

PSYCHOLOGY AS MYTH

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Saint Mary's University

October 1993

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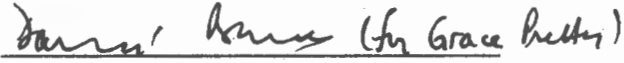
I would also like to thank personally Dr. Rowland Marshall whose insightful interjections helped reunite the often forgotten bridge between psychology and philosophy -- *praestat sero quam nunquam*. Dr. Grace Pretty whose challenging questions and guidance helped keep me on track -- *O si sic omnia* -- *gratias tibi ago*, and Dr. Phil Street who was my mentor, colleague, friend and *socius criminis* -- *olim meminisse iuvabit*.


Psychology as Myth

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Abstract

The existential disposition of self, the duality of being part symbolic (out-of-nature) and part animal (in-nature) creates a fundamental anxious state, the escape from which becomes a pursuit for meaning, a pursuit for Truth. This pursuit manifests itself metaphorically in mythological themes incorporating our existential duality and have varied over time becoming increasingly more symbolic. This thesis examines the dualistic existential state, the rise and fall of dominant mythologies in Western society and the history of psychology as a mythological manifestation of our dualistic state as it moves through these dominant myths. In particular, it describes psychology in our current scientific myth and explores the ramifications to psychology that the ongoing decay in the dominant scientific myth may have on it. Finally this thesis highlights the in-nature side of the discipline of psychology and discusses some future options for psychology as the dominant myth changes.

INTRODUCTION

The discipline of psychology is dying.

Later that day I sat in the office of my friend in the department, Ray Harcum. Two walls of the office were covered from floor to ceiling with textbooks, from introductory to advanced, in psychology. I asked him why, after over one hundred years of psychology, if one wanted *real* knowledge of human behaviour and consciousness, one would not go to any of these books. Why was it, I asked, if I wanted to know something about the *important* things of what it meant to be human -- about the human condition, about love, hate, courage, jealousy, awe, dignity, terror, compassion -- I would not go to these psychology texts, but to Dostoevsky, Goethe, Schubert, Picasso, Strindberg, Shakespeare? Why did *King Lear* and *War and Peace* contain and teach more psychology than all the texts on the walls? What had gone wrong with our field that this was so? Where did we make the wrong turn (LeShan, 1990, p. 3-4)?

The discipline of psychology owns psychology¹. While some psychological domains seem to overlap with other disciplines, (sociology, anthropology, psychiatry), in the main, the discipline of psychology has both legal and historical rights to psychology proper. It has, through its

professional associations (e.g., Canadian Psychological Association) and through licensing legislation in each province, established itself as a legitimate discipline, legally sanctioned by the government to offer psychological services (in applied and academic settings), to the people (its audience). In general, the discipline of psychology has: 1) a self-governing mandate, in that it has the power to define for itself what is and is not psychology (i.e., formally, in the right to license psychologists and control in a general sense, what they do, and informally, in the power to claim that academically accredited knowledge of psychology is true knowledge, the truth); 2) a code of ethics to govern the behaviour of those using the power of the discipline (i.e., formally in a documented code of ethics such as the Canadian Code of Ethics for Psychologists, and informally through internal power relationships and the threat of punishment by other members of the discipline); 3) a discipline approved general model to work from (i.e., formally, in North America for example, there is the scientist-practitioner model, and informally and perhaps practically the working model becomes anything that will maintain the power of the discipline [in other words, if under attack, then any model or approach which saves the image of the discipline is acceptable; psychologists, theories and models may be sacrificed but never the discipline]); 4) an entrenched methodology (i.e.,

formally, in North America for example, it is the scientific methodology which is accepted, and informally it is the maintenance of the image of the adopted methodology); and 5) universities that provide training to potential psychologists (i.e., formally in the granting of degrees in psychology, and informally in converting non-believers into believers, or at least into the image of believers).

In effect, the scientific discipline of psychology comfortably nurtures psychology under its wing. Like the mother with her baby, the science of the discipline protects psychology from the charlatans that would have psychology be something other than what the discipline defines it as. For only if psychology is defined in terms of the science can the image of legitimacy be maintained and the respective power that goes along with it.

What if, in this effort to protect psychology, in an effort to establish and maintain itself as the legitimate owner of psychology, the use of science placed so many controls on psychology that it threatened the discipline's own existence? What if it was discovered that it denied itself resources of knowledge vital to its growth, to its capacity to understand human beings better? What if science isn't the best or only way to understand humans? In other words, what if the adoption of the scientific model, the

making of psychology into a science actually failed to deliver a complete understanding of the human dimension and what if the audience found out? Could the audience's confidence in the discipline erode to the point where the discipline could lose its legitimate right to own psychology? Like the over-protective parent the discipline's pathological nurturing of psychology into becoming only a science (primarily in North America), pure and simple, may be thwarting psychology's natural growth, strangling psychology's potential to address, as LeShan (1990) questions, "the important things of what it means to be human" (p. 3).

I believe that the discipline of psychology is dying; that members of the discipline internally, and non-members externally are losing faith in the discipline's ability to address important human issues and that they are turning elsewhere to search for answers to their questions. In effect, the discipline is losing the right to own psychology, for it no longer, if it ever did, encompasses all that might be comprised by the term "psychology".

I believe that *generic psychology is enveloped by a meta-psychology which can be described as a manifestation in mythological form of our search for meaning.* Although I will deal with this in more detail later, in relation to the

discipline of psychology, I believe psychology will not die with the discipline, but will simply change form as the faith of the audience shifts from the discipline of psychology to something else. Psychology in this sense is not limited to a scientific definition, or any other particular definition; rather it transcends concrete definitions as part of a continuing myth that follows the belief systems of its audiences in their effort to struggle with their lives. The discipline, on the other hand, is on a path to extinction. Extinction not in the physical sense, for there will likely still be psychologists peddling their services; rather extinction in terms of their credibility as the legitimate owners of psychology, and thus the power and confidence they now enjoy will diminish and largely vanish.

The aim of this thesis is: 1) to place psychology and indeed science in a much broader field, a meta-psychological field, in order to understand psychology (and science) as the manifestation of the human need for myth; 2) to describe mythology as a metaphorical representation of our underlying existential state, a dualistic prison that paradoxically sustains life; 3) demonstrate historically how psychology as a myth has changed form to meet the needs and beliefs of its audience; and 4) to point out the need for change within the discipline of psychology now, the need to change its view on the nature of psychology, so that it can regain legitimacy

and begin to truly answer the questions of its audience.

The discipline of psychology cannot afford to pretend that the will of the masses has no effect on it. To do so is to be authoritarian and dictatorial, and as history clearly suggests, such regimes invariably end in ruin. The discipline of psychology is at a critical turning point and this thesis addresses the need for change.

MYTHOLOGY

Bald fact and scientific objectivity simply cannot satisfy the diverse requirements of the psyche, cannot inspire confidence in troubled and perplexed hearts, and cannot curb fear in the face of the uncertain and the unknown. Science must be supplemented with myth or, as our age remarkably demonstrates, science is itself mythologized. Psychology and mythology are interchangeable (Day, 1984, p. 277).

In an age when science has become such an accepted and powerful part of everyday life, it is difficult to believe that mythology is at the root of all science, indeed that science is mythology. Like mysticism, witchcraft and primitive deities, mythology has long been cast aside by many as superstition and nonsense. In fact, some believe there are no new mythologies. It is often regarded a dead subject left to historians, anthropologists and perhaps religious experts interested primarily in yesterday's problems.

The future, we are told, is to be found in science. Truth follows rules, laws and principles which can be discovered only through rational, "empirical", experimental and, for psychologists, statistical processes (Bidney, 1965). One of the founding fathers of the scientific method, Descartes

(1637) stated,

I wish to give myself entirely to the search for truth... (Scientific) method consists wholly in the ordering and disposing of those objects, toward which the attention of the mind must be directed if we are to discover any truth (p. 31, 379).

The pursuit of truth, then, is at the root of all science; yet the need to pursue truth is also at the root of all mythology, which is,

...a form of expression which reveals a process of thought and feeling -- man's awareness of and response to the universe, his fellow man, and his separate being. It is a projection in concrete and dramatic form of fears and desires undiscoverable and unimaginable in any other way (May, 1991, p. 28).

Myths are stories of our search through the ages for truth, for meaning, for significance...I think that what we are seeking is an experience of being alive, so that our life experiences on the purely physical plane will have resonances within our inner most being and reality, so that we actually feel the rapture of being fully alive (Campbell, 1988, p. 5).

Myths are stories from cultures and religious traditions that help us become aware of our true self. They are the larger story of humankind, bringing enrichment, excitement, and meaning to our individual lives, expressing the fears and hopes that reverberate within a tradition's collective spirit. They create a world in which persons can live and feel comfortable. They help us comprehend our human limitations and point to the sense of mystery that is conveyed only in religion (Biallas, 1986, p. v).

Myths are necessarily human. They are metaphorical accounts of the state of being human. They involve the question "Who am I"? Myths reveal, through drama and allegory, the experience of being human in a way that transcends language and our concretized reality. Myths are not objects, nor do they cling to objects; rather, they incorporate objects. Myths have many masks, but no body. They encapsulate dualisms, like Descartes' mind-body split, allowing us an active position within the universe instead of a spectator's seat on the outside. Myths lay bare the essence of our humanness, the ultimate duality in its totality, what Becker (1973), calls "individuality within finitude" (p. 26). This is the existential paradox myths address, that of being caught with a symbolic self² in an animalistic body (Biallas, 1985; Campbell, 1987; Carse,

1986; Chase, 1949; Lang, 1968; Livesey, 1975; May, 1991; Murray, 1969).

Man has a symbolic self that brings him sharply out of nature. He is a creator with a mind that soars out to speculate about atoms and infinity, who can place himself imaginatively at any point in space and contemplate bemusedly his own planet. This immense expansion, this dexterity, this ethereality, this self-consciousness gives to man literally the status of a small God in nature... Yet at the same time, as the Eastern sages also knew, man is a worm and a food for worms... His body is a material fleshy casing that is alien to him in many ways -- the strangest and most repugnant being that it aches and bleeds and will decay and die. Man is literally split in two: He has an awareness of his own splendid uniqueness in that he sticks out of nature with a towering majesty, and yet he goes back into the ground a few feet in order to blindly and dumbly rot and disappear forever. It is a terrifying dilemma to be in and to try to live with (Becker, 1973, p. 26).

It is this symbolic, cognitive self caught in an instinctual, physical body that gives birth to human life itself. Life emerges from this primal womb in a never ending

struggle to find the answer to the questions our paradoxical state leaves us with. namely. "Who am I" ? and "Where do I come from"? Myths, as Jung (1959) describes, "are the necessary interlinks between the human spirit and the natural man" (p. 512) that allow the world to have meaning and ourselves to have significance.

Life, taken from this perspective, is the state of always trying to escape from our initial condition. Whether we favour the animalistic part of us and remain in nature like the more "primitive" societies, or we adopt the western posture of the rational man standing outside nature attempting to control it, the existential dilemma we are caught in, is the motivational force of life itself. To be human and to be alive is to always be in the process of becoming. Sartre (1956), employing the concepts of "value" and "lacking", states it this way, "Value is everywhere and nowhere: at the heart of the nihilating relation "reflection--reflecting," it is present and out of reach, and it is simply lived as the concrete meaning of that lack which makes my present being" (p. 146).

Value, then, is what belongs to that which we lack and which we are perpetually in the process of trying to secure. Being caught in a dualistic dilemma, we value what secures for us that which we lack -- namely freedom from the dilemma

itself. For Sartre, to be human is also to be caught in a state of always becoming; it is necessarily futuristic, because we are always in the state of valuing that which we lack. This is life.

The struggle out of the existential paradox of individuality within finitude becomes, therefore, life itself, and myths are the links between the in-nature and out-of-nature sides of us that allow the duality to become a totality, so that life will be meaningful and we ourselves significant.

I have said that science is interested in Truth³ and certainly its methods are designed to filter out untruths. When science searches for Truth, however, it does so under the assumption that humans can know Truth literally and absolutely in some non-metaphysical way. The desire to control nature, to find its hidden truth, (laws, principles, statistically significant data), is executed from a position that is fundamentally outside of nature, that is objective, a position that lies in the symbolic self.

Science professes Truth on the assumption of a spectator's role in nature and labels its explanations as Truth, in an effort to close the game to players who are non-scientific. Science seeks sole ownership of Truth and this is why its

explanations are not offered gratuitously. Since science must be authorized by its audience to be the carrier of Truth, it is in constant battle to establish and maintain itself as the only carrier of Truth. It does so by first drawing attention to the patent inadequacies in knowledge of the members of its audience. You will remain deaf to scientific explanations unless you first understand the weaknesses and untruths of your current beliefs. If you do not suspect your current beliefs to be false or useless, then they will remain the carriers of Truth (Carse, 1986; Wilber, 1983). Carse (1986) states,

(Scientific) explanations succeed only by convincing resistant hearers of their error. If you will not hear my explanations until you are suspicious of your own truths, you will not accept my explanations until you are convinced of your error. Explanation is an antagonistic encounter that succeeds by defeating an opponent...Whoever wins this struggle is privileged with the claim to true knowledge. Knowledge has been arrived at, it is the outcome of this engagement. Its winners have the uncontested power to make certain statements of fact. They are to be listened to. In those areas appropriate to the contests now concluded, winners possess a knowledge that no longer can be challenged (p. 127, 128).

In this sense, the pursuit of Truth becomes the pursuit for power to be the carrier of Truth. In western history, the onset of science as the carrier of Truth was accomplished at the expense of pagan rituals, mystical symbols and magical thinking (Kantor, 1984; Lowry, 1971). One kind of truth⁴ is replaced by another, the older becoming an untruth, the younger, eventually becoming simply "the truth".

For what purposes might science be interested in Truth? Why is Truth so important? What do we want to do with Truth that we couldn't do with untruths? Have not almost all of yesterday's truths turned out to be untruths of today?

I believe that it is not Truth in a literal and static sense that we are really after, but rather that it's the pursuit of Truth that represents metaphorically our struggle to find significance, to find meaning, to deliver ourselves from our existential dilemma.

In other words, literal, static Truth is simply a belief (the belief that life is meaningful and that by understanding the Truth we will come to understand this meaning), that allows us the momentary freedom to live under the necessary myth of significance and the "certainty" that comes with falsifiability. Faced with the absurdity of

living a meaningless life, caught in an existential trap, we lean into life clutching at illusions or beliefs that allow us enough meaning to continue into the next moment. With the next moment, however, our confidence swells as the illusion gains support from the previous lived moment. The game continues, one moment building on the next, one myth building on another. As our awareness grows, as allies around us support our illusion of significance, as we support theirs, so does our confidence in Truth grow. We come to believe in Truth and establish a plethora of rules and regulations that dictate what can be known as True. By dismissing untruths (as all truths become over time), we secure absolute Truth as a sanctuary, the ultimate sanctuary that allows us to continue to dream of a meaningful life. We place a veil over our existential angst keeping it at bay; we live.

We inflate Truth, therefore, with a contrived worth so that the fantasy of a meaningful reality can continue. Truth, in effect, is a myth in which we choose to believe in order to hold onto meaning in our life. The aim, therefore, is not really to find Truth, nor to discover ultimate reality, for this might shatter the dream; rather, the aim is always to be pursuing Truth, by allowing it a position just out of reach so that the game can continue.

It is critical that Truth never be found. Partial truths like Newton's Laws of Motion are acceptable because they do not stop the game, but rather just provide it with some direction. Those who claim they have found Truth, who can explain everything in a formula, can never be believed. This would end the game and be the beginning of death (Carse, 1986). Instead, their formulas are analyzed in detail, flaws or possible flaws are found and the notion is quietly left to gather dust as part of the untruths of the past. This for example, is what happened to orthodox psychoanalysis. For a time it received great reviews as the fundamental Truth of our existence. Eventually, however, its Truth was questioned, and evidence of Truth was demanded. Untruths were found and it was eventually replaced by the more "scientific" and hence more truthful, behaviourist approach. Today we see that behaviorism is also quickly losing ground to other truths. The pursuit of Truth continues.

Myths allow the game to continue also, but in a fundamentally different way than does the scientific pursuit of Truth. The scientific pursuit of Truth (i.e. through science) imposes rules on the game that demand that the Truth never be acknowledged as illusion. Myths, on the other hand, incorporate the illusion of Truth in a metaphorical act that resonates deep inside us, giving expression to the terrible joy created by our dualistic primal state. Myths

open life to new possibilities, emphasizing flow and change, where the pursuit of a literal Truth through science, for example, attempts to enclose life in explanations that emphasize boundaries, formulas, and laws. Myths are the hidden structure, like the beams of a house, that connect us with our universe and allow us the comforting sense of having a home. The pursuit of (a scientific) Truth, on the other hand, is a formal structure with an entrenched methodology that is imposed on the universe by spectators examining it objectively. It leaves us with an explanation of the universe that alienates us from it. Myths provide us with a life vivifying sense of being truly alive, of being home in the universe in a way that still allows us to be both in nature and out of it. The scientific pursuit of Truth can allow us only a position out of nature (Campbell, 1987; Capra, 1980; Carse, 1986; LeShan, 1991; May, 1991; Wilber, 1983).

If the pursuit of Truth is the myth that allows us a meaningful life, which in turn is the metaphorical manifestation of our dualistic existential state, then science has become the method/strategy through which the myth gets realized. Science, in effect, is mythologized. In other words, if a myth is a meaning system in symbolic form that addresses our struggle with our duality, then science can be taken metaphorically as a myth, since it is currently

the dominant structure or system through which meaningfulness is gained. The value or meaningfulness of things is currently measured through scientific validations or "proofs". Absolute Truth is commonly understood to mean scientifically validated truth and thus science becomes the means through which the pursuit of truth is sought. The pursuit of Truth, as stated above, is the grand myth, the sanctuary that maintains the illusion of a meaningful life. In a multi-tiered fashion, the discipline of psychology, by adopting solely the scientific model, is incorporated within science, even as science is incorporated within the greater myth of the pursuit of Truth. The pursuit of Truth, in turn, offers us a way out of our existential crisis by providing us with the necessary and vital belief of a meaningful life. It is within this context that psychology should be understood.

The critical element in science is not Truth, but rather faith, the faith that the audience places in science as a viable way of pursuing Truth. The meta-theory at play is that science can provide meaning and hence rescue us from our existential struggle, if and only if we have faith in it. If we lose faith in it, science itself becomes an untruth and like all the other untruths of the past, science (and with it the discipline of psychology), will get tossed aside in the never-ending struggle to search for Truth.

This is why it is important to live in the greater myth (the pursuit of Truth), and not to hold onto the current mask the myths hide behind (e.g., science or the science of psychology), as though it were real and hence significant. If you find your significance and meaning in the forms myths employ (e.g., view science objectively as Truth), and fail to see, let alone live in, the greater myth itself (i.e., the process of pursuing Truth), then you run the risk of becoming insignificant and meaningless whenever the myth changes form. In a sense, you get stuck believing an old myth.

This getting "stuck" in an old myth is what cognitive behaviourists (without intending to include their own system) call "rigid constructs" (Ellis, 1984; Beck, 1988). You are considered to have rigid constructs when your thoughts or beliefs impede your ability to change with your environment. Those who hold onto the pursuit of a literal Truth through science will have nowhere to go, nothing to hold onto when the myths change form. In fact, as the myths change form, the threat of meaninglessness caused by rigidly holding onto the forms -- the shell -- of the myth, creates tremendous angst triggering a defensive stance in favour of the form. One dogmatically defends the form as literally true, and hence meaningful since one's significance is tied so heavily to it. If it dies, the believer dies. If, for

example, a Behaviourist truly believes that behavioural principles are the Truth, any threat to behaviorism is also a threat to her. If you call yourself a behaviourist and take your significance from it, then a threat to the title is, in effect, a threat to you. Your reaction is to defend your position as the Truth and to discredit other proposed truths. But clearly this is an argument about power and not Truth since the game now is to impose one's own truth over other truths. In other words, if you literally possessed absolute Truth through your scientific experiment, there would be no reason to defend it, only to state it. It would simply be a matter of "seeing". By stating the Truth, all other non-truths would quickly die away. The fact that it needs defence however, indicates at least implicitly, that it is not the Truth you possess and that you are, by virtue of your actions, partially aware of it. You therefore enter into the game to defend your version of the Truth over other truths in order to maintain that sense of meaningfulness your version of the Truth has brought to you. Part of your defence may be to suggest that others need to be "shown" the Truth and that you are assisting them in their discovery of it; but in the end this line of defence can be used by either side and hence does nothing to resolve the issue. If you are both showing each other the error of the others' ways, then no resolution can be reached. Ultimately, the pursuit of Truth is lost to the dogmatic imposition of

truth. In other words, you lose the myth to the form in which the myth is incorporated.

If a myth is to address the dualistic nature of humans, then its manifestation, in the broadest sense, can follow either one of the two sides. There are, therefore, both symbolic and animalistic manifestations of the same myths.

If we choose the more animalistic side of us, then the myths get created in societies where nature dominates and is the vehicle through which meaning is realized. In these societies, cognitive strategies or intellectual pursuits become trivialized if at all tolerated. These are the "primitive" societies. Here the myths are acknowledged and lived openly in all aspects of society, linking the human with nature so that there is more nature than human in human nature (Campbell, 1987; Chinchester, 1989; Laistner, 1967; Livesey, 1975). This is clearly emphasized in Chief Seattle's letter to George Washington:

Every part of this earth is sacred to my people. Every shining pine needle, every sandy shore, every mist in the dark woods, every meadow, every humming insect. All are holy in the memory and experience of my people.

We know the sap which courses through the trees as we know the blood which courses through our veins. We are

part of the earth and it is part of us. The perfumed flowers are our sisters. The bear, the deer, the great eagle, these are our brothers. The rocky crests, the juices in the meadow, the body heat of the pony, and man, all belong to the same family.

This we know: the earth does not belong to man, man belongs to the earth. All things are connected like the blood that connects us all. Man did not weave the web of life, he is merely a strand in it. Whatever he does to the web he does to himself (Campbell, 1988, p. 34).

If, on the other hand, the symbolic side is chosen, then the myths get created in societies where rational thought is authorized to hold meaning and where the instinctual body functions and nature itself are held in contempt. These are the "advanced" societies of the western industrialized nations. Here the myths are not acknowledged, but rather get played out in the hidden forms of "Truth" that the rational human hides in. Just the same, the human is still linked to nature despite pretence to the contrary. This time, however, there is more "human" than nature in human nature (Campbell, 1987; Carse, 1986; May, 1991). Sheldrake (1991), symbolizing nature through materialism states,

Behind materialism in all its forms lies the figure of the Great Mother, as material reality, as Mother Nature,

as the economy, as the welfare state. She is also the environment -- enclosing and containing us, the source of nourishment, warmth, protection, but we are also utterly at her mercy, for the environment is uncaring and merciless: it devours and destroys.

Although many materialists have a romantic side and implicitly acknowledge the life of nature in their private lives, most of them explicitly deny it, adopting the conventional view of mankind as the only truly conscious, purposeful species in an otherwise inanimate world. From their point of view, the material metaphors that pervade materialist thought may tell us something about the way our minds work but have no relevance to nature itself because nature is inanimate and material (p. 74).

This dualistic expression of myths, the need to incorporate nature in reason, are the very arguments that Becker (1973) makes when he describes the hero myth as our vital truth. Siding with the symbolic self, he argues that the motivating force behind human life comes from the fear and denial of the animalistic side, the denial of the decaying body, the denial of death. In an effort to always align ourselves with the symbolic self we play out heroic acts in our daily life to demonstrate, narcissistically, our superiority over nature and death. Society, in fact, becomes

a codified hero system. He states.

It is still a mythical hero system in which people serve in order to earn a feeling of primary value, of cosmic specialness, of ultimate usefulness to creation, of unshakeable meaning... The hope and belief is that the things that man creates in society are of lasting worth and meaning, that they outlive and outshine death and decay, that man and his products count (Becker, 1973, p. 5).

This, then, is the denial of death that keeps western industrialized societies "advanced". "Advanced" because our need to demonstrate our specialness or ultimate usefulness to creation can only be established through a comparison with something else. In a multi-tiered fashion, this need to demonstrate superiority gets played out on all levels, from the lonely individual competing in the job market, to nation states competing in wars. All industrialized countries are stuck being "advanced" since their myth, and hence their meaningfulness, manifests itself in the superiority of its position over another. To admit to not being "advanced", would be to kill the very roots of meaningfulness to which they cling. To lack meaning is to render life purposeless, and to impede further motivation to live. "Advanced" societies, if they are to survive, are trapped being

"advanced", opposed to the body, to nature, to death.

Becker (1973) goes on to state, however, that the heroic system can also be viewed as a natural creative process that is not founded on the denial of *death*. We do not create a heroic system solely out of a fear of death, but rather we also create it out of a fear of life. He states,

We might say that the child is a "natural" coward: he cannot have the strength to support the terror of creation.... They (animals) live in a tiny world, in a sliver of reality, one neuro-chemical program that keeps them walking behind their nose and shuts out everything else. But look at man, the impossible creature. Here nature seems to have thrown caution to the winds along with the programmed instincts. She created an animal who has no defence against full perception of the external world, an animal completely open to experience. It is appalling the burden that man bears, the *experiential* burden.... The individual has to repress *globally*, from the entire spectrum of his experience, if he wants to feel a warm sense of inner value and basic security.... we have achieved a remarkably faithful understanding of what really bothers the child, how life is really too much for him, how he has to avoid too much thought, too much perception, too much *life*.... *The result is that we*

now know the human animal is characterized by two great fears that other animals are protected from: the fear of life and the fear of death (P. 50-53).

This is the fear and denial of *life* that keeps primitive societies "primitive". "Primitive" because in an effort to maintain order in what is otherwise a chaotic world, they strive for the simplest of answers, to maintain a link to the land like the animals who display no fear of the universe. For the same reasons that "advanced" societies are stuck being "advanced", "primitive" societies are stuck being "primitive", opposed to individual self expansion, to new experience, to standing alone against nature.

The denial of death as well as the denial of life, in both their mythological forms -- the advanced and the primitive societies respectively, exemplify the dualistic existential positions of being human. Although they emphasize one side of the duality, neither can eliminate totally the need for the other. Primitive societies require deities, myths and rituals in a symbolic form -- to make sense of and provide meaning for their world in nature. And western societies, despite our denial, are constantly reminded through our daily aches and pains, of the limitations that our animalistic body places on us. This in turn motivates us to initiate heroic acts to counter our fears and create a

science if not a mythology which accounts for the body.

It may be argued that the differences between the myths of "advanced" societies and the myths of "primitive" societies are just semantics. That what "advanced" societies call primitive belief systems are, for "primitive" societies, their science, and conversely what "primitive" societies call scientific belief systems are, for "advanced" societies, primitive beliefs. This high order linguistic twist provides fuel to the fire of my argument since it emphasizes the impression of concreteness where there is only myth. What is clear is that the imposed artificial structure, whichever way you take it, cannot be removed from its contextual arrangement. If the argument is placed in the context of how humans across various cultures have a need to understand their realities through mythological themes, then I think similarities can be made between the two belief systems at a higher level. This, in fact, is exactly what I am doing when I say that the pursuit of Truth is the grand myth. Both primitive and advanced societies are pursuing Truth and, therefore, the language used to describe what they are doing is, in one sense, the same. On the other hand, when you move down into lower level myths, it is not difficult to demonstrate that a society that believes in a scientific approach to understanding the universe and a society that relies on the tossing of bones on the ground to

understand their reality are fundamentally different. Within this context I believe my previous argument holds weight. That is, I believe there is a distinct difference in dominant belief systems between the two societies, that one society follows an out-of-nature mythology and the other follows predominantly an in-nature mythology.

The inability to escape duality, despite our bravest attempts in both directions, points to the need to consider both the animalistic and symbolic sides as two parts of a greater whole. This is exemplified through the taoist symbol of yin and yang.

The two interlocking components of yin and yang are based on the idea of continuous cyclical fluctuations that involve a much broader notion of the underlying fundamental rhythm of the universe. Change does not occur as a consequence of some force, but as a natural tendency, innate in all things and situations. All developments in nature, whether in the physical, psychological or social realms, show this cyclical pattern and this is symbolized in yin and yang. Capra (1980) states that, "The yang having reached its climax retreats in favour of the yin; the yin having reached its climax retreats in favour of the yang" (p. 106). Out of the head of yin, comes the tail of yang and out of the head of yang, comes the tail of yin. The two are interlocked in one

totality, and within the head of each pole is the eye of the other, symbolizing that even when the one is strongest, it cannot be strong without the other (Capra, 1989; Campbell, 1987).

In primitive societies, where our in-nature side is stronger, there is still the requirement to invent myths that make sense of and provide meaning. If we were solely in-nature, then there would be no need for myths since we would not be conscious of a symbolic self that required sublimation in-nature. This is also the case in western societies where our out-of-nature side is stronger. In this case, there is still the requirement to consider the limitations nature imposes on us, via our bodies, by creating heroes and hero systems. Acts become heroic by virtue of their ability to transcend the bodily limitations of the average human animal. If we were solely symbolic, then there would be no need to pursue Truth, to act heroic, since we could know nothing but truth and have nothing to be heroic over. One side cannot be emphasized, without making reference, explicitly or implicitly, to the other. Myths are the metaphorical acts of such reference.

In summary, this section provides us with seven main themes that will become the central focus of the remainder of my thesis. They are:

- 1) That essentially life is the struggle out of our existential paradox of individuality within finitude, and that myths are the links between the animalistic and symbolic sides of us that allow this duality to become a totality so that life will have meaning and ourselves significance;
- 2) That science (including the science of psychology), is currently the authorized character of truth and that the pursuit of Truth represents metaphorically our struggle to deliver ourselves out of our existential dilemma, to find significance and meaning in our lives. The pursuit of Truth is the grand myth;
- 3) That science (including the science of psychology) is the form through which the myth gets realized and is, therefore, mythologized as a lesser myth within the grand myth;
- 4) That an act of faith is required to keep a myth alive;
- 5) That it is important to live in the myth and not get stuck with the vehicle the myth employs, since it is through the myth that meaning is found. To lose the myth to the vehicle the myth incorporates, is to run the risk of insignificance;
- 6) That myths can manifest themselves in either side of the animalistic and symbolic duality. When the myth focuses on the in-nature side, we label them as "primitive" societies. They deny life and remain safe and "primitive". When the myth focuses on our out-of-nature side, we label them as "advanced" societies. They deny death and remain alienated and "advanced";
- 7) That the animalistic and symbolic duality, qua duality, is an illusion and that it is better viewed as a totality.

THE PRE-SCIENTIFIC MYTH

Introduction

In discussing myths, it is important to understand the process through which change between myths occurs. By way of introduction, therefore, I am going to describe first global aspects of the process of change, trends and pitfalls in understanding change, and historical characteristics that allow us to determine when change has occurred. This will allow us to determine which myth is dominant when, and will help to identify when changes between competing myths have occurred. Second, having established criteria which permit the recognition of change, a more detailed description of the pre-scientific myth will ensue.

We all stand on the shoulders of our ancestors; we inherit a tradition. The very language we speak incorporates in a condensed form all kinds of assumptions about things, people and situations. We take things for granted that our ancestors discovered by trial and error; we can neither avoid nor dispense with our social inheritance which is handed down in the form of countless traditional skills and assumptions.... We are never without interests in and attitudes towards our environment just as we are never without expectations of it and assumptions about it. Patient, passive,

presuppositionless enquiry is a methodological myth.... Just as problem solving behaviour starts when routine activities are interrupted or breakdown, so we ask questions when one or another of our expectations is falsified or when traditional assumptions are no longer adequate to explain diversity of experience (Peters, 1962, p. 26).

If we are to understand and define change then we must first start with an examination of some of the epistemological underpinnings of our inherited language through which change gains its meaning. The growth and praxis of science over the last 400 years, specifically of objectivity and the scientific method, have influenced language and our use of it to such an extent that we often lose sight of the metaphorical nature of language, and instead tend to visualize concepts in terms of objects. We get subtly drawn into believing, as our manipulation of concepts continues and our arguments advance, that the concepts we created are hardened facts and that the changes we are discussing occur between actual things of substance. We tend to get stuck on the connotation of concepts instead of the denotation. Jaynes (1986) emphasizes the metaphorical nature of language when he concludes that the "subjective conscious mind is an analog of what is called the real world. It is built up with a vocabulary or lexical field

whose terms are all metaphors or analogs of behaviour in the physical world" (p. 48). Language itself is necessarily metaphorical since it is a symbolic representation or expression of our experiences and as such, plays a decisive role in the life of our society. "Language forces an a priori categorization of reality upon people and thus predetermines their perception and experience" (Shames, 1991, p. 347). In our case, the use of science over the last four centuries, with its objectivistic epistemology, has lead to an a priori perception of the objectivity of our experiences. For example, while in one sense we understand intelligence to be a percept, a notion, a creation of the mind to deal with matters of the mind, in the same breath we also talk of intelligence as though it were real, as though it had substance. We have scientific tools to measure intelligence, to compare one's intelligence with others, to turn one's intelligence into a numerical quotient that lends credibility to the belief that intelligence exists outside the imagination. We come to know intelligence objectively, as a quantifiable "thing", and this reification is a direct result of the epistemological influence objectivistic science has had on our use of language. The fact that either within psychology or without, nobody can agree on a definition of intelligence has not hindered our belief that we can measure it. Anastasi (1988) writes,

...it should be noted that the unqualified term "intelligence" is used with a wide diversity of meanings, not only by the general public, but also by participants of different disciplines, such as biology, philosophy, or education, and by psychologists who specialize in different areas or identify with different theoretical orientations (p. 362).

While we understand the problems of attempting to quantify a perceived function that nobody seems to be able to satisfactorily define, it has not stopped us from preaching the quantifiability of intelligence, nor from peddling tests of intelligence to the uninitiated. When pushed, the psychologist as scientist will admit that intelligence per se is not being measured, for the metaphorical nature of intelligence is understood; rather that behaviour is being measured that is thought to have captured within it the elusive construct of intelligence. The psychologist arbitrarily defines what intelligence is in a real sense by marketing "scientifically validated" measures of intelligence. The quantifying of constructs in this manner is the very act of hardening or concretizing what hitherto was only a symbolic tool. Over time, as research continues to reinforce the reification of intelligence, this process of objectifying concepts generalizes and virtually eradicates the notion that these constructs are not

substantive, are not quantitative do not exist apart from our need to think about ourselves. The de facto result of quantification is that the metaphorical nature of intelligence is eclipsed, and through abstraction and generalization, so also is the metaphorical nature of language itself.

As I will argue later, the current effect of science on language, and subsequently on our knowledge of all things, has led to a belief system that is governed by an objectifying process. We lose sight of the fact that the concepts we have created are *manufactured models of reality* that were created to assist us in understanding our position in the universe and do not, in themselves, have any substantive essence. Fromm (1988) states,

....names of things, such as "table" or "lamp" are misleading. The words indicate that we are speaking of fixed substances, although things are nothing but a process of energy that causes certain sensations in our bodily systems. But these sensations are not perceptions of specific things like table or lamp; these perceptions are a result of a cultural process of learning, a process that makes certain sensations assume the form of specific percepts. We naively believe that things like tables and lamps exist as such, and we fail to see that

society teaches us to transform sensations into perceptions that permit us to manipulate the world around us in order to enable us to survive in a given culture. Once we have given such percepts a name, the name seems to guarantee the final and unchangeable reality of the percept (p. 69).

In a similar fashion then, when we talk about change between a pre-scientific myth and scientific myth, we are not talking about actual changes between actual myths, and therefore our understanding of change cannot be tied down to a factually based or literal historical understanding of static events over time. Instead, the change between myths must be understood in terms of its metaphorical nature. There are no concrete facts that "prove" myths, just interpretations of mythological themes. The process of change that occurs between myths, therefore, should be viewed as a continuing flow of gains and losses moving from one mixture of beliefs about the pursuit of Truth to another mixture of beliefs about the pursuit of Truth. It is a dynamic process, a current of myths with occasional pools which provide some temporary anchor, which often gets lost in the tempestuous waves of grey that characterize the process. At times it will appear that individuals, groups and societies unanimously and categorically favour one myth over another, that there is a cohesion of belief. On closer

inspection, however, there will always be a part of the society that will not believe in the prevailing myth, a part of the group that will not conform to societal norms and a part of the self that will not concede the power of the myth.

When I speak of pre-scientific and scientific myths I am not offering concretized facts; rather I am offering metaphorical interpretations of historical events. Their context is the pursuit of Truth, itself a metaphorical expression of our existential state of individuality within finitude. It is often less a matter of which myth is "truthfully" reigning, than it is a matter of interpretation since myths by nature are metaphorical and hence demand the creation of structure.

In other words, Truth is tied to the subjective belief system of the user. If I believe, for example, that "humanistic psychology" is the Truth, then, in comparison to other schools of psychology, it is dominant. Humanistic psychology is a metaphorical structure which reflects my pursuit for Truth. My belief in humanistic psychology is contextually tied to a level which places itself in competition with other myths of parallel status (e.g., psychodynamic, behavioural, cognitive, etc.). In this way, I create a myth (humanistic psychology), in order to

ascertain how and through what I will pursue Truth relative to other myths of similar function. It is not that there "is" humanistic psychology, in any objective sense, only an abstraction created to distinguish itself from other rival myths. When one changes the context to which the myth is tied, one changes the myth itself. For example, if I focus only on humanistic psychology, removing the other schools from observation, I inevitably sink into a different myth. The context or focus of pursuit changes and, in a reductionist fashion, I create new myths at a sub-humanistic level (e.g., client-centred, gestalt). It is in this layered manner that myths get built, one on top of the other, spiralling downwards. To take the gestalt school, for example, they have inevitably developed various sub-sub-myths (i.e., different styles that are taught by different gestalt schools). Eventually one arrives in the internal and private myths of the individual.

This process of recasting historical events in terms of current concepts or new myths, of imposing new structure, is the practice of all of us as we attempt to find meaningfulness in life. Reflecting on the historians role, Durant (1968) writes,

Our knowledge of any past event is always incomplete, probably inaccurate, beclouded by ambivalent evidence

and biased historians, and perhaps distorted by our own patriotic or religious partisanship.... The historian always over-simplifies, and hastily selects a manageable minority of facts and faces out of a crowd of souls and events whose multitudinous complexity he can never quite embrace or comprehend (p. 12).

