MAPS OF MEANING: THE ARCHITECTURE OF BELIEF

ROUTLEDGE (1999)

Jordan B. Peterson, Ph.D.

PDF Version with Figures May 2002



PREFACE: DESCENSUS AD INFEROS	7
CHAPTER 1: MAPS OF EXPERIENCE: OBJECT AND MEANING	15
CHAPTER 2: MAPS OF MEANING: THREE LEVELS OF ANALSIS	28
2.1. Normal and Revolutionary Life: Two Prosaic Stories	29
2.1.1. Normal Life	31
2.1.2. Revolutionary Life	35
2.2. Neuropsychological Function: The Nature of the Mind	37
2.2.1. The Valence of Things	38
2.2.2. Unexplored Territory: Phenomenology and Neuropsychology	44
2.2.3. Exploration: Phenomenology and Neuropsychology	49
2.2.4. Explored Territory: Phenomenology and Neuropsychology	
2.3. Mythological Representation: The Constituent Elements of Experience	
2.3.1. Introduction	81
2.3.2. The Dragon of Primordial Chaos	93 115
2.3.3. The Dragon of Primordial Chaos	124
2.3.5. The Divine Son: Images of the Knower, the Exploratory Process	145
2.3.6. The Great Father: Images of the Known, or Explored Territory	153
CHAPTER 3: APPRENTICESHIP AND ENCULTURATION: ADOPTION OF A SHARED MAP	175
CHAPTER 4: THE APPEARANCE OF ANOMALY: CHALLENGE TO THE SHARED MAP	188
4.1. Introduction: The Paradigmatic Structure of the Known	189
4.2. Particular Forms of Anomaly: The Strange, the Stranger, the Strange Idea & the Revolutionary	Hero 197
4.2.1. The Strange	
4.2.2. The Stranger	199
4.2.3. The Strange Idea	
4.2.4. The Revolutionary Hero	216
4.3. The Rise of Self-Reference, and the Permanent Contamination of Anomaly with Death	225
CHAPTER 5: THE HOSTILE BROTHERS: ARCHETYPES OF RESPONSE TO THE UNKNOWN	244
5.1. Introduction: The Hero and the Adversary	244
5.2. The Adversary: Emergence, Development and Representation	247
5.2.1. The Adversary in Action: Voluntary Degradation of the Map of Meaning	256
5.2.2. The Adversary In Action: A Twentieth Century Allegory	269
5.3. Heroic Adaptation: Voluntary Reconstruction of the Map of Meaning	289
5.3.1. The Creative Illness and the Hero	290
5.3.2. The Alchemical Procedure and the Philosopher's Stone	312
5.3.2.1. Introductory Note	
5.3.2.1.1. Part One	312
5.3.2.1.2. Part Two	310 317
5.3.2.3. Episodic Representation in Medieval Christendom	
3.3.2.4. The Prima Materia	
5.3.2.5. The King of Order	332
5.3.2.6. The Queen of Chaos	334
5.3.2.7. The Peregrination	335
5.3.2.8. The Conjunction	341
5.4. Conclusion: The Divinity of Interest	
5.4.1. Introduction	347 353
147 THE LAVINIA OF INTERST	171

