd, triggered by a breakdown in expected relations. Perhaps it was the teleological bonds that were challenged (What purpose did her death serve? What could have been its value?), or perhaps is was the death itself, insofar as it reminded him of mortality's fatal challenge to the possibility that we may be fully unified with the world around us. In *Civilization and It's Discontents*, Freud writes that "We cannot fall out of this world." (Freud, 1930/1991, p. 253) and yet it seems that upon death, that capacity we most closely associate with our own mortality –consciousness- is irrevocably detached from the great chain of being, an insurmountable tear in the stable series of relations that, we had unconsciously assumed, bound us to reality. Death is our most profound alienation, our most personal non-relation, and our greatest reminder of the absurd.

Kuhn and *The Structure of Scientific Revolutions*

Like Camus, Kuhn is a giant of 20th century philosophical thinking. Unlike Camus, he does not favour the esoteric. He is not a 'continental' thinker. He is not an existentialist. He does not speak of 'the nostalgia for unity', the absurd or apartment managers killing themselves rather that living out an existence which, upon 'definitive awakening', appears utterly meaningless.

And it is for all these differences that Kuhn is most interesting as an elaboration of Camus' existential hypothesis.

Ostensibly, Kuhn is concerned with how we *do science*, how we construct theories about the way the world works, and how these theories are modified or rejected when it becomes

apparent that, well, the world doesn't *really* seem to work that way after-all. In describing this 'theory construction' process, Kuhn presents a model –and though he would deny it- a *system*, that not only re-iterates Camus' own assertions regarding a fundamental need for unified relations -*meaning*, but seeks to describe, in systematic detail, how this need is manifested behaviourally.

Anyone familiar with Kuhn's text may immediately object to my assertion that Kuhn is concerned with meaning. Certainly, Kuhn is an epistemologist, a student of the history of scientific thought. Kuhn was *not* concerned with the meaning of life. While this last assertion may be true, I would suggest that Kuhn, perhaps more than any other 20th century thinker, was essentially concerned with how human beings go about constructing meaning, both as individuals, and in concert with those around us. While Kuhn offers no answers as to what life's meaning may be, he is wholly absorbed in the process by which we acquire and maintain meaning.

Remember, by meaning, we do not exclusively mean *purpose*, as is commonly meant when philosophers inquire into the meaning of life –(What is the purpose of life? What is the value of existence?) By meaning, we mean *a general system of stable relations, a network of ordered associations*. The links that bind this system are often teleological, but may also be causal, conceptual, logical etc. While Camus focuses mainly on teleological links –purpose, value- he also touches upon religion, science, logic and art, suggesting that the fundamentally different kinds of relations that bind elements of these spheres of understanding are all means to the same end -establishing means of sensibly relating elements of our perceived reality such that we may satisfy our nostalgia for unity. While Kuhn does not focus on teleological links which may bind relations, he does develop the causal, conceptual, and logical associations that organize

and inform all thought and perception. Kuhn is therefore concerned exclusively with meaning, and as we will see, it is no mere co-incidence that psychological theorists explicitly concerned with meaning-making operate largely from the theory construction system that Kuhn has developed.

While Kuhn is no existentialist, he is concerned with the same matters which concerned Camus, and describes them in the same general manner. Like Camus, Kuhn sees human beings as driven to establish a single, unifying relational matrix which explains, or accounts for, all that we perceive. Since Kuhn's focus rests mainly on scientific endeavour, 'explanation' mainly involves mapping out the causal links which bind perceived events with other perceived events, as well as the conceptual links (similarity) that bind perceived qualities with other perceived qualities for the purpose of categorization. Like Camus, Kuhn sees this unified relational matrix – or paradigm- as being under constant assault from another domain –'nature'- which is irrational and chaotic. Like Camus, Kuhn places special attention on the meeting point, or more accurately, the incommensurable fissure that lies between these two domains- nature and paradigm. Like Camus, Kuhn sees the spawn of this rupture –anomaly- as a source of "essential tension" and even "acute personal distress".

To begin, Kuhn (1962/1996) describes the "pre-paradigm" (p.12) period that characterizes any emerging sphere of knowledge and corresponding program of inquiry. At this stage of empirical 'development', every phenomenon receives its own theory –its own relational matrix that situates the phenomena both causally and conceptually. This is to say, for every empirical observation, there is an individual theory that seeks to explain it, where very few of these theories explain more than one observable phenomena.

Using the example of early research involving electricity, Kuhn (1962/1996) relates the work of numerous individual theorists, "Hauksbee, Gray, Desaguliers, Du Fay, Nollett, Watson, Franklin, and others" (p. 13), men who all considered themselves 'electricians', but whose "theoretical and methodological beliefs" (p.14) differed significantly from one another, for even though "most experimenters read each other's works" (p.14) their respective theories bore "no more than a family resemblance" (p.14) to one another. Kuhn is describing an early science where "different men confronting the same range of phenomena, but not usually the same particular phenomena, describe and interpret them in different ways." (p.14)

Yet, somehow, the divergences between differing theories melt away as one of these 'proto-paradigms' gains dominance over the others.

> What is surprising…is that such initial divergences should ever largely disappear. For they do disappear to a very considerable extent and then apparently once and for all. Furthermore, their disappearance is usually caused by the triumph of one of the pre-paradigm schools, which, because of its own characteristic beliefs and preconceptions, emphasized only some special part of the too sizable and inchoate pool of information. (Kuhn, 1962/1996, p.17)

While the newly adopted paradigm often accounts for more observable phenomena than others theories, this is not always the case, and it certainly not the case that the emerging paradigm accounts for all of the phenomena that the previous 'proto-paradigms' described.

> for the triumph of one of the pre-paradigm schools…it must seem better than its competitors, although it need not, and in fact never does explain all the facts with which it can be confronted. (Kuhn, 1962/1996, p.17)

If the move to a single explanatory framework cannot be entirely motivated by the unequivocal explanatory superiority of one 'proto-paradigm' over another, it does indeed seem surprising that such initial divergences should ever disappear. Perhaps there is more that pragmatic parsimony that underlies this move to a singular paradigm, and underlying 'nostalgia for unity' that provides its own motivation for the establishment of a unifying paradigm. As we will see, Kuhn makes his own assertions regarding the possible psychological mechanism that underlies our desire to establish and maintain such unifying associative networks.