This leads to a paradoxical situation with respect to judging the validity of my argument that change is actually occurring. If we are always dealing with incomplete knowledge, inaccurate, biased "facts" and an over-simplification of events, how then can the legitimacy of my claims, indeed of any be evaluated? How can Truth be established?

The concept of validity presupposes first, there is such a thing and second, that we have the tools to measure it, that is, to judge whether the argument is Truthful. But if the argument I'm proposing is that the pursuit of Truth itself is the myth that is lived out in various cultural and societal manifestations, and that the mix of belief systems among various cultural manifestations of truth is so convoluted that it is up to the individual to interpret the situation and impose structure, who, then, is to decide what is Truthful in an ultimate sense? In other words, if I'm arguing that absolute Truth does not exist, but instead that

we are actually engaged -- necessarily of course -- in a pursuit of an illusory Truth. who is to decide which illusion we are pursuing or ought to pursue? This is not a problem just with respect to the validity of the arguments I put forth in this thesis, it is essentially *the* problem we all face in determining what is meaningful in our lives and what is not, what we are willing to believe and what we are not.

While I can offer no absolute answers to the problem I would suggest that conceptually the answer lies in the version of Truth that is most compelling or cogent. If we are looking to avoid angst through the pursuit of an illusory Truth, then the most powerful version of Truth will determine which illusion we are pursuing, since the most compelling argument of how Truth is to be pursued will provide us with the greatest security. In other words the dominant myth will be the one which provides the most compelling argument for the pursuit of Truth for that particular moment in time. The dominant myth is the one that provides the individual, and collectively the society, with the greatest hope for meaningfulness, for hope for meaningfulness is the pursuit of Truth.

A change in myths, or the process of conversion, takes place only when there is: 1) a lack of hope, faith or belief

in the current myth; and 2) another myth available to take its place. Conversely, a myth will only maintain dominance over other myths if it has the power to maintain the faith of its followers that it is the best available myth that will provide them with the greatest hope of meaningfulness in life. It is the union of both power and faith that creates a cohesive bond that forges a proposed version of Truth into the most compelling myth available.

A proposed version of Truth, or myth, in turn becomes the tool through which the validity of statements can be judged. For example, if I were to suggest that psychology is not a science, but rather a religion and that psychologists are its priests, the psychologists, as arbitrators, have the power to determine the "validity" of my assertions based on the authority they have been granted through various societal institutions and judicial bodies -- the social contract. The discipline of psychology becomes an institution, a power structure within society that over time gains legitimacy through controlling a particular area of knowledge. It uses its power to claim authority over informal psychology. In other words, it has been given the power to impose Truth, and that power is authorized by the *faith* people have in its ability to discern Truth. What the discipline of psychology cannot do, however, is actually determine, in an absolute sense, the Truthfulness of my

assertion, since that would presuppose it knew the Truth, rather than the simple conventions to which it adheres. In the end all it can do is impose truth based on its view of it. The discipline of psychology's version of Truth is not sensitive to other versions because of its inherent power, which must ensure that it places other truths in a subordinate position. The discipline of psychology is necessarily biased in favour of its belief in its own truth.

This imposition of an artificial and constructed truth as the Truth belies the manner through which meaning is initially gained. Examining power more carefully, we find that the power to dictate one truth over other truths necessarily implies a dominant myth through which the pursuit of Truth is currently being sought. If the assertion about psychologists as priests is rejected because it lacks *scientific* validity, then science must be the myth through which Truth is being pursued. If it is rejected because of *historical* inaccuracy, then *historical* accuracy must be the myth through which Truth is being pursued. Whatever the reason(s) for rejecting it (or accepting it for that matter), the illusion of Truth being promoted in the rejection (or acceptance) becomes the myth through which Truth is being sought. An examination of the power structures of a given society, the place where power rests within a society will assist us, therefore, in determining

which versions of Truth, or myths, are being pursued.

Another characteristic of the element of power in a "legitimized" discipline, is that although it implies the myth that is being pursued, it does not necessarily indicate that those who impose the myth are personally pursuing that myth. It would be possible, for example, for members of the discipline of psychology, who represent the discipline (qua judges), to reject my statement about the religiosity of psychology based on a lack of scientific validity, but not believe in scientific validity themselves. In effect members of the discipline could hold personal beliefs in total contrast to the myth put forward by the discipline. Aside from appearing somewhat hypocritical, it would more importantly reveal the underlying state of powerlessness that even they are caught in. In other words, the advantages of being a psychologist are accepted by individual psychologists at a cost, and that cost is that they must submit to the authority of a discipline with which they don't entirely agree. In order to remain in good standing as a member of the discipline of psychology, they must follow the "party line" which purports to be truth, if not the Truth.

Such is the paradox of power: that it manifests itself in both an in-nature and out-of-nature myth; that is, while we

all have power (even if it is only over a portion of ourselves), and therefore create a version of Truth -- an out-of-nature myth that we live by and which affects others. we are also always under the power of someone else, and therefore, are subject to other created versions of Truth, other myths. The fact that there is no one who has absolute power over everyone else, that we are all interdependent, makes us all susceptible to the myths of others. When we act in accordance with the prevailing myth, we display an allegiance to an in-nature myth, since the act itself is, within the context of its allegiance to the mainstream, a bid for security, protection from the risk of being different; it keeps us safe. In the same situation, however, to the extent that we disagree with the prevailing myth, we display allegiance to our own out-of-nature myth by taking a step out of the "herd". This is why within both societies and individuals, there are always conflicting myths in play. Power is not static but dynamic, and as such the conflicting myths of the people reflect the ambiguity I alluded to earlier. Whether it is the individual's personal myth (one actually trusted) or the myth of another (one they [willingly] submit to), will depend on the context and the subjective stance of the individual making the decision. Externally, for example, the judges of my statement may appear to be unanimously supporting a scientific validity belief and there may be no way to know whether it is their

true belief or not. Internally, of course, some may not, in fact, believe in scientific validity at all. In this sense, therefore, both the belief in scientific validity and the non-belief in it can be said to be correct, depending on the position one takes. Once again, a grey area at best.

As indicated above, metaphorically speaking power is both a manifestation of our in-nature, and our out-of-nature sides⁵. When power controls our behaviour, when we submit to the power of others we are bowing to an in-nature myth. We recognize the dangers of the world, concede our own potentialities and secure ourselves in the rules and demands of others, losing ourselves in the "crowd". In effect, we abandon our own individuality for the safety of the masses because there is safety in numbers and because we lack the strength to face the uncertainty of the world, the possibility of death, alone. Submitting to the power of others is a recognition of our animalistic vulnerabilities, a denial of our expansiveness and individuality, and a desire for tribal security. Existentially, this is referred to as self-estrangement, or the living of an inauthentic life.

....this is the life of someone who resolves his "ambiguity" by identifying too much, and too easily, with the "communal character" of his existence. In doing

so he "loses" what is unique about himself, and in that sense "loses" his very self. He no longer "owns" himself since, in one way or another, he has succumbed to a take-over by others. In that sense, he is not authentic... (Cooper, 1990, p. 109).

The "ambiguity", in this case, refers to the existential dilemma of individuality within finitude, and the "communal character" is the abandonment of freedom and resultant tribal security that occurs within in-nature societies.

In an opposite way, however, power can also reflect an out-of-nature mythology. The position of having power over others demonstrates the uniqueness of individuals as they push out of the "herd". Its existential roots lie in the need to side with our symbolic self, to illustrate to others, but most importantly to ourselves, that we are special, more "God-like" than others. Becker (1988) writes,

...he must desperately justify himself as an object of primary value in the universe; He must stand out, be a hero, make the biggest possible contribution to world life, show that he counts more than anything or anyone else (p. 4).

Power, taken collectively, therefore, is an expression of our dualistic, existential state, and as such is an important tool in understanding the changing process that occurs when one myth is exchanged for another.

While power is a necessary ingredient for the process of change to occur, it is not a sufficient ingredient. The judges of my statement on the religiosity of psychology may have the power to reject opposing statements, but they do not have the power to force belief in their version of the Truth. The concept of belief or faith is equally important in determining whether a change in myths, or versions of the Truth, actually occurs. Where power focuses primarily on external actions, faith or belief focuses primarily on internal will.

Although belief and faith have similar connections to power, belief is a less extreme version of faith. Belief differs from faith primarily in the terms of conviction or certainty. The believer bonds with his belief externally, desperately trying cognitively to acquire the "correct" belief system so as to quiet his own internal disbelief. The "true" believer attempts either to impose his beliefs on others, converting them to his belief and thus feeling secure that he has chosen the correct belief, or denigrates the beliefs of those he cannot convert, and therefore

superficially and momentarily soothes his own fears. The believer's necessary engagement with the beliefs of others belies the hollowness of his own conviction, because the more converts he wins over, or the more damaging his retorts, the more successful he is at restraining his own disbeliefs. Wilber (1983) states,

The "true believer" -- one who has no literal faith, let alone actual experience -- embraces a more or less codified belief system that appears to act most basically as a fund of immortality symbols... ..since one's immortality prospects hang on the veracity of the ideological nexus, the nexus as a whole can be examined only with the greatest of difficulty. Thus, when the normal and unavoidable moments of uncertainty and disbelief occur, (magic: is the dance really causing rain? mythic: was the world really created in six days? scientific: what happened before the big bang? etc.), the questioning impulses are not long allowed to remain in the self system (they are threats to one's immortality qualifications). As a result the disbelieving impulse tends to be projected onto others and then attacked "out there" with an obsessive endurance... ..It is not the rightness or wrongness of the opposing view but the particular passion with which it is opposed that belies its origin: what one is trying

to convert is one's own disbelieving self (p. 65-66).

Metaphorically the "true" believer is best understood in terms of an in-nature myth. The acceptance of external beliefs and the promotion of them as Truth, comes from a need to submit to a belief system or myth of another so that the power invested in the belief system, in the current version of Truth, vicariously empowers the believer, quieting his fears of meaninglessness. Fromm (1988) writes,

It (belief) consists of formulations created by others - usually a bureaucracy. It carries the feeling of certainty because of the real (or only imagined) power of the bureaucracy. It is the entry ticket to join a large group of people. It relieves one of the hard task of thinking for oneself and making decisions (p.30).

Although, on the surface the believer may appear to be totally secure in her belief, and thus maintain an externally perceived out-of-nature myth (heroically demonstrating one's power over others through the belief), she will give evidence of her internal disbelief if her belief comes under attack and if she cannot muster enough support to ward off the attackers. The buried, but not forgotten fears of meaninglessness will resurface and she will desperately search for a new meaning in a new belief.

This is the act of conversion that demonstrates the shifting of belief systems or myths as based on both power, externally imposed, and the need to believe, internally driven.

Faith, on the other hand, is

....not a belief in alleged facts (which would ultimately require evidence of the truth of those facts to justify it), but a moral state, a disposition of the heart and will, which is quite independent of the existence or non-existence of any outward facts (Drake, 1968, p. 184).

It is the internal certainty and conviction that separates faith from belief, and the act of faith is usually discernable from a belief when severe opposition fails to dissuade one. Faith is the staking of one's self on the truth and worth of one's ideal and in this way, it is primarily seen as a manifestation of an out-of-nature myth. Our ability to maintain a myth despite extreme external opposition is a statement of heroics and specialness, which emphasizes our symbolic self. We stake everything on the myth including our meaningfulness, and therefore will willingly die for it both figuratively and literally. The willingness to die, as opposed to an accidental death as a

result of a belief, is evidence of faith.

Notwithstanding the differences between belief and faith in their primary manifestations as participation in an in-nature and out-of-nature myth respectively, their connection to and bonding with power is what makes them critical in the changing of a myth.

I will now discuss how the combined forces of power and faith (or belief) permeate our history and as such, formulate the culturally approved versions of the Truth. I will define the dominant myths of the pre-scientific period, touching upon the ancient, Greek and medieval world views, and then focus in on the dominant power and faith systems of medieval times.

The Zeitgeists

The Ancient World View (before 500 B.C.)

The world appears to primitive man neither inanimate nor empty but redundant with life; and life has individuality, in man and beast and plant, and in every phenomena which confronts man -- the thunderclap, the sudden shadow, the eerie and unknown clearing in the wood, the stone which suddenly hurts him when he

stumbles while on a hunting trip. Any phenomenon may at any time face him, not as "It" but as "Thou". In this confrontation, "Thou" reveals its individuality, its qualities, its will. "Thou" is not contemplated with intellectual detachment; it is experienced as life confronting life, involving every faculty of man in a reciprocal relationship. Thoughts, no less than acts and feelings are subordinate to this experience (Frankfort et al, 1957, p. 6).

The Ancient world view of the universe manifests itself as a metaphorical in-nature myth. The ancients believed that there was a natural order to the universe and that all things were inherently determined by this order. The primitive human's relationship to the universe was primarily one of passivity, as the whole of nature was seen as a single fixed order within which human life ran its course. There was no intention to control nature, only the experience of acting with it. The brute reality of survival in the early days of civilization lead to an acute awareness of nature, and as a consequence, established an interconnectedness between man and the universe. The necessary indulgences in nature, the dangers and beauties encountered, as one hunted animals, planted seeds for harvest or built fires for warmth, lead to the experiencing of nature in such an intimate and overwhelming way that the

objectification of reality was not possible. The natural rhythms of the universe were experienced daily and these experiences were personalized in the stories of the peoples of the time. The natural order possessed a certain sacredness, a religious sacredness that was experienced in the lives of the first societies and were revealed in the stories and myths of their times (Bianchi, 1975; Campbell, 1988; Frankfort et al, 1957; Fuchs, 1975; and Van Melson, 1961).

The mythologizing of the universe appeared as a direct offshoot of both this personalized interaction with nature and the interpersonal storytelling that overtime became ritualized and entrenched. The "Thou" encountered was highly individual and thus all events become individual events that were explained as actioned encounters with the powers of nature and that necessarily took the form of a story. These were not stories for entertainment, nor were they meant to be detached intellectual explanations; rather the ancients were recounting events in which they were involved to the extent of their existence. They experienced directly the conflict of the powers of nature and participated in them. The myths they were telling were for them, the Truth.

Over time, the daily experiences of nature lead to an understanding and respect for the natural order of things.

While all things were mythologized, it became clear that there was a natural hierarchy in nature and most importantly, that humans were a part of this hierarchy. The experiences of the early cultures lead to distinction in power with respect to the forces of nature. It was clear that the sun, sky and clouds had more power than the animals, plants and rocks since the impact of the sun, sky and clouds on the lives of ancient people were more severe than the animals, plants and rocks (Bianchi, 1975 and Fuchs, 1975).

Culturally, this natural hierarchy had significant impact on the growth and structure of ancient societies. In Mesopotamia, for example, the origin of the world order was mythologized as...

a prolonged conflict between two principles, the forces making for activity and the forces making for inactivity. In this conflict the first victory for inactivity is gained by authority alone; the second, the decisive victory, by authority combined with force (Frankfort et al., 1957, p. 173).

For both Mesopotamians and other primitive societies, the understanding of the hierarchy of nature and nature's use of force to establish order, where accepted realities of

everyday life. There was no reason to believe that humans were not subject to the same hierarchical power, since their experiences of nature's wrath and beauty enveloped them. Overtime, natural order became civil order. In other words, the establishment of a state or governmental body developed out of a naturalized understanding of the powers of the universe. In the case of the Mesopotamians, cultural authority was established out of a need to instill guidelines for living together that would ensure the safety of all (as was believed to be true of nature); and, in accordance with their experiences with nature, when the "natural" authority of the state was questioned, force was employed to determine correctness or Truth (Frankfort et al, 1957).

Obedience to created cultural powers was initially expected because of the authority it represented, and if authority alone was not enough, then force or physical coercion was used to ensure compliance. The establishment of obedience to power developed naturally from daily life in ancient times; cultures were subordinate to the powers of nature, individuals subordinate to the state, families to the head of the family, children to their parents. In this way, the natural forces of the universe and hence the Truth, became by extension the authority for culturally sanctioned bodies or officials to demand obedience. If obedience wasn't

offered, then force would be justifiably used, as in nature, to demonstrate the "natural" authority of the body in power. As societies developed, the natural order became less clear as links with nature were severed. As a result the "natural order" of the state was most often established by force.

In ancient societies, therefore, we see the rudimentary principles of power and faith take form. Faith in the natural order of the universe is established through the daily experiences of the people and a belief in the power of culturally sanctioned authorities is entrenched, in part, by the extension of this natural order to the order of societies, and in part (and when all else fails) by the use of force. Notwithstanding the use of force, it was the people's faith in the natural order of the universe and in power hierarchies, and the security and prosperity that societies under the control of leaders received, that entrenched power and faith as operating motifs of early civilizations.

This tradition of faith in the unseen forces of nature and of subordination of the self to the powers of the state are (metaphorical) examples of in-nature myths. The perceived monumental forces of nature shrivel up the individual's desire to stand out of nature. The powers of the state, as an extension of the powers of nature, therefore are

willingly believed in and submitted to by the individual. The fear of death conjured up in the mythological conceptualizations of the powers of nature (i.e., the various Gods and Goddesses), or the state as it metaphorically represents nature, keeps the majority of people conceptually tied to the awareness of their physical and mental weaknesses with respect to the challenges of life. As a consequence, the prevailing in-nature myths keep the individual and the society "safe" and primitive.

The Greek World View (circa 700-150 B.C.) The early Greek thinkers were

....convinced of the reign of law in the universe. In the life of the individual, the overstepping of what is right and proper for man, brings ruin in its train, the redressing of the balance; so, by extension to the universe, cosmic law reigns, the preservation of a balance and the prevention of chaos and anarchy. This conception of a law governed universe, a universe that is not playing of mere caprice or lawless spontaneity, no mere field for lawless and "egoistic" domination of one element over another, formed a basis for a scientific cosmology as opposed to fanciful mythology (Copleston, 1985, p. 21).

The prosperity and growth of civilization through urbanization and state authority provided the opportunity for the loosening of the bonds of nature. Although early Greek life was primarily based in agriculture, and hence still heavily tied to nature, the entrenchment of state rule and the bureaucracies that necessarily developed around them afforded the more privileged class -- those with power -- to indulge in matters more uniquely human (e.g., philosophy), in matters that lay outside any physical contact with nature. As a result mythological themes, as expressed through powerful institutions and belief systems of the day, evolved from one of Gods and Goddesses of nature, to one of transcendent order governed by reason. As Plato (Cahn, 1990) in his famous metaphor of the cave, wrote,

...imagine men to be living in an underground cave-like dwelling place, which has a way up to the light along its whole width, but the entrance is a long way up.... Do you think, in the first place, that such men could see anything of themselves or each other except the shadows which the fire casts upon the wall of the cave in front of them?... And is not the same true of the objects carried along the wall?... If they could converse with one another, do you not think that they would consider these shadows to be the real things?... whenever one of them was freed, had to stand up

suddenly, turn his head, walk, and look up toward the light, doing all that would give him pain, the flash of the fire would make it impossible for him to see that objects of which he had earlier seen the shadows... If you interpret the upward journey and the contemplation of things above as the upward journey of the soul to the intelligence realm, you will grasp what I surmise since you were keen to hear it... ..namely that in the intelligible world the form of the good is the last to be seen, and with difficulty; when seen it must be reckoned to be for all the cause for all that is right and beautiful, to have produced in the visible world both light and the font of light, while in the intelligible world it is itself that which produces and controls truth and intelligence, and he who is to act intelligently in public or in private must see it... ..do not be surprised that those who have reached this point are willing to occupy themselves with human affairs, and that their souls are always pressing upward to spend their time there, for this is natural... (p . 185-188).

What is so compelling about Plato's argument is that it rests not on superstition, but logic and reasoning. The new belief being promoted still advocates an other worldliness (the fire), that provides substance and stability to the

ever changing pace and appearance of the physical world (the shadows on the wall). but goes beyond the mystical, superstitious beliefs in the Gods and Goddesses of nature, to a reasoned understanding of the True nature of the universe (the upward journey of the soul to the intelligence realm). There was not an immediate conversion of beliefs from superstition to reason, but simply the retreating of one version of Truth, one myth which was based totally in nature, to a new version of Truth, a new myth based slightly less in nature.

The early Greeks were profoundly impressed with change, from birth and growth to decay and death. Their perceptions of the constant process of change that they experienced in all facets of their life, lead to the philosophical questioning of the very nature of change. The early Greeks believed that, despite the constant changing of the universe, as experienced through the senses, there must have been something permanent, something which was primary, which persisted, and which took on the various forms in the process of change (Copleston, 1985). Plato (in Hardy, 1989) wrote that "there are two kinds of existing things, one visible, one unseen... and the unseen is always in the same state, but the visible constantly changing" (p. 118). The pursuit of this permanent element underlying change, this Truth, took on many forms, but the method of search was

clearly not based on superstitious experiences of nature: rather it was a reflective process based on reason which enabled the Greeks to discover some underlying principles and laws of nature that hitherto went unnoticed.

This stepping into reason by the Greeks is pivotal in our understanding of the metaphorical nature of our underlying dualistic disposition. The use of reason to discern nature is a metaphorical step into the symbolic self, into our out-of-natureness, and as such brings together the contrasting poles of our duality. It is not that our out-of-natureness hasn't been there all along, for the very development of mythological explanations of nature point to its existence; rather it is that the Greeks insisted that reason be used to determine the Truth, which signifies a change in the vehicle of pursuit of the grand myth, Truth. This challenge to the old vehicle of pursuit, the belief in the powers of nature painted metaphorically in Gods and Goddesses, is the first major clash between our two existential sides at a societal level and as such, provided the basis for both the in-nature and out-of-nature myths that dominate later history.

There are three central concepts I wish to identify from this review of early Greek world views. The first is that despite a thrust towards our symbolic self through reasoning, the mythological theme in play at that time was

still an in-nature one; second, that this dominant in-natureness, expressed philosophically by the Greeks, is the rudimentary source of power for religious institutions of later times, crystallized in the form of religious dogmas; and third, that the more subordinate out-of-natureness expressed philosophically in reason, is the rudimentary source of power for scientific institutions of modern times, crystallized in the form of scientific methodology.

While the use of reason to explore the nature of the cosmos and the individual's place in it was a step into our out-of-natureness, the step itself was a short one; in fact, one foot never left the security of the old position. The prevailing pagan belief system in the polytheistic nature of the universe and the guarded belief in the unyielding powers of the Gods and Goddesses did not provide the early Greeks with enough courage to go beyond the safety of contemplating the essence of the universe. While it was acceptable and safe to ponder the True nature of the universe and thus come to an understanding of the individual's place in it, it was not acceptable to try to control nature, nor was there even a suggestion that this was possible. The predominant belief, and for most the faith, to which they still clung, was that behind the scenes there was a power source that controlled both the universe and them, and to which they were subordinate (Copleston, 1985; Durant, 1966; Hardy, 1987; Van

Melson, 1961). This power source was thought to be divine, and was the expression of the Gods in nature and the soul in human form. Here was a logical extension of the nature mythologies of the past, to a philosophical mythology that still adhered to what Lovejoy (1978) labels "the Great Chain of Being",

Since from the Supreme God Mind arises, and from Mind, Soul, and since this in turn creates all subsequent things and fills them all with life, and since this single radiance illuminates all and is reflected in each, as a single face might be reflected in many mirrors placed in a series; and since all things follow in continuous succession, degenerating in sequence to the very bottom of the series, the attentive observer will discover a connection of parts, to the supreme God down to the last dreg of things, mutually linked together and without a break (p. 63).

There was a dominant penchant towards a hierarchy of unseen essence, from God (Gods and Goddesses) at the top end, to the most primitive of matter (rocks, the earth etc.) at the bottom, that linked together the whole "Chain of Being". It is here that we formally learn of our existential duality, since the human being is seen to be positioned half way between the two poles, between the depths of matter (the

animal self), and the heights of spirituality (the symbolic self), and thus caught in a struggle that pulls the person in both directions. Although the arguments put forth to support this belief in the unseen essence are rationally based and hence out-of-nature (because the rational, cognitive argument points to our superior position with respect to other animals, and because of the heroics of the individual making the statement -- the stance that goes against the previously held belief in the pagan Gods and Goddesses rests in the symbolic self); the clinging to an unseen reality that makes faith in sensual data seem inept, and which places the human in a static powerless relationship to God, clearly emphasizes the in-natureness and helplessness of our situation. True, we can ponder the nature of the universe and understand our place in it, but we can do nothing to change either the universe or our place in it, since ultimately we are impotent.

The realization of our impotence, both physically, in our daily encounters with the hardships of life, and now intellectually or cognitively, through reason, creates an overwhelming feeling of apprehension and timidity with respect to life's challenges. Over time, this helplessness and subservience to the universal order excites fears of meaninglessness, in a fatalistic fashion, which in turn creates a willingness to escape from the freedom of this new

found knowledge, and return to the safety and control of another authoritarian and conformist belief system. In other words, putting a crack in the shell of a prevailing belief system (the Gods and Goddesses of nature), resulted in the release of fear, fear of meaninglessness, since a lack of a trustworthy version of Truth would mean either that nothing could hold True value, including life, or, that all things hold the same value, including death. If the former were emphasized, then value rapidly falls away from life and meaninglessness results; yet if the latter is emphasized (and, if one acknowledges that life on the purely physical plane is a struggle at the best of times), then there would be sufficient reason to halt the push forward, to cease struggling to live and thus, as a consequence, fall into death.

Human life becomes particularly meaningless if, in addition to the existential fears, the only alternative belief system being offered, by reason, promotes a static view of the universe in which human fate is sealed in the powers of some unseen God. In desperation, the people flee the presented Truth and capitulate, assigning their beliefs willingly and enthusiastically to any power system that will allow the game to continue. The move from this position to one which places religious institutions in a power position over us, is simply a logical extension of the belief that we

are ultimately required in any event to obey the wishes of a divine, unseen power, and that these divine wishes are best understood through obedience to the religious institutions of human creation, that reportedly are divinely inspired, and which represent directly the ultimate power. Durant (1957) explains that

Most men are harassed and buffeted by life, and crave supernatural assistance when natural forces fail them; they gratefully accept faiths that give dignity and hope to their existence, and order and meaning to the world; they could hardly condone so patiently the careless brutalities of nature, the bloodshed and chicaneries of history, or their own tribulations and bereavements, if they could not trust that these are parts of an inscrutable but divine design. A cosmos without known cause or fate is an intellectual prison; we long to believe that the great drama has a just author and a noble end (p. 3).

The fears created by the cracking of the old belief system are sealed in the belief one places in the new system and the pursuit of Truth continues through the submission to an authoritarian power that dictates, through its dogma, that ultimate Truth is to be found in a life that is most "Godlike". The religious institutions of the Roman Christian

era that followed the Greek era, of course, reserved the right to be the sole judge of what was and was not "Godlike" and their authority was willingly granted by a "God fearing" public. The state, on the other hand, maintained its position of authority by coveting (over time), the power source of religious institutions and thus became an extension of the divine power. The state and church, as we shall see, become the dominant powers of the in-nature myth, establishing their authority through the belief and faith of the public, and when questioned, through force and the elimination of any competitors.

Finally, it is equally important to realize that, despite the dominance of an in-nature myth in early Greek world views, the emphasis on reason as the authority to decide what is the Truth reflects an out-of-natureness that points towards what would later become a scientific myth.

Nature was no longer what revealed itself immediately but something which manifested itself only in and through science....nature began to lose its formed character and stature to become something elementary which is subject to laws and capable of being given form in multitude of ways. It became the sum total of elementary forces and materials. True, nature remained something primordially given, but no longer something

that was originally formed; it was now that which can be formed and reorganized in many fashions by virtue of elementary laws (Van Melson, 1961, p. 209-210).

Through reasoning or logical analysis the early Greeks laid the foundation for a system of organizing and understanding the universe that was scientific in principle. There was an order to the universe and that order was based in laws that were comprehensible, if unchangeable, to the individual. The fact that all this was couched in an in-nature grand myth, does not preempt the scientific nature of the approach. For example, Aristotle conceived the earth as consisting of the element earth in the centre of the cosmos, surrounded by the sphere of the element water, about which were the spheres of the elements air and fire (Van Melson, 1961). Despite the incorrectness of the view, the methodology was logical, and in part empirical, as it was based on the observation of terrestrial bodies which clung to the earth and celestial bodies which revolved around the earth. Although the unseen forces of the universe won the match in the end, and retained power, the elemental diversity of the seen matter of the universe and methodological principles of understanding them, could never again be neglected.

The Medieval World View (600 to 1500 A.D.) As stated above, the need to escape from existential fears created by exposing the "untruthfulness" of the ancient world view, provoked a need to submit to a new version of Truth that fell under the authority of both state and religious institutions. The fall of the Roman Empire left Christianity as the dominant religious order of the western world. Although the loss of security and prosperity of the state in the last days of the Roman era plunged the western world into the warring, primitivism of the dark ages, the church, for the most part, held its ground and power (Durant, 1957).

The expansion of the Roman Empire left much of the land unprotected and lawless at its fall, and the early medieval ages (600 to 1000 A.D.) saw the retreat of peoples from the countryside of Europe, to lands protected by former state and church officials, or by anyone who could muster an army and defeat all opponents who challenged their authority to the land. Feudalism was the economic subjection and military allegiance of a man to a superior in return for economic organization and military protection. These were unstable times and security from threat of death was at a premium. Those without power clung to whomever promised them the most security, the greatest chance to live. The safety of a feudal village was purchased at a high personal price, however, since most of what the average laborer would reap

from the lands, or from the selling of goods, would be appropriated by the Lord of the feudal kingdom (Durant, 1957).

The church maintained its hold on the people primarily because of its previous position of power within society that afforded it the wealth to support armies and protect the people. As Durant (1957) summarizes, "So enmeshed in the feudal web, the church found herself a political, economic and military, as well as a religious institution;... Feudalism feudalized the church (p. 564). They had the power to provide security both physically and spiritually, although most people could not afford the time for religiousness and ignorance in general promoted a place for superstition and witchcraft which, so long as the church received its money from the people, was a tolerated inconvenience. It was only in times when the pagan beliefs of the past became a threat to the security and prosperity of the church state, that force was used to determine legitimacy to claims of Truth (Adler, 1986; Durant, 1957; Hoyt, 1989; Starhawk, 1982).

In this way then, the Catholic church became the dominant power of the Medieval ages that helped entrench Catholicism as the dominant myth of Truth. It placed heavy emphasis on moral control of the people through the proclamation of the

evilness of the body and of human nature, and justified such claims based on interpretations of the Bible, the Holy, and hence truthful, book. It reinforced rituals of the mass and servitude to God (through obedience to the church and its officials), which kept the majority timorous of the wrath of "the Almighty", and which fortified their needs for sacrifice and atonement. This, in turn, ensured the church-state a congregation of devout Catholics that believed in God, albeit out of fear, and who, through their actions, subsequently determined the dominant myth of the time (Bianchi, 1975; Durant, 1957; Fuchs, 1975; Kaufman, 1958).

Catholicism, then, was a pre-scientific myth and is best understood as an in-nature myth since this religion was primarily one that demanded obedience to God, through God's worldly institutions (the church and her officials), which in turn kept the majority of people fearful of God, fearful of the church and fearful of the way they lived. It was a time of subordination to higher powers, both worldly and other worldly, and the majority recognized their creatureliness, recognized the weaknesses of their bodies and, in general, the frailty of the human condition. They willingly capitulated their desire to stand out of the crowd, to show themselves as truly symbolic, and obediently knelt with the others and prayed for eternal salvation under God. Their fearfulness of life made them dependent on the

church for salvation which in turn was reinforced at all levels to ensure the myth was maintained. For most it was not so much faith in God or the church as it was a need to believe in God to save them from a meaningless life. It was not so much a conviction of will, as it was an insurance policy against the unknown forces of the universe, and the labourers put just as much belief in witchcraft and superstition as they did in God (Durant, 1957; Hoyt, 1989).

While the state in early medieval times failed to maintain authority, by the 12th century order was generally reestablished. Kings were predominantly in control of their kingdoms and state authority, won by force, was shared, although often grudgingly, with the church. Since the King gained his authority through force under the recognized need to sustain law and order, and since this law and order was declared divine, so long as the church shared power, it became accepted that the head of the state, the King, governed by divine rule. The King's word, with recognition and acceptance by the church, had divine power and as such, became a dominant authority in medieval societies. The head of the state, therefore, was also important in determining which myth of Truth was dominant.

By the late Medieval period, (1200-1500 A.D.) both the church and the state were the two most powerful institutions

of Europe and with the belief and faith of the people, they collectively established Catholicism as the dominant in-nature myth of the age.

The Primary Myth

The above presentation of the growth of mythological themes through early western history describes how power and faith (or belief), have evolved over time with the natural growth of civilization. As we begin to understand how the combined forces of power and faith are used in determining which myths are dominant, we come to understand how the growth of a predominantly in-nature myth has occurred.

The progression of an in-nature myth from one of supernatural forces controlling nature including human nature, through a reasoned belief in the unseen forces of nature, to a religious belief in God, the source of the unseen force in nature, exemplifies the human struggle with individuality within finitude. The need to address the existential fears created when conscious animals, who are capable of reasoning and cognitively manipulating their environment, are confronted with an inability to explain why they are alive, is sufficient reason to produce a system of beliefs or myths that dictate a version of Truth to the people.

The fact that it is an in-nature or primitive myth suggests that the myth grew from an extension of the experiences of early societies. They lived, in comparison with contemporary societies, more like animals than humans, within nature. The inability to escape from the controls of an in-nature myth is, in part, due to the fears of casting away the only viable belief system that is thought to be capable of quieting the fear of meaninglessness, and also in part, due to historical circumstances that have not placed enough resources in the hands of others to allow faith in a different belief system to be forged. In other words, it is not that early societies chose an in-nature myth over an out-of-nature one; rather it is that they could only have created an in-nature myth since there were never enough resources and talent available that could have provided the safety required for a new belief system to take hold. Paralleling the child/parent bond with the individual/nature bond, the societal member (child), learns to leave the bonds of nature (parents), in incremental stages which culminate both in an internal process of realizing that individuation is possible, and from an external process that provides the necessary safe environment to make separation a viable option. Both internal and external antecedents are required for changes, either within one myth or among myths, to occur.

This process of individuation can be conceptualized as a death (of old myths), and rebirth (of new myths) that allows for the transformation of in-nature myths, as we have seen, and for the change from a pre-scientific to a scientific myth. The in-nature myth is an extension of our animalistic self and takes the spotlight first because of our own particular evolutionary past. Changes to the in-nature myths occur as a result of the incremental steps of individuation.

The emergence of the individual, metaphorically an out-of-nature myth, while always an under-current even at the peak of the pre-scientific myth, did not formally take shape until about the end of the middle ages (circa 1500 A.D.) when events began to unfold in a manner which permitted and assisted the production of a new myth. Before examining this changing process, it becomes important to firmly characterize the prevailing myth prior to the change, in order that the change in myths might be more easily recognized. For this reason, therefore, I will now examine the pre-scientific myth as it manifested itself prior to the scientific revolution.

By the mid-medieval ages (circa 1000 A.D.), societies settled into a feudal system of order that brought security, safety and routine into the lives of the people. There was a strict class system in place which dictated roles and

functions of all societal members and which, as a consequence, placed significant restrictions on individual freedom.

A man had little chance to move socially from one class to another, he was hardly able to move geographically from one town or from one country to another. With few exceptions he had to stay where he was born.... A person was identical with his role in society; he was a peasant, an artisan, a knight, and not an individual who happened to have this or that occupation. The social order was conceived as a natural order, and being a definite part of it gave a feeling of security and belonging (Fromm, 1965, p. 57-58).

The experience of death through war, disease and simply the harshness of everyday life conveyed a practical wisdom of life to the average citizen that enabled the metaphorical nature of religious explanations of life's meaning to become entrenched. Life was often overwhelming and seemingly out of the control of the serfs and peasants that laboured the lands, and thus a myth that spoke to their experiences, a myth that proclaimed the wrath of God and the need for atonement was willingly believed (Durant, 1957; Fromm, 1969; Palmer & Colton, 1978; Watts, 1970). The external and internal antecedents to change were not yet in place;

therefore, separation of society in general from nature and individuals, specifically, from the domination of their animalistic selves was not yet possible. There was just a simple acceptance of powers outside the control or understanding of the average citizen and these powers manifested themselves, metaphorically in myths of the omnipotence of God, and physically in the powers of church and state. Campbell (1988), speaking on the development of western myths writes that,

The civilization of the Middle Ages was grounded on the myth of the Fall in the Garden, the redemption on the cross, and the carrying of the grace of redemption to man through the sacraments.

The cathedral was the centre of the sacrament, and the castle was the centre protecting the cathedral. There you have the two forms of government -- the government of the spirit and the government of the physical life, both in accord with the one source, namely the grace of the crucifixion (p. 59).

While these primary ties to power structures blocked the possibility of the individual separating from the social order she or he was in, it sufficed to quench fears about one's place in the universe. In so doing, the common serf found a way out of eternal doubt. "He (the serf) may suffer

from hunger or suppression, but he does not suffer from the worst of all pains -- complete aloneness and doubt" (Fromm, 1969, p. 51).

At the societal level, therefore, the dualistic struggle between the primitive and advanced models of societies is easily won by the in-nature model. God, the symbolic representative of Truth, imposes himself on society in a way that suppresses the symbolic function of the individual, reminds her of her creatureliness and directs her to remain in her place among nature. There are both implicit and explicit "indignations" of God that reinforce the in-natureness and sense of wickedness of the human animal and which dictate that salvation can be realized only after death. For example, the myth of the Fall in the Garden, as mentioned earlier, is a Christian myth that renders all of nature corrupt for us.

Without a word the lord God expelled the pair from the garden, to till the ground from which they were taken... From this moment death, suffering and evil entered the material world -- the outward and visible signs of something still worse, of the fall of the world from grace, of separation from the divine life of God, incurring the sentence passed upon Lucifer -- the sentence of everlasting damnation... With the fall of

Adam and his expulsion from Eden, the Christian story has stated its problem. It has represented the whole plight of man and of the created universe -- the sense that things are not as they should be, that death and pain are imperfections, the sense of separation from the divine, of conflict with nature, of guilt, of anxiety and the impotence of will.... (Watts. 1970, p. 54-56).