Figure 1: The Domain and Constituent Elements of the Known	23
Figure 2: The Metamythological Cycle of the Way	25 25
Figure 3: Normal Adaptation	34
Figure 4: Revolutionary Adaptation	36
Figure 5: The Ambivalent Nature of Novelty	45
Figure 5. The Amotivated Nature of Novelty' in the Course of Goal-Directed Behavior	46
Figure 7: Emergence of "Revolutionary Novelty" in the Course of Goal-Directed Behavior	47
	49
Figure 8: The Motor and Sensory Units of the Brain	54
Figure 9: The Regeneration of Stability from the Domain of Chaos	59
Figure 10: The Motor Homunculus	
Figure 11: The Twin Cerebral Hemispheres and their Functions	63
Figure 12: The Multiple Structure of Memory	67
Figure 13: Abstraction of Wisdom, and the Relationship of Such Abstraction to Memory	72
Figure 14: Conceptual Transformation of the Means/Ends Relationship from Static to Dynamic	74
Figure 15: Bounded Revolution	76
Figure 16: Nested Stories, Processes of Generation, Multiple Memory Systems	78
Figure 17: The Constituent Elements of Experience	90
Figure 18: The Positive Constituent Elements of Experience, Personified	91
Figure 19: The Birth of the World of Gods	95
Figure 20: The "Death" of Apsu, and the (Re)Emergence of Tiamat as Threat	98
Figure 21: "World" of Gods: Hierarchical Organization	101
Figure 22: The Enuma elish in Schematic Representation	104
Figure 23: The Battle between Osiris and Seth in the Domain of Order	108
Figure 24: The Involuntary Descent and Disintegration of Osiris	108
Figure 25: The Birth and Return of Horus, Divine Son of Order and Chao	109
Figure 26: Voluntary Encounter with the Underworld	110
Figure 27: Ascent, and Reintegration of the Father	111
Figure 28: The Constituent Elements of Experience as Personality, Territory and Process	114
Figure 29: The Uroboros - Precosmogonic Dragon of Chaos	117
Figure 30: The Birth of the World Parents	120
Figure 31: The Constituent Elements of the World, in Dynamic Relationship	121
Figure 32: Novelty, the Great Mother, as Daughter of the Uroboros	128
Figure 33: The Spontaneous Personification of Unexplored Territory	130
Figure 34: Unexplored Territory as Destructive Mother	133
Figure 35: Unexplored Territory as Creative Mother	138
Figure 36: The "Heavenly Genealogy" of the Destructive and Creative Mothers	139
Figure 37: The Exploratory Hero as Son of the Heavenly Mother	147
Figure 38: The Metamythology of the Way, revisited	148
Figure 39: Castle, Hero, Serpent and Virgin: St. George and the Dragon	150
Figure 40: The Process of Exploration and Update, as the Meta-Goal of Existence	151
Figure 41: Order, the Great Father, as Son of the Uroboros	167
Figure 42: Explored Territory as Orderly, Protective Father	168
Figure 43: Explored Territory as Tyrannical Father	171
Figure 44: The "Heavenly Genealogy" of the Tyrannical and Protective Fathers	172
Figure 45: The Exploratory Hero as Son of the Great Father	173
Figure 46: The "Death" and "Rebirth" of the Adolescent Initiate	180
Figure 47: The Paradigmatic Structure of the Known	193
Figure 48: The Known: Nested Groups and Individuals	194
Figure 49: The Fragmentary Representation of "Procedure and Custom" in Image and Word	201
Figure 50: The "Dual Death" of the Revolutionary Hero	216
Figure 51: The Crucified Redeemer as Dragon of Chaos and Transformation	221
Figure 52: The Socially Destructive and Redemptive "Journey" of the Revolutionary Hero	222
1 .5 m. c 22. 1 m. Socially Desir active and Medicinpure Southery of the Revolutionally 11610	222

Figure 53: The (Voluntary) Descent of the Buddha	231
Figure 54: The World-Tree as Bridge between "Heaven" and "Hell"	233
Figure 55: The World-Tree and the Constituent Elements of Experience	236
Figure 56: Genesis and Descent	241
Figure 57: The Devil as Aerial Spirit and Ungodly Intellect	248
Figure 58: The Vicious Circle of the Adversary	259
Figure 59: The Constituent Elements of Existence, reprise.	265
Figure 60: The Emergence of Christ from Group Identity and Chaos	300
Figure 61: World-Tree of Death and Redemption	309
Figure 62: The Alchemical Opus as ''Normal Story''	328
Figure 63: The Alchemical Opus as ''Revolutionary Story''	329
Figure 64: The Wolf as prima materia, Devouring the Dead King	336
Figure 65: Dragon of Chaos as "Birthplace" of Christ and the Lapis	339
Figure 66: The Alchemical Opus as Myth of Redemption	345
Figure 67: The Restitution of [Christ] the Mystic Apple to the Tree of Knowledge	358
Figure 68: The Eternal Return of the Boddhisatva	359

I will utter things which have been kept secret from the foundation of the world. (Matthew 13:35)

PREFACE: DESCENSUS AD INFEROS

Something we cannot see protects us from something we do not understand. The thing we cannot see is culture, in its intrapsychic or internal manifestation. The thing we do not understand is the chaos that gave rise to culture. If the structure of culture is disrupted, unwittingly, chaos returns. We will do anything – anything – to defend ourselves against that return.

"... the very fact that a general problem has gripped and assimilated the whole of a person is a guarantee that the speaker has really experienced it, and perhaps gained something from his sufferings. He will then reflect the problem for us in his personal life and thereby show us a truth."

I was raised under the protective auspices, so to speak, of the Christian Church. This does not mean that my family was explicitly religious. I attended conservative Protestant services during childhood with my mother, but she was not a dogmatic or authoritarian believer, and we never discussed religious issues at home. My father appeared essentially agnostic, at least in the traditional sense. He refused to even set foot in a church, except during weddings and funerals. Nonetheless, the historical remnants of Christian morality permeated our household, conditioning our expectations and interpersonal responses, in the most intimate of manners. When I grew up, after all, most people still attended church; furthermore, all the rules and expectations that made up middle-class society were Judeo-Christian in nature. Even the increasing number of those who could not tolerate formal ritual and belief still implicitly accepted – still acted out – the rules that made up the Christian game.