Once this unifying paradigm is in place, the empirical process that follows can be characterized as 'Normal Science.

> Normal science is an attempt to force nature into the preformed and relatively inflexible box that the paradigm supplies. No part of the aim of normal science is to call forth new sorts of phenomena; indeed, those that will not fit into the box are not seen at all. Nor do scientists normally aim to invent new theories, and are often intolerant of those invented by others. Instead, normal scientific research is directed to the articulation of the phenomena and theories that the paradigm supplies. (Kuhn, 1962/1996, p.17)

Normal science essentially involves operating from the singular, dominant relational matrix, and utilizing this matrix to account for our perceptions of 'nature'. Of course, no single paradigm, however comprehensive, has yet been devised that can account for all that 'nature' can throw our way, and the desire for our paradigm to possess *stable* associations requires that the matrix remain relatively inflexible, even in the face of nature's endless onslaught of novel phenomena. To maintain the paradigm in the face of an uncooperative nature, scientists become adept at employing the duel strategies of unconsciously ignoring those phenomena that are "unrelated, or

unrelatable" (Kuhn, 1962/1996, p.35) to the relational matrix, as well as consciously focusing on only those phenomena that our paradigm seems likely to account for.

When science is carried out in this manner, 'new' phenomena develop and enrich the paradigm rather than rather than challenge it, as scientists are focusing only on phenomena that can be accounted for, and ignoring phenomena that can't. This process of normal science, "determination of significant fact, matching facts with theory, and articulation of theory" (Kuhn, 1962/1996, p.34) allows the 'fixed box' of the paradigm to change, but only insofar as it 'gets bigger', not insofar as it's fundamental relational assumptions have been revised or altered. Not insofar as it may become 'undermined'. As long as the paradigm is able to successfully "force nature into conceptual boxes"(p.5), it avoids "fundamental novelties" (p.24) that may be "fundamentally subversive"(p.24) to its "fundamental commitments"(p.24)

The unintended and ironic aspect of paradigm articulation lies in the consequence of its own development; the more phenomena a paradigm seeks to account for, the more specific its assumptions become, and the more easily the paradigm is falsified. Put differently, the more articulated the paradigm, the more associations in its relational matrix. The more associations in its relational matrix, the greater the possibility that one or more of these associations will be challenged, for "The more precise and far-reaching the paradigm is, the more sensitive an indicator it provides of anomaly." (Kuhn, 1962/1996, p.65) The greatest threat to any paradigm, that which invariably severs these relations, is the *anomaly*.

Anomaly is the unexpected. It is the collision of a unified relational matrix and the reality it was meant to account for. It is the collision of 'paradigm' and 'nature'. Just as Camus' notion of the absurd is not found exclusively within the domains of unity or chaos, but in the disparity

between the two, so it is with Kuhn's anomaly, which is found in neither paradigm nor nature, but in that gap between paradigm and nature, that point at which "nature has somehow violated the paradigm induced explanations." (Kuhn, 1962/1996, p.52) It is the unaccounted for phenomenon that can not be ignored, despite the blinders put in place by the paradigm. It is the exception that does not prove the rule, rather, it is the phenomena that is so "unrelated and unrelatable" (p. 35) to the existing associative network, that it implies the existing relations must be false. The paradigm is undermined.

Revolution is the result. Suddenly –or not so suddenly- the relations that bind the current paradigm are severed by an anomaly that doesn't challenge any one link in the relational matrix, but undermines the most central associative assumptions of the paradigm, the central links to which all others connected. As Kuhn (1962/1996) points out, the anomalous astrological phenomenon that challenged Newtonian physics didn't merely discredit the peripheral associations in the paradigm, but were such that Newton's absolute space-time paradigm had to be incorrect, its central associations shattered beyond repair. Only the 'curved space' of Einstein's general theory of relativity was able to account for these observations, and was able to do so insofar as is offered up a completely different series of proposed relations, and entirely new paradigm that was meant to account for nature. Like all new paradigms, which are "seldom or never just an increment of what is already known" (p.7) Einstein's general relativity implied "a change in the rules governing the prior practice of normal science" (p.7) as it required a "reconstruction of prior theory and the re-evaluation of prior 'fact', an intrinsically revolutionary process." (p.7)

These paradigms are not distinguished by continuous additive difference, but by a complete, incommensurable leap from one set of fundamental assumptions to another.

Paradigms differ in kind, not in degree. Einstein's relational network was not a cumulative extension of Newton, for

> to make the transition to Einstein's universe, the whole conceptual web, whose strands are space, time, matter, force, and so on, had to be shifted and laid down again on nature whole. (Kuhn, 1962/1996, p.149)

And it is this incommensurability between paradigms that becomes a new source of "essential tension" (Kuhn, 1962/1996, p.79). If a yawning fissure separates nature from the paradigm meant to account for it, such fissures also exist *between paradigms themselves*. And just as we are motivated to establish a unified system of relations that swallows nature, so too are we motivated to overlook the gaps between paradigms and treat them as though they represent the continuous development of a single school of thought.

From the outset, scientists downplay the difference between paradigms by only acknowledging the existence of competing paradigms once their current paradigm has been undermined by anomaly. There is seldom even a temporal gap between paradigms, where one has failed and no other has emerged to take its place. Instead, "the decision to reject one paradigm is always the decision to accept another." (Kuhn, 1962/1996, p.74) In attempting to close the paradigm gap even as it appears, scientists minimize the actual period of time between paradigm shifts such that their psychological exposure to the gap, that 'paradigmless' period of shattered relations, is itself minimized. The anomalies that fractured the original paradigm are quickly buried within the new, such that even if we are aware, in an abstract sense, that such anomalies exist, our *feeling* of these anomalies is diminished, for as Camus (1955) tells us, "the feeling of the absurd is, for all that, not the notion of the absurd." (p.21) And it is our feeling of the absurd that is acute and must be dealt with.