The eating from the tree of knowledge of good and evil takes all of humanity out of the mythological zone (the symbolic self), that transcends good and evil, right and wrong, and places us between the pair of opposites. It casts us out from a world where Truth was known, to a world where Truth must be continually pursued. Like the child that for the first time becomes conscious of the fact that she and the universe are not one, that she is separate from other objects in the universe, that she exists for others as an object and therefore realizes her body as herself, the Fall in the Garden represents humanity's consciousness of the bodily, animalistic self. For the first time Adam and Eve become aware of their bodily selves, aware of their fallen position from their previously held Godlike status in the Garden of Eden and aware for the first time of the possibility of their own death. For disobeying the word of God they feel both ashamed and guilty, and as a result of the sin, God banishes them to a life where all of nature has

been corrupted by their sin, where pain and suffering are forever present and where subsequently they must always be aware of their own finitude. The fear of death is created and along with it, the capacity to deny it.

The myth of the Fall in the Garden is a myth that illustrates how our dualistic, part animalistic and part symbolic selves have come into being. It suggests that we were once Godlike (the symbolic self), and in this way can be used to point to our out-of-natureness. Instead, in the hands of God's earthly representatives, in the hands of those who seek earthly power, the fall into evil (the bodily self), is emphasized for maintenance of control purposes, and therefore gets mythologized at a societal level as an in-nature myth. All Christians of the time had to repent the "original sin" of Adam and Eve and then strive to be more Godlike, in ways that were directed by church and state officials, while on earth, in order to regain salvation in the afterlife.

The myth of how salvation came into being varies, but Watts (1970) writes,

In the course of time, one of the sons of Adam, Seth, procured a branch of the fatal tree... It became the famous rod of Moses, which turned into a serpent to

confound the Egyptian magicians, with which he divided the waters of the red sea... It became a beam in the great temple of Solomon the Wise. It passed in time to the carpenters shop of Joseph, the foster-father of Jesus, and from him it was acquired by Judas the Betrayer, who, in the end, turned it over to the Roman soldiers who used it as the Cross upon which they crucified the Christ -- for the Cross which became the Tree of Salvation (p. 54-55).

In this way, therefore, God through his son Jesus has provided all Christians with a way out of their existential dilemma. Against the tree of knowledge, the knowledge of death, God offers the tree of the cross, the way of eternal salvation.

Salvation through repentance on earth is the very myth that gives the church its tremendous power over the people. Aside from controlling the immediacy of their existential fears on earth, aside from capitalizing on their experiences of the harshness of life and the assuredness of death, the Christian church developed a system of belief that ensured that if proper attention (the pursuit of Truth), was given to God (the Truth), as dictated by the Bible (the version of Truth) and as interpreted by God's worldly representatives (those who know the Truth), then come judgement day, the

individual may be allowed readmission into God's Kingdom in heaven (freed from the existential struggle). It is important to realize that once the pursuit of Truth has begun, once you have placed belief in God, the fears do, for the time being, disappear, in a self-fulfilling way, and thus reinforce belief in the Truthfulness of the myth. In this way, therefore, the myth of the Fall in the Garden is a Christian in-nature Myth and is representative of the ways in which religious dogma was used to ensure the medieval societies remained primitive yet secure.

Although the medieval society was still in a process of individuating itself from nature, the out-of-nature aspects of society were still present. For example, the creation of a myth that points to an omnipotent God that controls all and is omnipresent in the world, is itself a model of the symbolicness of the feudal society. If the society were totally in-nature, then there would be no need for myths at all, since the myth itself is a metaphorical, symbolic, representation of our experiences. Myths are cognitive maps that allow us to find safety in the world, and thus while they primarily still tied the feudal community to nature, by accentuating bodily death, they also signalled their out-of-natureness by providing a version of Truth that allows the soul (symbolic self) to escape death.

As with society, the individual was dominated by an in-nature myth or myths, but still maintained his out-of-natureness within the context of the overriding primitiveness of his in-nature beliefs. For example, the class structure and rules of behaviour for serfs within feudal communities did not allow for the possibility of transcending that structure or those rules (Durant, 1957). In his own simple way, however, the individual serf maintained a heroic stance amongst his peers that allowed for the symbolic expression of his specialness in nature. If his job was to till the land or her job was to prepare the meals, then this was done with particular pride in his ability to grow the best crops or for her to cook the tastiest meals. Their individuality, their heroic stance against their animalistic selves, while humbled by God's, the Church's, the State's, the Lord's, and nature's powers, still found expression within a narrow band of behaviour, and metaphorically, therefore, the out-of-natureness of the individual also found expression. Durant (1957) writes that "we must picture him (the serf) not as an oppressed and beaten man, but as a strong and patient hero of the plow, sustained, as every man is, by some secret, however irrational pride" (p. 557).

Examining more closely this "irrational pride", the "irrational" component denotes the metaphorical nature of a

myth which transcends reason, and the "pride" component is the belief or faith the individual places in that myth. For the most common people it was a belief in a power source which imposed itself upon them and not an act of faith in God, and all his worldly representatives which kept the fears of meaninglessness at bay. Their need for security, both physically and psychologically, accentuates their in-natureness and also represents a certain desperation for relief from fear that finds relief quickly through the most readily available myth that can quell this anxiety. For this reason, the majority of people in feudal communities did not have an internal conviction of faith in the myth, but readily believed in whatever myth would help.

The act of faith, by definition, can be determined only in times of extreme pressure. It is only when challenged with an alternate belief system that faith and belief become distinguishable. That does not mean that faith does not exist outside of extreme opposition, or that no one is faithful to dominant belief systems. It means simply that unless faced with a threat or challenge to one's beliefs, there is no way of measuring the level of conviction or faith that one has. In other words, externally there is only one way to separate believers in Catholicism from those with faith in Catholicism, and that is to severely threaten Catholicism. The believers capitulate and convert to the new

myth and those with faith remain loyal to Catholicism.

The primary myth of the medieval age, therefore, is the in-nature myth of Catholicism. The church and state combine to establish the power system through which the myth is controlled. It is through this power system that the people, collectively, through their faith and belief in the myth, arrest their existential fears and obtain meaningfulness in life.

Lesser Myths

While the church and state controlled access to the primary myth by determining what was and was not in accordance with God, lesser myths prevailed that allowed those with weaker beliefs in God access to a different myth that would equally address their existential needs.

At any one moment in time, there are a plethora of different myths in play at a multitude of levels, from societal to personal. These myths provide believers at all levels, the safety net required to ensure that, should their dominant myth fail to keep their fears at bay, there would still be a reserve of myths available for their use. At the individual level, Leshan and Margenau (1982) illustrate this multi-myth point by describing,

... a day in the life of an imaginary, hard-boiled, down-to-earth businessman.

In this man's everyday work, as he sits at his desk, he lives in a reality we all know very well. It is the reality we in the West ordinarily think of as the real one. It is the reality in which we tie our shoelaces and design the shoes, in which we buy airplane tickets and take a taxi to the airport. The businessman would say, as would most of us, that this is the one *real* reality, and every other one is actually some aberration or other, usually temporary.

One day the businessman comes home from work. He knows there has been some meningitis in the area, and he is worried about his three-year-old child. Sitting downstairs in the evening he hears his child crying upstairs. As he goes upstairs, he is terribly frightened. He finds himself pleading, "Please don't let it be meningitis." He is really praying. His whole consciousness is involved in this action. He is completely organized in such a way that this is the only thing that makes sense to him, that what he is doing at that point is the reasonable action to be doing. He does not question it. At that moment he is perceiving and reacting differently than he does during the rest of the day (p. 9-10).

The first myth, the one of the businessman's everyday reality is based on a physical, concrete, scientific-like understanding of the universe and works well within the contextual framework it was designed for. The security of perceiving reality from this position allows the businessman the opportunity to engage in the world in a meaningful way. There is safety in knowing that his job will provide him with sufficient resources to live, that the taxi will take him to the airport and that the ticket he purchased will *guarantee* a seat for him on the airplane. All the guarantees collectively clamp down on one's fears of unpredictability and reinforce the perception that the myth currently engaged in, is the Truth.

It is only when the contextual sands on which the myth is built, shifts that a crack in the shell of the myth appears. At that moment one's belief in the myth is tested, and if enough resources cannot be found to shore up the contextual framework, the once hidden fears of meaninglessness seep out. For the businessman, the reality of the everyday world cannot subdue his fears in the moment. To arrest the existential angst created by a vulnerable myth, the businessman employs an alternate myth, a prayer, and refocuses himself in a different contextual framework. He changes myths.

Lesser myths in the middle ages were also employed to arrest existential fears that the dominant Christian myth could not assuage. Although there are many lesser myths, I will focus on two lesser myths that reappear later in history. The first is a competitive in-nature myth, witchcraft, and the second is an alternate out-of-nature myth, science.

Witchcraft

Amid famines, plagues, and wars, in the chaos of a fugitive or divided papacy, men and women sought in occult forces some explanation for the unintelligible miseries of mankind, some magical power to control events, some mystical escape from a harsh reality; and the life of reason moved precariously in a milieu of sorcery, witchcraft, necromancy, palmistry, phrenology, numerology, divination, portents, prophecies, dream interpretations, fateful stellar conjectures, chemical transmutations, miraculous cures, and the occult powers in animals, minerals, and plants (Durant, 1957, p. 230).

Despite the church's efforts to console the souls of the peoples of Europe, despite their power, in co-operation with the state, to make believers out of non-Christians, there was still a wide spread belief in the powers of nature that

resembled the earlier beliefs of pagan peoples. The belief in Gods and Goddesses, in magic and unknown powers was a sentiment of the middle ages that had roots in past pagan understandings of the powers of nature and which soothed the angst of those who either never heard of the Catholic church or who found the church too removed from their daily lives to comfort them in their trials and tribulations.

Reflecting the Goddess beliefs of both the Ancient and early Greek world views, many women and some men practised witchcraft or Wicca. For those within the covens, witchcraft was not superstitious, wicked, evil or satanic, but was a pagan belief in nature and in natural powers. Adler (1986) writes,

Followers of Wicca seek their inspiration in pre-Christian sources, European folklore, and mythology. They consider themselves priests and priestesses of an ancient European shamanistic nature religion that worshipped a goddess who is related to the ancient mother Goddess in her three aspects of Maiden, Mother and Crone. Many craft traditions also worship a god, related to the ancient horned lord of animals, the god of the hunt, the god of death and the lord of the forests (p. 10-11).

Witches, in relation to Catholicism, practised a competing in-nature religion that emphasized the hidden powers of nature in the form of gods and goddesses but that sought to evoke a sense of that natural power in the worshiper. This promoted an understanding of human nature in which humans participated in the powers of nature in a way that was contrary to the divinely inspired hierarchical philosophy of Catholicism. Witches had access to nature's powers, through the Mother Goddess of all nature, and did not support a belief in a God that was fundamentally out-of-nature. The crucial difference between the two in-nature religions was that Christianity was based on a power-over others, which reinforced the need to obey and be dependent on a God which was out-of-nature, while witchcraft was based on a participation in the powers of nature, since the individual was viewed as being a part of nature (body and soul) and not apart (soul) from nature. Reflecting on the witches' power, Starhawk (1987), a modern witch, states,

To be a witch is to make a commitment to the Goddess, to the protection, preservation, nurturing, and fostering of the great power of life as they emerge in every being... I am on the side of the power that emerges from within, that is inherent in us as the power to grow is inherent in the seed. As a shaper, as one who practices magic, my work is to find that power, to call it forth, to coax it out of

hiding, tend it, and free it of constrictions. ...that work inevitably must result in conflict with the forces of domination, for we cannot bear our own true fruit when we are under another's control (p. 8).

Witchcraft was in direct competition with Catholicism because both were dependent on the strength of the beliefs of its followers and both competed for the beliefs of the same people. They paralleled each other in many ways, both preaching access to special powers and both practising rituals that instilled a sense of safety in the people who believed in them. Witchcraft practised sacrifice to their gods and goddesses in order to tap into the powers of nature and to call forth the natural powers within themselves, and Catholicism preached that earthly sacrifices, as directed by the church, would be rewarded by God in heaven. Sacrificing an animal in a symbolic ritual that calls forth the powers of the Gods and Goddesses of nature, parallels the symbolic act of eating and drinking the body and blood of Christ. Both acts are sacrificial (for the witch it is the animal that is sacrificed, for christianity it was Christ), and both are symbolic of contact with a greater force.

The persistence of witchcraft and the influence it had on the peoples of Europe promoted a competitiveness within the church that inspired the redefining of witchcraft.

Witchcraft became equated less with nature and more with evil. Witches (primarily women) were either seen as "seductive and charming (bewitching) or ugly and evil (wicked). In any case the women were supposed to possess a variety or "supernatural powers" (Adler, 1986, p. 10). The church's decision to redefine witches in terms of their evilness, was a clever strategy. The church, along with the power of the state, could now legitimately (in the name of God), crush its opposition. By skillfully interpreting passages from the Bible they convincingly determined that witches were working with Satan and justifiably, therefore, they struck out against witchcraft. The inquisitions of witches began (Adler, 1986; Hoyt, 1989; Monter, 1969; Starhawk, 1982).

It is important to recognize that although witches in medieval times promoted an in-nature myth through the grounding of the individual in nature, they also represented an out-of-nature myth in that they sought to bring forth the natural powers within the individual, thus making them "special" powers in comparison to those who were not participants. In other words, those practising witchcraft, had access to natural powers within themselves that externally appeared as "supernatural". In comparison with those who did not practice "the craft", they had "magic" and to that extent they reflected an out-of-nature myth. Their

"specialness" was a description of their own spirituality and not that of a dominant God. but their "specialness" also emphasized their uniqueness, and therefore, their separation from the "herd".

The church's attack on witchcraft demonstrates how a dominant myth maintains its position as the pursuer of Truth. It does not simply state the Truth, for Catholicism is but one of many myths that are in the pursuit of Truth; rather it has used its power to impose its truth.

The persecution of witches grew out of the inquisition, a brutal investigatory body established by the papacy in the thirteenth century to stamp out heretical sects that were attacking corruption in the church and challenging its spiritual and political power... The *Malleus Maleficarum* stated that Christians must believe that witchcraft exists and do everything in their power to stamp it out... It warned that the end of the world was approaching and that this involved a desperate battle between the followers of Christ and the forces of Satan. It maintained that mere accusations of witchcraft was sufficient cause for arrest, and that anyone arrested who did not confess freely should be put to torture (Marrow, 1990, p. 22-23).

The power of the church was used in two ways: the first, dogmatically by preaching the evilness of witchcraft and the second physically through the inquisition. As may be recalled, this style, of first attempting to convert others to one's own belief and then, when that fails, to impose (by attacking alternate beliefs) one's own belief, reflects the acts of those who lack faith in their own myths. It is through the power of the church that we see, on a societal level, that religious leaders had less faith in God than belief. When the legitimacy of the Catholic church was questioned, when those who held the power of the church were threatened, the reaction was not to fall back on their own dogma and rely on God to save them; rather they attacked and killed in the name of God, but ultimately in an effort to cope with their own lack of faith. In the end, the clergy display their own faithfulness in God by attacking the pagan religion. It was power and fear of persecution that in the end maintained Catholicism as the dominant myth.

Another important aspect of the witch hunts were their effect on the subjugation of women and nature. Christianity,

...identified flesh, nature, women, and sexuality with the Devil and the forces of evil. God was envisioned as male - - uncontaminated by the processes of birth, nurturing, growth, menstruation, and decay of the flesh. He was

removed from this world to a transcendent realm of spirit somewhere else. Goodness and true value were removed from nature and the world as well (Starhawk, 1982, p. 5).

With this definition of women, nature and the body, Christianity planted the seed of its own destruction. It was an in-nature religion that demanded obedience and dependence, but the dogmatic imposition of a God that was essentially out-of-nature, that was symbolic, emphasized a shift in the existential duality that promoted the possibility of the individual transcending animal constraints (the body) and existing in the bliss of heaven. While the need to depend on earthly religious institutions was still heavily advertised, the beginning of a movement towards individuality, towards myths that emphasized the symbolic self, had commenced.

Science

While Catholicism was the dominant myth of the medieval ages and witchcraft was an alternate in-nature myth, science, although still in its infancy, was quickly becoming a recognizable, competing, out-of-nature myth.

At a time when the church maintained control over the educational institutions, when in fact, monasteries created

educational facilities. the voice of science was heavily embedded in the voice of the church. This point is aptly demonstrated in the works of Aquinas who strove to distinguish the boundaries of the "double truth" principle. Under the Averroian interpretation of Aristotle, the "double truth" principle referred to the belief that faith and reason constituted two sources of truth and that either one could theoretically overrule the other (Peters. 1962; Klien, 1970). This of course was a threat to the power of the church since their myth was that God, through them, was the Truth. Saint Aquinas, as scholar, sought to eradicate this problem by examining the epistemology of Truth. In the end, however, he capitulated to the powers of the church, demonstrating his own belief in the primary myth. Klien (1970) writes,

In general, an effort was made to reduce conflict between philosophic "truths" and the dogmas of theology by striving to demonstrate the reasonableness of such dogmas. When this could not be accomplished, as was the case of the Trinitarian doctrines and belief in miracles, then St. Thomas placed his trust in faith as a safer guide than reason (p.163).

In this way, therefore, the Greek philosophical tradition of Aristotle, was used to confirm the hierarchical position

of the church by reasoning that the soul was the source of power behind the visible world. Thus, in a watered-down fashion, new ideas in the middle ages became more concerned with the different interpretations of given facts (since the universe was ultimately unchangeable), than it was with revolutionary ideas. Peters (1962) writes,

Scholasticism has become a byword to designate quibbling over the details of a system whose basic assumptions are never seriously challenged. Gone was the bold speculation of the Greeks; gone, too, was the intense concern over ways of living which characterized the philosophy of the Stoics, Epicureans, and early Christians. For the Schoolman or the Arabs wisdom lay in the past; Aristotle was the great philosopher. Averroes and Aquinas disagreed on many points, but their disagreements were mainly concerned with the correct interpretation of Aristotle. The task of the thinker was that of the administrator. Ideas, like the hierarchy of church officials, had to be welded together into a secure and final system that would resist strains from within and corruption from without. Everything had to be sifted, cross-examined, and put in its appropriate place. Patient logic was applied to all the details; only the basic assumptions were logically unassailable because divinely revealed (p. 226).

Mythologically, therefore, science grew out of the in-nature myth of the church that had secured the Truth in the greater sense, and now merely employed science (qua scholasticism) to tie down some of the outstanding details. The method however, because of its rational, logical characteristics, provided less faithful academics with a powerful tool that would eventually bring the entire in-nature myth into question.

As is characteristic of myths, when the primary myth is strongest, the beginning of an alternate myth, that will eventually overpower and replace the primary myth, will begin to take shape. For those scholars without strong beliefs in the Christian myth, the rational, logical methodology of scholasticism lead to a questioning of the Aristotelian faith in the divine assumptions of the church. This coupled with technological advances (e.g., the telescope), and a rise in individualism, paved the way for a few who showed faith in another myth, to come forward.

The Scientific Revolution began with Nicholas Copernicus, who overthrew the geocentric view of Ptolemy and the Bible that had been accepted dogma for more than a thousand years. After Copernicus, the earth was no longer at the center of the universe but merely one of the many planets circling a minor star at the edge of a

galaxy, and man was robbed of his proud position as the central figure of God's creation (Capra, 1988, p.54).

Copernicus, demonstrating his own out-of-natureness through the expression of his ideas, knew full well the price of his words. He understood the power of the church and the threat his ideas would pose for the Christian myth. For this reason, in his own struggle with the need to stand out of the crowd and state his opinion, and with his fear of losing the security of the church, the primary myth, Copernicus published his ideas only after his death and then only as a hypothesis (Capra, 1988; Hawking, 1988). Notwithstanding his "shrivelling back into the safety of the herd" behaviour, Copernicus represents the first major attack on the power of the church by the emerging scientific myth, and in a broader sense, exemplifies the heroic stance of a few who willingly place faith in an alternate myth.

The scientific myth shook the very foundation the church stood on. It sought to explain the universe in mathematical terms, to discover the laws and principles of the universe, and in so doing it robbed God, and his earthly officials, of the power to determine Truth. More and more Truth was becoming scientific Truth. The vehicle through which Truth was sought was changing, and it was changing from an in-nature myth that placed the individual under the power of an

Almighty God, to an out-of-nature myth that for the first time placed the individual in a knowable universe. For the first time, people were beginning to believe that the wonders of the universe were within human capacity to understand.

Psychology

Psychology is at best always difficult to define. In its broadest sense, psychology attempts to understand the phenomenology of the human condition in all its intricacies, but in so doing, creates a new human phenomena thus trapping itself in a tautological fashion, within its own theoretical framework. In other words, psychology offers no a priori knowledge of the human condition and, therefore, is forced to interpret psychological events from an imperfect or biased position. Those searching for the psychological Truth of the human condition, do so from a post hoc position that is necessarily based on suppositions which psychology cannot confirm. Therefore, there can never be absolute assurance that psychological Truth is known. In the end, all that one can do, is *search* for the Truth, and content oneself with truth(s).

This characteristic of psychology is itself metaphorical of the search for the grand myth. The grand myth is the

pursuit of Truth, and not Truth itself. Psychology, therefore, is interested in pursuing the Truth.

While psychology is also interested in physical, biological, behavioural and instinctual truths, since they are all linked to our humanness in the end, each individual truth must be linked to a theoretical supposition of the Truth. Each theory, then, becomes a mythological vehicle for the Truth. For example, Freudian psychology attempts to reveal the Truth through the analysis of unconscious instinctual drives. In a similar vein, behaviorism attempts to reveal the Truth by understanding the particular conditioning patterns of human behaviour. Neuropsychologists, on the other hand, believe that Truth is to be found in understanding the neurological and biological pathways of the human brain. Thus we have another truth. All these truths, at the sub-psychology (schools of psychology) level, reveal, through their particular theoretical assumptions, the vehicles through which the pursuit of Truth is being sought. None of them is the Truth, as any psychologist from another school will be pleased to tell you, but each of them does represent the pursuit of Truth. Each vehicle (school) is itself a lesser myth of the grand myth.

Moving one step upwards, then, psychology (in its broadest, collective sense) is also a vehicle of the pursuit of Truth that seeks to understand the human condition in all its complexities. This "understanding" of the human condition is metaphorical of the pursuit of Truth. The quest to understand, is a quest to discover the Truth of our human condition; it is a quest to lay to rest the dilemma we find ourselves in, the dilemma of being part animal and part symbolic.

While psychology attempts to pursue Truth, it does so within the context of the primary myth of the society as a whole which sustains it. In other words, psychology is a lesser myth of the primary myth of the society, and as such *cannot escape its influence*. Although psychology, in an academic sense, did not exist in the middle ages, psychological problems did, and they were naturally interpreted from within the contextual framework of the primary Christian myth. For this reason the psychopathologies of today, were, in the middle ages, the work of the "devil" (Durant, 1957; Klien, 1970). It was the soul and not the mind that was "sick", and therefore the earliest "psychologists" were those who dealt best with matters of the soul -- the clergy. Discussing depression as it was seen in the middle ages, Moore (1948) writes,

In the "dark night" the soul is not in a state of negligence and lukewarmness, but on the contrary is ever turning to God with a certain heedfulness. The darkness is sometimes associated with a fear of having offended God that has no ground in anything the person has done, and so there is certain resemblance to the familiar picture of anxious depression (p.160).

While psychology in medieval times manifested itself in terms of the primary Christian myth, lesser myths, such as witchcraft and science also had their psychological base. Witches were often seen as psychic healers, possessing the power of magic that had the power to cure one's illnesses.

Some covens used music, chanting and dancing to raise psychic energy within the circle. Psychic healing was often attempted, with varying degrees of success. The most common form of "working" was known as "raising a cone of power". This was done by chanting or dancing (or both) or running around the circle. The "cone of power" was really the combined wills of the group, intensified through ritual and meditative techniques, focused on an end collectively agreed upon (Adler, p. 109).

Science on the other hand, anchored psychology to reason, and dealt with problems of the mind (or soul) in terms of

abstractions. Peters (1962) writes,

The Nominalist tends toward the position that the term "soul" is a name for the totality of functions: it is not a mere name, a sound signifying nothing: but, on the other hand, it is not the name of something that remains, alone and solitary, when all the attributes are stripped off. The Realist takes the other road; there is a world of ideas with which the soul has communion by right of its own nature; stripped of the senses and disconnected from the body, it may confront the ideas or enter the presence of God. A deep chasm separated the two points of view. It was destined to widen as time went on; for the Nominalist became more and more occupied with analysis and the senses, while the Realist developed an introspective psychology; the Nominalists foreshadowed the coming of empirical psychology, while the Realists have their successors in the later mystics and in some forms of rationalism (p. 264-265).

Psychology in the middle ages, therefore, was the understanding of the human condition from the context of the myths of the day, primarily the Christian myth, but to a lesser extent, witchcraft and incipient science myths.

THE SCIENTIFIC MYTH

Introduction

... we are not the stones over which the world flows: we are the stream itself. ... ceaseless change does not mean discontinuity as persons. Only that which can change can continue (Carse, 1986, p. 45).

The change of myths at both the individual and societal level, is a necessary consequence of life. The pursuit of Truth (the grand myth) operates within the finite boundaries of an acceptable lesser myth, but the lesser myth itself floats in an unconstrained sea of alternatives. The movement of this sea depends on the availability of choices and the willingness of individuals and collectively of societies, to change. For this reason, to the extent that individuals (or societies) perceive alternatives and/or lose faith in their previously held myth, they will determine whether the seas are rough or steady. In other words, the turbulence of myths, the extent to which they change, depends on the availability of other choices and the perceived need to change.

For the individual, he can either lose faith in his previously held belief, opening the doors to angst, thus precipitating a personal need to change myths and remain

safe; or the dominant myth itself can lose favour with other believers and therefore change to a lesser myth, which in turn leaves the intransigent individual alone with a fallen myth. Again the crack in the shell of the fallen myth results in anxiety which ultimately demands that the individual change myths.

In the former case, the individual operates from an out-of-nature position, and the decision to change would not be motivated by sources external to the self, but instead by a personal desire to change arising from an internal locus of control, demonstrating her own uniqueness, her own special position out of the "herd". In the latter case, the individual is operating from an in-nature position, since the desire is to remain in the safety of the "herd" and, therefore, a change is only initiated out of a need to remain within the common myth. The individual, in this case, is operating from an external locus of control. Neither, of course, can operate in total isolation from the other. The out-of-nature individual, therefore, seeks an alternate myth that places him in another common, albeit different, "herd" which displays his in-natureness, and the in-nature individual displays her own out-of-natureness through the final decision to change and leave the safety of the previous held beliefs. In the end, change occurs.

Within psychology, a shift of myths can be viewed from various levels. For example, it can be seen as the move from structuralism to functionalism, from European schools of thought to North American schools of thought, or from a psychodynamic perspective to a behavioural perspective. The discipline en masse shifts focus, and while there will always be those who hang on to the old myth, the majority seem to popularize the new myth. The weaknesses of the psychodynamic myth, alledged lack of scientific validity for example, get emphasized when a move to the behavioural myth is desired. There is a need to discredit or invalidate the old myth since one can begin to believe in the new myth, only if one sees the weaknesses of the old. The weaknesses point towards the restrictiveness of the old myth and are contrasted with the expansiveness of the new. It is less a case of the old myth being wrong (although this attack is often launched), than that the old myth, by becoming so widely accepted as the Truth, threatens the grand myth, the pursuit of Truth. When a myth, the psychodynamic for example, approaches acceptance as the Truth by, in this instance the discipline, there appears a counter movement to overthrow it. The counter movement in this case was behavioural psychology. The seeds of the new myth are often planted long before the old myth reaches its peak, as there are always competing myths; but as psychodynamic psychology became the panacea to all of psychology, there were those

within the community who sought out and highlighted its weaknesses. Since Truth could never be found, and hence the faith placed in psychodynamic psychology as the Truth never fully justified, the need to change myths became more apparent and accepted with time. A new myth is always poised, as it were, to take its place.

The new behavioural myth, of course, emphasized its validity in comparison to the dying myth so as to ensure the dismissal of the latter. The behavioural myth built strength through the relevance of new research that was used to validate the shift.

A change in myth does not necessarily mean revolution. Although there are often revolutionary ideas within a change in myths, most often the change is evolutionary. The change occurs slowly, patiently, often waiting for the major supporters, the heroes of the old myth, to leave the scene so that their legacy can die with them. As psychodynamic psychology in North America has died with the death of its major supporters, so too is the fate of behaviorism tied to the life of its major supporters.

Skinner remained an active and eloquent spokesman for behaviourism in the face of its declining popularity as a perspective. In his last decade, however, he expressed

less hope for the field of psychology and less tolerance for its cognitive and clinical expressions. ... Skinner died believing himself to have been a present day Darwin and to have suffered the anti-scientific attacks of cognitive, clinical and humanistic psychologists (Mahoney, 1991, p. 631).

The myth has changed form and those stuck with the old myth suffer the death that goes along with it.

A change in myth at the societal level is a paradigmatic shift. It occurs as a result of a challenge to the old paradigm, a challenge that cannot be converted or ignored. Kuhn (in Esper, 1964) sees science as,

... an evolutionary process in which phases of "normal science," each dominated by a "paradigm" -- a corpus of theory, rules and standards -- alternate with creative phases of revolution which are reactions to anomalies or counter-instances that resist assimilation to the prevailing paradigm and demand a new paradigm (p. 39).

Kuhn points out that so long as a given paradigm dominates, it generates a sense of unity, common purpose and inevitable progress. During this period when anomalies occur, there is pressure to continue to operate within the

existing paradigm as long as possible. When this is no longer possible, a paradigm shift occurs. In the period between the emergence of the anomaly and the paradigm shift, what Kuhn calls the stage of extraordinary science, the habit of appealing to the past paradigm begins to break down (Esper, 1964; Kuhn, 1970; Van Leeuwen, 1982).

At the societal level, therefore, a paradigmatic shift occurs when prevailing myths cannot adjust to new challenges. The in-nature myths of early societies were forced to change because they could not accommodate the challenges of rational thought. The breakdown period, Kuhn's extraordinary science, was comprised of the recurrent challenges and counter-challenges of the medieval age that occurred as the battles for the dominant position took place. In some cases the challenges were backed by physical violence; in other cases it was a war of words. By the late medieval period science was in a challenging position to the religious myth and the work of Copernicus caused what became the paradigm shift into the scientific myth. The shift, while revolutionary in thought and mythologically significant, did not occur at revolutionary speed. It occurred over hundreds of years, in small incremental steps that may be landmarked by occasional revolutionary ideas. These ideas provided structure to the process, but in no way encapsulated the shift.

Few discoveries were greater than Copernicus'. for they projected an order into the heavens that no one has successfully challenged. Many thought then, and some still think, that this great statement of truth dispelled clouds of myth that had kept mankind in retarding darkness. What Copernicus dispelled, however, were not myths but other explanations. Myths lie elsewhere. To see where, we do not look at the facts in Copernicus' works; we look for the story in his stating them. Knowledge is what successful explanation has lead to; the thinking that sent us forth, however, is pure story.

Copernicus was a traveller who went with a hundred pairs of eyes, daring to look again at all that was familiar, in the hope of vision. What we hear in his account is the ancient saga of the solitary wanderer, the *peregrinus*, who risks anything for the sake of surprise. True, at a certain point he stopped to look and may have ended his journey as a Master Player setting down bounded fact. But what resounds most deeply in the life of Copernicus is the journey that made knowledge possible and not the knowledge that made the journey successful (Carse, 1986, p. 165-166).

The significance of Copernicus' work, therefore, was not just that he uncovered a new order to the cosmos, but, that

he challenged the dominant myth of the day and that his challenge itself represented a step into an out-of-nature position. His quest was a metaphorical representation of the heroic act which challenged the safety the old myths provided and which would, if successful as his was, deliver him as a symbolic hero for others. The heroic symbol, like the metaphorical nature of myths, can assume many forms, transcending concrete definitions. Also like myths, the heroic conquest, if it is engaged in at the societal level, can signal a paradigmatic shift.

Copernicus, therefore, provided a new definition of the cosmos, which challenged the prevailing Christian belief that the earth was the center of the universe. His actions represent a step into an out-of-nature position and he used scientific principles and equations to make that step. As such, he became a heroic symbol for others, offering them both a choice in a different myth that wasn't there before, and in the same breath, seriously wounding the Christian myth. Science, in turn, came to be viewed as the new gospel, the new myth through which the grand myth is realized. The science of Copernicus becomes the Truth.

These two factors, the questioning of the old myth and the launching of a new one, were pivotal in the change process and as such, became the catalyst that thrust Copernicus with

his theories into the mythological role of the hero. Abstractly, he represents the beginning of the end of the Christian myth and the end of the beginning of the scientific myth.

In this broadest sense -- as an event that took place not only in astronomy and the sciences, but in philosophy and religion and in the collective human psyche -- the Copernican revolution can be seen as constituting the epochal shift of the modern age. It was a primordial event, world destroying and world constituting (Tarnus, 1990, p. 3).

The Copernican revolution was an anomaly in the Christian world view that could not be converted or ignored. As a result, it launched the western world into the Kuhnian "extraordinary science" period. Science, along with other dynamic myths, combined to wear down the influence of the religious myth, to wear down the force of "the word of God" and to carve out a new myth, a new "word". Those supporting the Copernican revolution, those with faith, forged to push science forward as the new Messiah, the new seer of the Truth and the evidence they put forward, overtime, was convincingly swallowed by the masses. Faith in the new myth was established.

Similar to the mythological role of the Copernican revolution, there were other heroic stances, other challenges and other shifts in the balance of power between the scientific world view and the Christian world view. The growth of the scientific myth did not occur in isolation from society, but was a manifestation of society, of the intricate web of myths that are ever present in society. The change of one dominant myth for another occurs at every level of society, from individual fluctuations within the self, to societal paradigmatic upheavals. The growth of science as a dominant myth, therefore, must be understood with contextual reference to significant events within society. These events, when tied to individuals, thrust those individuals into heroic roles, and when tied to society in general become the landmarks of knowledge. Thus, for example, Copernicus the man is offered the status of a hero and his work is a pivotal landmark in cosmology, astronomy, political science, economics, history, science, psychology, sociology, philosophy and religion.

I will now examine the scientific myth by describing several of these heroic individuals and landmarks in an effort to pinpoint the significant turning points of the growth of the scientific myth. In so doing the out-of-nature mythology will show through, as will its extension to the existential depths of the human psyche.

Before outlining those pivotal markers of change that resulted in a shift from an in-nature religious myth to an out-of-nature scientific myth, however, it is perhaps necessary to examine out-of-natureness in more detail in order to distinguish it from in-natureness and to determine its effect on both individual and world views.

Out-of-Natureness

As stated in the first section, out-of-natureness refers to a movement towards realization of the symbolic self. The symbolic self emphasizes the internal existential need to push the self out of the "herd", out of the body, out of the animal self, and to deny the death of the self by maintaining a belief that the self is not represented through the body. It constitutes an alignment or identification of oneself with one's mind, one's specialness and one's God-likeness.

As with the over-emphasis on the in-nature myth in the ancient period which stifled individual expansiveness and kept the individual tied to a safe but restricted world, the move towards an out-of-nature self, while unshackling individuals from the chains of past authority and offering them for the first time the ability to control their own destiny, also had a negative consequence: the alienation of

the self from the world. The slow shedding of the religious myth, the human coveting of God's power, severed the ties humans had to the earth. The "great chain of being" had been broken. In other words, as we shall see, the shift into a scientific myth created a world view that placed the ability to "know" the universe in the hands of humans. For the first time, the mysteries of the universe were not to be left to a hidden, omnipotent power, a God, but were thought to be knowable, knowable to humans. The pathway to this knowledge lay in the human capacity for rational thought, in the workings of the mind, in consciousness, and was theoretically defined by the scientific method promoted by the hero Copernicus among others. The scientific myth reinforced the out-of-natureness found in the Greek philosophical dialogues and in the scholasticism of the late medieval period. Now, however, the balance of power, intrapsychically speaking, had shifted towards the symbolic self, a shift which left the animal self severely wounded.

The greater the strength of the symbolic self and the more entrenched the scientific myth gets, the greater the distance the individual places between his symbolic self and his animal self, between his rational mind and his emotions, between his control of nature and his ties to nature. The more symbolic the individual, the greater her perception of strength. The greater the perception of strength, the

greater the denial of the bodily self. With the symbolic self comes an increased need to compete with "others", to place distance between oneself and "others", especially human "others". All "others" represent weakness, represent in-natureness, represent the bodily self that will decay and die. It is in comparison to "others" that ones' significance is judged; therefore, one is always obligated to stay ahead of everyone else, to not be average, to not be weak. To be weak is to acknowledge ones' bodily self, to acknowledge that one is less than God-like, that one will perish meaninglessly. To be average is to put a crack in the shell of ones' meaningfulness, to bring into question one's own significance. If I can no longer rely on a God to save me, if I must save myself I cannot afford to be average. The average will perish, only the above average, the special will survive. It is only in the belief that one is above average that one can maintain an illusion that one has the power to be significant. What is required is a faith in one's specialness, a faith that one can transcend the perils of daily life, that one can escape one's own death and remain secure enough to live. With the removal of omnipotent power in nature, with the removal of all superstition, mysticism, fable and myth, also goes the safety of living with a certainty of significance. With scientific "certainty" comes the conclusion that if the scientific view is True, there can be no significance for humanity; and if

science "fails". what is left? By placing destiny in human hands, we have theoretically cut off any possibility of going back. If science fails us we will not be saved from existential irrelevance. We will be nowhere. Lost.

What the scientific myth represents is our conscious acknowledgement that we are now responsible for ourselves.

It is the process individuation and of separating from Mother Earth and it is what is meant by out-of-natureness. Significance now rests in human hands. Only by maintaining a myth that promotes the constant acquisition of evidence that one is not like the "others", that one is special and hence significant, can one maintain an illusion of meaningfulness in one's life. The pursuit of Truth through a scientific myth is the quest for meaningfulness. Searching for meaningfulness in life is the existential search that perpetuates human life.

The power of one's out-of-natureness is personified in the image of the hero, the winner, the one who stands out just a bit more than the others, who has a few more material possessions, who has more money, more status, more talent, is better looking, advances faster, gets higher marks -- anything that can be used to demonstrate one's specialness with respect to others, that points towards one's closer association with one's symbolic self, with God, with the

Truth, can be used as a lever to push oneself out of the "herd". The need to push out of the "herd" comes from an existential search for meaning, a desire to make sense of one's position in the universe. If, for example, the scientific myth places the possibility of knowing the universe within human reach, then the desire to gain that knowledge must be the quest of humanity, since it is through this pursuit that life becomes meaningful and hence liveable. At the societal level the pursuit of knowledge through science becomes the metaphorical representation of the grand myth, the pursuit of Truth. It represents the human quest for significance. If Truth can be found, then the meaning of life will also be found and humans will finally break free of their existential dilemma. They will have a concrete, known, and honest role in the universe and won't, therefore, have to continue to create significance in artificial heroic roles within humanly constructed societies.