Finally, the gaps between paradigms are formally erased as textbooks are written –and re-written- such that the history of science is made to seem the articulation of one great unifying paradigm stretching back to the first glimmers of civilization. As Kuhn (1962/1996) notes

> Textbooks, however, have to be re-written in the aftermath of each scientific revolution, and, once re-written, they inevitably disguise not only the role but the very existence of the revolution that produced them. (p.137)

Towards the end of *The Structure of Scientific Revolutions*, Kuhn (1962/1996) asks a deceptively straightforward question: "Do we need a unifying framework?" (p.171) Camus'(1955) deceptively straightforward reply would be: "To understand, above all, is to unify." (p.13) The quest of unity is the central theme of both "An Absurd Reasoning" and *The Structure of Scientific Revolutions*. Camus sees our attempt to reconcile a domain of unity with domain of disunity, where absurdity festers in their seemingly unbridgeable divide. The 'nostalgia for unity' that motivates this attempt is not limited to any one domain of understanding –science, art, religion- all are shaped by a desire for the singular, stable, relational matrix that *is* meaning. The awareness that an entirely unifying network may be an impossibility produces an anxiety, a tension that Camus characterizes as existential anxiety.

Kuhn describes his own picture of a domain of human understanding shaped by a desire for a unifying paradigm that seeks to swallow nature whole, where anomaly is the constant reminder that a similarly unbridgeable gap may ultimately thwart any attempt to unify nature with the paradigm meant to account for it. While Kuhn's analysis is mainly limited to the

domain of scientific understanding, Kuhn introduces a new source of unity discrepancy that Camus does not himself develop: not only is there a potentially incommensurable rift between paradigm and nature, but there are multiple incommensurable rifts between the multiplicities of 'unifying' paradigms themselves. Our desire to smooth over all of these rifts is indicative of a drive, a need on the part of scientists to above all, unify. Even if it can be suggested that there is no pragmatic need for a unifying framework we may still be at the mercy of a *psychological* need for unity, a need that mirrors itself in all domains of understanding, and, if not met, results in some kind of tension or anxiety.

While Kuhn doesn't explicitly postulate a universal, psychological need for unity, like Camus own 'nostalgia for unity', he does suggest that the scientific quest for unity bears some relation to psychological make-up of humanity in general. Drawing from the work of the Hanover School of Gestalt Psychology, Kuhn (1962/1996) suggests that our fundamental mode of perceiving the world relies on an implicit relational matrix, like a 'gestalt', for "something like a paradigm is required for perception itself." (p.113) Kuhn (1962/1996)suggests that it is not merely co-incidental that the incommensurable differences between paradigms are akin to the entirely different 'duck and rabbit' images that can be perceived from the same series of lines in the Gestalt sketches we were shown in elementary school. Scientific revolutions are not merely analogous to these "gestalt switches" (p.113), they are indicative of a primal mode of perception, of a basic inclination to have "perceptual categories"(p.111) in place that provided associative order to the raw sense data that continually floods our awareness.

Kuhn tries to cement the link between basic psychological disposition and paradigm dynamics by making reference to a particular experiment carried out by J. S. Bruner and Leo Postman the late 1940s, where Kuhn (1962/1996) takes this psychological experiment to be "a

wonderfully simple and cogent schema for the process of scientific discovery." (p.64) The methodology employed by Bruner and Postman (as cited in Kuhn, 1962/1996) was fairly straightforward –present subjects with playing cards for variable durations and ask the subject to identify what playing card that has just been presented to them. Presumably, everyone is familiar with a deck of cards -everyone has a 'paradigm' in place- where there are certain expected relations between the various features found on each card. We expect the two of hearts to also be red, and the ace of spades to also be black. We expect the ten of club have ten clubs, not nine or eleven.

What happens, then, when subjects were presented with *anomalous* cards, cards that did not conform to standard paradigm we have in place for the features found on a deck of playing cards? What happens to subjects when they are exposed to cards that have been rendered, in a sense, *meaningless*? What Bruner and Postman found was quite surprising. Just like a scientist unconsciously ignoring anomalous data that does not conform to his existing scientific paradigm, experimental subjects simply wouldn't *see* that the anomalous cards differed from their relational expectations. A red nine of clubs was identified as a nine of clubs, without any mention made of it being red instead of black. A black jack or hearts was identified as a jack of hearts, even though it was black instead of red. Gradually, after many repeated viewings, subjects would begin to notice the anomalous cards, and identify them correctly at each subsequent presentation, having now generated a new 'paradigm' to account for the novel association of playing card features.

What Kuhn finds to be particularly interesting is that a small sub-set of subjects were never able to form a new paradigm for the anomalous cards, even though they were aware that something was wrong with the cards being presented. These subjects, despite claiming that there

was something unusual about the card they had just been presented, could never articulate what it was about the card that was anomalous, an inability that also rendered them unable to construct a new network of expected relations to account for the new kinds of cards. Kuhn (1962/1996) also points out that these subjects experienced "acute psychological distress" (p.63) in the face of these anomalous cards, but only when they were unable to construct a new paradigm to account for them.

Why should subjects experience psychological distress if anomaly itself was not a potential source of anxiety? Were these subjects distressed because their inability to build a new paradigm around the anomalous cards reminded them of their imminent mortality? Or did they experience this anxiety because, as Camus suggests, we possess a general, innate *need* to establish unified relations, and when this need is thwarted, or our existing networks break down, we experience anxiety. While the anxiety experienced by an apartment manager who has lost his daughter, and the anxiety experienced by an experimental subject who cannot accommodate anomalous cards into an existing paradigm may differ greatly in their quality and intensity, we suggest that these differing modes of anxiety have a common cause. In both scenarios, as with the breakdown of scientific paradigms, *meaning*, that stable network of expected relations, has been *undermined*. Existential anxiety, in form or another, is the result.

Ronnie Janoff-Bulman and *Shattered Assumptions*

And where Kuhn leaves of with psychology, we take up with psychology over thirty years later. Janoff-Bulman's *Shattered Assumptions* is a unique work when placed in the context of late twentieth psychology. Prior to the complete solidification of behaviourism as the primary paradigm of empirical psychology, philosophically ambitious psychological theorists penning

grand, existential texts weren't entirely uncommon. Abraham Maslow, Victor Frankl, and Carl Rogers all attempted to incorporate continental existential theorists into broad psychological frameworks that could be empirically validated and provide the basis for clinical therapy.