At the individual level the philosophical consequence of a knowable universe is that it offers the illusion of releasing the psyche from a state of low self worth. If the illusion is that Gods' power now rests in the hands of humans, then each individual becomes a source of that power. With a knowable universe, each individual has the right to claim one's specialness, one's God-likeness and the act of

making such claims becomes the quest of the individual within the society of the scientific myth. The "Great American Dream" exemplifies this notion. In the race to demonstrate one's specialness anything and everything is used in a codified game of heroics that is culturally sanctioned through a system of acceptable heroic roles. The businessman becomes a hero by demonstrating his ability to make the business more profitable, the construction worker gains the title "hero" by being a good provider for her family. Becker (1973) writes,

Man will lay down his life for his country, his society, his family. He will choose to throw himself on a grenade to save his comrades; he is capable of the highest generosity and self-sacrifice. But he has to feel and believe that what he is doing is heroic, timeless, and supremely meaningful (p. 6).

While few if any scientists would literally die for a scientific theorem, they would figuratively die for one. They would place their careers, their working lives and reputations on the line for their theorems, their beliefs. Such heroics project their acts into a timeless sphere, and this timeless heroicness is the ultimate goal, it provides ultimate meaning. To be heroic beyond one's grave, to make one's mark in history, to cheat death, becomes the ultimate

expression of one's out-of-natureness. This is worth dying for, since one's bodily death has no meaning in comparison to the meaning gained by demonstrating that one is truly special, truly God-like, truly heroic. The heroic person is the winner.

What one wins in finite games is a title. A title is the acknowledgement of others that one has been the winner of a particular game. Titles are public. They are for others to notice. I expect others to address me according to my titles, but I do not address myself with them -- unless, of course, I address myself as an other. The effectiveness of a title depends on its visibility, its noticeability to others. ... Since titles are timeless, but exist only so far as they are acknowledged, we must find means to guarantee the memory of them. The birettas of dead cardinals are suspended from the ceilings of cathedrals, as it were forever; the numbers of great athletes are "retired" or withdrawn from all further play; great achievements are carved in imperishable stone or memorialized by perpetual flames. ... It is the principle function of society to validate titles and to assure their perpetual recognition (Carse, 1986, p. 24-25).

If one is always engaged in the acquisition of titles, engaged in heroic acts, what determines the winner of these titles, what determines whether one is a hero is the public acknowledgement of one's power. Power is publicly sanctioned recognition of one's heroism: it separates the winners from the losers, the weak from the strong, the rational from the emotional, the competitive from the naive, the aggressive from the timid, the symbolic from the animal-like. Power represents past accomplishments, past heroics that are legitimized through public agreement that what was done was deserving of a heroic title. The leaders of the church had power because the public acknowledged their heroics via their God-likeness. Copernicus' ideas had power because they could logically explain through mathematics the workings of the cosmos. He was heroic because his work represented a challenge to the religious myth, an attempt to find the Truth hidden under the corruption believed in by the public. Power, therefore, means an agreement between the winner and the losers that the game has been won, and that a title can be conferred. Might usually does not make right: therefore, right is usually conferred by the losers on the winners. It is an agreement in which there must be a common belief that the game has ended and a winner has been found. A belief, by either the winner or the loser, that the title has yet to be won means that the game is still in play.

Power necessarily demands both resistance and competition. It is only through opposition that one can win, that one can gain the "hero" title. If there were no striving to compete for a title, then the act would not be considered heroic. There can be no winner without a competition for position.

The titled are powerful. Those around them are expected to yield, to withdraw their opposition, and to conform to their will -- in the arena in which the title was won.

The exercise of power always presupposes resistance. Power is never evident until two or more elements are in opposition. Whichever element can move the other is more powerful.

One can be powerful only through the possession of an acknowledged title -- that is only by the ceremonial deference of others. Power is never one's own... I can be powerful only by not playing, by showing that the game is over. I can therefore have only what power others give me. Power is bestowed by an audience after the play is completed (Carse, 1986, p. 35-36).

The hero gains power via her title which is required by her to gain sufficient proof that she is not average, that she is special, significant, and that what she does and who she is, is ultimately meaningful.

As a consequence of this out-of-nature position, however, the human quest for knowledge leads to alienation, alienation with respect to oneself and the universe. The Copernican shift, the use of scientific mythology to pursue Truth, also means a severing of one's ties with one's animal self, with one's body and with one's ties to nature. By making the body (nature) an object before us, scientific mythology removes purpose from us. The scientific world has no purpose, no significance beyond the fact that it exists. The quest for scientific knowledge is a quest for power, but power at a cost. We can gain the power to manipulate objects in the universe, including ourselves, but we do it with the acceptance that in the end there is no meaning to it. We perform tricks to show others how clever we are, we give those tricks importance by labeling them an advancement or breakthrough, but since the tricks have no meaning other than that given by trickster and supported by the audience we get trapped having to invent more tricks, more science or else the audience will leave. Since science has rendered the universe meaningless, there is an underlying awareness of the alienation this supports. But so long as science keeps producing consumer goods, keeps the illusion that it will eventually know the universe, keeps performing tricks, the alienation is not talked about.... occasionally felt.... but denied. The discovery of the scientific method, therefore, was a both a gift and a curse.

The world revealed by modern science has been a world devoid of spiritual purpose, opaque, ruled by chance and necessity, without intrinsic meaning. The human soul has not felt at home in the modern cosmos -- the soul can hold dear its poetry and its music, but these found no certain foundation in the empirical universe (Tarnus, 1990, p. 4).

Alienation from one's animal self, and from nature is a necessary consequence of an over-emphasis on the symbolic self. The belief that one can truly know the universe, places the universe as object in external relation to the self. The consequence of out-of-natureness is that human beings can no longer participate in nature, they must control it. Human beings, in this sense, are Gods who become responsible for the control of nature. It follows that nature must be tamed into submission, it must be harnessed and used to demonstrate the heroics of human endeavours in order to maintain the new illusion of significance. In past in-nature myths, we could have let omnipotent Gods or Goddesses be responsible for the universe. Now that we have dismissed them, however, we must do it.

Science is the method through which the control of nature and hence are own significance is secure. Nature, therefore, is to be probed, examined and scientifically categorized so

that the Truth of nature can be found. Scientific discoveries of nature's inner workings reinforce the belief that humans have the power to control nature. The myth gets reinforced by those with faith that it will succeed. Great scientists become heroes and their findings become emblematic dogma for others to revere. Those with lesser talents merely have to stand in the limelight created by the real heroes in order to warm themselves in a delusion of importance and shed themselves of the chill of insignificance. The average become above average when they can point to their own "scientism" and membership in the "club", their own knowledge of science that validates their statements, that allows them to share the power of the great. It is in this sense that psychology warms itself in the coat of science in order gain legitimacy and significance for those who practice it or share its beliefs. Everything becomes "scientized"; sociology, economics, politics all change to reflect better their "scientism". On the individual level, people also change to reflect the new Truth. People become technicians, and engineers and choose, for example, to be referred to as domestic engineers and sanitation engineers. This common coveting of scientific power, in some scientific and some not so scientific endeavours, demonstrates both the faith people place in science and the need they have to place themselves within a myth that will allow them significance. The more human

control that is shown over nature, the more of nature that becomes known, then the greater the strength of one's belief that the scientific myth is the Truth.

Man has begun to realize that his specific task is to unveil the potentialities of nature. Nature is no longer for him the Mother Nature or the deified Nature which produces him and provides him with the necessary conditions of life, but has become a kind of warehouse filled with the neutral raw materials needed for the creations of man. Nature has ceased to be a naturally formed world in which man finds his dwelling. It has become available matter which man can transform at will. In this way nature has lost all its sacred character which characterized it in all preceding periods, from antiquity through the middle ages...

(Van Melson, 1961, p. 220).

Let us now turn to the scientific myth.

The Primary Myth

There are neither starting nor ending points between myths, only arbitrary lines in the sand. The growth of science as the dominant myth of today does not begin with Copernicus but has threads running through the scholasticism

of the late medieval period, spanning the logic of the Greek dialogues and even reaching into the very first human stories that tried to capture reality symbolically in mythological forms. It is not that science and mythology are essentially different; rather, ultimately they are expressions of the same thing, they are expressions of a desire to find meaning in the universe.

The scientist of today attempts to make sense of her reality with the symbols and formulas she has at her disposal. She has faith in them. Faith that scientific validation of theories about the mysteries of the universe will reveal these mysteries in an objective form, as they "really" are. Sometimes she concludes that she has discovered a model that fits the reality she experiences; most times she does not. Similarly, the primitive hunter of yesterday also tried to understand the forces of nature by developing mythological models to explain natural events around him. He too, thought that he understood nature in terms of the many Gods and Goddesses found in it. Sometimes his model allowed him to predict accurately his future, most times it did not. The primary difference between yesterday's storytellers and today's scientists is that today we live under a philosophical belief that we can control nature -- that the Gods and Goddesses of nature, the mysteries of nature, are within our grasp of knowing. This act of

internalizing the power source of nature through the acquisition of the knowledge gained by science, the process of enveloping Gods' power, is an act of out-of-natureness, an act of defiance against the unpredictability of nature, against the past fears that nature has projected, the fears that remind us of our own finitude. Our fears of nature, specifically the acknowledgement and subsequent fear of one's own death, were eclipsed by an acceptance of a belief in the scientific myth. So long as one demonstrated a control of one's own destiny, not relying on a distant God for protection, then the possibility of suppressing the inevitability of one's death from consciousness became a reality. While both the primitive understanding of the universe and the scientific understanding of the universe share a common mythological theme, namely that they are both human expressions of an attempt to find meaning in the universe, to find meaning in our existential state, what separates the two is that the primitive understanding of the universe is based on an in-nature position and the scientific understanding of the universe is based on an out-of-nature position. The belief that one can control all of nature is the axiom of the scientific mythology and it is what distinguishes it from its more fearful past. The control of nature is a metaphor for the strength of ones' humanness. It is a statement against the fears that have kept individuals subordinate to the powers of the universe. It is

a denial of death.

The modern era has been dominated by a culminating belief, expressed in different forms, that the world -- and Being as such -- is a wholly knowable system governed by a finite number of universal laws that man can grasp and rationally direct for his own benefit. This era, beginning in the Renaissance, and developing from the Enlightenment to socialism, from positivism to scientism, from the industrial revolution to the information revolution, was characterized by rapid advances in rational, cognitive thinking. This in turn gave rise to the proud belief that man, as the pinnacle of everything that exists, was capable of objectively describing, explaining and controlling everything that exists, and of possessing the one and only truth about the world. It was an era in which there was a cult of depersonalized objectivity, an era in which objective knowledge was amassed and technologically exploited, an era in belief in automatic progress brokered by the scientific method... (Havel, 1992, p. A17).

There are many different landmarks that exemplify this shift in beliefs. The exploitation of the earth, colonialism, slavery, the growth of the middle class, the growth of the rich at the expense of the poor, greed, revolutions, the

growth of democracy, freedom, the decline of formal religious institutions, urbanization, the competitive spirit, the protestant work ethic, inventions, industrialization, technology, discoveries, advances in sports, art and music, the medical model, racism, human rights, the "me" generation, escapism, individualism, authenticity... etc. In short, almost every aspect of society as we know it, now represents the scientific mythology. This should not surprise us, however, since mythology has less to do with "things", in any objective sense, but rather deals with the hidden structure that allows these "things" to have importance for us. It is in our coming to understand these "things" as being important, that we reveal the myth. In an attempt to describe the scientific myth, therefore, I will highlight what I consider to be important turning points in the advancement of the scientific myth. This will in no way cover all the pivotal points in the growth of the scientific myth, but will serve as a demonstration of how the scientific myth gained dominance and what this myth means with respect to the human psyche and our existential dilemma.

Galilei as Hero If Copernicus was the first major hero of the scientific myth, then Galilei was the second. He reinforced the Copernican shift of the position of the earth with respect to the universe. Mythologically, Galilei forced

a clash between the dominant myth and the subordinate challenging myth. He brought into center stage the troubling inadequacy of the church's interpretation of the physical universe. its promise to be the holder of the Truth and revealed the nature of the clergy's placating responses to the miseries of the common citizen. These were all highlighted when Galilei pointed out that the earth and hence man was not the center of the universe, as the religious myth had portrayed. The questioning of the church's authority through the questioning of the validity of its doctrine provoked a battle for the grand myth. While one battle was fought between the church and Galilei, for which he was excommunicated, the more significant battle, mythologically speaking, was between the scientific myth and the religious myth. The mythological struggle was a fight for dominance. The winner would become the vehicle of the grand myth. The winner would represent the Truth.

Galilei, therefore, did not end the game, but weakened the position of the church as the vehicle of the grand myth. In Kuhn's terms, Galilei was an essential ingredient in the extraordinary science period, where the erosion of an old paradigm is brought about by a persistent challenge to it by an anomaly that cannot be ignored. For this Galilei became a hero.

Descartes as Hero Descartes became a heroic player because he represented another pivotal point in the death of the religious myth. A philosopher and scientist, Descartes promoted a scientific method based on the certainty of mathematics that would allow him to construct a complete science of nature about which he could have absolute certainty. Descartes saw the problem of our dualistic state in terms of an obedience to God or to science. Mythologically he understood the struggle between an animalistic self that required a God for safety, and cognitive self that had the power to stand alone. The dilemma was reconciled through an illumination Descartes had, which he attributed to God.

The crux of Descartes' method is radical self doubt -- all traditional knowledge, the impressions of his senses, and even the fact that he has a body --until he reaches one thing that he cannot doubt, the existence of himself as a thinker. Thus he arrives at the celebrated statement, "Cogito, ergo sum," "I think therefore I exist." From this Descartes deduces that the essence of human nature lies in thought, and that all things that we conceive clearly and distinctly are true (Capra, 1988, p. 59).

Descartes threw philosophical weight behind a scientific method which he believed the only way to come to the Truth: and hence, if it is the Truth, it must be God's truth. Descartes placed another nail in the coffin of earthly religious authorities, undermining the belief placed in them, but attempted to save God from the same fate by supporting a belief that science was divinely inspired.

The significance of Descartes' "Cogito ergo sum" is that it drew a line between the body and mind and supported the mind as the carrier of the Truth. From this came the belief that the mind is to be trusted and our emotions, our bodily selves are not, that the truth is cognitive not emotive, rational not spiritual, that Truth can be found in an objective scientific analysis of nature backed by mathematical equations and not by a spiritual connection with nature or a participative in-nature philosophy. Descartes demonstrated what appeared to be a way out of the existential dilemma. He understood science to be God's method of understanding the universe which God was sharing with humans, in particular himself. He avoided a direct conflict with the church by incorporating church doctrine into science. He enveloped the remaining power of the church and forced it into a new direction, a symbolic, mathematical, scientific direction. Descartes coveted the old vehicle of Truth in order to let his version of the new

vehicle of the Truth emerge. He entrenched the medieval belief that the body (and bodily desires) are the haven of the devil and, therefore, cannot hold the Truth. By philosophically separating the mind from the body and by placing the mind in allegiance with the Truth, Descartes psychologically severed one's True self from one's animal self. Descartes philosophically legitimized the power of heroic acts for everyone. He entrenched the correctness of the belief that the world can be known to humans, that humans are "small Gods", that they are special because of their ability to think, to think rationally. It is rationalism and scientific methodology that are legitimized as the new vehicle of the Truth. By freeing oneself from the chains of the religious myth, by demonstrating philosophically that humans have the power to know the universe, that humans can become "small Gods", Descartes places the whole universe as object before a symbolic self. No longer could the world be seen as part of the self or the self as part of the world. No longer could the world contain fairies, nature Gods and Goddesses, or magic. The denial of a participative world meant a severing of the symbolic self from the animal self, the mind from the body, humanity from nature. Descartes places humanity on its own in an alienated, but knowable universe. Humanity is almost alone, almost Godless.

Have you heard of that madman who, in the broad light of the forenoon, lit a lantern and ran into the marketplace, crying incessantly: "I am looking for God!" ... As it happened, many were standing there who did not believe in God, and so he aroused great laughter ... The madman leapt right among them ... "Where is God?" he cried. "Well, I will tell you. We have murdered him -- you and I ... But how did we do this deed? ... Who gave us the sponge with which to wipe out the whole Horizon? How did we set about unchaining the earth from the sun? Whither is it moving now? Whither are we moving? ... Are we not falling incessantly? ... Is night not approaching, and more and more night? Must we not light lanterns in the forenoon? Behold the noise of the gravediggers, busy to bury God ... And we have killed him! What possible comfort is there for us? ... Is not the greatness of this deed too great for us? To appear worthy of it, must not we ourselves become Gods?" -- At this point the madman fell silent and looked once more at those around him: "Oh," he said, "I am too early. My time has not yet come. The news of this tremendous event is still on its way ... Lightening and thunder take time, the light of the stars takes time to get to us, deeds take time to be seen and heard ... and this deed is still farthest from them than the farthest stars -- and yet it was they themselves who did it! (Nietzsche.

1882, p. 156).

Newton as Hero Newton's *Mathematical Principles of Natural Philosophy* was the crowning achievement of the modern era that entrenched science as the new truth. Newton's discoveries of the forces of gravity and motion were key illustrations of the power of the new vehicle of Truth. It represented a common, relatively simple principle that applied to all the universe. Whether it was a falling apple or the movements of the planets, the same theory applied. It reinforced the Cartesian view of nature, that there were universal laws underlying the forces of nature and that these laws were accessible to humans through the mathematics of science. It was this principle of universality, the view of nature as machine, that embedded a philosophical belief that the universe could be known. The method had been found and all that remained was to work on the details.

In the Newtonian view which was still popularized by the religious myth, God was seen to have created a world of material particles with forces that interact among them. In the beginning He set these forces in motion and, like the inner workings of a watch, the universe continued to run ever since. This mechanistic view of the universe was closely related to determinism -- the belief that what happens occur with definite causes and definite effects, the

belief that any part of this system can be understood and in principle predicted with absolute certainty.

The picture of the perfect world-machine implied an external creator: a monarchical god who ruled the world from above by imposing his divine law upon it. The physical phenomena themselves were not thought to be divine in any sense, and when science made it more and more difficult to believe in such a god, the divine disappeared completely from the scientific world view... The philosophical basis of this secularization of nature was the Cartesian division between spirit and matter. As a consequence of this division, the world was believed to be a mechanical system that could be described objectively, without ever mentioning the human observer, and such an objective description of nature became the ideal of all science (Capra, 1988, p. 66).

Newton gave us a formula which entrenched the mechanistic world view. From this point on God became a mathematician. Newton demonstrated that science could determine Truth and, therefore, he was pivotal in the shift from a religious myth to a scientific myth. For this Newton became a hero and his work was honored as the exemplification of success of the scientific method. While science has changed dramatically since the sixteenth century, the power of the Newtonian

world view still ripples on today.

The Growth of the Middle Class

The structure of society and the personality of man changed in the late Middle Ages. The unity and centralization of medieval society became weaker. Capital, individual economic initiative and competition grew in importance; a new moneyed class developed. A growing individualism was noticeable in all social classes and affected all spheres of human activity, taste, fashion, art, philosophy and theology (Fromm, 1969, p. 60).

Economically, the late medieval period saw a significant growth as a result of the security of the medieval period. While the individual remained distant from the higher classes of society, the trade between villages and nations, the exploration and exploitation of new colonies meant a significant growth in the merchant middle class. The rise of the middle class, through the expansion of trade was pivotal in the rise of the scientific myth, since it represented a growing strength of the masses that would seek out and demand change with respect to the prevailing power structure. While the power they sought was predominantly economic, their recognition that a better life on earth

could be sought, was a significant change from the medieval point of view. Over time, the growing power of the middle class would force change as they, en masse, began to see the restrictiveness of the clergy and the state, the constraints of the religious myth.

The average middle class man was lifted from the burdens of previous ages and could see for the first time, his own power, a power that resided in his own out-of-natureness. While the difference in his life was predominantly material in nature, the psychological effect of this difference stimulated the symbolic part of the individual psyche, pushing him forward into a previously suppressed side of himself. This momentum culminated in a need for a change in the dominant religious myth, a need to change to a myth that would represent this new found power in the scientific myth. The growth of the middle class represents a loss in belief in the old myth.

As time passes, as power accumulates in the pockets and in the psyches of the common man, the demand for change grows stronger. With advances in technology, with the growth of consumer products, the proof of the power of the scientific method becomes obvious. Urbanization, industrialization and the consumer mentality are all evolutionary processes in the growth of the middle class. It is impossible, of course, to

determine if industrialization, for example, resulted in a strengthening of the scientific myth or whether the scientific myth pulled society towards industrialization. It is probable that both occurred together since the direction of myths in a society at any one point in time are always convoluted. What is most significant about the rise of the middle class is that for the first time the common individual had access to the power that hitherto was the domain of the elite. Neither the elite, nor the very poor disappeared in this new order; in fact, one could make the case that the divisions between them have increased. Yet, the fact that there was a mass improvement in the standard of living for a significant portion of the total population, and that this increase in standard of living was a direct result of the advances of science, through advances in technology demonstrated the strength of the scientific myth at the grass roots level, and consequently had a profound effect on the individual human psyche and on the further entrenchment of the scientific myth in society. The individual saw and wanted the gains offered by the scientific movement and the mythological philosophy of science. Its out-of-natureness offered a psychologically safe way of changing myths.

It is important to recognize that change in any form has both positive and negative consequences. While it is true

that some felt a new freedom in the growth of the middle class. others felt it a threat. The old order was shaken, and with it the security that was woven into it. As with all changes of myth, from individual intra-psychic changes to global paradigmatic changes, the change process itself is necessarily difficult. Intra-psychically it is a battle between our in-natureness, our desire to hold onto the piece of security we currently enjoy, not wishing to push our luck with the unknown and frightening forces of nature, and our out-of-natureness which instructs us to find the courage to push out of the "herd", to take charge, to challenge the odds, to be bold, to be immortal and to live forever. At the societal level the collective forces of our individual struggles are fought out in various battles for control of the dominant myth. For some, it is a time of great hope, for others it is a time of despair. The process of individuation, of growth, of change requires a period of death in order for rebirth to take place. It is always a cycle of death and rebirth, a cycle of ever changing myths, a cycle that enshrines the existential struggle that is life. The rise of the middle class, therefore, sees the emergence of a new myth trying to come of age in a hostile environment. It necessarily is a struggle for rebirth through the death of the old myth.

The Reformation

... Eck, in Latin, made an objection that well expressed the view of the church: Martin, your plea to be heard from Scripture is the one always made of heretics. How can you assume that you are the only one to understand the sense of scripture? Would you put your judgement above that of so many famous men and claim that you know more than all of them? You have no right to call into question the most holy orthodox faith, instituted by Christ the perfect Lawgiver, proclaimed throughout the world by the Apostles, sealed by the red blood of martyrs, confirmed by the sacred councils, and defined by the church... and which we are forbidden by the Pope and the Emperor to discuss, less there be no end to debate. I ask you, Martin -- answer candidly and without distinctions -- do you or do you not repudiate your books and the errors which they contain?

Luther made his historic response in German: Since your Majesty and your lordships desire a simple reply, I will answer without distinctions... Unless I am convicted by the testimony of Sacred Scripture or by evident reason (I do not accept the authority of Popes and councils, for they have contradicted each other), my conscience is captive to the Word of God. I cannot and will not recant anything, for to go against my conscience is neither

right nor safe. God help me. Amen (Durant, 1957, p. 361).

Luther became a hero because he successfully challenged the old myth. He threatened the authority of those in power by declaring the right of the individual to interpret scripture and to accept or reject civil or ecclesiastical decrees according to personal judgement or conscience. This was a defiant act, an act of out-of-natureness that again wounded the religious myth. The threat to the church was not only to its own power, but to the whole of society, for the church fathers understood their role in society as keeping it safe for others. With their downfall, with a loss in personal power, with a forced move back into the "herd", the fears of their in-natureness, their insecurities rang forth. The church had no choice but to fight Luther and the whole reformation movement. The death of their myth, of what they believed in, meant psychologically a death of themselves. It meant the end of their significance.

The reformation was not just a challenge to the clergy, but was an act of revolutionary significance because it drew into question the right of the clergy to represent God. The reformation emphasized the right of the individual to talk directly to God, bypassing the clergy and thus mythologically accentuated the individualization of the

self, the self stepping out of the "herd". This individualization, this process of growing up and separating from the bonds that had held one in safety for so long, represented a further break from the religious myth and accentuated the strength of the self to stand alone. The reformation, therefore, was aligned with the scientific myth because it emphasized the power of the individual to stand alone, to step out of the "herd", to existentially side with one's symbolic self. The reformation was an anomaly that could not be ignored.

Revolutions Political revolutions are, in terms of our duality, acts of stepping out of the "herd", of declaring one's uniqueness, one's right to represent oneself. The French, English and American Revolutions saw the rise of democracy, a principle of the age which demands respect for the powers of the individual. In particular, the emergence of the United States as a nation, is a mythological act of rebirth, of shedding the old skin of an old myth for a new one. The War of Independence not only meant a political break from the British Empire, a break from the continent, a break from the religious myth, it was also mythologically a rebirth into a new myth, a scientific myth. The United States is representative of the philosophical, political, economic, psychological and mythological change from an old myth to a new.

The upheaval in America was a revolution as well as a war of independence. The cry for liberty against Great Britain raised echoes within the colonies themselves. The Declaration of Independence was more than an announcement of secession from the Empire: it was a justification of rebellion against authority... The American constitutions seemed a demonstration of the social contract. They offered a picture of men in a "state of nature," having cast off their old government, deliberately sitting down to contrive a new one... listing specifically the inalienable rights of men -- inalienable in that they could not conceivably be taken away, since men possessed them even if denied them by force... America became a kind of mirage or ideal vision for Europe, a land of open opportunity and of new beginnings, free from the load of history and of the past... (Palmer & Colton, 1978, p. 337-340).

The inalienable rights of men as declared in the Declaration of Independence, was a statement of human control over destiny. It was an out-of-nature act that cast off the shadows of past authority and was metaphorically part of the culminating strength of the scientific myth. The United States was a new land with a new ideal and it was no accident that it used technology and science to advance its power in the world. The United States became one of the

major world military powers with the dropping of the atomic bomb, a bomb developed by science.

Scientific Methodology We have said that a primary principle of the scientific myth is the scientific methodology itself. Scientific methods allow the former mysteries of the universe to be revealed to humanity through a deliberate, rational and mathematical process.

The fundamental assumption is that there exists a single, infinite and rational totality of being, which can be fully known in a fully rational way by a single science by means of a single method. In other words, there is only one objective world, which in principle is accessible to everyone and can be known in an objective way, as it really is, through a single science (Kockleman, 1966, p. 73).

If one is to know the objective world, then one must start with that which is most evident. The more complex things, are best understood by examining the simpler elements that make them up. Reductionism -- the practice of understanding the complex through a logical understanding of the smaller elements that are derived from the complex -- becomes a crucial element of scientific methodology. Here we see the Greek logical influence being extended into an arm of the

scientific myth. If nature is nothing more than a big machine, then the way to discover how this machine works, is to reduce it to its smallest, most evident parts. When all the smaller parts are understood, then a complete knowledge of the more complex system can also be understood by simply linking all the parts together in a logical fashion.

Inherent in reductionism, is the deterministic belief discussed earlier. The only way to justify linking all the parts together to understand the more complex objects in nature, is to first accept the principle of causality. One thing must be linked to another through a causal relationship, through a relationship which states that a change in one object occurs as a result of a change in another (others). This is the cause and effect relationship. The belief is that there are no objects in nature that do not fall under this relationship. True, causality may be linked to many objects, and hence a perception of randomness may occur, but in the end, all that is required is a detailed understanding of the relationships between the one object and all the others in order for that object to be perfectly determined or controlled. Reductionism requires causality which is based on a deterministic belief.

Reductionism becomes the method that justifies the categorization of nature. Nature loses its mystery, loses

its connection with humanity, and becomes an object that is to be dissected into its smallest parts so that its mysteries can be known, so that it can be controlled. Control of nature becomes a goal of the scientific method, since obviously one cannot demonstrate total knowledge of something until one first separates oneself from the "thing". Only then can "it" be manipulated objectively, externally, scientifically. Only then can "it" be controlled.

With the emergence of a myth that promotes the specialness of the individual, the control of nature becomes a metaphorical act of this myth. The desire to control nature is a human desire to demonstrate one's own out-of-natureness, one's own power over nature and metaphorically over one's in-natureness. In this sense the denial of one's animal self, the denial of one's in-natureness is assured through the demonstration of one's control over nature. The human capacity to control nature is a demonstration of one's God-likeness, it is a demonstration that like God, humans also have the ability to unleash the powers of nature in any direction desired.

If significance is to be gained by siding with one's symbolic self, by being rational, then it must consistently do so in order to suppress the knowledge of the insignif-

icance of life that is revealed through knowledge of one's animal self. In other words, in order to maintain the myth that Truth is found only in a symbolic self, you must suppress your bodily self and concentrate on your rational, logical skills. since the former will remind you of that which you are trying to deny. *The scientific solution to the existential dilemma is denial.*

The denial of one's animalistic self prevents full conscious realization of the difficult situation that life presents us, namely, that we are part symbolic and part animal, and that despite our greatest efforts to believe we are something more than just an animal with a decaying body, we cannot be certain that in the end that body and us with it, will die, die meaninglessly; and that all that we do in life cannot prevent us from fearing that with this meaningless death comes a meaningless life. While it could be acceptable that death is meaningless, what is unacceptable is that life is meaningless. And yet, irrespective of all attempts at finding the ultimate meaning to life, in the end we are left only with hope, not proof, that life has any purpose. Truth is not known and therefore, we have no ultimate, final answer; we do not have a guaranteed meaningful life. This unacceptable situation leads us to create meanings through the pursuit of truths, which via myths, in this case scientific myths, we trust

will add up to something, will constitute the Truth. If we cannot know the meaning of life, then we must pretend we can find it, or create it, and we do this through the incorporation of a myth into our belief system. This is the existential purpose of the scientific myth and, therefore, of the scientific methodology that provides the credible structure and practice to the myth. If we cannot keep the animal self at bay, then we must admit our death. The scientific myth, through its scientific methodology, provides no answers with respect to the meaningfulness of death. In fact, it promotes a mechanistic relationship to death. Death occurs when the plug is pulled on the machine, it just happens, you just die. This mechanistic understanding of death however, has never been acceptable, could never keep the existential fears of meaninglessness away. If you live and just die in an inanimate and numb world, then life itself becomes meaningless. What happens to purpose in life? The possibility that in the end we may live and die without purpose, without having done anything significant, *creates an overwhelming need to justify living any longer*. The impossibility of using one's symbolic self to come to any logical, rational conclusion on the meaningfulness of life creates such angst, such dread, that a consistent powerful myth that denies the existence of anything outside that myth, is absolutely required. The myth must enable us to remove from consciousness the

insignificance that comes with the acknowledgement of one's death. A comprehensive myth, one which accounts for everything, is, therefore, not just a desirable and logical afterthought, it is the only goal possible. Faith (in a grand myth), as Tolstoy rightly observed, is that by which we live.

Scientific methodology is the infrastructure of the scientific myth which has as its central existential purpose the denial of one's death. Death becomes a taboo subject in a society which promotes a scientific myth because the open acknowledgement of death would break the code of silence and shatter the religious devotion we have to the fallacious scientific myth. The "death" question begs "the significance of life" question and, therefore, the "death" question is best kept buried. It is best that one's energy be forced into something more productive, more healthy, namely the living of one's life under a scientific myth. Faith in a Godless myth, in a scientific myth is absolutely necessary in a Godless society if one is to maintain a belief in the significance of one's life. In this sense, science becomes God-like and the scientific myth covets the power of the old religious myth. In the end, we must live under a myth, some myth, -- any myth, or face the harsh conclusion that life is meaningless. The creation of significance is the function of the myth, is the grand myth.

The goal of science is to obtain the power of nature that was once the territory of God. By so doing, the individual becomes God-like and through the mythological system of science, provides himself with the security needed to ensure that the illusion of significance is gained. By promoting human control over nature, the individual takes a stand out of the "herd", unleashes himself from past authorities and takes a position along side a science that is humanly created and humanly controlled. If power is gained through the knowledge of how the objective world works, and the gaining of that knowledge is performed solely through scientific acts based on mathematical relations, then only that which is quantifiable, only that which can be measured scientifically can have significance. In other words, the quantifiability of objects denotes whether something is an object or not, whether it is consistent with the scientific myth or not and hence whether it is part of the Truth. If it is not quantifiable, if it is subjective, then it becomes an extension of the human bodily self and hence loses all significance, all power. The Cartesian mind/body split severs the world into that which is scientific (mind-like, rational, symbolic) and that which is not scientific (body-like, emotional, instinctual). That which is scientific is quantifiable, concrete, objective, publically knowable and, therefore, holds significance since it is in metaphor relationship to the Truth. That which is not scientific is

qualitative, ephemeral, subjective, experiential, and holds no significance since it is essentially fiction, not the Truth. It is only through the pursuit of Truth that significance is found.

In a scientific world view, the world is split into human and non-human elements. The scientific myth states that Truth is only found in non-human elements, the elements of the objective world. The only real world is a scientifically validated one. Everything else takes a position to the rear of that which has scientific validity, that which is True. The strength of maintaining a scientific myth is that it allows the holder to possess the power of nature, but the weakness of it is that it automatically places the individual on the outside of the "real" world. The upside to science is that it gives you power and control; the downside is that your "humaness" gets cast in terms of circuits and wires, with a little flesh, and the wires are the "better" part, although of no lasting significance.

The individual is severed from the objective universe. We have the power to manipulate the "real" world, but we do not live in a "real" world. We do not "belong". A product of the scientific myth is alienation.

It is not difficult, therefore, to see why human endeavors become "scientized". You cannot hope to declare yourself or your products as legitimate unless you gain the confidence of the people on whom you rely to confirm your significance (either directly to you or through your products). You covet, therefore, the myth which offers you and your products significance, you find *faith* in science. This faith, as we shall soon discover is exactly what the discipline of psychology, through membership in the scientific community, has developed.

Scientific methodology is a formal system, both logical and rational, through which nature becomes known, through which control over nature is demonstrated. Formal methodology, such as hypothesis testing, is a method through which facts become known and accepted as the Truth. Over time, as faith in the success of this science is secured, as technology provides physical evidence of the power of this method, then only that which is backed by a scientific method, that which has scientific proof of its validity becomes the Truth. All other competing truths are judged by the ultimate measure of Truth, the scientific measure.

A Lesser Myth

Women

So where are all the women? Is it just coincidence that there is an absence of women in the growth of the scientific myth, that the heroes are male, that the scientific myth is primarily a male myth? The scientific myth is based on a premise of control over nature and represents the metaphorical vehicle of the grand myth, Truth. In this form, the Truth as myth is embodied through the underlying premises of science, namely the emphasis on mind/consciousness/rationalism and not on body/experience/intuition premises that, coincidentally, have been assigned to nature and to a lesser extent to women. It is important to connect with women, therefore, because, as a lesser myth within the context of the dominant myth, they provide for the dominant myth an in-nature link. The need to place women in a subordinant role reinforces the fact that the dominant myth is out-of-nature since women are more representative of nature. For the same reason that the women healers during the Christian myth had to be subdued, women, in the reign of a scientific myth, also must be subdued. An examination of women as a lesser myth will both be an exploration of the in-nature side of the scientific myth and will also serve to foreshadow the role women will play when inevitably an in-

nature myth pushes forward in an attempt to overthrow the reigning scientific myth.

The underlying processes of science, science itself and through abstraction the culture (since science is the dominant myth of the culture) are thought to be superior to non-scientific (nature-like) approaches because of a demonstrated ability to control the underlying processes of nature, and hence nature itself. Women are generally absent from science and, consequently, from the levers of power within our culture because women mythologically represent the human link to nature.

Women are not entirely identified with nature, but are held to be closer to it than men. There are three reasons for this position: (1) women also participate in culture, we are considered intermediate between culture and nature. However, what is distinctive about women's physiology is connected with our reproductive role, and our bodily involvement with reproduction is greater than men's. Thus we are seen as more a part of nature than are men. (2) Because women nurture infants and children, who have not yet acquired culture (and are therefore closer to nature). Again, however, women are intermediate between culture and nature because our role is to socialize children, that is, to transform

"natural" humans into "cultural" ones. Women who care for children are kept closer to domestic cycles, hence to the "natural" family, than men, who circulate in the more artificial "cultural" settings of society beyond the family. (3) Women's psyche is thought to be closer to nature. Women deal more with what is concrete, while men deal more with what is abstract. This results from the difference between the ways females and males are socialized by their mothers (Orther, 1974, p.34).

Women, during the rise of the scientific myth, were kept from science because it was understood that since they are closer to nature than men, they are less suited for scientific endeavors. Women were believed to be physically, socially and psychologically closer to nature. They were in-nature suited and science was an out-of-nature business. Of the few who did make it into the male domain, they were accepted only on their ability to be man-like, that is, to act in accordance with the scientific myth. While today we see a refusal on the part of most women to accept this definition, at the time, the two elements of faith (in the myth) and power (over women) were well entrenched and, therefore, the myth was generally accepted as Truth.

In the Victorian era, for example, the scientific categorization of right and wrong behavior, supported in

part by the decaying religious myth, crept into the moral code of society to the extent that there was great pressure for women and men alike, backed by a right to use physical and/or psychological force where necessary, to overtly behave in a "proper" fashion. The Victorian age represents an attempt to secure an in-nature, but non-religious myth. If a religious myth wasn't allowed in a scientific paradigm, then a social myth, a myth of the people (and hence partially a step out of the herd) was created to keep them safe. The social myth represents an attempt to secure meaning within a threatening scientific myth which allows only alienation.

... within the Victorian pattern of values, society was God... They had lost their faith in religious values of their ancestors and put their faith in society instead. It was only by wearing the corset of society that one kept oneself from lapsing back into a condition of evil. Formalism and prudery were attempts to suppress evil by denying it a place in ones "higher" thoughts, and for the Victorian, higher spiritually meant higher socially. There were no distinctions between the two. To be a gentleman was as close as you would ever get, while on earth, to God (Pirsig, 1991, p.267)

There were rules for everything, from how to think, to how to dress, to how to act properly. If human control over nature was to be believed, then a human law for correct (non-nature) behavior had to be established. Nature had to be driven out of humanity if the myth of our God-likeness was True. The shunning of overt sexual behavior, for example, was deemed "proper" because sexual behavior was linked to the bodily, animal self. To enjoy sex or at least to admit to enjoying it, was a statement of one's in-natureness and hence was against the dominant myth. Sex was for procreation only and was a duty to be performed. The Victorian age, therefore, represents a shift away from a formal religious myth, replacing the omnipotent powers of God with the omnipotent power of society. Women were less condemned to a social role by God in this period, than they were condemned to it by "social grace".

Aside from the obvious patriarchal control over women that the exclusionary policy of the scientific myth represents, it may also be understood in terms of a metaphorical act of one's existential dilemma. We have said that despite our attempt to side with either an in-nature or out-of-nature definition of self, that in the end, we can never totally dismiss the other. If the scientific myth is a myth of out-of-natureness then for my statement to be logically true, there must also be an in-nature myth available as well. The

in-nature myth is expressed in terms of the roles women were assigned in society. Mythologically, under the scientific myth, men are God-like and women are animal-like. Women are seen as "other" in relation to men who are the "one".

The category of the *Other* is as primordial as consciousness itself. In the most primitive societies, in the most ancient mythologies, one finds the expression of a duality -- that of the *Self* and of the *Other*. ...Otherness is a fundamental category of human thought. Thus it is that no group ever sets itself up as the *One* without at once setting up the *Other* over against itself. ...No subject will readily volunteer to become the object, the inessential; it is not the *Other* who, in defining himself as the *Other*, establishes the *One*. The *Other* is posed as such by the *One* in defining himself as the *One*. ...Here is to be found the basic trait of women: she is the *Other* in a totality of which the two components are necessary to one another. ...She is defined and differentiated with reference to man and not he with reference to her; she is the incidental, the inessential as opposed to the essential. He is the Subject, he is the Absolute -- she is the *Other* (de Beauvoir, 1948, p. 81-83).

Society maintained a dichotomy of distinct male and female roles (the one and the other) because these roles were a necessary balance, metaphorically speaking, of the internal existential struggle. The individual male, for example, will be free to explore his out-of-natureness only to the extent he has access to a secured in-natureness. He secures his in-natureness through the systematic coveting and domination of women. By establishing women as "other".

The coveting of women (women as property) allows him access to his in-natureness since for him, she, by her nature, has access to nature, and, the domination of women (the power to control women through control of the levers of power within society and relationships), ensures him the security he needs to explore his out-of-natureness, i.e., to become a man. In fact, the domination of women is a statement of one's out-of-natureness since it is metaphorical of an act of control over nature, which, in turn, is the goal of the scientific myth. That does not mean that domination over women did not occur prior to the scientific myth, only that this domination is a metaphorical act that is linked to one's out-of-natureness.

Since being a man is a statement of one's out-of-natureness, as defined by the dominant myth, then the individual male must strive to be a man in order to gain the

security he needs to live with the reality of his existential state. In other words, since the individual male must accept a myth in order to survive, and since the fear of being wrong, with all the existential consequences that being wrong would mean, is so great, then most men will not have the internal courage to go against the dominant myth. The acceptance of the dominant myth, however, establishes a patriarchal relationship to women in order to covertly maintain a link to that which the myth denies, namely, one's in-natureness. Seen mythologically, therefore, the patriarchal system is much more than just a grab for power, it is a necessary consequence of a myth which maintains an overemphasis on one's out-of-natureness. The patriarchal system, which has been largely denied by those maintaining it, is a necessary reaction to a skewed out-of-nature system that also denies one's in-natureness. To admit the imbalance of the patriarchal system is to admit one's in-natureness and hence to bring forth all the angst that this admission would unleash. Like the religious myth before it, the scientific myth works well so long as all the players have faith in the myth and those in power have the necessary resources to either convert any non-believers to the myth or control/destroy them.

As for the individual woman, she too is caught in the existential dilemma that pulls her in both an in-nature and

out-of-nature direction. Unlike men, however, she does not have a myth that will allow her the illusion of significance that comes with the denial of one side of the self. She is constantly reminded of her in-natureness both by bodily functions and by her social role as the Other. Her out-of-natureness, her need to be an independent self, the need to completely be herself, is channeled through an attachment to the One, the male One. She becomes "the better half", "the wife", the mother, the Madonna, the seductress, "the bitch". Her ability to be the One, to project her out-of-natureness comes only in terms of being the Other, on accepting her given role. In the end, she is defined only in terms of the Other role. If she chooses to be the One as defined by the scientific myth, she can do it only by becoming male-like. The scientific myth affords her only a male out-of-natureness, which of course still means a loss of self. She must still be Other.

Unlike men, a woman is not allowed to feel secure in herself. As the Other she is constantly reminded of her inappropriateness. She is aware of herself as Other. The male, by denying his in-natureness, secures a "true" self by aligning himself with the dominant myth. He is legitimized. The woman, as Other, cannot deny either her in or out-of-natureness. She finds sanctuary from angst only through dissasociation, only by attempting to deny both her body and

her mind. To integrate herself, to become whole, is to bring into consciousness one's existential disposition. Like the male she feels the pain of seeing her total self. Unlike the male she cannot find peace in an out-of-nature myth; she instead must deny both sides of herself, feeling disgusted with her body and betrayed by her mind. She is never beautiful enough, and never smart enough. She may, from time to time, align herself with one side or the other, but this move provides her with no peace. As the Other she is constantly reminded of her duality. If she aligns herself with her body, she becomes, for example, "the dumb blond" exploited for her sexuality, and if she aligns herself with her mind, she becomes the "stuck-up bitch". The only safe ground is to become neither, to be undefined, to be the Other.

Psychology Psychology as a discipline evolved out of the acceptance of the scientific world view. Of course there were previous psychological explanations of things that were predominantly cloaked in religious symbolism (i.e., the devil possessing the insane), in conjunction with the religious world view that was then dominant, but the discipline, like almost all other disciplines that emerged from this era, evolved together with the emergence of a deterministic, reductionistic categorical understanding of nature. If nature was a machine, then human nature, being

part of the greater whole, could be categorized and sectionalized into its fundamental parts in order to completely understand it. This, at least implicitly, was the discipline of psychology's mission, which moved eventually from the goal of understanding the mind (psyche) to the self proclaimed mission of nothing less than the prediction and control of human behaviour.

Prior to Descartes, the mystical tradition had favour in Europe; it had an audience that was faithful to it. Following the Aristotelean philosophy, there was room for an understanding of nature that allowed nature to be alive, that allowed it to have a soul. Aristotle's anima mundi was the philosophical understanding of this conception of nature and it itself had roots in the Gods and Goddesses of the nature religions that came before it. According to Aristotle, there was a vegetative soul that gave living form to plant life, an animal soul that shaped the instincts of animals, and a rational soul that essentially gave us consciousness. Human nature came to be understood in terms of both the animal and rational soul, thus allowing a link to the body and through it, to nature. All three "souls" became mythologized and allowed nature to be deified (Sheldrake, 1992). Their were spirits in everything: the forests became haunted, humans became possessed with magical powers and lands became sacred.

Over time, as I have already pointed out, the Catholic Church incorporated most of these folk traditions and myths into its own religious mythology. Churches were built on old sacred grounds, the Mother Goddess was replaced by Mother Mary and the power that had previously been in the hands of the priestesses of the "craft" were now transferred to the hands of the priests of the church.

In conjunction with this change, mental illness, which had previously been defined in terms of ill favour with the Gods and Goddesses, was now defined in terms of possession by the devil. The psychological problems had not changed, but the mythological explanations (and actual treatments) of them had.

Descartes, using the deductive reasoning of the Platonic tradition, dismissed the vegetative and animal souls, and like Plato who had discerned that there was only one source of the light in the cave, found only one source of our being, namely thought or reasoning itself (Cogito Ergo Sum). Coming from within the religious myth, he quickly added that reasoning was God-given and therefore, by extension, still allowed God a place at the head of the line. Descartes dismissal of a vegetative and animal psyche however, had significant ramifications for the understanding of the human being. As Descartes' ideas found favour with the masses, the

defining of human spirit, of the human soul, became contained solely by the rational soul. The body, or animal soul was dismissed and with it the conscious link to our bodily selves, to our animal self, to nature, and existentially to death.

With the animal self out of the way, so to speak, the compartmentalizing of all of nature was quickly pursued. Medicine took its greatest leap in the early years of the scientific myth, as it became acceptable to dismiss any spiritual connection between the body and the human (rational) soul or to regard the soul as irrelevant altogether. Hence experimentation with the workings of a body, which was essentially an inanimate machine, was increasingly legitimized. All of nature could be broken down into its smallest parts, understood at the simplest level and then reassembled in a complete understanding of the whole. This reductionistic and largely mechanistic approach to understanding the human body became the medical model. The medical model was the understanding of our bodies (and by implication our minds to the extent that mind and brain are equivalent) from within scientific mythology. Whatever was leftover, e.g., the "spirit" or "soul" was regarded as unimportant and was left to the increasingly marginalized discipline of theology.

Psychology as a discipline took root out of the schism that was created with the inception of the Cartesian mind/body split. Psychology represents a link between the old in-nature mythologies and the newer out-of-nature mythology. The psyche as "soul" was essentially the original pursuit of psychology, but the notion of a "soul" itself in a scientific world view that essentially dismisses the actual existence of spiritual entities, became problematic. In an effort to maintain power and through its significance psychology overtly reported to be trying to predict and control human behaviour, this being a scientific, rational endeavor, while always covertly maintaining a link to the animal side. Although this is not any different than the hard sciences, the hard sciences are better able, by virtue of their domain of research, to maintain cover. No science has ever dismissed entirely its animal side. All scientists are human and therefore cannot help but present both sides in their work. Psychology as science, however, because the nature of what it is studying is always directly rubbing shoulders with its animal side, has had a much more difficult time covering it up. The history of psychology, therefore, is ultimately the history of a struggle between our out-of-natureness and our in-natureness.

As the discipline of medicine gained legitimacy by demonstrating an understanding and hence control over the

workings of the body, the view that human nature, if it cannot be spirit, must ultimately be concrete in form, must ultimately be within the human body becomes an accepted myth. Psychology, therefore, in order to gain legitimacy itself within society, also accepts this myth and since the human soul is rational in nature, the brain becomes the ultimate focal point for psychological research. The acceptance of a scientific myth means that the search for human nature becomes a search in the only area left open to it by the dominant myth. Human psychology becomes heavily linked with brain psychology and the discipline of psychology (particularly clinical psychology) becomes heavily linked with the discipline of medicine. The medical model, concerning itself with the diseases of the body covets psychology and over time the religious demons that had once possessed the insane, become the diseases and disorders of the mind or brain. Again the psychological problem remains the same, even if the mythological explanation of it changes.

While psychological problems became defined in accordance with science and in clinical psychology specifically with the medical model, psychology itself spreads out in many directions searching for its scientific roots. Psychological experimentation becomes scientific experimentation with the acceptance of the scientific method of objectivity,

determinism and verifiability. However crude the early psychological experiments may now appear, they were a reflection of the dominant myth and a reflection of the dominant scientific thinking of the day.

Freud, for example, developed his understanding of the interplay between conscious and unconscious forces from Newtonian theories on attraction and repulsion and from mechanistic theories of neurology. The mechanistic understanding of physiology, that body chemistry and the nervous system be understood in terms of an electrical system, and that the nervous system acts as a conductor for the body, coupled with Helmholtz's conservation of energy theory (the idea that the greater the external stimulus, the greater the consequences on the CNS since it is the conductor for the body and since no energy could be lost), lead Freud, a neurologist, to investigate the role of energy in the body. After a failure to find a physical verification of his theory, Freud took his energy research and reworked it into a scientific explanation for his psychological theories on the energies (id, ego and superego) of the psyche. Freud believed that psychic energy (ego) followed the laws of motion, that it was attracted to a direction of least resistance (id), that it required an external force to put it in motion (superego) and that once in motion it would not come to rest unless acted upon by an external force (the

therapist). He further believed that neurons were energy particles whose primary function was to discharge their energy. They also had a secondary function, which was to store enough energy so that the body would be able to meet emergency needs for its own survival. The interaction of neurons at contact barriers results in a release of energy for neurons with weak barriers and the maintenance of energy for neurons with strong barriers, the former then fulfilling the primary function and the latter fulfilling the secondary function. The release of energy was a repulsion reaction and the storing of energy was an attraction reaction paralleling Newtonian theories on motion. The primary function of the releasing energy (the pleasure principle) developed into the id and the secondary function of the withholding of energy (the pain principle) became the superego. The system in which the entire process took place became the ego. In this way, therefore, Freud developed his theory in a scientific way and was correct in asserting that it was scientifically based.

From his patients and likely from the general repression of sexuality in society (since sex was a bodily pleasure and the body was denied), Freud argued that psychological problems, developed, in general, out of the intrapsychic conflict among the id, the ego and the superego. The repression (or storage of sexual energies), of

the id, because the superego (social norms), failed to provide an avenue for release and resulted in conflict which the ego (the executive system) dealt with by banishing the impulses of the id into the unconscious. This, according to Freud, did not solve the problem, but only resulted in the unconscious forces being released into consciousness in a cloaked, symbolic form.

What is critical to understand in this explanation is first, that Freud developed his theory in part, as an attempt to expose the hidden world of the Victorian age. His approach was both intellectual and scientific and it cut through the security blanket that "social grace" and moral codes had represented in society.

The Victorian age placed society itself at the highest point of power with respect to Truth. Extending from the power that the middle class received during its growth in the few centuries before, society, and in particular those with money, established the standards of behaviour by which all members of society were to be judged. Paralleling the religious moral code, the Victorian moral code was the lived Truth of the scientific myth that had not yet taken full command.

By exposing the in-natureness and subjectivity of this Victorian myth through a scientific explanation, Freud became a hero of the scientific myth, championing the rational approach to understanding human behaviour and laying bare the untruths of the Victorian age. He took a step out of the herd by challenging a non-scientific and hence non-truthful belief of society, and in this sense represents an out-of-nature position.

The second critical point to realize is that despite his scientific approach, Freud still ended up with explanations of unconscious and symbolic forms compatible with an in-nature position. By "discovering" or "creating" the unconscious, Freud gave the world a place to hide, a place to stay safe. If one had to establish a conscious relationship with the world that had to follow a scientific myth, then the way to maintain a link to nature (i.e., with instinctual animal forces) would be to do so through the unconscious. The idea of the unconscious works to displace the religious myth, to displace the Victorian social code of behaviour and seeks instead to metaphorically represent our in-natureness. It is through the unconscious that the id, those biological, instinctual bodily motives, come through, and it is through therapy (science) that the hidden structure of the unconscious can be understood and with catharsis, dealt with.

Freud demonstrated the balancing point at which psychology as a discipline attempted to maintain itself. Freud's psychology had one foot in the old in-nature myth and the other in the new out-of-nature myth. By coveting science in the way he did, however, and in demonstrating the subjective and unscientific beliefs of the Victorian age, he managed a major coup with respect to the vehicle through which the myth was to be played out. In other words, Freud's discovery was a further step into the scientific myth. As the Victorian moral code was a step away from the hardened religious myth of past ages, Freud's conscious/unconscious myth, because it was hailed as scientific in nature and because it exposed the "untruths" of the Victorian age, was a further step into the scientific myth. The fact that it failed to dismiss subjectivity altogether reflects the slow movement of the changing of myths. The development of psychoanalysis also reveals the precarious position the discipline of psychology is in, as it attempts to deal with the human condition from within a scientific myth despite our experience of being both in and out of nature, our endless duality.

Instead of trying to describe in some historical manner, the development of psychology in terms of its scientific mythology, I will instead focus on another dominant theory in psychology in the twentieth century, the psychology of

behaviorism. In so doing I will accentuate the role psychology has played in the strengthening of the scientific myth, demonstrating psychology's marriage to science, as well as highlighting the roles two of psychology's heroes have played in the battle between the two intrapsychic, existential sides of ourselves as expressed through the psychological myth.

More than any other psychological myth, behaviourism claims to represent the scientific ideal. Its rise to power coincides with a societal rise in the power of science itself and sciences by-products, technology and materialism. It is important to understand the development of psychological theories, not in terms of ground breaking, world shattering events, but rather from a much broader and more encompassing mythological framework in which the psychologist, qua scientist, is a part. While psychoanalysis maintained a position at the turn of the century that was both in and out of nature, paralleling the societal disposition that believed in science but still maintained a link, via Victorianism, to nature, behaviorism was primarily a twentieth century phenomenon and took a position that coincided with the tremendous scientific leaps that this century has produced. Behaviorism was a rejection of the in-natureness of past psychological myths, and similar to the transformation to a scientific myth that took place at the

societal level, the proponents of behaviorism first attacked the prevailing psychological myth to shake belief in it and concurrently pushed forward its own mythology as the best available alternative. Skinner (1965) writes,

An even more common practice is to explain behaviour in terms of an inner agent which lacks physical dimensions and is called "mental" or "psychic". The purest form of the psychic explanation is seen in the animism of primitive peoples. From the immobility of the body after death it is inferred that a spirit responsible for movement has departed. The enthusiastic person is, as the etymology of the word implies, energized by a "God within". It is only a modest refinement to attribute every feature of the physical organism to a corresponding feature of the "mind" or of some inner "personality"... It is not the layman alone who resorts to these practices, for many reputable psychologists use a similar dualistic (the inner self controlling the outer self), system of explanation... It has been argued that a single physical organism is controlled by several psychic agents and that its behaviour is the resultant of their several wills. The Freudian concepts of the ego, superego and the id are often used in this way. They are frequently regarded as nonsubstantial creatures, often in violent conflict, whose defeats or

victories lead to the adjusted or maladjusted behaviour of the physical organism in which they reside... A science of behaviour can hope to gain very little from so cavalier a practice. Since mental or psychic events are asserted to lack the dimensions of physical science, we have an additional reason for rejecting them (p. 29-31).

Within this statement, Skinner quickly links psychoanalysis with the animistic myths and untruths that have been previously challenged by science. By pointing to the in-natureness of psychoanalysis work he weakens faith in it, and by pushing forward a "science of behaviour", he aligns himself with what was then the more dominant scientific myth. Skinner himself takes a step out of the herd, by challenging the previous dominant myth, and his allegiance with science, the pursuer of Truth, makes him a hero within the discipline of psychology because of the discipline's need to gain legitimacy from a society that is increasingly adopting the scientific myth. The following are tributes to Skinner upon his death.

In a period when psychology was struggling to create its foundations as a science and a profession, the contributions and clarifying writings of B.F. Skinner were a fundamental survival tool. From him we got a

bounded scientific object -- the behaviour of organisms, a powerful technology for practice -- behaviour modification, and a grounded metaphysics -- behaviourism (Goncalves in Mahoney, 1991, p. 632).

The world has lost one of its truly innovative thinkers, but I have no doubt that B.F. Skinner will be remembered and cited for a long, long time. And I hope that in some psychological Valhalla, Skinner and Freud have finally had a chance to come to terms with their similarities -- and to settle their very considerable differences (Bowers in Mahoney, 1991, p. 634).

The canonization of Skinner, first as a leading scientist who helped establish the science of psychology, and then more explicitly through the suggestion that he end up in a "psychological valhalla" with another psychology demi-God, reflects both the role a scientific myth has had in shaping theories and concepts within psychology, and the faith people place in the idea that deification is possible if one holds onto the correct myth, keeps the faith. By maintaining an allegiance to science in a time when science was dominant, Skinner enhanced the illusion of the possibility of immortality ("Skinner will be remembered and cited for a long, long time"). This immortality is an allegiance with our out-of-natureness and points to the symbolic self that

leaves behind the bodily self.

Psychology, as we have seen, has taken on many myths in order to maintain an allegiance with the grand myth, the pursuit of Truth. Behaviourism represents the furthest push into the scientific myth that psychology has attempted. It dismisses the notion of an inner (bodily) psyche, by suggesting that by being non-scientific the idea lacks value, and instead places strength in the empirical, deterministic behaviours of the human being. Its surge forward is both an assistance to the maintenance of the scientific myth and reflection of the hold the scientific myth has on the discipline. As the myths change, power also moves from the hands of the Gods and Goddesses, through the priests, to the hands of the psychologists qua scientists.

THE DECAYING MYTH

Introduction Having established that science is the current myth through which the grand myth, the pursuit of Truth, is being played out, I will now introduce the counter myths that seek to undermine the dominant myth and through them explain the decline and fall of the scientific myth.

Counter myths are always present. They slowly work away at the dominant paradigm in the early stages with no apparent result, and in the later stages in catastrophic waves. Counter myths represent the other half of the existential dilemma. In the current case the counter myths represent the in-natureness of the human psyche both at the individual and at the societal level collectively.

I believe we are currently reaching the end of the scientific myth, that faith in the scientific myth and the reality that has been manifested from it, is weakening dramatically. The weakening of faith ultimately results in the weakening of power for those who represent the scientific myth, since power and faith are inextricably linked. I will explain how the scientific myth has been weakened throughout the twentieth century, the very century that saw the highest peaks of science and its technological by-products. This emergence of a counter myth, of course,

parallels the yin and yang conception that when the one side is at its peak, the other side begins its growth. By offering evidence from philosophy, psychology, sociology, history and science I will demonstrate how the underlying premises and pre-conditions of science and the scientific paradigm can no longer be valid. The world view that the scientific myth holds as Truth, declines and falls with evidence from both inside and outside the scientific community. This evidence, whether absolutely true or not, undermines the credibility, trust and faith people place in science and the scientific paradigm.

I have said that both faith and power combine to maintain a myth as dominant and I have also said that while there are always dominant myths, there are also always lesser myths which seek to undermine the power and faith people place in the dominant myth. People placed faith in science because science could successfully demonstrate, through technology, that it was safe enough to leave the religious myth that was then dominant. Overtime, power slipped away from religious leaders and fell primarily into the hands of the masters of the scientific class, and, in a residual fashion, to the remaining members of the scientific class. With the creation of the illusion of individual rights, all of us, to a certain extent, covet the scientific paradigm and become part of the scientific class. The masters of the scientific

class, however, are those who best represent the heroics of the myth. At a societal level the very fabric of our society is involved, social infrastructures that maintain society as we know it, that maintain the illusion of safety that comes with faith and belief in the myth. The masters of the myth include those who represent or gain power from association with the judicial, political, economic, medical and educational systems in our society. The master class of the myth are those who maintain a disproportionate amount of power in these institutions within society. They are the "priests" of science. They are the keepers of the faith, and so if faith in them declines, then faith in the institutions they represent is jeopardized and the decay of the scientific myth begins.

There is little question that the scientific class has grown significantly in power during the reign of the scientific myth. It has picked up where the religious myth has fallen. The scientific class reflects all those who appear to use logic, rationalism, objectivity and science as a standard by which all other things are judged. It is this function of placing value in the intellectual, logical, rational, or by extension scientific properties, which determines whether or not one can be included in the scientific class. It is the coveting of one's out-of-natureness, of one's symbolic self that is at the root of

the growth of the scientific class. It is the philosophy of individualism, patriarchy, and the growth of the middle class that entrenches this scientific class. Unlike the religious myth which judged statements of truth through a religious filter, the scientific myth judges statements of truth through an intellectual, rational filter. The premise is that the greater the intellectualization (the use of logic, rationalism, scientific validity and rhetoric) of statements, the closer these statements represent the Truth. Arguments are no longer won by appealing to the word of God, but instead are won through a clever combination of logic, rhetoric, data, statistics and intellectualization complete with increased specialization, the creation of an "inner club" language and the use of reductionistic objective principles as evidence that the process is valid and can be generalized.

As the scientific myth grows in power, those who can best display this cleverness take the most power. The very institutions that are at the corner stones of our society -- the medical, academic, judicial, business, scientific and political institutions -- represent the clubs of the scientific class. These institutions have power because the average person places faith in them to determine Truth in their respective areas of expertise. There are, of course, sub-institutions or less powerful sub-sections of these

institutions which covet a specific piece of the larger institutional turf and defend it through the use of the tools that the scientific paradigm has offered them. In addition, there are individuals within these sub-sections who also cut out a parcel of expertise and defend it with the virtues of the scientific myth; and at the weakest levels, there are those who parasitically associate themselves with these institutions or individuals in order to warm themselves in the glow of validity that has been created around them. All these sub-sections, sub-sub-sections and individuals gain their respective power from allegiance to the scientific myth. This internalizing process at the institutional level and at the individual expertise level reflects the need of both the individual and society to live under the dominant myth. Legitimization of society evolves from the legitimization of its institutions down through the individual.

In order to remain legitimate, the scientific class dismisses *all* other notions of reality that cannot be demonstrated scientifically. The others are either judged superstitious, fanciful or psychotic. They are determined to be unreal and hence not valued or even recognized. This interpretation, this dismissal of an in-nature reality, fits hand and glove with the greater scientific myth and is a manifestation of it. The scientific class is a mythological

heroes response to a myth that demands a position out-of-nature. In other words, those who have the most power within the scientific myth maintain this power because of the heroics this power offers them. In a scientific myth the heroics aligns with the symbolic self, therefore, the heroics is measured in terms of one's God-likeness and through this purpose in life is maintained. The heroics become a demonstration that one is God-like and hence worth something since God (the symbolic self) is currently valued. If the scientific class holds the power of the dominant scientific myth which in turn is a manifestation of the grand myth, the pursuit of Truth, the decay of the scientific myth can be established by demonstrating that there is a lack of faith in, and diminishing power of the masters of the scientific class. If the infrastructure that maintains the myth decays, inevitably the myth itself will fall.

While religious leaders still maintain power even today, there is little doubt that their power has decreased significantly during the twentieth century, that it is still on the decline and that it now represents only a residual power within society. While religious leaders can demonstrate against abortion, for example, they no longer control the levers of power in society and, therefore cannot stem the tide of abortions being performed in society today.

They lack credibility in a society that dismisses notions of God and miracles as superstition. The demi-gods of the church, the clergy, decline further with the acknowledgement that they are susceptible to the same human failings as the rest of us. The now common revelation of sexual abuse amongst the leaders of the church illustrates this point. It is not just the acts of abuse that cripples religious power, it is the revelation that the heroes of the past myths, the demi-gods, the clergy, are only mortal after all. It is the fall of the hero that reveals the slow death of religious power through the wearing away of the faithful. Initially the heroes can deny this revelation and maintain the flock by dismissing the guilty as individuals who do not represent the majority in power. But, as the burden of evidence builds, the questions in the minds of the faithful grow stronger and slowly the flock slips away. In a similar vein, as I will demonstrate, the scientific heroes are also falling. They are caught in the never-ending story of the death and rebirth of the hero. They are caught in an existential need to align themselves with their symbolic self while at the same time being unable to rid themselves of their own animal weaknesses. In a society that values the symbolic self, the scientific hero represents the mythological ideal through which the grand myth can be realized. There is a need to believe in our heroes because they represent the possibility that Truth and hence a

meaningful life can be found. The hero represents hope and, therefore, if the hero falls, the individual will have no choice but to create a new hero. To not live in a myth, not to have new heroes is to face the existential realization that life has no knowable meaning.

It is important to note that neither the orthodox religions nor the scientific class will ever fully disappear. There will always be those who will not be strong enough to leave the old myth. There will always be those who, for example, will always maintain at least one foot in the doors of the church... just in case. Some will still enact the ritual of going to church, but will reflect little of what is demanded by the church in their day to day lives. Similarly, there will be those who use science as a foundation for validity in their day to day lives, and yet also go to church on Sunday praying to a God for salvation. These are no longer the faithful, but reflect reluctant believers whose belief fades into the background upon the emergence of a new faith, a new myth. They are caught between myths and are so unable to discern the Truth, that they take a little from each, cannibalize both myths, by taking what is most "True" from each in order to remain as safe as possible. They are waiting patiently for a new myth that will eliminate the incongruity of the various myths they are holding onto. They are waiting for the Truth. While

the decaying of a myth will not eliminate the myth, it will, in the end, drain it of its power.

Let us now examine the decay of the scientific myth by: first, examining how the individual is affected by the myth; second, by explaining the ramifications on society over the twentieth century; third, by demonstrating how science itself has moved past its original paradigm to the extent of falling in on itself; and finally, by showing how psychology has failed in its attempts to become a science and the results this has had on the discipline.

The Individual I have remarked that one of the hallmark features of the scientific paradigm has been the growth of individual power at the expense of a select minority. The middle class had gained power at the expense of both church and those who control the state. The growth of the middle class was a societal step out-of-nature that pushed beyond the dogma of obedience and created an illusion of individual rights and freedom. I say it is an illusion because clearly while rights and freedoms have been struck into law, the lived reality requires a conformity to authority that parallels past authorities. While contextually we have thrown off the religious myth, thus establishing our out-of-natureness, the step forward that was taken was a small and cautious one.

The Victorian moral code kept freedom of the individual in check and the masters of the scientific class ensured that the levers of power in society would remain in the hands of the elite. While it is true that the American dream -- that any class of people could succeed in America -- does have its share of success stories, these successes occur as a result of conversion to the well established access paths to success (the need to conform to authority and work hard in areas that get rewarded by those in authority) and not on the basis of freedom (the ability to be rewarded for doing what you truly feel you should do). Success, ostensibly defined in terms of money and power, the former providing access to the latter, becomes the benchmark for heroics in the scientific world view, and the individual is made slave to the game of achieving both. In the end, you must demonstrate that you are cut from the same cloth, that you can pass the initiation test, that you can present an image of success that is congruent with the image desired by the club. The result is a conversion, an acquiescence to the powerful in order that the individual might become a hero, might share in the power the club represents. While his heroics place him farther out-of-nature with respect to those who don't share this power, in the end, he is still left in a subordinate role, taking orders, obeying "the system" in order to hold onto the only valued heroics society offers him.

What is the meaning of freedom for the modern man? He has become free from the external bonds that would prevent him from doing and thinking as he sees fit. He would be free to act as he wants if he knew what he wanted, thought and felt. But he does not know. He conforms to anonymous authorities and adopts a self which is not his. The more he does this the more powerless he feels, the more he is forced to conform. In spite of a veneer of optimism and initiative, modern man is overcome by a profound feeling of powerlessness which makes him gaze towards approaching catastrophes as though he were paralysed (Fromm, 1969, p. 281-282).

This paradoxical position of feeling powerless while gaining power reflects both the illusion of freedom mentioned above and ultimately reveals the weak link in the mythic armour. The dynamic here is an existential one. The struggle is internal, yet it manifests itself for others externally. The powerlessness one feels internally despite being given more power, is manifested in apathy externally while maintaining the veneer of an advanced society to others. This external manifestation is the myth. The tracks of bravery our hero leaves behind (the movement more into an out-of-nature myth) are left softly in the ground and are marked in small incremental steps in order to ensure the greatest safety. The fear is that the balance of power will

be tipped out of his hands and back into nature, back into the unknown. The quest is to demonstrate one's symbolicness, one's heroics; the fear is that one's actions will not be recognized as heroic, as meaningful. It is safer to live in the dominant myth, since the dominant myth provides the greatest chance of succeeding in one's heroic quest and the greatest chance of being recognized as a hero. To be forced to live with the realization that one is not heroic, not symbolic, not God-like and to be confronted continuously with the view that life has no knowable meaning is simply unacceptable. To accept it is to throw yourself into an existential crisis. One inevitably chooses to live in the myth. Living in the myth, however, necessarily means living under the control of others, abandoning autonomy, freedom for safety. We become heroes locked into fighting make believe dragons because we fear the revelation that there may be no reason to fight, no reason to live. The fear is existential and the heroics mythological.

Intrapsychically, the scientific myth with its objective stance offers the individual demi-God status, offers power, but at a cost. The cost comes from a severing of ties to earth, from the individual's ties to his animal self. The individual is left in a knowable universe which can be objectively held and manipulated, controlled but never felt. The result of living the scientific myth is alienation,

alienation from the world and from ourselves.

With Galileo, Descartes and Newton, the new science was forged, a new cosmology defined, a new world opened to man within which his powerful intelligence could act with new freedom and effectiveness. Yet simultaneously, that new world was disenchanted of those personal and spiritual qualities that for a millennia had given human beings their sense of cosmic meaning. The new universe was a machine, a self contained mechanism of force and matter, devoid of goals or purpose, bereft of intelligence or consciousness, its character fundamentally alien to that of man. The premodern world had been permeated with spiritual, mystic, theistic and other humanly meaningful categories, but all these were regarded by the modern perception as anthropomorphic projections. Mind and matter, psyche and world, were separate realities. The scientific liberation from theological dogma and animistic superstition was thus accompanied by a new sense of alienation from a world that no longer responded to human values, nor offered a redeeming context within which could be understood the larger issues of human existence (Tarnus, 1991, p. 326).

This feeling of alienation is the seed of destruction for the scientific myth. The fact that the scientific myth

cannot address the larger issues of human existence, namely, its purpose, reflects the inherent flaw in the structure. Science can provide a vision of reality which, coupled with denial can put off a conscious internal examination of one's meaningfulness, but it can never totally dismiss the need to know. No matter how much faith is held in the dominant myth, the scientific myth does not answer the "meaningfulness" question. In the end, the dominant myth stands on a weak foundation. The scientific myth can provide the individual with safety, success, heroics and the vision of a meaningful life, but because the scientific myth is built on one's out-of-natureness and dismisses one's in-natureness as unreal, the myth can never totally fulfil the demands placed on it.

The scientific myth can never totally provide a meaningful life. The scientific myth cannot be Truth, but only a vehicle for Truth. The game is to pursue Truth, not to find it and the faith placed in the pursuit is the illusion that keeps fear at bay. The scientific myth is only metaphorical of this pursuit and while one must have external and as much as consciously possible internal faith/belief, in the end the individual must be able to let the myth go. Not to do so is to risk everything on a myth which cannot hold Truth, nor provide one with meaning. Within each of us, no matter how faithful or heroic we are with respect to the dominant myth, there lies a residual feeling which cannot be satisfied.

Despite the greatest faith, the inability to know for sure, to be absolutely certain, the inability, in the end, to touch that intangible Truth, to lay at rest once and for all the quest for meaning, leaves room, no matter how small, for disbelief. Put simply, the fact that Truth is not known to us, the fact that we construct our own truths, leaves room for doubt, for disbelief. This crystal of disbelief in the individual's psyche and collectively in the psyche of society becomes the foundation for the downfall of the dominant myth and sets the stage for the rise of a new myth.

I cannot think of myself as a part of the world, the simple object of biology, psychology and sociology, nor can I shut myself out of the universe of science. Everything that I know of the world, even through science, I know on a basis of a view which is my own, or an experience of the world without which the symbols of science would be meaningless. The entire universe of science is constructed upon the world as lived, and if we wish to think about science itself rigorously, appreciating its meaning and scope exactly, we must first of all reawaken that experience of the world of which science is an inferior expression. Science has not and will never have the same sense of being that the world as perceived has, for the simple reason that it is a determination or explanation of that world.

I am not a "living being" or even a "man" or even a "consciousness" with all the characteristics which zoology, social anatomy or inductive psychology attributes to these products of nature or history. My existence does not come from my antecedents or my physical or social entourage, but rather goes towards them and sustains them. For it is I that make exist for myself... that tradition which I chose to adopt or that horizon whose distance from me tends to disappear, since it would have no such property as distance were I not there to view it. Scientific views according to which I am an event in the world are always naive and hypocritical because, without mentioning the fact, they sustain themselves on that other view, that consciousness by which, initially, a world is disposed around me and begins to exist for me (Merleau-Ponty in Freidman, 1991, p. 84).

Or put another way...

I can know myself only through the mediation of the other, which means that I stand in relation to my "id," in the position of the *Other*. If I have a little knowledge of psychoanalysis, I can, under circumstances particularly favourable, try to psychoanalyse myself. But this attempt can succeed only if I distrust every

kind of intuition, only if I apply to my case *from the outside*, abstract schemes and rules already learned. As for the results, whether they are attained of my efforts alone or with the cooperation of the technician, they will never have the certainty that intuition confers: they will possess simply the always increasing probability of scientific hypotheses. The hypothesis of the Oedipus complex, like the atomic theory, is nothing but an "experimental idea"; ...it is not to be distinguished from the totality of experiences which it allows to be realized and the results which it enables us to foresee. Thus psychoanalysis substitutes for the notion of bad faith, the idea of a lie without a liar: it allows me to understand how it is possible for me to be lied to without lying to myself since it places me in the same relation to myself that the Other is in respect to me; it replaces the duality of the deceiver and the deceived, the essential condition of the lie, by that of the "id" and the "ego." It introduces into my subjectivity the deepest intersubjective structure of the *mit-sein*. Can this explanation satisfy us (Sartre, 1956, p. 91-92)?

The problem is this; the fact that we are conscious of ourselves as Other, creates a duality of the self, (Self/Other, subjective self/objective self, bodily self

/symbolic self), that in turn creates the need for purposefulness. In other words, it is only in relation to Other, by seeing ourselves in relation to the way Others see us that ourselves become separated. The whole becomes parts. It is the revelation that we can be Other, that in fact we must be Other and that this Other is not necessarily congruent with ourselves that splits the existential atom and creates the duality of mind and body. It is in this separation that the existential duality begins. It is here where the demands for meaning, in order to determine Truth begins. It is here where the need for myth begins.

The man who enters the transition stage stands, in the tension point between personal and social confirmation. He cannot resolve this tension by renouncing social confirmation, for no man can live without it: everybody must play a social role, both as a means to economic livelihood and as the simplest prerequisite for any sort of relations with other people in the family and society. On the other hand, he cannot resolve the tension by sacrificing personal confirmation, for this suppression of a basic human need results in an anxiety that may be more and more difficult to handle as the gap between person and role widens. To stand in this tension, however, is to insist that one's confirmation in society also be in some significant sense a

confirmation of oneself as a unique person who does not fit into any social category (Freidman, 1991, p. 168-169).