And yet, if one goes to the library and types 'existential psychology' into the search engine, a clear and substantial gap appears in the literature. From the late 1960s, to the late 1980s, almost nothing is written that pertains directly to existential matters. Then, once the Behaviourist ice sheets had fully retreated, psychological theorists began to once again address existential matters en masse, in a broad, all-encompassing manner. The past fifteen years in particular has seen three substantial works appear that re-evaluate existential matters from a psychological perspective. The first of these to appear was Roy Baumeister's *Meanings of Life* in 1991, followed by Ronnie Janoff-Bulman's *Shattered Assumptions* in 1992, and Jordan Peterson's *Maps of Meaning: The Architecture of Belief* in 1999. While it would be worthwhile to generally evaluate Baumeister's text in this context, the latter texts place a greater focus on the structure of meaning maintenance and acquisition, following directly as they do from Kuhn's model of paradigm dynamics.

As we will see, Janoff-Bulman's work is in many ways a culmination of what has been presented thus far. Like Kuhn, she describes a system of competing relational systems, of associative networks that we employ as the fundamental means by which we structure our perceptions of reality. While Kuhn's paradigms are generally held together by causal and conceptual links, Janoff-Bulman's (1992) "assumptive worlds" (p.2) –like the accentuated elements of TMT's 'cultural worldviews', are structured teleologically, where the bonds are centered on purpose, value, and subjective intent. Still, the dynamics that govern these 'assumptive worlds' are identical to those that govern 'paradigms'- they are meant to account

for reality, they expand over time, and in-so-doing, their 'predictions' become more precise, making them more and more susceptible to anomaly. Often, these frameworks become fundamentally undermined by anomalous events that lie at the intersection of the assumptive world and the reality that they are meant to account for, and the awareness of these anomalous events provokes a great deal of anxiety.

Like Camus, Janoff-Bulman (1992) sees us as driven by what she calls a "unity principle-the need for a stable, unified conceptual system in order to impose order on a complex, confusing, chaotic world."(p. 26) Like Camus, Janoff-Bulman would be more concerned with bereaved, suicidal apartment managers than testy Newtonian physicists who can't explain why light appears to 'bend' as it moves through space. Like Camus, Janoff-Bulman is primarily concerned with those associative networks that are undermined by personally traumatic events – threats to our physical being- rather than just any benign anomalous phenomenon, though these traumatic events are, nonetheless, anomalous phenomena, and the anxiety they provoke is due in large part to their anomalous nature, and the degree to which they shatter the system of stable associative expectations that we seem driven to establish and maintain.

It is in this regard that Janoff-Bulman most significantly differs from TMT; if we experience anxiety in the face in the aftermath of potentially deadly experiences, or even at the thought of such experiences, this anxiety is predominantly the result of threatened or shattered meaning frameworks, of a thwarted "unity principle" (Janoff-Bulman, 1992, p.26) or an undermined "sense of coherence" (p.11), rather than death, in an of itself. As with Camus, the anxiety that surrounds death lies in its implication for meaning, not the event.

Shattered Assumptions begins with Janoff-Bulman making a general statement of purpose, placing the focus of the text squarely on very real, very personal, and all too common psychological experiences, rather than esoteric existential debate. Janoff-Bulman (1992) wonders

> How can we understand the psychological impact and aftermath of traumatic experiences? How do people come to terms with these events and go on with their lives? The responses of survivors to extreme life events tell us a great deal about our common human needs, capacities, and illusions. (p.3)

Traumatic experiences, which are taken to involve extreme physical threat to oneself or ones loved-ones, seem to somehow violate "a few fundamental assumptions about ourselves and our world, assumptions that generally go unquestioned and unchallenged." (p.4)

Unlike the conscious, systematic paradigms that Kuhn sees as guiding scientific inquiry, Janoff-Bulman (1992) sees these assumptions as a jumble of loosely associated -even contradictory- causal, conceptual, and teleological assumptions about reality that are bound together in "a network of diverse theories and representation" (p.5) that form the "bedrock of our conceptual system –least aware of, and least likely to change." (p.5)

> Surely, our basic assumptions may be more private and less elegant than theories that guide scientific research, yet they are nonetheless important as guides for our day-to-day thoughts and behaviours. (Janoff-Bulman, 1992, p.4)

Like Kuhn's paradigms, they are the basic boxes into which we instinctively squeeze our perceptions, the "conceptual system that automatically structures a persons experiences" (Janoff-Bulman, 1992, p.5), for we are naïve "deductivists –not inductivists in how we approach the

world." (p.27) We are therefore "heavily biased towards what we already know and believe, for these assumptions provide the lenses through which we perceive and interpret new information." (p.27)

As with any paradigm, we are motivated to maintain our assumptive worlds in the face of any evidence that may unravel them –the "perseverance effect" (Janoff-Bulman, 1992, p.74)- as well as to retain the greatest possible stability in the links that have already been established – "cognitive conservatism." (p.74) On the one hand, we inherently interpret new information in such that it conforms to our existing assumptive worlds, reworking the experience such that any contradictory implications are sanded away, leaving a clean surface that can be readily adhered to our existing system of relational expectations. On the other hand, experiences that our assumptive worlds do not account for are simply ignored, where experiences relevant to our assumptive worlds are "more likely to be noticed and attended to."(p.30) Like the paradigm oriented scientist who only tackles the puzzles her paradigm is equipped to solve, this short-term solution provides our assumptive worlds with utmost stability in the face of a "complex, changing world" (p.70), for they do not even change to the degree that new information, however benign, is ignored rather than added to the matrix.

Of course, assumptive worlds eventually *do* change, most often in a gradual manner wherein novel experiences are interpreted such that they plug cleanly into the pre-existing set of assumptions. As with Kuhn's 'normal science', Janoff-Bulman's (1992) "normal change" (p.70) is characterized by change that "is gradual and incremental, rather than sudden of swift."(p.70) When sudden, swift change does occur it can be so dramatic that "the assault on our fundamental assumptions is massive"(p.70) signalling "the end of normal change"(p.70) and potentially, the end of the assumptive world altogether.