In the scientific myth the balance of power has been given to the Others' perception of self. By adopting the position of Other (by engaging in the heroics of the myth); we dismiss or deny our internal, intuitive Self and rely instead on the societal interpretations. The bodily Self is denied. The heroic acts within a myth are a display for Others. It is an external personae which offers a collective security by accepting the myth as Truth. The problem, of course, is that it does not reflect ourselves and, therefore, the adoption of this heroic stance results in an alienation of the Self. It is from within this alienation that the dialectic begins. We must be in the world and yet, to be in the world means to role-play scenes that do not reflect who we are. Who we are, however, can only be ascertained by being in the world. The result is angst, dread, despair.

The Despair which is conscious of being despair, as also it is conscious of being a self wherein there is after all something eternal, and then is neither in despair at not willing to be itself, or in despair at willing to be itself. This form of despair is: despair at not willing

to be oneself; or still lower, despair at not willing to be a self; or lowest of all, despair at willing to be another than himself, wishing for a new self. ...The immediate man... wishes to be another. ...At the moment of despair no wish is so natural to them as the wish that they had become or might become another. ...Commonly such a despairer is infinitely comic. Think of a self... and then that this self gets the notion of asking whether it might not let itself become or be made into another... than itself. And yet such a despairer, whose only wish is this most crazy of all transformations, loves to think that this change might be accomplished as easily as changing a coat. For the immediate man does not recognize his self, he recognizes himself only by his dress, he recognizes (and here again appears the infinite comic trait) that he has a self only by externals. There is no more ludicrous confusion, for a self is just infinitely different from externals (Kierkegaard in Freidman, 1991, p. 371).

To remove denial or to demonstrate that the self is infinitely different than externals will bring forth the pool of fear, dread, that has been waiting in abeyance. It has been slowly building in the inner linings of the stomach, eroding the external dominant myth ever since the dilemma of Self and Other, mind and body, subject and object

was initially felt. The human condition is an absurdity the dilemma of which creates profound anxiety, angst and fear.

The pain of despair is that a being is aware of itself as unable to affirm itself because of the power of nonbeing. Consequently it wants to surrender this awareness and its presupposition, the being which is aware. It wants to get rid of itself -- and it cannot. Despair appears in the form of reduplication, as the desperate attempt to escape despair (Tillich in Freidman, 1991, p. 375).

It is this overwhelming suffering in despair or dread, however, which demands resolution and the resolution within easiest grasp is the dominant myth. In the Freudian example, therefore, it becomes easier to adopt an "id, ego, superego" myth through which Truth is known, in short, to accept the position of Other, than to live in the uncertainty of not having a knowable purpose, and the subsequent fear that erupts from it. The problem with accepting the Self as Truth arises from the realization that I can be Other, that I can be object and hence not myself. The scientific myth demands a self which is Other. It demands that I role play myself for Others as though this were my True self. While I can always know that I am pretending, acting, role playing, and hence know that I am not myself; what is really confounding

is that even when I want to show others myself (including myself), and to express my inner most self, I am faced with the revelation that I can only be Other for others, that I can never be myself for others (or myself). I am left in isolation, alone, scared and in pain. I am now faced with a dilemma. Is my Self real and True, even though it can never be for Others, and they can never know me or support who I am; or is my Other real, True?

In the past, the myths have always allowed access to my Self through a connection with nature. While then I was still Other for others, I could, at least, take refuge in the fact that my Self was real since I could acquire a connection, metaphorically, of Self with the world through the living of the myth. In past myths I could be Other by acting in the myth, playing out my heroic roles, but I also felt connected with the world through the heroics. The old myths, since they were more in-nature than out-of-nature, since they still had connection to the bodily self through the lived possibility that meaning could be found in a mystical, magical, spiritual world, an inner world, which is now considered superstitious, illogical or psychotic, provided the individual with a connection to the bodily self through acting in the myth. One could still have hope that one's self was being conveyed to Others through a metaphorical connection occurring within the acting,

symbolically through the myth. The self was felt and not pondered. In other words, the old dominant myth allowed me to express both my symbolic and animal self and hence meaning was both symbolically and bodily understood and felt. There was hope.

The scientific myth, on the other hand, creates a sense of alienation between the Self and self as Other because it dismisses any notion that the bodily Self (body, emotion, superstition, intuition, etc.), is important. It severs any hope that the Self can find legitimate expression in the world, demanding instead that we adopt the dogma, any dogma really, that represents the Others' conception of Self. While before I could believe in the myth knowing that the myth gives me a feeling of connectedness, a path for my inner Self to be conveyed, the scientific myth demands obedience to the myth and severs my hope for a connection to the world.

The alienation of the self from the world, the acceptance that the world is object and that we are also objects, cannot in the long run hope to maintain the illusion of Truth. In the final analysis we are simply not able to dismiss our bodily selves. We can deny it externally while maintaining an allegiance to it internally, nor we can deny it from consciousness, only to find it metaphorically

expressed in all that we do. What we cannot do, however, is exactly what the scientific myth demands of us. What we cannot do is live in an objective world, that is alienating to the self. While we can follow a dominant myth we cannot follow it exclusively. There are always lesser myths at play. The lesser myths reflect the attempt by the individual and collectively by society to find a connectedness to the world. The scientist preaches the objective world view through his science during the week and on Sunday is found praying to God in church. The politician guards her power as a symbol of her God-likeness, her heroics, but the need to guard it reflects the inner sense that it is only temporal, and hence does not truly mirror her inner self. From the individual perspective, therefore, the inability of the scientific myth to offer a personally meaningful connection between the universe and one's self, demands that science not become the Truth. Intrapsychically the dominant myth does not allow legitimate expression of the self and as a consequence either can never be fully believed, or cannot be regarded as fully comprehensive. We all hold out hope that there is more, that there is meaning. The downfall of the scientific myth (and a scientific psychology) has been inevitable from its inception. Despite our extreme attempts at fostering faith in the dominant myth, we have simply never had that faith.

Society While the Christian myth fell to the more convincing scientific myth, the interconnectedness with nature that had once been more tangible through religion, became weaker and weaker. There were many attempts to hold onto this source of power from both inside and outside the church. The romanticism of the seventeenth, eighteenth and nineteenth centuries was in sharp contrast to the general laws of science and metaphorically represented the attempt by society to maintain a link to nature through the arts. As religion itself became more secularized, the arts took on a new secular value within society. Artistic endeavors became less and less concerned with God and more and more a reflection of a more personalized relationship between man and nature. The romantic period reflected the unbound multiplicity of nature, of subjective awareness, of the uniqueness of the object vis-a-vis the soul. Through the arts there was greater use of emotion and imagination and a turning inward to the mysterious interior of the human being as it came to be represented symbolically through art. Through writing, poetry, painting, sculpture, artistic endeavors of all kinds were transformed from an attempt to mirror nature to a metaphorical expression and examination of both the noble and darker sides of the human condition. This, of course, was the antithesis of the control and order of nature put forth by science and, therefore, a split between science and art, mind and soul was evident. Science

remained dominant because it could rely on more tangible evidence, but art held the low ground through an attachment to feelings.

Around the turn of the century a shift occurred with respect to the positioning of the myths within society. As more and more people moved from the country into the cities to take up work in the factories of the industrial age, there was also a transformation of harmony with nature. The physical movement away from nature resulted in a psychological movement away from our in-nature self. As the scientific myth took roots the seeds of discontent were also planted and began to germinate.

The world at the turn of the century was filled with hope that science would lead the individual to greater prosperity and freedom. The Colonization efforts became less focused on converting indigineous peoples to a religious truth, and more interested in exploitation of the land and the people for greater individual wealth and freedom. The mythic hero was no longer the individual who displayed a closer relation to God; rather it was the individual who displayed the most personal power, money and control over other things, including human "things". While exploitation of others has always been a human trait, the difference arises out of a mythological system which severs ties with one's in-nature

self. A world devoid of spirit and meaning places all people including oneself, as object in the world. One becomes a "thing" for others, the inner self being rendered invalid, which in turn creates intrapsychically a sense of alienation from oneself and externally a sense of alienation from others and from the universe. In desperation we throw ourselves further into the dominant myth, hoping it will somehow deliver the bliss it rhetorically offered. Having cast away a spiritual, in-nature self, the individual, taking on the cloak of God, empowers herself through science to control her own destiny, to create her own meaning. But what if she is wrong? What happens if science cannot deliver? Where then can one go for Truth?

A pivotal point in the decay of the scientific myth occurred around the same time science made its greatest conversions within society. The First World War marked a significant turning point with respect to the advances of science. For the first time on such a grand scale, technology unleashed its darker side and with it the revelation that science may not be true salvation after all. Tank warfare, advanced weaponry, gas warfare and ariel combat become part of the bloodiest battle in history: the war to end all wars. Unlike the more romanticized military campaigns of the Victorian period, WW1 signals an end to romanticism, to naive hopes for bliss, to the optimistic

belief that science would deliver salvation for all. The ramifications of the First World War left the western world in crisis. Having thrown out God, having dismissed our animalistic selves as invalid, we were now caught in the revelation that the myth in which we had placed truth may not be able to deliver Truth. By making ourselves God, we had nowhere to turn, no one to blame for the mistakes. The downward spiral had begun, the cracks in the myth were beginning to show.

The First World War had a rippling effect throughout all aspects of society. The Victorian moral code was challenged, and its grip on society loosened (in particular by the woman's suffrage movement). The roaring twenties reflects a societal trend towards the devolution of general rules and laws that govern behaviour, a trend which would become enshrined in the twentieth century. The younger generation in particular throw off past truths with a self-righteous disdain. The older generation and the older truths could not be believed. As individualism took on more and more power, relativism became more and more respected. Universal laws were wearing thin.

As I will discuss in more detail in the next sections, it was during this same period that Einstein delivered his general and special theories on relativity, throwing the

scientific community into crisis, and it was also during this period that depth psychology made its greatest advances. The turning inward to the inner self was a theme which coincided with the external alienation. Depth psychology was an attempt to remain linked to our inner selves and externally to the universe.

Art also shifted focus from the expression of universal sources of nature, including human nature, to a personalized art form. In 1905 Picasso displayed his first art works and started what would become the cubist perspective. No longer were artists expressing the unbounded creativity of nature in its generalized collective beauty, rather artists started creating metaphorical representations of their own internal perspective of reality. Like psychology, the focus moved inward, became personal and abstract at the same point in history that the greatest severing of our ties with nature was occurring. Out of the head of the ying comes the tail of the yang.

While the scientific myth remained dominant, pouring out more and more advanced technology, maintaining, not yet in a desperate fashion the faith of the flock, its weaknesses were becoming harder and harder to ignore. This was the extraordinary science period, the time in which the the dominant myth fights hardest to stay on top, yet also the

time in which the inevitable breakdown of the old paradigms slowly occurs. The stock market crash and subsequent depression, the Second World War and the unleashing of the atomic bomb were crushing blows to a myth which had promised so much. In a span of less than 50 years the western world had seen the effects of a scientific myth run wild. Science was pumping out new technology, but technology was increasingly showing its darker side. As society became more and more dependent on the market economy, the goal of individual autonomy was somehow getting lost. While the individual gained more rights and became more free to choose, in a material, practical sense, the choice was somehow obfuscated by a mass market mentality that failed to address individual needs. The paradox of the twentieth century is that individual rights and freedoms are smothering the individual. Too much freedom, too much choice becomes frightening. Cut free from past chains of oppression the individual is set adrift in a sea of relativity. A relativity devoid of meaning, significance... Truth.

As the twentieth century advanced, modern consciousness found itself caught in an intensely contradictory process of simultaneous expansion and contraction. Extraordinary intellectual and psychological sophistication was accompanied by a debilitating sense of anomie and malaise. An unprecedented broadening of

horizons and exposure to the experience of others coincided with a private alienation of no less extreme proportions. A stupendous quantity of information had become available about all aspects of life... yet there was also less ordering vision, less coherence and comprehension, less certainty. The great overriding impulse defining Western man since the Renaissance -- the quest for independence, self determination, and individualism -- had indeed brought those ideals to reality in many lives; yet it had also eventuated in a world where individual spontaneity and freedom were increasingly smothered, not just in theory by a reductionist scientism, but in practice by the ubiquitous collectivity and conformism of mass societies. The great revolutionary political projects of the modern era, heralding personal and social liberation, had gradually led to conditions in which the modern individual's fate was ever more dominated by bureaucratic commercial and political superstructures. Just as man had become a meaningless speck in the modern universe, so had individual persons become insignificant ciphers in modern states, to be manipulated and coerced by the millions (Tarnus, 1991, p. 388).

At every crossroad where the scientific myth would take the lead, a counter myth would spring forth from its soft

underbelly, revealing weaknesses and vulnerabilities. The inseparability of the dominant myth from its counter myths reflects metaphorically the inseparability of the animal self from the symbolic self as they unfold in a mythological dynamic.

The twentieth century dialectic is embodied in the mythological themes of the scientific myth and, in what I will call the quest for the authentic self. The scientific myth, as we have seen, takes the position of other and externalizes the self in terms of heroic roles. The authentic self, on the other hand, takes the position of inner self and seeks to connect itself through expression with external reality. The struggle at a societal level reveals itself in boom and bust cycles of increasing intensity. The vast destruction of the Second World War, the emergence of the fascist right and the maniacal treachery of technological instruments shattered the illusion of a short term struggle to salvation. There was a flaw in the system. WW2 wasn't supposed to have happened. We were supposed to have learned our lessons from the First World War. If we were to take on God's power then surely we could design a world where war wasn't necessary.

What the Second World War revealed most of all, was that human beings were not ready to be God. That the design of an

external mythological system where human destiny was in the hands of humans, where nature was to be controlled and manipulated, was flawed, and yet now that it was established, there didn't seem to be any way around it. In a true Kuhnian fashion the extraordinary scientific period pushed on attempting to ignore the real wounds of the Second World War. The 1950's saw a return to traditional family values, economic and technological prosperity, and the illusion of safety. Internationally we saw the decolonization of the world as the fascist regimes of the 1940's exposed the true colours of such colonies. Individualism and its political cousin, the self determination of the nation state promoted a further gain for true expression of the authentic self. Despite the backdrop of the cold war, despite nuclear bomb shelters and MacCarthyism, the 1950's boom reassured the masses that science, technology and the scientific mythological infrastructure were the only viable mythological systems in which to place our faith. The scientific myth was working -- or so it seemed.

The inability of the masters of the scientific myth to dress the wounds inflicted by the second world war period, the attempt to cover up the problem through mass production, T.V. and consumerism meant that the pendulum would inevitably swing the other way with even greater momentum.

The downward spiral into relativism, into anarchy, into chaos slid further in the 1960's. The hypocrisy of the "system", the scientific myth, became one of the central themes of the teenage revolution. Those without power attacked those with it, exposing the untruths that were preached as Truth, the inconsistencies in policies, the cover up. Free love, psychotropic drugs, Eastern mysticism, introspection, meditation, feminism, environmentalism and the re-emergence of the human spirit were enshrined characteristics of the "me" generation. Desperate youth were attempting to connect with an inner self which was denied expression under a dominant out-of-nature myth. Self expression as never before expressed became the rule in a society where all other rules seemed absurd. "Tune in and drop out".

The line it is drawn

The curse it is cast

The slow one now will later be fast

As the present now will later be last

The order is rapidly fading

And the first now will later be last

The times they are a changing (Dylan, 1967).

The 1960's represented a clash between the inner and the outer self, between the dominant myth, the scientific myth

and the counter myth, the quest for the authentic self. The youth of that time expected a revolution, expected an overthrow of the dominant myth, expected Truth. What they ended up with was the exposure of a non-truth. The 1960's permanently ruptured the scientific myth. There was no turning back, all the rules were fading away, the spiralling fall downward was accelerating at a speed impossible to slow. The myth had been exposed and the hypocrisies revealed. The 1960's were a fatal blow to the scientific myth, a myth that now lay mortally wounded. The times were indeed changing.

What the youth of the 1960's failed to appreciate or perhaps could not appreciate, was the amount of time required for a myth to die. The wounds were there yet the myth still lived. The revolution of the 1960's failed to come. There was a revolt but no revolution. There was a war but no victory. While the rules were being stripped away, it seemed nothing was available to fill the gap. The postmodern era left no sustainable myth. Grand theories and universal overviews could no longer be sustained without empirical falsification and intellectual authoritarianism. There were no more Truths.

Postmodernism... is an antinomian movement that assumes a vast unmaking in the western mind... deconstruction,

decentering, disappearance, dissemination, demystification, discontinuity, difference, dispersion etc. Such terms... express an epistemological obsession with fragments or fractures, and a corresponding ideological commitment to minorities in politics, sex and language. To think well, to feel well, to act well, to read well according to the episteme of unmasking, is to refuse the tyranny of wholes; totalization in any human endeavor is potentially totalitarianism (Tarnus, 1991, p. 401).

The twentieth century, therefore, has seen both booms and busts in the scientific myth. While on a purely physical plane science has assuredly maintained the upperhand, it has achieved great numbers, and achieved great powers; pushing forward with its technology, with its control over Truth. On this level it is definitely advancing; it is definitely the dominant myth.

The scientific myth's achille's heel, however, has been exposed and with it the inevitability of its death. On a more psychological level as well, the scientific myth is being undermined. While it offers relative freedom, wealth, position and power, it fails to address what all myths must address. It fails to address the meaning of life. While power over the flock is maintained, faith both externally and internally is being lost. The scientific myth is rapidly

losing its ability to provide us with meaning in life. The bust cycles all reflect the same thing -- that science cannot deliver meaning, it cannot offer us Truth, only "facts" and objects. The Western world's obsession with material goods is a reflection of desperate people in a desperate hour. "If only I had a newer car, a bigger house or that next promotion, then I will have made it, then others will offer me demi-God status". The reality, however, is that the status is a hollow victory because it fails to be linked to the inner self, to the authentic self. On the outside we are showered with praise, on the inside, in the pit of our stomachs, we feel the emptiness, the lack of genuineness, the doubt. More and more goods are bought, greater status is achieved, yet the doubt fails to go away. To be inauthentic and great is all the scientific myth can now offer. The angst created by such a state will inevitably need to be redressed. This redress will be the death of the scientific myth.

Science While myths are generally sought because they provide individuals and societies with an illusion of permanence which serves to ward off fears of death, the lived reality of life seems to be that nothing has permanence, that so called permanent structures all have a shelf life, some longer than others but none lasting forever. Newton's eternal laws no longer are eternal, nor

are Einstein's theories. Perhaps the only permanent structure is change itself. The problem then with a scientific myth that looks for laws in the universe, equations that somehow will deliver a "knowable" and hence "controllable" and hence fearless universe, is that it's an impossible quest. Yet surely this is what the early scientists believed they could do, and this belief is what ultimately is at the heart of the scientific myth. The faith in science is that science can ensure we will live longer, that science can cure diseases, that science can make life easier, that science can deliver us from evil, that science can unravel the mysteries of the universe and ultimately find its meaning.... our meaning. What I will examine in this section are the more recent scientific discoveries that use science itself to undermine the earlier belief that science can let us "know" the universe.

Science now maintains that there are indeed limits to human knowledge. In fact, scientific knowledge cannot possibly maintain a clean, objective stance any longer. Objectivity itself demands, at certain levels, faith; faith in the process, faith in mathematics, faith in science.

I will outline how modern science is beginning to recognize the fluidity of the universe, a fluidity that precludes laws yet maintains relative structures. This

postmodern interpretation of the universe has crucial implications for the scientific myth and, of course, the science of psychology since psychology's current dominant myth is still constructed from essentially outdated ideas. I will discuss, therefore, how the new science assists in the decay of the current myth and the ramifications this decay has for science and society.

It is important when examining science to recognize that it is a human phenomenon, a creation of the mind, a model of reality that seeks to explain reality and that it is not reality itself. It is equally important to remember that scientists are not special humans, do not possess special powers and are in effect fallible humans just like the rest of us. I point this out because when examining the myth of science it is easy, in fact natural to offer scientists an upper hand, to give them demi-God status, to accord them the power of knowing as opposed to the power of guessing just like the rest of us. The insidious nature of myths are that they require, at some point, special power to bail themselves out. Out-of-nature myths require an in-nature side. Science itself would be a perfectly rational system were it not for the fact that scientists were human and humans are emotional in addition to being rational. In order to make up for this shortcoming, since the need for a believable rational myth is so strong, there is an inherent

and often implicit urge to make heroes out of scientists so that they become blessed with divine grace and their words, ideas and models become Truth. It is through this act of faith that power is conferred upon science and by extension scientists. It is through this act that the inner self is denied and the self-as-other is reinforced. It is through this act that we bow to the powers of others at the expense of our own authentic power (however humble).

Since, as mere individuals, we feel weak in the world, since we recognize the obvious limits we have in comparison to the universe, since we lack "real" power in the universe, power of any significance, we fight back in a mode which offers us the greatest advantage: we fight back with our minds and create heroes out of mere humans and myths out of mere ideas so that by association we can quell our own fears and be secure in the knowledge that we know the Truth, that we are in control. This is the part of science that rarely gets acknowledged, yet it is critical to an understanding of the scientific myth. The status of scientists and to a lesser extent all those who use science as a tool for getting at Truth is critical. The power is critical and the faith is critical. Without these components in science, without heroics, scientists would fall away to more glorious campaigns. They would have to leave science because it would not be blessed with significance and it is significance

which in the face of death allows us to live. It is not what they actually do that really matters, although this is the illusion, it is the recognition they receive from others that ensures their allegiance to science. This is why it is important to have letters behind your name, to ensure that you get published, to ensure that you are recognized as a hero. While scientists will remark that it is knowledge that they are after, it is important that we see that there is always personal recognition tied to that knowledge. Nobel prizes are not given to ideas they are given to people, they are given to heroes and it is this heroic adventure that keeps scientists practising science. It is important, therefore, when examining the scientific myth to keep this very human dimension uppermost in mind, for it is this which provides the foundation of all science and it is through this dimension that the decay in the scientific myth occurs.

Mathematics is at the very heart of all science. Stemming from the Platonic ideal of an underlying form behind a dynamic world, mathematics fulfils the rationalistic quest to seek out the hidden order in chaos. Without mathematics scientists lose their control over the universe and the loss of control results in loss of faith since it is only through control of the universe that fear is kept at bay. If science cannot control the fear of chaos, then ultimately scientists lose hero status, power and dominance. So mathematics is a

key component of a scientific myth that derives from a scientific world view. Mythologically, therefore, we will see that mathematics, which cannot be logically explained as anything other than a human cognitive creation, takes on superhuman qualities, qualities that extend beyond any logical explanation. Mathematics gets imbued with divine grace and with it science and scientists. Referring to mathematicians, the backbone of the scientific theology, Sheldrake (1988) states,

Mathematical relationships seem to express strangely timeless truths, valid everywhere and forever. These Truths are objective, and yet clearly part of the world of thought rather than the world of things.... One cannot escape the feeling that these mathematical formulae have an independent existence and an intelligence of their own, that they are wiser than we, wiser even than their discoverers, that we get more out of them than we originally put into them (p. 35).

Even when philosophy takes mathematicians to task, insisting that they demonstrate this eternal nature of mathematics, the belief continues:

The majority of writers on the subject seem to agree that most mathematicians, when doing mathematics, are

convinced that we are dealing with an objective reality, but then if challenged to give a philosophical account of this reality find it easiest to pretend that they do not believe in it after all.... The typical mathematician is both a Platonist and a formalist -- a secret Platonist with a formalist mask that he puts on when the occasion calls for it (Davies & Hersch in Sheldrake, 1988, p. 35).

What should be impressive here is both the mysterious qualities ascribed to mathematics and the deep seated need to maintain an allegiance to this mysterious power. If science itself is to be an out-of-nature mythology then there must be a covert in-nature link. The mystery of mathematics is the link.

We will recall that Newtonian physics and the scientific philosophy that was created from it achieved the faith of the flock because mathematical equations could demonstrate significant control over natural objects. This mathematical control was thought to be generalizable and the popular opinion was that the world was like a clock that simply had to be pulled apart so that the smallest parts were laid bare and the mysteries of the universe known. The popularity of this myth occurred at a time when there was a transfer of power occurring politically favouring the growing middle

class. Scientists produced technological devices of use to the merchant middle class and so both groups supported each other.

The power of the mechanistic model should not be underestimated, for the slow death of the religious myth required a new myth so that existential fears could again be put to rest and significance from the new myth attained. It is important, therefore, to recognize that it was not science itself which won the faith of the masses, rather it was science's cogent philosophy coupled with physical, attainable, technological "proofs" that made it believable. By making life more comfortable technology and consumer goods have provided the linking pin between science and the masses. It fed the average person with sufficient comfort that the faith in more and more prosperity kept the power neatly tucked away in science's hands. What is critical here is that a need has been created and that faith is crucial to maintaining power.

While the mechanistic view won many victories, by the mid 17th century cracks were beginning to show. While mathematics could describe the motion of a satellite of Jupiter it could not describe the motion of a snowflake in a storm. While it could predict the growth of a soap bubble, it could not explain the growth of a tree. It seemed there

were two worlds to be conquered -- the world which dealt with small systems and simple laws, and another which appeared far too complicated to be handled by a generalized law. Newton's theories on gravity worked fine when two objects were modeled, but throw in just one more and the theory fell apart. While the mechanistic model was in trouble, what was not questioned was the power of mathematics to get us out of the jam. Mathematics, after all, was empowered through faith to get us out of all jams and the mathematical wizards, the scientists, created statistics to do the job.

Statistics was a way of getting some order out of a sea of randomness. Where there were many degrees of freedom, statistics mathematically (hence Truthfully) allowed for some order, not perfect order, but average order, probability which was better than chaos. The creation of statistics was a critical test for the scientific myth. What the faithful require is a belief that science can deliver the goods, that science is salvation, that science can keep the meaning- lessness of the world at bay. Once faith was placed in science under the mechanistic model, there was a need to maintain the faith despite the shortcomings of the mechanistic model. Statistics allows some chaos into the world, but statistics is mathematical and hence endowed with special powers to get at the Truth. What was required was a

leap, faith that statistics coupled with the mechanistic model could maintain the hope placed in science as a whole. Since the seed had been long planted and faith in science established and since no viable counter myth was in sight, the leap was a natural one and for most not even a noticed one. To the common person faith in science was all that mattered; what occurred behind closed scientific doors was not terribly important, and if important not readily available -- and if available, the predominantly illiterate masses couldn't comprehend it anyway. Scientists, after-all, were special people. They had an education which gave them special powers to know the Truth. From the faithful there was obedience.

I emphasize this human, emotional response to what historically appears to be objective because if we understand the compelling need to believe in science, we will see how entrenched the scientific myth needs to be. The greater the need to believe the easier it becomes to overlook inconsistencies, to overlook flaws in the myth which initially appear to have no effect, but which over time wear the myth thin and weakens faith. When this denial eventually breaks, science quickly moves to patch up the tear in the mythological fabric in true Kuhnian fashion. This is exactly what occurred with statistics. Stewart (1991) states,

By the end of the 19th century science has acquired two very different paradigms for mathematical modelling. The first, and older, was high precision analysis by way of differential equations; in principle determining the entire evolution of the universe but in practice applicable only to relatively simple and well structured problems. The second, a brash young upstart, was statistical analysis of averaged quantities, representing coarse features of the motion of highly complex systems.... the two paradigms were equal partners, equally accepted in the scientific world, equally useful, equally important, equally mathematical. Equal. But different. Totally irreconcilably different (p. 54).

The solution to the wrinkle in the scientific myth was to create a different model but maintain allegiance to the mysterious mathematical process and hence keep it scientific. While the practical problems of science were dealt with by the creation of this second method, what wasn't worked out was the philosophical and mythological ramifications of this action. A crack in the myth had been opened, but as no one really wanted not to believe that science would eventually sort it all out, denial took over and relative peace ensued. The faith was that science, while currently having to rely on statistics, would eventually,

perhaps in a hundred years or so, break through the riddle of the more complex system and the old mechanistic belief in science would be proven correct. Statistics was a momentary inconvenience that did not disprove the myth that the universe was knowable and thus the myth was thought safe. This process of ignoring the mythological ramifications of problems like these, the fact that science was, by its actions, admitting that the mechanistic world view couldn't work, that the True meaning of the universe was out of reach, is a common feature in the early decline of a myth. In the initial stages of any death, denial is the easiest option.

We discussed earlier the ramifications of a myth which fails to address weaknesses within it. The boom and bust cycles which seem to encapsulate this century reflect the difficulties that denial evokes and the increased pressure that results from not dealing with mythological inconsistencies. Science is no exception from this phenomenon and while the nineteenth century drew to a close with Newtonian and probability theories holding firm, the science of the early twentieth century produced another serious blow to the scientific myth.

Quantum mechanical theory examines the world of sub-atomic particles and pushes beyond the limited Newtonian world

view. When measuring sub-atomic particles it was noticed that two measures could be made. Particles appeared as and could be measured as either single particles with constant position in space/time or as waves with determinable momentum (the wave/particle duality). What can not be done, however, is to measure both these dimensions at the same time. It seemed that the measuring of sub-atomic particles demanded a compromise between the a particle and its momentum. One could be measured only at the expense of the other. What this meant was that universe was not necessarily accessible to us, at least not all at the same time. It was a scientific necessity that a compromise had to be struck at some point in the measurement. Quantum theory lead to the conclusion that the world could never be known. It placed limits on human knowledge; in fact, for the first time in three hundred years, human knowledge was placed back into the universe. It wasn't that we merely didn't have the scientific tools to do the job; rather, our tools led us to the conclusion that the Newtonian picture of an objective, fixed, measurable world was wrong for sub-atomic particles. Heisenberg, with the introduction of matrix mathematics discovered that at sub-atomic levels there was no such thing as an exact science. This became known as Heisenberg's uncertainty principle and as Zukav (1980) remarks,

Heisenberg's remarkable discovery was that there are limits beyond which we cannot measure accurately, at the same time, the processes of nature. These limits are not imposed by the clumsy nature of our measuring devices or the extremely small size of the entities that we attempt to measure, but rather by the very way that nature presents itself to us. In other words, there exists an ambiguity barrier beyond which we never can pass without venturing into the realm of uncertainty (p. 111).

What, then, are the philosophical and mythological ramifications of this principle? In many ways we are still attempting to come to terms with it despite the over 50 year lapse in time since its discovery. The nature of quantum mechanics and the nature of the uncertainty principle place limits on knowledge in a way that brings the experimenter into the experiment. Previously conceived notions of science have been based on the assumption of objectivity. The scientist and the object of study were separate and the experimental design was created to minimize the effect of the scientist on the experiment. This belief that objects could be studied with a minimal amount of experimental error follows directly from a Newtonian world view which places the world as object before us. Heisenberg's principle suggests that this assumption is incorrect and that the bias occurs in the establishing of the hypothesis to be tested

and in the very design of the experiment itself. The hypothesis and test design have significant effects on the outcome. In a way, they pre-select the outcome. If sub-atomic particles can be measured either as a wave or a particle, then the decision to set up an experiment to measure, say, the particle, pre-determines what will be found. The experimenter, in establishing the conditions of the experiment, in effect changes what can be found. Since there are no absolute starting points from which to begin, the experimenter is trapped setting the limits of the experiment and determining the design from a biased position which ultimately determines the outcome. The exercise is no longer one of discovering the mysteries of nature, but rather it appears to be more like an exercise in creating them. Not only is objectivity in question, but the whole nature of science comes closer to artistic expression of a perceived reality than any True objective reality. If there can be no objective measure then there is nothing to tie the whole system down. Science may be a perfect representation of the universe and how it works or it may be an illusion which seems to have very practical consequences. If the universe can never be known, all we have to work with in the end is faith.

The culmination of the effects that quantum physics had on knowledge became known as the "Copenhagen Interpretation"

and is explained by Stapp (1972): The Copenhagen Interpretation of Quantum Mechanics was essentially a rejection of the presumption that nature could be understood in terms of elementary space-time realities. According to the new view, the complete description of nature at the atomic level was given by probability functions that referred, not to underlying microscopic space-time realities, but rather to the macroscopic space-time realities. Instead it turned back and anchored itself in the concrete sense realities that form the basis of social life.... This pragmatic description is to be contrasted with descriptions that attempt to peer "behind the scenes" and tell us what is "really happening" (p. 1098).

What this means is that there are real limits to reductionism and real limits to objectivity. Both reductionism and objectivity, however, are the backbone of the old science and the backbone of the scientific myth. If science itself is now saying that clean objectivity cannot occur, and that the long held belief that smaller elements will eventually tell all there is to know about bigger more complicated systems is false, then what happens to the myth and the security that comes with it? If we necessarily need to become demi-Gods in order to maintain the belief that the world is knowable, controllable and safe, then what happens when we begin to admit that we are not Gods, that we are

just humans after all, that the universe cannot be known?

Quantum physics not only provides problems for reductionism and objectivity, but also for causal reality. If we cannot demonstrate that experiments are objective then we cannot demonstrate causal relationships. Experimenter bias will always ensure that the causality around events cannot be known. Causality is important to the scientific myth, however, because it assumes that events don't happen arbitrarily, that there is an underlying structure to the universe and this structure is both predictable and controllable. If causality cannot be known (and this was initially admitted, although not believed, with the acceptance of probability theory), since probability only requires the correlation of events and not causality, then the myth is mortally wounded and invariably faith will wane.

What the uncertainty principle maintains is that because there is no way to peg down the Truth, the error rate assigned to experiments to allow for human and apparatus inconsistencies is arbitrary, meaningless in any absolute sense and functionally an element of faith, not fact. Since it is the error rate that gives the experimenter the certainty to make assertions about the True nature of the universe, and with it the power to manipulate the masses,

the entire experiment and the power that goes with it become more elements of faith than fact. In other words, in the traditional experiment, the experimenter, being objective, manipulates one variable while controlling others, and it is believed that the experiment is done within a closed system so that the utmost certainty about the events and the control over these events can be maintained. This, in the early days of science, seemed to work well especially with mechanical models. If the uncertainty principle is correct, however, then the experimenter is not objective and his design pre-selects the relative course of events of the experiment. The outcome is simply a creation of the experimenter's own sense of reality and not necessarily of any objective reality. In the traditional setting it became an act of faith that the results obtained actually represented the True nature of the universe. This faith is reinforced by rather simple experiments from mechanical physics that appear so convincing to us that the method was thought generalizable to the rest of the universe.

There is no doubt that the mechanistic model has provided us with many technological tools, but to assert that the model is then generalizable to the rest of the universe is an act of faith in the model and not fact. It appears that the more complex the system (the less it deals with inert objects), the greater the chance that the flaws in the

mechanistic model will show up. This is why scientists had to go to probability theory. While probability theory did not quite fit the faith that had been held in the mechanistic model, what was not lost was the faith that eventually the mechanistic myth would be proven correct. Now, however, the uncertainty principle makes objectivity impossible and brings causality into question and so the faith that science was going to sufficiently maintain the quest to know the universe was beginning to weaken.

One of the "proofs" of the experimental method, the one that perhaps gains the most respect, is that an experiment can be repeated with relative consistency, then it can be believed that a Truth has been discovered (or more honestly a potential truth since the Truth would end the game). What the uncertainty principle and quantum mechanics questions is that even if we can repeat the experiment, we may simply be repeating the same relative biases as the original experimenter (and these are always carefully outlined in the experimental report), and so the results ultimately would still require an act of faith that they Truly represent reality. This is generally what we get. Most experiments, especially those with greater complexities, do not give exactly the same results; rather, if they are to be believed, they need only come statistically close enough to the original experimenter's results. Unless they are

relatively simple experiments, they will not give the same results because no matter how carefully initiated, a different experimenter is bound to influence the results in slightly different ways and thus statistically different results are not only possible, but probable. Convention then dictates whether the results are close enough to be considered proof as to the Truthfulness of the original experiment. When sufficient repetitions are provided then the scientific community consensually ordains the research as Truth (or truthful since absoluteness would end the game), and the researcher gains "hero points".

What quantum physics brings into question is the authenticity of the entire scientific field. It is not that scientists can't produce technological devices for our amusement, it's more that we should question the usefulness of placing such faith in science to get us out of our existential dilemma. If they are now admitting that they cannot know the universe, then shouldn't we be looking elsewhere for purposefulness?

When asked about the existential inadequacies of their field, scientists may assert that this is not their responsibility. Yet the power that science wields in society, a power they are all too ready to employ, and the fact that it is used so effectively to justify our actions

confirms that we do place a lot of faith in it; faith not only in its ability to be of practical use, but also faith at an existential level that it will, eventually, unravel the mysteries of the universe and deliver to us the True meaning of the universe and of ourselves. While scientists may assert that they are not concerned with such philosophical questions about the meaning of the universe, the heroic praise they get from others as to their ability to do just that seems to belie the fact. Scientists are humans and like the rest of us they want a way out the existential dilemma. They may not acknowledge that their quest is for purposefulness, but their actions, their heroics say otherwise.

Time magazine turns Stephen Hawking into an overnight demi-God who epitomizes the out-of-nature hero when it writes,

Even as he sits helpless in his wheelchair, his mind seems to soar ever more brilliantly across the vastness of space and time to unlock the secrets of the universe (Hawking, 1988, backcover).

or as Timothy Ferris of Vanity Fair advertises,

Stephen Hawking has overcome a crippling disease to become the supernova of world physics. Unable to write or even to speak clearly, he is leaping beyond relativity, beyond quantum physics, beyond the big bang, to the "dance of geometry" that created the universe (Hawking, 1988, backcover).

Nothing could be more heroic, more God-like than the picture of a crippled man, whose body has virtually given out on him, yet who at the same time can transcend his bodily barriers and soar through the universe with his mind. This is the scientific hero, a truly out-of-nature hero and his book is a testament to scientific mythology. It confirms that science is firmly in command and re-establishes faith by reciting a long list of battle honours from past campaigns to enshrine the belief that science is on a steady course to find the "dance of geometry", the Truth. Hawking may be a scientist who reports to be only interested in scientific truths, but his actions reflect a man in search of heroics. Others may have written these kind words about him, but it is he who allowed them publication on the cover of his book. It is he who wrote the book for public consumption; it is he who wanted the recognition. It sold millions of copies.

I am not questioning here the brilliance of the man, just highlighting the heroics. Scientists may argue that they are only interested in the facts of science, but it is more than just coincidence that this book made Hawking an instant star (not to mention the royalties). It is also more than just coincidence that he offers us the following,

...If we do discover the complete theory (the Grand Unified Theory), it should in time be understandable in broad principle (the myth) by everyone, not just a few scientists. Then we shall all, philosophers, scientists, and just ordinary people, be able to take part in the discussion of the question of why it is that we and the universe exist (the existential question). If we find the answer to that, it would be the ultimate triumph of human reason (our out-of-natureness) -- for then we would know the mind of God (Hawking, 1988, p. 175).
(parentheses added).

Clearly Hawking is searching for demi-God status, the quest is existential, the vehicle is scientific and the faith heroic. It is these acts of heroics that force science out of the closet and into the limelight and often the arm doesn't have to bent too hard. Science may truly not want the responsibility of quieting existential fears, but scientists do seem to like the limelight and the heroics,

and with both of these comes power and the responsibility to maintain the myth.

The last fifty years have not adequately dealt with the mythological implications of quantum physics. For the most part science has maintained its hold on the flock by maintaining that quantum physics is a special case for sub-atomic level analysis only, and this, of course, has little effect on the average person. The question here is one of scale. Scientific theory is currently holding that at the scale of everyday things mechanistic and probability theory works well, and at the sub-atomic scale, quantum theory seems to work best. The fact that reality itself at the sub-atomic level can only be dealt with in terms of probabilities and that these probabilities have no verifiable link to any objective reality, does not seem to get much attention outside of scientific doors. Put simply, we don't know how to handle the mythological and existential ramifications of quantum physics and the last fifty years of trying has still not adequately addressed them. The solution was to minimize the effect on the public and to maintain denial that anything was really wrong. There was nothing that faith in science couldn't eventually sort out.

I say all this making it sound as though there was a conspiracy to hide scientific problems from the public, and

in some ways there was. The conspiracy was not covertly orchestrated nor was it particularly well planned. The conspiracy of silence was from the existential depths of the scientists themselves who, as humans, did not want to know that their efforts had no ultimate purpose that they were not discovering, or at least assisting in the future discovery of Truth. There is a need to maintain the myth and that need is as real for the masses as it is for those in power. Scientists need to believe that what they are doing is real, is True and, therefore, their ability to critique what they are doing has obvious limitations. They have vested interests in maintaining the myth not only for the practical worldliness of it but for the other-worldly heroics it offers them. Quantum physics placed serious limitations on human knowledge and threw the whole question of objectivity in science in doubt. Mythologically, however, there was a need to maintain the belief that eventually a way out would be found, that science would come through. In the meantime there were many consumer goods that could be produced, there were many things available for them to do that would allow them to maintain denial. Denial, however, could not be maintained forever. The next scientific crack in the mythological shell came in the form of chaos theory.

Chaos theory is a branch of science which explores non-linear dynamics. Most of what we know about the mathematics

of science follows linear differential equations and this allows us, in a reductionistic fashion, to make predictions about large systems from smaller pieces. In the past, non-linear equations were unsolvable and largely ignored by the deterministic scientific world. Approximations were used to manoeuvre around the dynamic rough spots and the success of the old science offered hope that eventually these irregularities would fall prey to the deterministic equations. Recent examination of non-linear equations, however, reveals that not only are they not deterministic, but that determinism itself may be more of an illusion and chaos more the rule.

Chaos theory has many formal and informal definitions. Formally it can be defined as "Dynamics with positive, but finite, metric entropy" and informally as "Dynamics freed at last from the shackles of order and predictability.... Systems liberated to randomly explore their every dynamical possibility.... Exciting variety, richness of choice, a cornucopia of opportunity (Gleick, 1988, p. 306). Non-linear systems produce randomness within a finite structure that revolve around what is called a strange attractor (strange because although attracted to a central point, the dynamic system never actually reaches it). The effect is a chaotic system which seems not to be deterministic and yet, since it runs within finite borders, does appear to have some non-

random qualities.

There may, in fact, be non-random periodic cycles within a dynamic system, yet no way to predict the time, location and degree of non-randomness. The weather, which follows a chaotic pattern, for example, gives some level of predictability, and this predictability is what the person reporting the weather seeks to address. As we are too well aware, however, their ability to predict is quite limited since they are working from within a chaotic system and the movement of weather patterns is too dynamic and random to offer orderly, accurate predictions. There is, in effect, an order found within chaotic patterns and/or chaotic patterns within order depending on how you look at it. This order within chaos is important because it brings into question our understanding of order in the universe. If time and space are relative (as the relativity theory suggests), then our understanding of chaotic systems with their periodic orderli-ness suggests that the order we see in the world, the order that differential equations describe, may just be orderly periods within a larger chaotic system that, relative to our position in space and time, seems permanent. In other words, instead of the orderly universe that the scientific myth holds onto, it may, in fact, be the other way around. It may be that the universe is dynamic, chaotic with periods of relative time and space that offer momentary

"permanence".

If we now look back at mathematical equations we begin to see the path they have lead us on. The use of mathematics itself pre-conditions us to think in terms of logical systems that obey laws, and so the science that develops out of an absolute reliance on mathematical equations cannot help but support a belief in an orderly universe. In a sense, you create the universe you want to see. The reliance on mathematical equations comes in part because they legitimately appear to work and have practical implications, and in part, because of an existential need to believe that the universe is knowable and that this pursuit of the mysteries of the universe will eventually bring to us our purpose in the universe. It is here that we begin to see the magical qualities of mathematics. The faith in the logical manipulations that mathematics offers us, is a faith that espouses that mathematics is not just a creation of the human mind, but that it somehow transcends the humanness of us and taps into the mysteries of the universe. Mathematics, in short, becomes a medium between us and God, between the known and the unknown, between the out-of-nature part of us and the in-nature part. Mathematics becomes sacred and God becomes a mathematician (thus implying that all those who work with mathematics are demi-Gods). What the chaos theory suggests, however, is that coupled with this notion of a

logical, mathematical universe, is a universe which is dynamic, vibrant, creative and essentially unknowable. Both together seem to encapsulate all we know about the universe and the reliance of one at the expense of the other is no longer acceptable.

Those wanting to hold onto the notion of a knowable universe may argue that if objects appear permanent for us and if we cannot notice the chaos in those objects anyway, then there are no practical reasons to be concerned about its chaotic function (i.e., if science is working well on the old system, why fix it?). As more and more research is being done with chaotic systems, however, what is being noticed is that old equations do not offer perfect descriptions of the world around us. It is interesting to note that in the western world there are appointed officials whose job it is to collectively fix the exact numbers for various measures so that more up-dated versions become ordained as Truth. The speed of light, for instance, is not absolute but has changed over time and it is assumed that these changes reflect better measuring apparatus and less experimenter error, so that the most recent official number is also the most accurate. It can be argued, however, as Sheldrake (personal communication, 1992) has done, that the changes in measurement reflect not better measurement but chaotic fluctuations and, therefore, even the most

acknowledged Truths about the universe, the ones we thought we knew, the ones that were definite, the laws, may in fact not be accurately portrayed and may be impossible to pin down. What was perceived as experimenter error may in fact be the small differences in a chaotic system that lead to catastrophic changes later. (This idea is known as the butterfly effect -- the idea that a butterfly flapping its wings in New York can cause a hurricane in China). Later, of course, is relative and so from a human perspective may not be noticeable, but that does not mean that it doesn't exist. From a scientific perspective it may not be worthwhile to address this inconsistency, but what cannot be ignored are the mythological ramifications of such an assertion. In the old science it was believed, either explicitly or implicitly, that the universe followed certain laws and that these laws were within our grasp to be known. What the Chaos theory is suggesting is that the world is chaotic, dynamic, ever-changing and that this changing occurs at different rates over time, thus only appearing to be orderly at certain times. This understanding of the universe is backed by astrophysicists who support the big bang theory. If the universe was created by a big bang, and if the universe is ever expanding, then it is necessarily dynamic, it is always in movement. If it is dynamic then there cannot be universal laws, for where would they come from? In order to have universal laws, they would have to have been part of the

design of the big bang, they would have to pre-date the creation of the universe.

I think at this point we can see that we are now into speculation that resembles theology more than science. Since I have asserted from the beginning that the mythological structure of science is based primarily on faith and not fact, then one can begin to see the mythological challenges the new science creates for anyone who has placed faith in the scientific myth. Not only does the new science have ramifications from within science, but it has significant ramifications mythologically for our entire society.

Science has advanced to the point that its own inherent assumptions about the universe, whether explicitly expressed or not, are now caving in on themselves creating confusion and division within the scientific community. If we remember that scientists are human and not demi-Gods, then we can expect that what happens inside the scientific community will be structurally similar to what has happened during past decays of myths, and also that the decay within the scientific community will be reflected in the larger community as well. This does not presuppose a predictable universe a la Newton, but structure within chaos a la the chaos theory. In past myths what generally happened when a dominant myth was challenged was that the defenders of the

dominant myth sought to either convert the challengers to the dominant myth or when conversion proved impossible, dismiss the challenges as either wrong or insignificant, thus maintaining, for as long as possible, the hold on power.

Years later Feigenbaum (who developed the chaos theory) still kept in a desk drawer.... his rejection letters. By then he had all the recognition he needed.... But it still rankled that editors of the top academic journals had deemed his work unfit for publication for two years after he began submitting it. The notion of a scientific breakthrough so original and unexpected that it cannot be published seemed a slightly tarnished myth. Modern science with its vast flow of information and its impartial system of peer review, is not supposed to be a matter of taste. One editor who sent back a Feigenbaum manuscript recognized years later that he had rejected a paper that was a turning point for the field; yet he still argued that the paper had been unsuited to his journal's audience of applied mathematics (Gleick, 1988, p. 180-181).

This is precisely what happened to Feigenbaum. His rejection letters reflect the desire of the scientific community to direct him to more worthwhile research and is

an example of what happens when the scientific myth is directly assaulted. Scientists as humans have an invested interest in seeing the scientific myth portrayed as Truth. This not only occurs at the physical, day-to-day level where they have a need to protect their direct and indirect power within the community, but also at an existential level since it allows them to claim their work as Truth (or at least on the path to Truth), and thus meaningful, significant and by extension they themselves significant. The peer system of review in science stems from a belief that scientists are impartial, objective and Truthful; but the lived reality is that they are human, emotional, petty and fallible. The inability of one editor, after his obvious error, to admit his mistake reflects how deeply ingrained the need to maintain power is. The loss of face in admitting his/her error was not acceptable because this admission reflects existentially the editor's fallibility of judgement, a judgement that was supposed to be objective, scientific, God-like. To admit to being wrong would be a sign that they are not as God-like as others, that they are fallible and possibly insignificant. There is an vested interest in maintaining the illusion of correctness, an existential interest.

What the new science offers is new ways of seeing the universe. It makes it impossible to conceive of a universe

that we are not part of and by extension that we do not help create. The new science breaks down the myth of objectivity, the illusion of deterministic principles as the only governing force in nature and questions the mythological assumption that the universe and its purpose can be known. The new science erodes the mythological foundation of the scientific myth and leaves both science and society in a state of decay, in a mythological vacuum.

Psychology

Through a massive hundred years' effort to erect a discipline given to the positive study of man has here and there turned up a germane fact or thrown off a spark of insight, these "victories" have an adventitious relationship to the programs believed to inspire them, and their sum total over time is overwhelmingly counterbalanced by the harvest of pseudo-knowledge that has by now been reaped.... The history of psychology, then, is very much a history of changing views, doctrines, images, about what to emulate in the natural sciences, especially physics (Koch in LeShan, 1990, p. 11-15)

Psychology has always been in a position of becoming. It has struggled since its inception to find a spot for itself

somewhere between theology (the religious myth) and science (the scientific myth). It seems caught between two worlds making both a poor religion and a soft science. The difficulty the discipline of psychology has had reflects in part the struggle we all have in coming to terms with our existential dualistic position.

While all social sciences suffer from an inferiority complex, from not being a hard science, psychology seems particularly susceptible since the domain of its research focuses on the object in which the struggle for legitimacy is occurring. Here more than anywhere else one constantly rubs shoulders with the softer side. The changing views and doctrines in psychology reflect the difficulty the discipline has had in maintaining denial about its animal self, about a part of its subject of study that doesn't seem to fit nicely under the scientific rubric. The knowledge gained through a science of psychology is reportedly objective and all pieces, therefore, are not impassioned with any greater significance than any other. Knowledge about neurotransmitters for example, while being different than say, social conditioning, has no greater value than social conditioning. They are all just pieces of a greater puzzle. In a reductionistic fashion we are just parts, objects, that when fitted together properly become a human. To value any one part over another is to be unscientific since "valuing" is a qualitative

action and science is a quantitative business. But if a reductionistic, objective science of psychology reports that we are nothing more than objects of study to be manipulated and controlled, then knowledge, a human function, that has been derived from psychologists, who are human, can have no greater value than say defecating which is also just another human function. Of course this is not the case. We do value human knowledge (cognitive functions), in this case psychological knowledge, over defecating (a bodily function). In fact, we go to great lengths to deny (especially to others) that we defecate at all (the denial of the bodily self). In order to maintain this awkward position of valuing while being objective, we construct an elaborate denial system. We get around it by empowering psychologists qua scientists with special abilities (read divine abilities) to get at the Truth. Their knowledge somehow transcends the limitations and conditions placed on it by their own research. Their knowledge is valued because it is not human knowledge, it is God-like, it is the Truth. In other words, in order for psychologists to study their subject objectively, which, since they are humans, means to study themselves objectively; they must somehow take themselves out of the field of study, they must transcend their humanness and become demi-Gods. While in the more traditional sciences it was easier to be a demi-God, to control and manipulate, to be objective looking, since their subjects of study did not

actively challenge their power; psychologists face the challenge of their own research within their own body. Psychologists are emotional beings with a body. Their research is impassioned by their own desires, their own cravings for significance and the only way to get past this to an objective, emotionless stance is to deny one's emotions in one's research, to deny one's body. This position is easier to adopt and gets greater support when it coincides with the dominant myth. Therefore, the acceptance of the scientific myth assists in the denial of their bodily selves by those who use the myth to maintain power, in an effort to project and maintain the illusion of demi-God status which offers them purpose, meaningfulness in a world where meaning is unknown and perhaps unknowable. This pseudo-meaningfulness allows them the illusion of escaping their existential prison.

What I will address in this section is the decay of the discipline of psychology, a decay of a scientific psychology that has failed to shake off its in-nature side. While I will be taking some hard punches at psychology, I believe there are qualities of perhaps lesser value within the discipline of psychology that rarely get talked about, yet they need to be acknowledged so that the in-nature side to the discipline gets revealed. My examination, therefore, challenges the discipline to examine a part of itself it would rather leave

under the carpet. By exposing it, I hope to reveal the weaknesses of the current myth within psychology and by so doing demonstrate why the discipline is currently in danger of passing away.

The discipline has made every effort to maintain an objective, reductionistic and scientific stance in its research, teaching and practice of psychology, but this scientific stance has occurred at a cost, a cost not measured in terms of numbers, but in terms of faith. Paralleling other societal trends, there has been an ebb and flow in psychology in and out of its in and out-of-nature sides. These fluctuations have now culminated in a crisis, a crisis that falls from a much larger crisis in the scientific myth: a crisis of faith in science and consequently the discipline of psychology. The resolving of this crisis will be critical for the future of the discipline.

As mentioned earlier, Freud attempted to balance the in and out-of-nature sides of us at a time in history when the movement from a religious myth to a scientific myth was occurring. His model, therefore, reflected the mixed mythology of the time. In the end, however, the discipline fell towards the scientific myth as it became more clear within society that science would be the vehicle for Truth. The advancement of science in psychology, while usually seen

as progressive, logically oriented and a pursuit of Truth, has tied to it a much more human, in-nature side. There is an inherent need in the discipline of psychology as there is in the individual, to belong, to belong to something that matters. The need for acceptance, an emotional, in-nature need, has lead psychology to follow the path of the dominate myth, to follow science. Psychology is not a part from society carving out new ideas and new ways of being, rather it is a part of society caught in the struggle for legitimacy. Psychology is not trend setting, it is trend following, it follows the dominant myth.

The discipline of psychology is composed of psychologists and a psychologist is nothing more (or less) than a human, a human who feels the same need for acceptance as all other humans do.

There is no question but that psychology has seen itself, and has been seen, as the bastard child of the sciences. All the social science have suffered under this inferiority complex, and like all co-dependent hero children.... it tries harder and harder to be accepted. When a person or discipline needs acceptance, it becomes progressively rigid and rigorous in trying to do the right thing while becoming increasingly aware of its inadequacies. In this process.... the focus is more and

more directed on the tiny details it can "prove," scientifically, and psychology becomes more and more divorced from human issues and larger than human issues. Psychology's need for acceptance by science and medicine has pushed it further and further from creative, innovative thinking, lest it face rejection. When a person or a discipline needs so desperately to be accepted, it will literally sell its soul to get in (Schaef, 1992, p. 215).

The weak link in the science of psychology is the psychologist, the human psychologist. The problem with the psychologist parallels the same problem the scientists have with respect to the hard sciences, namely, that their humanness gets in the way of their science. In an effort to alleviate that problem psychologists like scientists have historically given themselves demi-God status, have become objective and thereby have been bestowed with special powers to see the Truth. The myth of objectivity, the myth of special powers, the myth of the psychologist/scientist, however, is increasingly being revealed both from new revelations from within the scientific community and from social trends shaping it from the outside. As a result, the discipline of psychology is increasingly moving into troubled waters because psychologists in the end are human and not demi-Gods. Speaking about codependence and therapists, Schaef

(1992) writes.

.... psychotherapists often come from addictive, dysfunctional families. Then tend to migrate to a profession where they can use the skills they learned at home and where those skills are valued.... psychotherapists are.... usually not in recovery, they do not understand or know how to recognize addictive dysfunctions or healthy functioning. Dysfunction seems normal; hence, when they find themselves in a profession that systematizes codependent functioning, it seems normal. Codependence thrives on others dependency upon them. Codependents tend to focus on others and get their validity (purpose/meaning) from caretaking, so they choose a profession in which they get paid for it. Therapists are trained to believe that it is their role to be in charge of the situation, to know what others need, to be able to know and interpret what is good for others, to know better than they do what is going on in the person and what will "fix" it, to be able to manipulate other in their "best interest", and to be responsible for others (p. 238).

The move towards a scientific psychology was driven, in part, by a society that increasingly believed in and was turning towards the scientific myth. Psychologists themselves

quickly developed the attitude that science was the best approach for the study of the human dimension. Cattell (1904) reports he saw no reason "why the application of systematized knowledge to the control of human nature may not in the course of the present century accomplish results commensurate with the 19th century application of physical science to the natural world" (p. 186). It should be noted that the assumptions about the scientific application of psychology falls from a 19th century understanding of science. I will digress here slightly to point out that while statistical procedures have advanced significantly, especially since the advent of computers, the underlying assumptions about statistics and their application to the human seem to go unquestioned. As the 21st century draws closer, the discipline of psychology has been reluctant to enter into, let alone deal with the ramifications of the new science of the 20th century. Does it not become more difficult to belief in a scientific discipline that insists on maintaining outdated beliefs about the universe? Questions like this can surely not help a discipline which is struggling to maintain its "scientism". Chaos theory, for example, suggests that with highly dynamic systems there may be no way to predict or control behaviour. Within certain boundaries control may be out of reach. Can you think of a more dynamic system than the human being? What if prediction and control are impossible for human beings? What does that mean for a discipline who

has a mission to do just that? While it is expected that psychology will always trail behind the newest advances in science, entering the 20th century before the 20th century is over should not be too much to ask. As science changes, the scientific myth as it was originally defined becomes weaker and weaker and the discipline of psychology which entrenches itself in this myth in order to maintain significance also becomes weaker, less believable, less Truthful.

As previously mentioned, the scientific myth was maintained by a growing middle class who used the technological applications of science to physically make a living and to mythologically maintain purpose. While it is commonly believed that science is the best approach to understanding the universe, what is important to acknowledge is that the link to the middle class, the link to the masses is a necessary condition to maintaining power, to being dominant. It is comforting to believe that science was adopted as a dominant belief because it offers us the Truth, the Truth being morally and psychologically appealing; but there is an equally reasonable alternative belief (although perhaps less palatable) that science was adopted not because of Truth, but because of a much more selfish reason, because of greed. While this may be less appealing, it is none-the-less a product of a mythology which places power, money, exploitation and the vision of the world as object to be

controlled and manipulated by us, before us. It is through this power side, this greed, that we see how an out-of-nature scientific myth covertly maintains an in-nature link. The exploitative side of technology, the cut-throat market place, the greed, the power all form part of the in-nature link to the out-of-nature myth. The market place would not survive without products, scientifically produced products. There is a entourage of parasites that surround the scientist and take care of the dirtier side, the business of science. While science maintains a white glove approach to its research, a colony of leeches constantly sanitizes science helping them maintain the demi-god image, while making a handsome profit for themselves as well. It is not just coincidence that major companies provide research grants. They provide it for a reason -- a bottom line reason. Have you ever seen a commercial that states "laboratory studies prove" or how about "2 out of 3 doctors recommend"? Rubbing shoulders with science and scientists is an obvious way of conveying your telling the Truth because science equals Truth. Science and business are no longer (if they ever were) separate and increasingly business is becoming the reason d'etre of science.

Whether this connection with its underlying selfish motivation is valuable for a human species is, for these purposes, relatively unimportant, but what is important is

that we recognize that business has its place in the larger context of science. It is not a part from science. it is in many ways the heart of science -- it keeps it alive. The benefactors of science are the in-nature part of science. Science advertises its intellectual approach to understanding the meaning of the universe. while covertly maintaining a strong link to the business community which greedily sells its products to the highest bidder.

Academic institutions, for example, where the bulk of research is done, sees as its business to ensure they produce marketable graduates, graduates becoming their product. Preparing people for the marketplace has virtually replaced the more loftier academic pursuits of knowledge for its own sake. Knowledge is no longer an end in and of itself, it is a means to an end, the end being a job. Professors work in a publish or perish environment because for the institution, their power is maintained by preserving the illusion that something important is going on inside. The acquiring of grants, contracts and research money is what builds and maintains academic power bases. It does not necessarily follow that something important is going on, that the research is actually meaningful, rather the illusion, the myth, is what is important. The number of articles published is more important than good research since good is relative and numbers are not. All articles must be seen as good

research however. Good research becomes good when it brings in money or power (prestige) or both. For these goods many hero points are awarded and both the professor and the institution share the limelight. Good research with no money or prestige is not good research. The point is, that research is less judged on its own merit, than it is on what it can get you. It is a commodity. The academic institution parasitically maintains a link to the scientist and the scientific community (including psychology) equally maintains a link to its animalistic self through allegiance to these institutions.

I point all this negative side out because if psychology is to gain some of this scientific power, the power to manipulate and control, then it must also tap into this less desirable aspect of the scientific mythology. It is through this manipulative, power oriented side that the connection to the animalistic self is made. The underbelly of the science of psychology is that it justifies the exploitation of others, the control of others, the manipulation of others for the nicest of reasons. This control is executed by ordinary people who do not see themselves as ordinary, over other ordinary people who are pathologized.

Since establishing and maintaining the faith of the masses is crucial in gaining power and power is crucial to the

control and manipulation of others, and since psychology is following the dominant myth, it can be expected that psychology will need to develop its own "technologies" in order to lure the potential flock.

The construction of the psychological subject in this century was guided largely by external institutional influences and by the market for the psychological product. The influential institutions were the American universities, which demanded that psychology be useful and have the appearance of a science. The product, psychological expertise, was shaped first by the needs of educational administration and then by the military. All these influences converged to force the abandonment of individual consciousness (e.g., depth psychology -- the link to the in-nature side), in favour of the statistical aggregate, which was more immediately relevant to administrative needs for social control (Tolman, 1992, p. 142).

Both the first and second world wars with their increased technology demanded, for the first time, the categorization of people into specific job aptitudes. This offered the discipline of psychology a chance to demonstrate its usefulness to the public, to gain public support, to convert them and by so doing to become significant. The method used to gain legitimacy was the method the public already had

significant faith in the scientific method. It is at this time that statistics become the main power tool of the profession. since statistics (from the 19th century), was already accepted as being scientific. In a discipline that once strove to understand the individual, the individual increasingly slipped out of view and was instead replaced by a deviation from the mean. As a result, "technical criteria like null-hypothesis testing completely supplanted theoretical ones in justifying knowledge claims" (Tolman, 1992, p. 142). Overtime a theoretical understanding of the human being, an overview of what we are became less and less important. We no longer needed an explanation or description of what a human being was, we needed only a formula. The bottom line was "were your results statistically significant"? Statistical significance gave you permission to declare Truth (usually in small forms) and this won you a hero biscuit.

In an effort to convince the public that it was a legitimate science, similar to the hard sciences with their technological spinoffs, psychology too had a marketable commodity. It had a complete menu of "scientifically valid" tests that promised to reveal the True nature of ourselves and it offered a sub-section of the discipline that, for a fee, would assess and treat your psychological maladies. Paralleling the social attitude of the 1950's, the mass

market mentality, psychology grew into a "legitimate" discipline and the business of psychology, psychotherapy, boomed.

The link to the market place, the link to the masses is no small component in the rise of the discipline of psychology. Without something to pedal to a consumer society, psychology had no chance for legitimacy and psychologists no chance to achieve demi-God status. The emotional need to be special, to have purpose is animalistic, the method of achieving it, the science, is symbolic, God-like. Freud put psychology on the map and psychological tests, coupled with a scientific oriented psychotherapy sold it to the public. Psychology became a business, a business for the middle class (where most psychologists draw from and where most of the business is done) and legitimacy came less from its scientific effectiveness, although this was the marketing slogan, then it did from the selfish need to make money and receive power by promising, not unlike past religions, a better life, salvation.

Bodhi Creek Farm - a gateway to experience deeper connections
with one's self and that which is beyond
the self.

Dr Harrington - let your soul sing - invites women to explore
their sexuality, sacredness and creativity -

\$535.00.

Jack Schwarz - getting to know your mission -\$350.00

Patti Culver - adventures in change - my purpose is to empower you to create balance and fulfillment in your life.

Core Belief Engineering - you can spend your energy and time enjoying better health, greater creativity and doing more (Common Ground. 1993. p. 20-21, 50).

It is not just coincidence that the 1940's through 1950's also entrenched, from within the discipline, behaviourism as the dominant model. The overthrow of depth psychology came at a time in history when science was making some of its greatest leaps forward. Again it would be palatable and perhaps preferable to suggest that behaviourism gained power because it was more scientific and hence more Truthful, and this surely was promoted as part of the equation. What must also be included, however, is the fact that behaviourism, by promoting itself as scientific, also wrapped itself in the scientific myth and the products from this myth sold. Science was a hot item and depth psychology with its link to the inner self was refuted as unscientific and dismissed. Behaviourism, which did not allow for an inner self, which placed the human entirely as other, took the reigns of power within the discipline. Behaviourism promised social control

which appeased those in power, it followed a laboratory model which made it easily adaptable to the academic world, it was reductionistic (rat behaviour equals human behaviour). it was statistical, and it was objective looking since it dismissed the inner world. In short behaviourism was scientific and science was the mythology of the day.

One would expect that behaviourism, since it is scientific, would flourish as "the" model for psychology and that we would soon reap the knowledge that this objective view of the human would uncover. One would also assume that if there were to be another model to dominate the discipline, that it would have to demonstrate greater "scientism" than behaviourism since Truth lies in science so less science would mean less Truth. One would assume this if the myth underwhich the discipline worked was the Truth.

The fact is, however, that behaviourism did fall out of favour and it fell as a result of a less scientific model. By the mid 1960's, the same time the adolescent world was tuning in and dropping out, behaviourism and its control on the discipline was beginning to wane. To counter the out-of-nature behaviourist model and to parallel a growing discontent within the public sector there emerged another model, a model which clearly was less scientific, a humanistic model. Unlike the detached, mechanistic under-

standing of human behaviour. the rigid, logical patterns of rewards and punishments outlined by the behaviourists. the humanists sought to address the fully functioning human by accentuating the more in-nature (and positive) characteristics of the individual.

The ideal type of individual would, of course, demonstrate organismic trusting. Being open to each new experience the person would let all the significant information in the present situation flow in and through and would trust in the course of action that would emerge as the best response to the present event.... living in the present results in an experiential freedom in which people have freedom to choose and direct their lives from within, regardless of the sad fact that actions may indeed be somewhat predictable on the basis of past experiences. The greatest sense of freedom comes in being creative, in being able to produce new and effective thoughts, actions and entities because the person is in touch with the spring of life (Prochaska. 1984, p. 115).

While humanism never achieved the dominant position in the discipline, it did offer a voice to the heretics in the crowd with its dissenting ideas. What humanism accomplished was to severely wound the scientific myth within the discipline. Like the adolescent revolt that failed to achieve a

revolution, the humanist revolt within the discipline also failed to flourish. What is significant about the humanist movement, however, is that it was an in-nature movement which eventually toppled the dominant out-of-nature, behaviourist model. The dissent from within the ranks had been publicly voiced and this voice mortally wounded any hopes of a truly scientific understanding of the human being. The discipline was on the slippery slope of devolution.

I wish now to turn to the applied areas of psychology, specifically, psychotherapy. Psychotherapy has always had a difficult time with the scientific myth and its applications to humans. While academics and research psychologists could design their world to manufacture required results, therapists had to apply the science of psychology to the real, and perhaps less cooperative, world. To this end, therapists more than anyone else have been able to see the difficulties the application of science has had.

Holding on to the myth of objectivity and trying to set up a human interaction in which one party is not really involved has set up an impossible situation for psychotherapy. The therapist must be caring and concerned and develop a model of a "healthy relationship" and at the same time be a scientist conducting a laboratory experiment in which the more uninvolved, neutral and

objective the therapist can be, the better it will be for the client.... People are not machines. therapists cannot be "objective" and the therapy session can never approach a laboratory setting. This erroneous reliance upon a mechanistic scientific method severely limits the efficacy of therapy as we have designed it. In effect we have set up a therapy in such a way that it asks both the client and the therapist to deny their own reality in order to fit into the model (Schaefer, 1992, p. 229-231).

The reality that is being denied is none other than the bodily self. Therapy has difficulty with a mythology that only acknowledges a symbolic self because it comes in constant contact with the reality that we have a bodily self as well. Humans are not machines, they are humans and the intellectual dismissal of the human side, the in-nature side, the emotional side, does not change that reality. For therapists, therefore, denial is harder to maintain.

While I am willing to believe that most therapists do therapy because of a genuine concern for others, it may be that the prescribed method, the scientific method, may in fact do more harm than good. Schaefer (1992) writes,

I have come to see techniques, exercises and interpretations as the "stash" of the codependent

relationship addict therapist. By calling it our "stash," I mean that we use techniques, exercises, and interpretations just as alcoholics use their hidden alcohol -- to perpetuate the disease.

Therapists use these three "tools" to maintain a power base, to keep themselves in their illusion of control, to manipulate the process of the client, and to foster dependency. When clients arrive at information at the use of these three tools, what they learn is to trust the tools and the therapist and not, ultimately, to trust their own process.... it is the therapist who needs the tools and methods, not the client or participant (p. 252-253).

The therapist (as codependent), carries into therapy their own personal "baggage" from their own lives and under the current model, so long as objectivity is assumed and once assumed maintained, they never have to deal with their own "not so healthy" lives. No where in the training schedule does it demand that the therapist be "healthy" themselves. Therapists are trained to be scientist practitioners and since objectivity is a cornerstone of this model, than one's personal life need not be an issue of concern. What objectivity mythologizes is the psychotherapist as demi-God. Objectivity coupled with knowledge that is deemed to be Truth are what allow the therapist to escape their own human

trappings. The removal of objectivity, therefore makes their knowledge biased and their power impotent. In short, they become human again.

Training to become a psychotherapist is primarily academic. What you have to demonstrate above all else is an ability to conform. Examinations are not designed to allow you to think, so much as they are designed to demonstrate the level of conversion that has taken place. Academic scholarship for the candidate psychologist in the discipline has more to do with conforming to a scientific mythology (and more often to the personalized style of individual professors) than it does to any serious consideration of what it means to be human. The real issues have all been thought out ahead of you, the answers more or less known, the details are all that is left. Research for the trainee, more often than not, comes down to taking a piece of a professor's own research and doing it for them. Original research is discouraged, it's too risky. Criticism is useful, but only in small doses and generally only in private conversations. The questioning of authority is, in the end, forbidden. Is there any wonder why therapists have high burn out rates. They are trained and highly rewarded for conforming to a mythology that has limited and perhaps harmful affects of the actual clients they offer services too. Since, as humans, they too wish to be part of a group that really matters, they are reluctant to give up

their scientific training. training they worked many years for. How many psychologists after anywhere from 5 to 9 years in university graduate and then decide to change jobs? They are almost compelled to be a psychologist at that point or else admit to the world and themselves that wasted those years in university (remember knowledge for its own sake is not rewarded, just getting the job). They feel trapped and ill prepared for what it is that they are suppose to do. The apprenticeship program that is suppose to occur and that is suppose to be of assistance to a new therapist, is largely ineffective. It is ineffective for many reasons, the least of which is that there are simply to many apprentices for the number of qualified therapists willing to take someone on. The overload means minimal contact with minimal supervision. This coupled with the fact that qualified therapists get few rewards for the duty make it a weak system at best. The training to become a therapists then, is conformist in orientation, largely academic, does not require that you be "healthy" and offers you few resources for help once you are in the job. This coupled with the fact that the science of psychotherapy does not fit well with the nature of what one is faced with in therapy, makes psychotherapy a more difficult business to sell to oneself and others.

The downward spiral of the scientific myth from within the rest of society over the past 20 years, the resultant chaos

and existential crisis that is rampant in our society today, the fact that there is nothing left to believe in, has had a significant impact on the discipline of psychology which had sold its soul to a now less believable scientific myth. In a milieu of directionlessness, the lack of a dominant mythological structure that has previously provided some focus and direction within the discipline; the sub-sections of the discipline (neuropsychology, feminist psychology, cognitive behaviourism, social psychology etc.), have increasingly entrenched themselves in their own sub-systems of beliefs and assumptions about psychology. It is now becoming increasingly difficult for them to talk to each other. Psychology as a structure is losing power to sub-sections within it that seem to be all going their own way in no acknowledged direction. The characteristic model that best describes the confusion of the last 20 years in the discipline is eclecticism. Eclecticism as a model is more of a smorgasbord of models, where the choice is left to the psychologist to know which one will work best with which client/experiment. No one model rules as dominant from within the discipline. While the cognitive behavioural model has attempted to rise to the top in recent years, the counter feminist models coupled with a rise of the more in-nature recovery movement has clipped short the reign of cognitive behaviorism. Put simply, the masses are reluctant to trust any one system anymore and this reluctance, this lack of

faith has resulted in the discipline offering not one model, but a plethora of models and techniques to shop from. While this has always been the case, since there were always lesser myths within the discipline, what appears to be occurring today is that the discipline is acknowledging by its actions (or inactions) that there no longer is a dominant model which is leading the discipline in any given direction rightly or wrongly. While there may be obvious benefits to this approach, from a mythological perspective, it is a crisis. The mere smell of chaos that the eclectic model brings forth brings with it a questioning that possibly the discipline does not know the Truth after all. This questioning excites existential fears that purpose, direction and meaning may not be known/knowable and this in turn snowballs a downward cycle in faith in psychology as the keeper of Truth. It has always been that faith and not Truth has been the cornerstone of the discipline that seeks to maintain power over others. Faith does not come from Truth, it comes from the believable promise of Truth. What the eclectic model exposes is the weakness in faith. If you are going to lead others, if you are going to be in command, then you must be seen to be strong, you must be seen to have convincable purpose and meaning. Eclecticism is likely to be viewed less as a scientific model (since there really is little science in it) then it is as a public admission that the discipline has lost its purpose. It is mythologically an admission of defeat for

the scientific myth. The discipline of psychology by embracing eclecticism vice science is admitting publically that science is not going to work, it is not going to deliver the goods, deliver salvation. This public statement, although still somewhat cryptic in form, is a breaking of the denial that has maintained a scientific mythology for the past several centuries and parallels other admissions from other scientific disciplines. The eclectic model, therefore, is myth destroying.

The downward spiral of a dying myth takes on a life of its own and it is here that we see how interrelated the power of the discipline is to the faith of the masses, its market. The majority of academic institutions are no longer offering schools of thought in any one model, rather they are offering a choice of models so that the new psychologists can be flexible to public demand. The pros and cons of all models are explored, each instructor offering their own biases, but no institution formally dictating a model of choice. The discipline conforms to public needs in an attempt to do what it does best -- to remain in power. Not even science itself is spared an attack. It is no longer the case that science is being preached as the only way of knowing -- the Truth. Feminist psychologists, tired of the old patriarchal models that failed to address their experience of reality have developed a more subjective, descriptive, qualitative method

of doing research and practising psychotherapy.

First and foremost, feminist therapists understand that women constitute an oppressed group in our culture. We understand, also, the psychological affects of this oppression on women.... feminist therapists welcome their clients' inquiries about their values, orientation, and methods, encouraging them to be educated and conscientious consumers.... Feminist therapists share with their clients stories about their own experiences to assist the clients' process. By being open about their values and orientation, by making well-timed self disclosures, and by encouraging the client to take an active part in making decisions about the course of therapy, feminist therapists step out from behind the professional mask of neutrality and become real people. In doing so they demystify the therapeutic process and minimize the professional distance and power imbalance between themselves and the client.... Feminist therapists.... employ consciousness raising.... assume an equal relationship with their clients.... teach the valuing of female friends.... act as advocates.... act as facilitators or guides and as companions or witnesses in the clients' therapeutic journey.... and reject the adjustment model of mental health, which encourages women to conform to social expectations or norms (Laidlaw and

Malmo, 1990, p. 3-5).

It is important to recognize that the feminist movement within psychology, while not dominant, is another attempt to link with the in-nature self. Out of the head of the out-of-nature myth comes the tail of an in-nature myth. There is an attempt by feminist psychologists to link with the past in-nature feminine myths, with the woman healers that were stamped out during the reign of the religious myth. To this end, feminist psychologists are more likely to use the terms, healer than therapist, rely more on inner or women's knowing than statistical knowledge, offer greater acceptance of spiritual healing, of wicca, and of the goddess movement. They place greater trust in the client knowing what is best for themselves, they promote equality in therapy and empower others largely by pushing against the more traditional, entrenched methods, ideas, philosophies and mythologies that have ruled the discipline since inception. Feminist psychologists, paralleling the work being done in the women's movement within society are seeking to carve out a feminine definition of reality so they no longer have to be other. This definition redefines science in ways that traditionalists would view as anti-scientific. Feminist psychology, like the humanist movement, places another knife in the back of a scientific psychology and the scientific myth.