What brings on this massive assault on our fundamental assumptions? Is it a cold fact that, if true, logically undermines our assumptive world? Janoff-Bulman (1992) claims that only traumatic events, events that are "out of the ordinary and are directly perceived as threats to survival and self-preservation" (p.53), are capable of shattering the kinds of associative networks that are the focus of her analysis.

To understand why this is the case, we must have some understanding of the content of these assumptive worlds. While Kuhn provides a model that accounts for the general dynamics of associative networks, the assumptive worlds that Janoff-Bulman describes aren't networks of causal and conceptual relations linking facts and events that, while comprising scientific endeavour, have little bearing on our day to day existence. With regards to the kind of paradigms that Janoff-Bulman describes, it is as Camus (1955) suggests, that "Whether the earth or the sun revolves around the other is a matter of profound indifference." (p.3) For the most part, the associations that bind Janoff-Bulman's assumptive worlds are *teleological* relations, relations that involve value, purpose, and intent, the kinds of relations that Camus saw as the most significant links in our everyday 'nostalgia for unity'.

Janoff-Bulman (1992) suggests that there are three central assumptions around which our relational networks are clustered. These assumptions allow us to "see and association" (p.9) between our various experiences, therefore avoiding the source of our greatest anxiety- "randomness, which denies the meaning of events." (p.11)

The world is benevolent.

The world is meaningful.

The self is worthy. (Janoff-Bulman, 1992, p.6)

The first of these assumptions works from the more fundamental assumption that some manner of divine providence exists, beyond the individual, beyond society, that intends for good things to happen to us most, if not all, of the time. This allows us to "believe in the preponderance of positive outcomes and good fortune over negative outcomes and misfortunes." (p.11)

The second of these assumptions presents a more immediate "self-outcome contingency" (Janoff-Bulman, 1992, p.11) that pertains to the intent of the individual themselves. We assume that "there is a relationship between a person and what happens to him or her" (p.9) where "a good, moral, decent person deserves positive outcomes; conversely, misfortune should be most apt to strike the morally corrupt." (p.11)

The final assumptions "involves a global evaluation of the self, and in general, we perceive ourselves as good, capable, and moral individuals" (p.9), thus deserving of the positive outcomes promised by the second of these assumptions.

At this point it could be argued that the content of Janoff-Bulman's assumptive worlds sound a lot like the cultural worldviews set out by TMT. In both cases we have beliefs involving cultural values dictating what are desirable qualities and behaviours from individuals, as well as an individual's sense of self worth in relation to these cultural values. While Janoff-Bulman makes no mention of a desire for symbolic immortality, perhaps it is the case that, as with cultural worldviews, assumptive worlds themselves reduce to a defensive reaction to the latent knowledge of our own mortality. Perhaps it is as TMT theory suggests, and all such meaning

frameworks are a response to our fear of death, rather than our fear of death being a reaction to the possibility of meaninglessness.

Janoff-Bulman (1992) immediately precludes this possibility by stating that the assumptive worlds she describes "derive from our earliest experiences with 'good enough' caregivers and *are not simply constructed as defence*." (p.60) With regards to traumatic events specifically, Janoff-Bulman sees the anxiety they provoke as stemming from both the reminder they provide of our own mortality, but most importantly, *insofar as such events shatter our assumptive worlds, in and of themselves*. She calls this the "double dose of anxiety" (p.64), whereby the trauma victim must deal with *both* the

realization that one's survival is no longer secure, that their self-preservation can be jeopardized in a world that is frightening and unsafe. (Janoff-Bulman, 1992, p.64)

as well as the new threat to

the survival of the conceptual system, which is in a state of upheaval and disintegrating. The very assumptions that had provided psychological coherence and stability in a complex world are the very assumptions that are shattered. (p.64)

Janoff-Bulman (1992) claims that the most enduring anxiety that results from traumatic anomaly is the latter, anxiety in the face of our unravelling relational matrixes, and the understanding that our "completion tendency" (p.106) with regards to these matrixes has been brutally thwarted.

She then suggests that the most compelling psychological evidence for this thwarted 'unity principle', 'completion tendency', or 'sense of coherence' lies in the two most common

psychological responses to traumatic life events –denial, and it's seeming opposite, persistent, intrusive recollection of the event. Both of these phenomena, Janoff-Bulman argues, are indicative of the damaged associative networks that underlies the anxiety of traumatic life events, and represent the desire to maintain these networks, or construct them anew.

> Victims alternate between the need to approach the trauma and avoid it, to confront the experience and protect themselves from it…denial representing the need to protect the individual, and intrusions reflecting the need to conceptually process the event. (Janoff-Bulman, 1992, p.94)

Why victims should wish to avoid recollection of the event is easy enough to imagine; like Kuhn's stubborn scientist, clinging to a failed paradigm, the trauma victim wishes to avoid all awareness of the unexpected anomaly that has shattered the framework that governs their fundamental perceptions of the world. In the most extreme cases of denial, "the victim exhibits continued, total amnesia for the overwhelming experience" (Janoff-Bulman, 1992, p.101), which allows them to avoid integrating the anomalous event altogether, including any novel associations it may imply. In this way,

> A set of coherent ideas could be separated from one's primary personal consciousness. These dissociated systems are evident in fugue states, and, particularly, in multiple personality disorder. Some amnesic barrier prevents this relatively coherent sub-system from being integrated. (p.101)

Yet even while the anomalous event and its associative implications are being suppressed, it is often the case that memories of the events recur, where such

> thoughts and memories are involuntarily persistent, recurrent, and psychologically disturbing. They are virtually universal among those who have experienced extreme, negative life events. (p.104)

Janoff-Bulman (1992) wonders why it should be that we would be driven to compulsively recall distressing events, where these "intrusions often provoke extreme levels of fear and anxiety." (p.104) This "curiously repetitive phenomena" (p.104) should be particularly peculiar if, as TMT suggests, our most fundamental compulsion is to *avoid* mortal thoughts. Why then should such remembrances bubble spontaneously from our unconscious? This only makes sense if, as Janoff-Bulman suggests, another, *stronger* drive exists, an innate 'principle of unity', or 'completion tendency', that if thwarted, prompts a potentially greater, or at least more enduring anxiety that what was elicited by the trauma itself -*existential* anxiety.

Jordan Peterson and *Maps of Meaning: The Architecture of Belief*

Jordan Peterson is going to present us a framework that, by now, should be familiar. Like Camus' Domain of Unity' vs. 'Domain of Chaos', Kuhn's 'paradigm' vs. 'nature', and Janoff-Bulman's 'assumptive world' vs. 'reality', Peterson (1999) presents us with two opposing domains, in this case, the "Domain of the Known" vs. the "Domain of the Unknown". (p.19) As with these other theorists, it is the collision of these domains, and what results, that produces a fundamental –perhaps *the* fundamental- human anxiety.

Like Kuhn, Peterson evokes the term 'anomaly' to describe the product of domain disjunction, but what makes Peterson somewhat unique, and valuable in our evaluation of TMT, is his claim that anxiety in the face of anomaly, and the cognitive construction of these domains themselves, are the result of *neurobiological hardwiring*. Peterson attempts to ground Camus' "nostalgia for unity" and Janoff-Bulman's 'principle of unity' in the neuropsychological

bedrock, such that he can establish a human need to construct meaning, where our anxiety in the face of reminders of an external domain without meaning is psychologically irreducible to any 'deeper', more fundament need -like, for instance, the desire to avoid the negative affect that results from an awareness of our own mortality.

Peterson (1999) begins by telling us that

the universe is composed of 'order' and 'chaos' –at least from a metaphorical perspective. Oddly enough, however, it is to this metaphorical universe that our nervous system seems to have adapted. (p.23)

such that "the human brain and the higher animal brain appears to have adapted itself to the external presence of these two 'planes'." (p.20) According to Peterson, various brain structures – primarily the limbic unit, and the neo-cortex- are responsible for rough sorting our perceptions into two general domains, each with their own affective valence. The first of these represents 'order'-stable associations and ordered relations, while the other represents 'chaos'-unpredictable, random associations, and disordered relations. One represents "our pattern of representations…defined territory, disciplined and restrictive"(p.20), while the other represents "all events that have not yet been categorized."(p.23) One represents *meaning* –"adjustable maps of experience and potential" (p.38), while the other represents the *unknown* -"nature, metaphorically speaking." (p.20) One is the *Domain of the Known* – "explored territory"(p.20), while the other is the *Domain of the Unknown* –"unexplored territory."(p.20)

While most of our experience falls within the boundaries of the Domain of the Known, the Domain of the Unknown is constantly intruding into awareness. This continual bombardment of anomaly, or unexpected events, has given rise to an evolutionary process whereby our brains

had to develop structures to deal with *both* domains, as both could be "reasonably regarded as permanent constituent elements of human experience –even the human environment." (Peterson, 1999, p.19) These domains are in such continual conflict that we have evolved such that "human beings are prepared, biologically, to respond to anomalous information –to novelty."(p.23)

This novelty most often presents itself in the form of what Peterson (1999) calls "inconveniences"(p.20), or unpredictable event that, ironically, represent an "integral, predictable, and constant feature of the human environment such that we have adapted to this feature."(p.20) For the most part, our adapted behaviour in response to anomaly it to experience "fear first, generally speaking" (p.19), and to "strive to bring ourselves back into the realm of the predictable."(p.28) When we feel we are able to accomplish this, for the most part, we are operating in a mode that Peterson calls "normal life" (p.19), a deliberate reference to Kuhn's own 'normal science'. Not surprisingly, we may also experience "revolutionary life"(p.19), where, just as revolutionary science is prompted by a shattered paradigm, "your encounter with the terrible unknown has shaken the foundations of your worldview. You have been exposed involuntarily to the unexpected and the revolutionary."(p.30)

As with TMT, Peterson sees culture as the primary buffer against existential anxiety, but unlike TMT, Peterson sees this anxiety as arising not from death, but from clash between the Domain of the Unknown, and the Domain of the Known, where culture actually comprises the Domain of the Known. If culture comprises the Domain of the Known, and the Domain of the Known is, essentially, our 'maps of meaning', or our networks of stable associations, Peterson (1999) sees these associations as cognitively represented as cultural "stories –adjustable maps of experience and potential." (p.38) Therefore

> We are protected from unpredictability by our culturally determined beliefs, by the stories we share. These stories tell us how to presume and how to act to maintain the determinate, shared, restricted values that comprise our familiar worlds. (p.53)

Eventually, anomalous inconveniences will appear that can not be accounted for by our existing cultural stories. These "inconveniences accumulate, rather than disappear. When they accumulate in sufficient numbers, they produce a catastrophe" (p.20), where "catastrophes interfere with the integrity of our whole stories, and massively disregulate our emotions."(p.20)

Again, Peterson looks to our neural anatomy as a foundation for both our fundamental *need* for stable associative networks –meaning- as well as the model of meaning framework construction\challenge\breakdown\anxiety that has been outlined by Peterson and all of the theorists presented thus far. According to Peterson, if we are to understand the relationship between our psychological experience of the Domain of the Known and the Domain of the Unknown, we must look to the brain structures that are responsible for these modes of perceived reality, these being the left and right hemispheres of the brain, respectively.