When all this is examined further, the problem within the discipline of psychology becomes more obvious. Psychology is operating without a plan, without a philosophy, without a myth. Eclecticism is not a model so much as it is a lack of model. It promotes an anything goes type of mentality, a desperate act by a discipline which has failed to produce a lasting scientific model, which has failed to live up to the expectations of a public which has placed faith in it. More and more within the discipline, the various factions are digging in. They no longer have a way of talking to each other, they no longer have a myth from which a collective purpose is given. Eclecticism is an abandonment of any intellectual pursuit of the total human condition, opting instead for fragmented sections that more often oppose each other than compliment. There is no longer a mission for the discipline of psychology except existence, existence increasingly in an insulated world where communication with the outside is often done defensively, uncooperatively and without meaningfulness. Psychologists produce research hoping that someone will recognize them, but recognition if given is often a compromise between what the publisher wants printed and their own ideas. By the next month, when the next edition comes out, their recognition is but a memory, its significance inconsequential. Instead of turning to the significance of what they produce, research psychologists turn to number of articles published. Hero points are given

for quantity not quality since quality needs to be tied to something that matters and the discipline with its increasingly divisive sub-sections are incapable of discerning, as a group, what is important and what is not. Numbers, on the other hand, cannot be refuted - either you produced 25 articles or you didn't. The peer method of review, which historically has been the quality control factor in the equation, has been more of an arena for peer assassination than objective analysis. The end result is you learn to only get those peers who will support you to review your work and to publish in journals that have a history of producing similar articles. Controversy is actively discouraged. I point all this out not to dismiss the discipline, but rather to expose its more in-nature underside. I seek to expose the side of the discipline you will not find in the textbooks and will only get a chance to see either by going through it yourself or by engaging in rather secretive talks with members of the club when they choose to be particularly honest about the way they feel. Eclecticism then, is reflective of a discipline that is dying.

I appreciate that at the time I'm saying that the discipline of psychology is dying, the discipline is seeing the greatest rise in numbers that it has ever had. What I will suggest, however, is that this growth is not reflective

of people who have faith in psychology. rather it is reflective of a desperate public in desperate times who are willing to follow anything or anybody who promises salvation. Since there are no dominant models within the discipline, since it is a free-for-all; exploiting the masses, the underbelly of the discipline that has always been there, is now all that is left.

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During the death of a myth, angst is a necessary product and a search for a way out of angst is the catalyst which eventually brings forth the new myth. What occurs between the death of the old myth and the beginning of the new myth are acts of desperation. It is not just coincidence that at the same time there is a rise in numbers in psychology, there is also a rise in the numbers seeking psychological help. Some search for a way out of angst by entering the discipline,

others by soliciting its services. It is also not just coincidence that there is a rise in fundamentalist religions, in evangelical religions, in pantheism, in self-help books, in the recovery movement and in right wing political movements. The characteristics that all these groups have in common is that they all advertise that through them salvation can be found. They all play to our in-nature side, our emotions that in an increasingly alienated and out-of-touch world needs expression. Out of the head of a scientific myth comes the tail an in-nature myth. The self-help/recovery movement, for example, asks us to get in touch with our hairy man, to know the Goddesses within, to heal ourselves, to get into a support group, to stop denying we're dysfunctional, to transform ourselves, to get in touch with our spirituality, to go beyond codependence, to watch out for our toxic parents, to learn to parent ourselves and to rescue our inner child. All this has nothing to do with science and everything to do with desperate people searching for salvation.

New age spiritualism is an affront to traditional monotheism.... .the American reality, perversely named (the) self-help industry, is marked by our tendency to put our faith in experts. What sells self-help books, tapes and workshops is the willingness to believe that they are experts who can help us achieve the good life, however it is defined at the moment; existential problems

are reduced to merely technical ones, which can be solved by expert techniques.... The self help industry has always been covertly authoritarian and conformist, relying as it does on the mystique of expertise, encouraging people to look outside themselves for standardized instructions on how to be, teaching us that different people with different problems can easily be saved by the same techniques. It is an anathema to independent thought (Kaminer, 1992, p. xiii, 6, 119).

Sound familiar? All this is accomplished by first ensuring that we are prepared to buy into the assumptions and premises that the self-help industry is marketing. In other words, in order for a new myth to be accepted we have to have been shaken in our old beliefs enough that conversion is possible. It is likely you will not find too many radical behaviourists at a John Bradshaw workshop. The fact that the self-help industry is so strong is reflective of a society that is letting go of a scientific myth. Once vulnerability in the person is established then the next step in the conversion is to sign up for experiential workshops (for a price) to get in touch with your feelings. Once through that, you buy and listen to tapes of the workshop you just attended so that the healing words can be revisited at your whim. The essential ingredient to the self-help movement is that we must believe the expert when he tells us that we are doing it ourselves.

The essential ingredient is faith, faith in the expert. Sound familiar?

Paralleling feminist psychological thinking, the workshops, tapes and books emphasize equality (by having the expert tell you its there) and attempt to empower others (by telling them they are doing it). Almost always the exercises emphasize experience over and often exclusive of intellectual discussion. You must override the intellect. Disbelief is a form of denial, a sign of dysfunction, a pathology. The fact that you are vulnerable for change, that the old myth has lost value for you and you need something to believe in, something to give you purpose, makes you a perfect candidate for conversion. There is nothing new in this formula: 1) you take a vulnerable person in an existential crisis, 2) you convince them first that you are a demi-God, 3) then you convincingly offer them something to believe in (after 2 this can just about be anything), and 4) you convince them that it works by tying it to emotions, that through faith their fears, their angst will fall away. The convincing part comes in two forms generally one form dominates the other. You appeal to their emotions both metaphorically through their intellect, or more directly through experience. A greater emphasis on one or the other will dictate whether it is more or less in-nature than out-of-nature. The clergy use to do it through Gods word and the collective practice of religious

rituals. The scientist practitioner does it through say, cognitive behaviourism (change the belief of the client by changing cognitions, then attach the new cognitions to emotion). Today the new expert does it through lecturing on what is wrong with our old beliefs/self (we are all dysfunctional [read the original sin]) then ties that new information to an emotional experience (visualizations [read baptism/confirmation rituals] then confirms the message so that the two parts are tied together. While the message is essentially the same, what is different is that the self-help/recovery movement is basing its authority not on science (rational/intellectual discourse) but on a more in-nature (emotional/experiential) foundation. While what does not change is the need for an expert to tell us all the Truth, what is changing is who gets to tell it. The pendulum is swinging the other way. The self-help/recovery movement is anti-scientific, anti-rational and anti- the dominant scientific myth. The marketplace is now demanding a change in myths and it is not just coincidence that the self-help movement started largely outside the domain of the discipline of psychology. There are a significant number of non mental health professionals working in the self-help/recovery field. By definition if you are helping yourself than the overt need for professionals becomes obsolete. If you are a professional, then you must admit your own humanness (read dysfunctions) and by so doing shed your professional clothes

and become human. Schaef (1992) spends the first half of her book talking about "the rise and demise of a psychotherapist" (p. 13), a self confession and testifying itself becomes a code of ethics for the new club.

If the larger domain of psychology has not embraced this movement, psychotherapy certainly has. Practising therapists, especially those in private practice who rely directly on the public for their living, are jumping off the old scientific bandwagon in droves attempting to get in on the latest big money winner. Book after book, workshop after workshop, the inner child of the discipline of psychology, the one that has always been poorly parented, is finding a voice in this new age movement (not to mention making a lot of money). It amazes me how quickly they have jumped ship, how quickly they have been converted. This conversion is evidence of a weak scientific psychology and a weak scientific myth. This conversion for the discipline is a link to the more animalistic side of what was overtly portrayed as a symbolic self. For the individual psychologist, the need to go where the money is demonstrates also the animalistic greed within.

What the self-help/recovery movement exemplifies is that what the masses are demanding is not a science, not more statistics, but something more believable, something more mythological, something that will offer them a purpose to

live, a purpose that is more connected to their inner selves. The result of a dying myth is that people search desperately looking for a way out of the angst that is created when denial is broken. The problem for psychology, therefore, is that, currently, it has little more than a weak science to offer them.

CHOICES

To highlight the central points of this thesis, I first wish to emphasize some of the mythological themes that have encapsulated the western world. From this foundation I will then return to the crisis of faith within the discipline of psychology and identify the choices available to the discipline for dealing with this crisis. The discussion of choices is predicated by the assumption that the discipline of psychology is actually in a position to make choices. It may be, however, that the discipline has no way of controlling its own behaviour, that there is no one in control and hence no real choices can be made. The ramifications of this possibility will also be discussed. I believe the discipline is reaching a crossroad in its history and that decisions made or the choice not to make them, will determine the viability of the discipline of psychology as being a carrier of the myth, or the vehicle of Truth in the future.

The history of the western world view has moved along mythological lines that have increasingly pushed towards an out-of-nature position. The scientific myth, for example, is more out-of-nature than the Christian myth, which is more out-of-nature than the Greek myths. A purpose of myths, however, has always been to maintain a link to both sides of

our being. This link need not be thought of as anything other than the belief in the link. That is to say, the link may be nothing but faith. The link is the faith that cements the object of the myth (the vehicle of Truth) with the experience of life. The linking process grounds our experience of life with a symbolic understanding of it, which ultimately offers us meaning and significance in what would otherwise be a cold, pointless, inhospitable and intolerable existence. Myths, therefore, are not a luxury, but a requisite for human life itself. There is no way to live without myth.

While it is perfectly legitimate for a mythology to be more out-of-nature than in-nature, what is not acceptable or bearable is for this myth to be seen as solely out-of-nature, solely one-sided. In other words, the faith placed in a myth, in the link (which ultimately gives those who maintain the myth their power), is only maintained so long as the myth can believably provide a way out of angst. The way out of angst is to maintain both an animalistic and symbolic expression of one's self. The myth is only worth holding onto if it provides a vent for both our in and out-of-nature sides.

It is important to recognize the conditional state of this arrangement. To state that the science of psychology is the

Truth means nothing without the faith of others -- of sufficient numbers -- that it is, at the very least, a way to get at the Truth. Despite all the other things psychology can offer, its premier value comes not from the relief of psychological distress or the (scientific) manipulation of human behaviour, but from its promise of redemptive power to deliver us from our existential condition. In short, its power to make sense of one's life, to make life meaningful. Faith, therefore, is critical to this task and faith will only be maintained so long as the science of psychology can maintain a link to both sides of our duality. The science of psychology is only believable if it provides the audience with a mythological connection. If it does not, it will not have redemptive value; the audience will begin to feel the anxiety that is created with this revelation and ultimately will search elsewhere for salvation. Mythology, therefore, is at the heart of psychology.

The western world view is not only a mythological thrust towards one's out-of-natureness, but it is also a consistent promotion of good over evil. One's out-of-natureness regardless of the mythological period, is usually defined in terms of what is good and worthwhile to strive for, while in-natureness is usually presented as negative, wrong, immoral or evil. By definition, if out-of-natureness is promoted over in-natureness, then this structural

arrangement forces, in the end, a good versus evil dynamic. While evil, as a term, seems to have currently fallen out of favour, the discipline of psychology, which clearly favours scientific knowledge over other knowledge, simply redefines evil in terms of those things or phenomena which it does not favour. In other words, good becomes what you value and evil what is not valued. In psychology, objective knowledge is valued, subjective experience is not valued.

Since the valuing of one thing over another is relative, that is, as one could just as easily value the "other", what determines what is valued and what is not is the faith of people to believe that what is being valued will, in the end, have some redemptive power. In other words, the faith in the myth which keeps angst at bay determines what is valued. During the Christian myth, God's word was valued and in a scientific myth, the scientist's word is valued. Put differently, the valuing of scientific knowledge in psychology is arbitrary, and, as has been illustrated in previous pages, the definition of psychology is reworked as the dominant myth is redefined.

The discipline of psychology is holding onto a definition of itself that is essentially scientific and that essentially favours our out-of-nature side. The problem with a world view that ignores one side of our duality, however,

is that it fails to be the comprehensive account it must be to merit our faith. The downfall of all myths has occurred because in the end they could not deliver salvation as they had defined it. A mythology that favours out-of-natureness over in-natureness, that seeks to rid the world of in-natureness by dismissing it, cannot in the end hope to actually achieve its goal. A scientific mythology, of which the discipline of psychology is a part, has as its goal the understanding (prediction and control), of the universe. The assumption, whether explicitly defined or not that underlies the desire to bring the universe under our control, is that when this occurs, we can then design it in such a way as to rid ourselves of all those things which are not valued (e.g., a la genetic engineering). By doing this we can confirm for ourselves the True meaning of the universe, since we will then be able to define it, and deliver to ourselves significance at last.

For psychology, the prediction and control of human behaviour has as its goal a small piece of this much larger scientific goal. The elimination of psychological problems through the prediction and control of human behaviour, and the promotion of psychological bliss is metaphorically the promise to deliver us from evil (to keep existential anxiety at bay), and to offer us salvation (to provide us with a meaningful life). The entire emphasis of psychology rests on

this faith that eventually we can predict and control human behaviour and rid ourselves of all unwanted behaviour, because psychology favours the notion that True meaning is found in that which we value and not that which is not valued. Abnormal psychology is studied because we wish to get rid of it. Normal psychology is studied only to get a baseline so that we can identify those who are abnormal. Even experimental psychology has the prediction and control of human behaviour as its goals. But what happens when chaos becomes an essential part of the universe and cannot be eliminated? What happens to the goals of psychology when it comes to terms with the new physics?

The primary reason faith is offered by the masses, the reason psychologists have the degree of power they have, is because they are promising salvation from our existential duality, they are promising meaning, happiness, significance. The problem with this promise should now be obvious. By not valuing our in-nature side, psychology attempts to dismiss the dualistic reality and by so doing plants the seed for its own downfall. The siding with the good as defined by a scientific mythology, the attempt to rid ourselves of our in-natureness is an impossible quest that the discipline is increasingly having difficulty coming to terms with. The discipline of psychology is in crisis, a crisis of faith because the audience (both in and outside

the discipline) is losing faith in the scientific myth of which it is a part. This loss of faith comes from the fact that, while science has produced many consumer goods to keep the masses occupied, it has failed to achieve salvation. In addition, it is becoming obvious that the scientific myth has tied to it a "negative" side of which it can never rid itself, and, therefore, the hope of any future salvation is quickly dissolving. Ostensibly, for the discipline of psychology, this means it has failed to offer the masses a better life (there are more people in therapy now than ever before) (Hillman & Ventura, 1992), and aspects of the in-nature side of the discipline, power and greed, are increasingly showing their heads.

It is not necessary that the in-nature side of a myth be viewed as negative. This is a choice. But, since our tradition has been to define things in terms of positive and negative and to favour the positive, automatically anything from the opposing side is negative. In other words, it is not necessary that greed and power be defined as negative. They are both just human traits; but in a world that promotes objective, non-biased realities as positive -- in fact as the only reality -- then greed and power (as biased motivators), must be defined as negative and denied existence, especially within the discipline. But it gets even worse. Since those in power in the discipline are

themselves seeking salvation and since they have, at least collectively, indicated that salvation can be found through this vehicle of Truth, there must be a vested interest on their part in denying the power and greed they must see within the discipline, both externally to the world and also internally to themselves. Not to do so would be to invite existential anxiety.

Here we move to the crux of the problem. In many ways the discipline of psychology is like an alcoholic and individual members of the discipline constitute the codependent family. Everyone in the family knows that it is in serious trouble and yet like all codependents, they all help maintain the problem by covering up the disease, by pretending to the outside world, that everything is under control. The problems of the discipline, if ever discussed openly, are only discussed with the reassurance that they will eventually be dealt with, that the members of the discipline qua scientists can handle it. Behind closed doors and amongst themselves, however, the pain of a sick discipline is pulling the members apart. There is a crisis of faith within the discipline that comes from the siding solely with an out-of-nature myth which cannot help but fail. The crisis in faith is an existential crisis.

Like a true alcoholic family, there are those (represented both in individuals and areas within the discipline) who are in complete denial and who ostracize those who dare speak about the problems of the discipline. Those who deny are the heroes within the family, the ones who do no wrong. They toe the "party line" and "know" that the Truth of the discipline is found in reductionistic experiments with statistical validations. They dig themselves further into the discipline, burying themselves under the problems above. They close off ranks with all those who are not in their sub-specialty and communicate more and more with only those who share their obtuse views. From the outside, however, they are heroes. The keepers of the faith. They maintain the faith through denial.

Others become "scapegoated" within the discipline, they draw attention to the problems and as such become the problem child -- if we just rid ourselves of him or her (or clinical psychologists or humanists, etc.), then everything would be fine. They are defined as the real problem with the discipline and significant focus is placed on "helping" them. Still others become the lost child of the discipline (e.g., existential psychologists). They are the loners who bring no attention to themselves and quietly practice their different approaches off in a corner somewhere. They recognize their differences and quietly hide. In many ways

they abandon and are abandoned by the discipline. Lastly, there are some who actually do talk to each other (selectively chosen others) about the problems, about their anguish over their chosen vocation. It is here that self-doubt is verbalized. It is here that the existential pain is softly acknowledged and it is here, I believe, where there is hope. What all these children of the discipline have in common is that they recognize something is wrong but they all shy away from talking about it publicly (and often privately). There is denial within the discipline of psychology, denial about their animal self, denial about their need for power, greed and manipulation. Nobody wants to openly talk about the darker side of the discipline, and certainly nobody wants to openly study it.

If the members of the discipline themselves have self-doubt, lack faith, why would they ever expect others to believe them? Yet this is exactly what is expected. They all walk on egg shells around the discipline, covering up the holes or attacks from the outside, afraid of confronting the problem from the inside for they are, in the end, just human. Like the rest of the human world, they need to be recognized as special, as important; they need to know that their life has meaning, meaning brought to them by a discipline which offers demi-god status. To break denial, therefore, is to be threatened to be singled out and

punished by the discipline. Since their significance comes from that which they do, comes from practising psychology, to openly attack the discipline would be to openly dismiss themselves as insignificant. There is a conspiracy of silence within the discipline to not talk about the larger problems that are eating away at the discipline. Psychologists do not want to break denial because with it there is a threat that they might have to recognize their own greed and need for power within themselves. Worse yet, they are afraid that there may be no answers for the discipline (or themselves), no way to repair the damage -- only existential anxiety. Breaking denial would mean the death of significance for them and would throw them into an existential crisis. To break denial would mean the acknowledgment of their animal self and in a world that sees the animal self as negative, it would mean that they are not demi-gods, they are not special, they are ordinary. To be just ordinary in a world which promotes the symbolic self, which promotes god-likeness, is to admit defeat and render yourself meaningless. With this, of course, comes all that existential anxiety.

One can see, therefore, why the discipline of psychology is having great difficulties with this issue. If it chooses to break denial and talk about its greed and need for power openly, it threatens itself with dismissal by the masses

(and certainly from the sciences), since it is admitting the falseness of its ways. If it admits this it is afraid it will lose all its distinction, all its power. To lose power, in the end, is to lose demi-god status and significance. On the other hand, to not talk about it in a world which is moving towards greater accountability from professionals about the ethics of their practices, is to be threatened with exposure from the outside, and this too would mean certain death to the discipline and meaninglessness to those in it. Threat from the outside is no small matter. In an age of mass media, "the information age", the public is gaining access to more and more examples of the weaknesses of the discipline.

It is important to keep in mind that faith is the critical ingredient in the discipline's ability to maintain power. There doesn't have to be any abuse of power nor overt greed, (although most certainly there is), there only has to be the perception that the discipline is not offering the Truth for it to fall out of favour with the masses, for them to remove hero status. The role of the media, therefore, is important and it's role generally follows two main patterns either supporting or attacking the discipline. A stated role of the media is to report on topics of interest in a non-biased fashion yet the media, seeking its own hero status, tends also to be swayed by the audience it speaks to. In this

respect it is biased, biased to the extent that it must report on items that sell newspapers or advertizements. As any newspaper will quickly demonstrate what currently sells are sensational stories attacking all institutions of the dominant myth. Corruption, greed and the abuse of power sells and so it is unlikely that the the media -- the voice of the public -- will leave this issue alone. Why would they? Like the scientists before them who exposed the untruths of leaders of the Christian myth, the media have nothing but hero status and power to gain, and since no one currently critique the media, they have little to lose. The demand for accountability, honesty and truth within the discipline, therefore, will not disappear, which means that the current denial will eventually be broken. The discipline of psychology, I believe, cannot afford to hide in its ivory towers any longer. It cannot afford to ignore the cries from the public for accountability and Truth. The wave of public outcries about the abuses of all institutions which represent the scientific myth, is tantamount to a revolution. Truth in the end is not decided by statistical equations, its decided by public faith -- the public trust. The discipline of psychology, if the current trend continues, will lose the public's trust.

It is important to keep in mind that those in power are not likely to be willing to look at their darker side

because there is a natural fear of what they might find. In usual course of events, therefore, there will be a redoubling of efforts to promote psychology as Truth. The recent rise in numbers of both practitioners and consumers in psychology is less an example of its success, than evidence of its demise. When the ills of the discipline do are exposed, it becomes policy to make public executions as examples to appease the masses. When you can't hide the damage the discipline is doing, it is always best to sacrifice a few in order to maintain control. The weeding out of the "bad apples" is an attempt to ensure that no real structural changes occur. If the temperature still does not cool, then perhaps an inquiry is called for. An inquiry usually lasts long enough for public attention to wane and usually makes all sorts of unrealistic recommendations for change. A few selected recommendations can be chosen, precisely those which will have minimal effect on the discipline. I point this out because these tactics are well known and also ineffective. Attempts to "whitewash" the issue will only postpone the inevitable demise of the discipline from both inside and out. Holding up a code of ethics and claiming that it is better than other codes to be found in other disciplines does nothing to stem the tide of criticism about the abuses of power within the discipline. When I speak of breaking denial, I am not talking about clever tactics to maintain the status quo while offering the

appearance of change, I am talking about significant, myth-shattering change.

For psychology, it is not difficult to predict that change will occur. It is part of a myth which is dying and if it cannot muster the courage to change from within, it will be forced to change from without. Change does not occur easily and generally does not occur quickly. It may be that psychology has become so compartmentalized that it cannot find a centralizing point from which change could occur. If the discipline no longer has a dominant model to follow, if it is eclectic and fundamentally without direction, it may be that change from the inside is impossible. If this is the case, then there will be a tendency to drift apart, since change inevitably will occur and since there is little motivation from the inside to keep it together. A discipline in denial, leaderless and directionless, is truly in peril.

It may be that psychology as an entity is outdated, that its sub-specialties such as psychobiology, clinical psychology, experimental psychology, social psychology etc., are better off placed in other disciplines. In effect, it may be that the discipline of psychology will dissolve and be assimilated by other, more established disciplines. This is certainly a common trend occurring within the discipline today. As the various sub-sections become more entrenched in

their selective beliefs and as they become unwilling to talk with other sub-specialties within the discipline because of these theoretical rifts, there will be a natural flow outwards towards more established disciplines which share similar theoretical positions. In other words, neuropsychology, for example, is more likely to be pulled towards the neurosciences, psychobiology towards biology, social psychology towards sociology and clinical psychology may split in many directions to follow the varied beliefs encapsulated under its specialty. This is one way the discipline may move as the myth it holds onto dies, and as it fails to find common ground for moving forward. Such would be a move by default since it would be essentially reactive in nature and would be an attempt to maintain denial.

There are, of course, other viable directions for the discipline. Instead of being reactive it could choose to be more proactive. It seems to me that what is required from within are new heroes who like Copernicus would initially be denied hero status until the mythological tide had turned in their favour. While I believe there are always heroes in waiting looking for the right moment in history to make their mark, I currently see no heroic individuals within psychology who are willing to break denial and talk about their own darker side. It may be, however, that potential

heroes will wait until it is a little safer for their emergence. Psychology, as a discipline, has never held significant power within the dominant myth. It has always been a lesser myth that has never ceased trying to imitate those with real power. To this end, it may be too much to expect a real hero to come from within the discipline. I suspect that the emergence of new heroes from within the discipline will occur at the same time that society is ripe to hear their words, because the new myth only becomes a myth with faith from the masses. Both are necessary ingredients. If the discipline is to be proactive, therefore, I suspect it will do it with the utmost caution. It will hold off any acknowledgment of its darker side until it is safe to do so. It will be safe when one believes one can admit the error of one's ways while maintaining power, status and significance. In short, I see little hope that psychology will be proactive and truly heroic. Instead, I suspect it will take the road of least resistance and opt to "go with the flow".

It is difficult to predict the nature of the new myth or even when it will come into power. It is even more difficult to predict what psychology will look like under that myth. If our age demonstrates anything, it is how difficult it is to remain in power for very long. All things become relative very quickly; few things, it seems, have the longevity that

is required for a mythology to take root. Yet this is exactly what myths need in order to reflect a certain permanence in the universe giving it some structure and us meaning. While I reserve the right not to attempt to describe the emerging new myth, since this would remain only idle speculation, I think it might be useful to describe some possible future trends based on what we have learned about myths.

First, if the death of an out-of-nature myth is to occur, it will only occur if the faults that are inherent are exposed and second, only if a more "truthful" myth is available to replace it. To this end, it is likely that in the future we will see an increased attack on the untruths of the current scientific myth. This is already occurring. At the very time I am writing, Time magazine (1993) publishes an essay stating:

Scientists it seems are becoming the new villains of western society.... they have silently acquiesced in the proposition that if we just keep writing checks and leaving them alone, science could solve the problems of the world. They have promoted the presentation of themselves as antiseptic drones whose work is incorrupted by influences like sex, greed or ambition, which muddy life for the rest of us. But science is done

by real people who do not check their humanity at the lab door.... Science is nothing if not a spiritual undertaking. The idea that nature forms some sort of coherent whole, a universe, ruled by laws accessible to us, is a faith.... We can only wonder whether some laws will stand revealed some day at the end of the grudging trial-and-error process of science. The theory of everything (the grand unified theory), even if it existed, could not pretend to tell us what we most want to know. It could not tell us why the universe exists -- why there is something rather than nothing at all. And it could not tell us if our lives have meaning, if God loves us (May, p. 64).

Second, as far as a new myth goes, it is likely that it will be more in-nature than out-of-nature. I say this despite the history of myths being increasingly out-of-nature because I believe a crucial ingredient was left out of the scientific myth that needs to be addressed. What the scientific myth did not have was a viable death myth and death ritual. In science, the body as object lives and dies and that is it. Death itself is without meaning.... it just happens. The existential and mythological focus is on life, specifically keeping one's self alive. Death is essentially denied any meaning whatsoever. This is why death is such a taboo subject for us and why the western world currently

holds onto a dying Christian death ritual within a scientific mythology. The two are awkward together and yet this is all we are left with. It is difficult to live without God all your life, to live in a scientific myth and then to turn to God on your death for what -- salvation? I believe that as the trend setting "babyboom" generation approaches death collectively, this clumsy relationship of having a Christian death ritual embedded in a scientific mythology, will become conspicuous. A critical mass will be reached within society and death itself, complete with its mythological in-nature ramifications will become topical, topical to the point of causing crisis, crisis in faith.

What the scientific myth has not addressed successfully is death. Death is the in-nature side to a mythology that heroically strives to make itself god-like, transcendent. The death question, mythologically is the life question, the purpose of life question. What death reminds us of is the absurdity of our existence. When the "babyboom" generation approaches death, the meaning of life will begin to take on greater importance. There are already questions about our Christian death ritual being raised that point towards the existential questions ahead: The Right to Die Society, Michigan's Dr. Kevorkian's "suicide machine" and most recently the Rodriegez request before the Supreme Court of Canada to have doctor assisted suicide. These early attempts

to redefine beliefs and practices regarding death, to die with dignity, are examples of an attempt to find meaning in life through a meaningful death. While it is still too early to determine the myth that will emerge, the return to the death question is a return to our in-nature self, an attempt to reconnect with the universe and find meaning.

The future of psychology is equally unknown; but like the return to the death question, it is likely that there will be a search for a discipline that offers more meaning to life and fewer statistics.

Footnotes

1. Definitions, in this case of psychology and the discipline of psychology, and later of the science of psychology, are necessarily problematic since they assume agreement, or perhaps impose order where there often isn't any. The boundaries drawn by definitions are tied to the context in which they are given and used, and therefore provoke disagreement when taken out of context and/or when taken as absolutes. Definitions, by their very nature, are designed to separate one thing from another. Definitions can determine what is figure and what is background, but they cannot remove the figure from the background. This inability to dislodge the figure from the background, the definition from the context, requires that definitions be allowed the freedom to swim in the contextual pools in which they are created and not be forced into channels, locks and eddies that constrain their movement and limit their usefulness. For example, the generic word psychology can be separated into the discipline of psychology and the profession of psychology, the former having to do with psychology as a body of knowledge and the latter having to do with the application of psychological knowledge in the community.

Such a distinction would be useful in terms of understanding how theory is separated from practice, or how

one complements the other, but remains separate. On the other hand psychology can also be defined historically in terms of the European and American schools of thought which assists in understanding the historical development of psychology as well as the differences and similarities of each separate school. In the first case the context is one of theory and practice of psychology and in the second case, the context is historical and comparative. In either case, the generic word psychology is defined or given structure through the situational or contextual preferences of the user. In both cases psychology is defined to assist the user in understanding a particular aspect of psychology in comparison to another particular aspect. Both definitions are correct within the contextual framework they are given, and both are wrong when the other definition (or perhaps a different one altogether), is used as "the definition" of psychology. For this reason definitions should be understood in terms of their functional role in providing a loose structure that allows the expression of ideas and thoughts in an open ended manner and not in terms of rigid absolutes to be emphatically employed at all costs. They are practical, functional devices which anchor thoughts and ideas in a mutually acceptable foundation that allows further discussion to ensue. It is within this flexible understanding of definitions that I now offer the following.

The term "meta-psychology", unless otherwise stated, refers to the mythological manifestation of our search for meaning embedded in a struggle between our bodily and spiritual selves. This meta-psychology imposes itself at the most macro level allowing all that may be considered psychology, all that finds expression through the mind both consciously and sub-consciously, to filter through its existential nets, resulting in a meaningful existence. This meta-psychology gives all subordinate structures a mythological cast in that they are expressions in the final analysis, of our existential state. Paradoxically, this definition of meta-psychology is also subject to the same filtering process. In other words, if meta-psychology is psychology and if all that is psychology filters through meta-psychology, then meta-psychology filters through itself. My definition of meta-psychology cannot escape the fact that it is conditioned by the current meta-psychology (Zeitgeist) that attempts to bring understanding (meaningfulness) to all other things. It should not, therefore, be interpreted as Truth or an absolute definition; rather it should be seen as a purposeful tool, a reference point that opens up an new avenue of approach in our attempts as humans to bring meaningfulness into our lives.

The generic term "psychology", unless otherwise stated, refers to all that is thought to be included in psychology. This definition emphasizes subjective understandings of psychology and therefore includes professional and lay understandings of the word psychology, the application of psychological principles or the thought that psychological principles were being applied, the body of knowledge that is or is thought to be psychology, and all historical references to or interpretations of psychology. If it can be thought to be psychology, then it falls safely under my definition of psychology. As stated above, this also includes meta-psychology if contextually we are discussing the paradoxical nature of meta-psychology. Otherwise, however, psychology is contextually arranged as a subordinate structure to meta-psychology.

The phrase, "discipline of psychology", unless otherwise stated, includes the academic and applied aspects of professional psychology. In other words, those who have been formally qualified through legislative bodies to uphold the most hardened understanding of psychology, the one that separates lay understandings of psychology, as stated above, from academically accredited understandings. This definition emphasizes the discipline as comprised of those who have formal control over psychology as it would be viewed by an outsider looking in. As a subordinate structure of the

generic term psychology it demarcates those who have the power to define what is and is not psychology for the uninitiated. At the macro level, this would include, for example, The Canadian Psychological Association and the various provincial certification or registration boards of psychology, and at the micro level, this includes anyone who is interpreted to be representing the formal power systems of the discipline. This definition can accommodate the fact of various disagreements within the discipline, while acknowledging the appearance of a unified whole from the outside looking in.

The term "science of psychology", unless otherwise stated, refers to anything psychological that is or might be interpreted as referring to a methodology that follows generally recognized scientific principles. While this definition is subordinate to psychology and meta-psychology, it parallels the discipline of psychology in that both are contextual examples of how the definition of psychology may be subdivided.

2. The symbolic self refers to our out-of-natureness, our ability to interact with the universe in a symbolic form that makes us noticeably different from any other creature. It is our ability to think beyond the given moment, to ponder, to disassociate from the immediateness of our

situation that creates our symbolic self, the more because we can construct models of the universe, because we can manipulate our environment based on our models of it. We are driven towards doing so in heroic acts of desperation, in a lasting effort to maintain our special association with the universe, because of our wish to live were it possible, forever and not as animals who must die.

3. There are those who would submit that science is not after Truth, per se, but that science is interested solely in utility. This clever argument attempts to bypass the issue of Truth in scientific pursuit, opting instead for the more humble role of simply offering society useful theories and products, tools for its endeavour. The key word here is useful. The utilitarian argument is the pursuit of the trappings or benefits of Truth by a different name, power, since the underlying assumption is that science knows what is useful and what is not. Similar to the pursuit of Truth argument, it covets the "usefulness" domain, promoting itself as the demonstrated keeper of all that is truly, even if temporarily, useful. It maintains that all scientific pursuits are useful to society, but hides the validity of these arguments under its own methodology. Scientific things are always viewed as useful to society, if for no other reason than to acquire a better understanding of things, and their utility is made valid through the scientific process.

The underlying assumption is that scientifically proven utility is best, or is representative of the truth. Whether or not the utilitarian argument claims to represent the Truth (a theory or product is said to be judged not by whether it is Truth, but rather by whether it is useful), it cannot be denied that utilitarianism equates knowledge with power. Power is the essential ingredient in determining whether actions are valued and people are heroic. If utilitarianism is after power then it achieves the same goal as those seeking Truth, namely, the illusion of purposefulness.

In a similar fashion, there are those who would contend that their belief in and practice of science is not absolute, is not the final court of appeal, but rather is relativistic. In other words, they too dismiss the power dimension of a "Truth" oriented science by reportedly placing all things in the same relative position as science. All things share the same amount of power and no one thing is necessarily better than the other. While on the surface this appears to be an equitable arrangement, a closer examination reveals the underlying dynamics at play in this argument.

If science were *merely* relative, there would be no reason for the intense level of commitment and devotion scientists

pay to their profession. Clearly the many years in training and education, the many years devoted to upholding the scientific tradition are not given without the underlying belief that this path is not an arbitrary choice, is not relative to all others, that this path is better, or the best. Such relativity, if it did exist, would render the devotion and commitment of such scientists meaningless. By choosing to become a scientist, the individual implicitly makes a statement about what he or she values, and value judgements, by their very nature, are not simply relative, but hierarchical. The judgement necessarily places the value of one thing over another.

If science were truly relative, then there should be no profession at all, since the categorization of things into scientific and non-scientific would itself become relative. Inherent in the categorization of things into scientific and non-scientific is a value judgement that makes such categorizations useful or purposeful. While the act of categorization may be relative (i.e., if all things could be considered part of any, or all or no group), the maintenance of a category and the exclusion of things from it indicates the dogmatic imposition of a structure that can only come from a hierarchical position. While one's position on the hierarchy may be relative to one's values (i.e., an artist may place his work over that of a scientist), the hierarchy

cannot be avoided. Clearly the scientist, who devotes his life to the profession, will not, in the eleventh hour, decide that his or her work has the same relative value as that of a beggar or drunk. He or she may decide that it is the same or of less value than other things but all in all these things will be sorted into some sort of hierarchy. This hierarchy will never place the scientist at the bottom of the ladder because doing so would be to admit that who they are (as judged by what they do) is without relative value. Such devotion, such commitment to one's duties as a scientist (or whatever for that matter) cries for the belief that there is an inherent worth in being a scientist that outshines other ways of life. To cloak science in relativism and to defend it as such, is to be a dogmatic relativist. Relativism becomes the absolute Truth.

4. "Truth" with a capital refers to absolute Truth, where as "truth" refers to versions of the Truth.

5. There may be some confusion here with respect to power over others and the power to empower. Some may feel that power, as applied to psychology, is not just negatively used to control others, but can also be used as a way to empower another person to take action on his or her own. Power over others is always a power to control others. The relationship is the essential element here. If someone has

power then the only way they can empower others is through an act of conversion. The power must come from outside the "to be empowered person" by virtue of the relationship. That is, by convincing others that the beliefs they hold require changing so that they too can share in the power that is gained through the adoption of a particular belief. Even if you were to empower by giving someone more money or more time or more energy, the fact that it is a giving process denotes a dependent relationship and this dependency becomes the power element. Community psychologists, for example, report a philosophy of not holding onto power over others with respect to their control over psychology; rather that they empower others through the giving away of psychology. While it would be logical to say that if you gave away psychology completely, then you would have shared your power with everyone and thereby nullified your own power over others, the act of empowering others (effectively making them all community psychologists), nonetheless is an act of conversion. It is an act of convincing others that what you have to give away is; 1) worth having, and 2) is within their grasp of getting. If these conditions are not met, then there can be no giving away of anything. There will be no market for the gift. Further, the act of conversion is an act of power over others and therefore is inconsistent with the philosophy that one is not using power over others in the giving away of psychology. While there is a significant

difference between what community psychologists wish to do and the traditional therapist-client relationship, in the end, power is used to give away psychology. People want to understand psychology from a professional, from a psychologist who has the recognizable credentials (the titles indicating one's power in a given area) to assure themselves that what they are being given is worthwhile having, is authentic.

In addition, since community psychologists by definition never give away their title, they in fact are not as willing as they profess to give away psychology. If psychology is to be given away, then the title must go with it. The holding onto the title is a statement of their retention of power over others in this area and is indicative therefore of a power relationship between them and their clients. One degree or another of power is required in all human interaction, and professionalization increases the differential.

The only way that empowerment, as such, truly occurs is from within the person. Empowerment has little to do with the coveting of external sources of power by being convinced that one's beliefs need changing. Empowerment is the act of making a decision for oneself. It is the removal of the power others have over you. It is a statement of one's out-

of-natureness, and as such it cannot be received through the selling or giving away of anything. It can only be taken. This means that community psychologists and indeed all psychologists must be in a power relationship over their clients no matter what their intentions. The title "Psychologist" itself gives away the unequal power relationship no matter what else happens in the relationship. It is for this reason that I state that power can be either in-nature, in terms of power over one or out-of-nature in terms of one's own power.

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