Peterson (1999) suggests that when we are operating from stable associations, when things are ordered, predictable, and familiar, we are operating primarily from the left hemispheres of our brain. This half of the brain

> is integrally involved in the production of positive affect, and appears particularly good at carrying out practiced activities, applying familiar modes of apprehension. The left seems at its best when…tradition governs behaviour, and the nature and meaning of things has been relatively fixed. (p.69)

In a sense, the left brain predominates when we are working 'from within the paradigm', when 'normal life' is like 'normal science' and we are perceiving only those things that are already accounted for, by and large, by our existing 'maps of meaning'. The left hemisphere of the brain is also responsible for the generation of positive affect, not co-incidentally, whereby perceiving and operation from established associative networks actually *feels* good, and at such a fundamental level that "positive affect rules in known territory by definition."(p.69)

When the unexpected arises, when we perceive an event that is not accounted for by these networks of the left hemisphere, the right hemisphere is activated, an area responsible for "the production of negative emotion…and for rapid and global recognition of patterns"(Peterson, 1999, p.69) which "drive the process of imagistic hypothesis generation and constitute the process of abstract exploration –fantasy- we use to give determinate (and oft bizarre) form to the unknown."(p.69) Peterson tells us that

> The right hemispheres comes 'on-line' when a particular situation is rife with uncertainty…and appears to have remained in direct contact with, and to be specialized for encounter with, the *unknown* and its terrors, which are apperceived in the domain of instinct, motivation and affect long before they can be classified or comprehended intellectually. The right's aptitude for global pattern recognition helps ensure that a provisional notion of the unknown event might be rapidly formulated. The right hemisphere uses its capacity for massive generalization and comprehension of imagery to place the novel stimulus in an initially meaningful context, which is the *a priori* manner of appropriate categorization. (p.70)

When we run into territory without patterned associations, it is the job of the right hemisphere to activate and generate negative affect, as well as establish patterns, via twin capacities for "pattern recognition" and "pattern generation"(p.70). *Meaning* is both sought out and imposed as we seek to link the seemingly random elements of the unknown into some kind of naïve

hypothesis or basic categorization, where the first links in these emerging patterns often take the form of simple metaphor, where "metaphor might well be regarded as the first stage of hypothesis construction." (p.70)

"Anxiety recedes" (Peterson, 1999, p.70)as the right brain generates and imposes these initial links, imposing unifying order on the events generated at the intersection of the Domain of the Known and Domain of the Unknown. The source of this anxiety, once again, is *meaninglessness*, or the lack of established associative bonds or relational ties to unify our perceptions in accordance with some kind of 'map of meaning'. As our pattern recognition/generation grows more sophisticated in dealing with the anomalous events, new ties may be formed, above and beyond mere metaphor, involving causation, purpose logic etc. According to Peterson, all of this happens *innately*, at the most basic levels of our neurophysiological structures.

To borrow a phrase from our next author, this anxiety is 'primordial', and does not reduce to some still deeper level in a causal hierarchy. Human beings are 'hardwired' to experience anxiety in the face of anomaly, in the face of those events which arise from a domain which is unknown, disunified, and chaotic, events that clash with the domain of unity and stable relations which we had previously established for ourselves. We feel this anxiety whether it involves a threat to our lives or, as is most often the case, when it does not, though we may feel it most acutely when our existence is threatened.

Heidegger and *Being and Time*

But it is not enough to suggest that anxiety is experienced in the face of the absurd\meaninglessness\anomaly in and of itself. It is not enough to suggest that a separate drive exists, as drive to establish unified, ordered relations, whereby anxiety results if this need is not met. While establishing this would be enough to discredit TMTs chain of reductions that sees all human cognitive behaviour reduced to the desire to avoid the negative affect that results from the awareness of our own mortality, we wish to go one step further, and suggest that even the negative affect that results from the awareness of our own mortality is largely predicated on a more fundamental anxiety –the aforementioned anxiety in the face of chaos and disunity, or *meaninglessness*.

We fear death because death is the most fundamental anomaly, the ultimate absurdity, and the most profound example of meaninglessness. Death is the greatest challenge to the relational links and associative ties that bind reality together, and us within it. To this point, only Camus has asserted this directly, claiming that existential anxiety in the face of death arises insofar as death 'undermines' our 'nostalgia for unity', fundamentally 'alienating' us from 'domain of unity'. Now we may come full circle, in a sense, by discussing a fellow existentialist philosopher, and contemporary of Camus', Martin Heidegger. Heidegger, of all the theorists presented thus far, makes the strongest case for existential anxiety arising from the absurd, where the existential fear of death arises insofar as it makes salient the absurdity of existence.

If we *truly* come full circle, and return briefly to "An Absurd Reasoning", Camus evaluates what he perceives to be a substantial oversight in Heidegger's existential analysis. According to Camus (1955), Heidegger tells us, "in the most abstract language in the world"

(p.18), that *anxiety* is the central 'reality' for humanity, and thus places so much emphasis on anxiety that "he thinks and talks only of it." (p.18) The source of this anxiety is the consciousness of our own mortality, or more precisely, the "finite and limited character of human existence"(p.18) of which we are "primordially"(p.18) aware. Anxiety lies at the core of our being, a primal mode that is sublimated into the various activities whose implicit aim is to "quash" and "benumb"(p.18) this same anxiety. Unlike Kierkegaard, Camus sees Heidegger as writing "without trembling"(p.18) of humanity's endless existential treadmill- driven by anxiety, racing ahead of death, occasionally glancing back in terror.

If this were a correct characterization of Heidegger's thinking, it would sound almost identical to the reductive framework put forth by Pyszczynski, Solomon and Greenberg – mankind as universally driven by a singular existential anxiety prompted by the awareness of our own demise -end of story. As Camus (1955) sees it, Heidegger's crucial error is that "He does not separate consciousness from the absurd." (p.18) This is to say, he doesn't make a distinction between the anxiety arising from the consciousness of our mortality, and the anxiety which arises from our consciousness of the absurd. Death, and its implications for the "character of human existence"(p.18) is implicitly taken to be the singular source of our fundamental anxiety, while the fundamental absurdity of existence is never discussed as having it's own implications for human existence, and its own set of related anxieties.

Contrary to Camus' characterization of Heidegger, however, I would suggest that a less selective reading reveals Heidegger's deep concern with those matters which Camus generally characterizes as the absurd, placing these matters at the heart of humanity's collective terror in the face of death. I would go further, and suggest that Heidegger places mankind's "flight from

uncanniness" as a primary source of the anxiety which is elicited by reflecting on our own mortality.

Heidegger's takes up these matters in Division II, I-50 of *Being and Time*(1953/1996) . Of course, the line of reasoning which culminates in these passages also continues on into the text as they lay the groundwork for still broader conclusions regarding our experience of existence. The argument presented at this point is predicted on terminology that has been developed and refined in the previous two hundred odd pages of the text, so jumping in mid-stream, and not carrying on to the sea, (so to speak) means that much of the theoretical richness of these passages is lost. Unfortunately, we'll have to settle for the 'the gist' of Heidegger's thinking here, and assume the reader is not too put off by Heidegger's 'most abstract language in the world'.

By this point in the text, Heidegger (1953/1996) has asserted that "care is the fundamental constitution of Da-sein."(p.231), where Da-sein, or 'being there', is the fundamental mode of our being- a self-reflective entity already situated within the relational matrix that comprises our reality. This *care* which comprises our being is made up of three interrelated aspects: "being- ahead-of-itself", "already-being-in (the world)" and "being-together-with beings encountered (within the world)."(p.231) Put differently, human beings are inherently anticipatory, living in a present, but *for* a future. While we perpetually project ahead of ourselves, it is also the case that we have hit the ground running, careening through an existence into which we are not merely immersed, but which *constitutes* us. We are not bounded entities, rather, our very being is inexorably linked, relationally, with the other beings we encounter in the world, along with the world we inhabit.

Insofar as we are fundamentally anticipatory, we are fundamentally a "being towards its end"(p.235), and insofar as we are being towards our end, we are a "being-towards-death."(p.235) Death is the one event whose probability of occurrence is 1.00. We can try to anticipate beyond death, but death remains the one "not-to-be-bypassed"(p.235) end which we can grasp with absolute certainty. Unshakable, primordial certainly, long before we engage in any kind of self-conscious, reflective scrutiny. Death has "always already"(p.228) been with us, "already included"(p.232) in our existence. Living is dying death, for "once born, we are old enough to die." (p.232)

What, for Heidegger, is death? Death is not a discreet event that abruptly ends our narrative arc. It is not the 'moral' of our story. It's certainly not a physical perishing, or merely a biological determination, nor is it merely the "permanent annihilation of the self" suggested by Pyszczynski, Solomon and Greenberg. For Heidegger, like Camus, *death is an implication.* Death implies something about our existence which causes us great anxiety. Death implies that existence is, and always has been, *meaningless.*

How does death come to have this implication? Heidegger(1953/1996) has claimed that the fundamental aspect of our being is *care*, and that care is itself fundamentally *relational.* Death, however, is radically *non-relational.* It is radically *individualizing.* And if death is fundamentally a part of our existence, so much so that we can be characterized as a 'being-towards-death', an absurd paradox lies at the heart of our being Existence is *relational*, yet we are ultimately *non-relational.* Do we then exist? We are "faced with nothingness"(p.232), and this nothingness is at the core of our very being. Heidegger believes he has identified a rupture, an infinite fissure at the core of our being, a disruption that we are desperate to "cover over".

Culture -or as Heidegger (1953/1996) terms it, *the they-* is our primary means of covering over this absurdity, insofar as we "entangle"(p.233) ourselves within *the they*. Heidegger describes Da-sein as giving in to the "temptation" to *flee* from its "ownmost being-toward-death"(p.233), a flight from our ownmost nonrelation. *Da-sein entangles itself.* If our existential anxiety originates from a primordial awareness of the absolutely non-relational nature of death, then it should be of no surprise that the manner in which we *cover over* this rupture is by wilfully immersing ourselves in the *they-self.* In death, we are "torn away from *the they*"(p.233), and it is the experience of *this* rupture, this profoundly alienating end-state, which makes us most acutely aware of our essential nonrelation, and is the source of our existential anxiety. As with Camus, it is not the spectre of our annihilation, in and of itself that provokes our anxiety, but the primal *alienation* that it entails, the sense that our essential relations have been severed.

Conclusion

TMT is a series of reductions. One of these reductions sees all cognitive behaviour, all *meaning-making*, all art, religion, philosophy *-culture itself,* as reducing to the need to avoid existential anxiety. Another of these reductions sees existential anxiety as itself reducing to fear of death, and then no further. We have tried to suggest, over the course of this thesis, that it is not the case that all meaningful thoughts and endeavours reduces to our desire to avoid existential anxiety. Rather, we have suggested that the desire to make meaning is essentially the desire to connect elements of perceived reality, and connect ourselves to this reality, where this desire is *not the result of any desire to avoid existential anxiety.*

We have suggested instead that our desire to make connections, to make meaning, is one that is innate, and the anxiety that is elicited when our desire is not met is the true source of

existential anxiety. We have suggested that death, or more precisely, what the *idea of death represents*, is the radical severing of relations, a radical disconnection, that shatters the relational matrix we have constructed that ties us to our perceived reality. Therefore, it is not the case that existential anxiety reduces to fear of death, but that fear of death is an instantiation of existential anxiety, which is itself anxiety in the face of disconnection, non-association, randomness, The Void, the absurd —meaninglessness.

In addition, we have attempted to outline a model, a general framework whereby the desire to make connections —to make meaning- manifests itself as a desire to unify all of reality, ourselves included, in a single, stable relational matrix. We have suggested that TMT's own desire to unify psychology under a single series of explanatory relations is an ironic instantiation of this primordial desire for unified meaning, this 'nostalgia for the one'. Eventually, the relational matrix we believe we have established -this Domain of the Known, this unifying paradigm, this assumptive world- comes into contact with another domain which we occasionally perceive as comprising reality —the Domain of the Unknown, Nature, Chaos- which is characterized by the complete absence of these ordered relations and stable connections. In the gulf that exists between these two seemingly incommensurable extremes -absolute unity and absolute disunity- we find absurdity, anomaly, trauma, and the origin of our existential anxiety.

Each of the authors we have presented, we believe, provides a crucial piece of this outlined alternative hypothesis regarding existential anxiety. Jordan Peterson attempts to establish a neurobiological foundation for our need to establish stable associative networks, as well as the anxiety we experience when these networks are assaulted. Camus suggests that the need for such networks is not limited to any one domain of human understanding or perception, while Kuhn lays out the template of a system for how these networks are formed, clash with

'nature', and are revised, destroyed or replaced. Janoff-Bulman and Peterson work from this Khunian framework to model their own understanding of meaning system dynamics, and Heidegger reinforces Camus assertion that our fear of death is largely a fear of what death represents –meaninglessness.

Is this final assertion is true, it would be fatal to the chain of reductions which characterise the grandest ambitions of Terror Management Theory.

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