When I was twelve or so my mother enrolled me in confirmation classes, which served as introduction to adult membership in the Church. I did not like attending. I did not like the attitude of my overtly religious classmates (who were few in number), and did not desire their lack of social standing. I did not like the school-like atmosphere of the confirmation classes. More importantly, however, I could not swallow what I was being taught. I asked the minister, at one point, how he reconciled the story of Genesis with the creation theories of modern science. He had not undertaken such a reconciliation; furthermore, he seemed more convinced, in his heart, of the evolutionary viewpoint. I was looking for an excuse to leave, anyway – and that was the last straw. Religion was for the ignorant, weak and superstitious. I stopped attending church, and joined the modern world.

Although I had grown up in a "Christian" environment – and had a successful and happy childhood, in at least partial consequence – I was more than willing to throw aside the structure that had fostered me. No one really opposed my rebellious efforts, either, in church or at home – in part because those who were deeply religious (or who might have wanted to be) had no intellectually acceptable counter-arguments at their disposal. After all, many of the basic tenets of Christian belief were incomprehensible, if not clearly absurd. The virgin birth was an impossibility; likewise, the notion that someone could rise from the dead.

Did my act of rebellion precipitate a familial or a social crisis? No. My actions were so predictable, in a sense, that they upset no one, with the exception of my mother (and even she was soon resigned to the inevitable). The other members of the church – my "community" – had become absolutely habituated to the increasingly-frequent act of defection, and did not even notice.

Did my act of rebellion upset me, personally? Only in a manner I was not able to perceive, until many years later. I developed a premature concern with large-scale political and social issues, at about the same time I quit attending church. Why were some countries, some people, rich, happy and successful, while others were doomed to misery? Why were the forces of NATO and the Soviet Union continually at each other's throats? How was it possible for people to act the way the Nazis had, during World War Two? Underlying these specific considerations was a broader, but at the time ill-conceptualized question: how did evil – particularly group-fostered evil – come to play its role in the world?

I abandoned the traditions that supported me, at about the same time I left childhood. This meant that I had no broader socially constructed "philosophy" at hand, to aid my understanding, as I became aware of the existential problems that accompany maturity. The final consequences of that lack took years to become

fully manifest. In the meantime, however, my nascent concern with questions of moral justice found immediate resolution. I started working as a volunteer for a mildly socialist political party, and adopted the party line.

Economic injustice was at the root of all evil, as far as I was concerned. Such injustice could be rectified, as a consequence of the re-arrangement of social organizations. I could play a part in that admirable revolution, carrying out my ideological beliefs. Doubt vanished; my role was clear. Looking back, I am amazed at how stereotypical my actions – reactions – really were. I could not rationally accept the premises of religion – not as I understood them. I turned, in consequence, to dreams of political utopia, and personal power. The same ideological trap caught millions of others, in recent centuries – caught and killed millions.

When I was seventeen I left the town I grew up in. I moved nearby and attended a small college, which offered the first two years of undergraduate education. I involved myself there in university politics – which were more-or-less left wing at that time – and was elected to the college board of governors. The board was composed of politically and ideologically conservative people: lawyers, doctors, and businessmen. They were all well (or at least practically) educated, pragmatic, confident, outspoken; they had all accomplished something worthwhile and difficult. I could not help but admire them, even though I did not share their political stance. I found the fact of my admiration unsettling.

I had attended several left-wing party congresses, as a student politician and active party-worker. I hoped to emulate the socialist leaders. The left wing had a long and honorable history in Canada, and attracted some truly competent and caring people. However, I could not generate much respect for the numerous low-level party activists I encountered at these meetings. They seemed to live to complain: had no career, frequently; no family, no completed education – nothing but ideology. They were peevish, irritable, and little, in every sense of the word. I was faced, in consequence, with the mirror image of the problem I encountered on the college board: I could *not* admire many of the individuals who believed the same things I did. This additional complication furthered my existential confusion.

My college roommate, an insightful cynic, expressed skepticism regarding my ideological beliefs. He told me that the world could not be completely encapsulated within the boundaries of socialist philosophy. I had more or less come to this conclusion on my own, but had not admitted so much in words. Soon afterward, however, I read George Orwell's *Road to Wigan Pier*. This book finally undermined me – not only my socialist ideology, but my faith in ideological stances themselves. In the famous essay concluding that book (written for – and much to the dismay of – the British Left Book Club) Orwell described the great flaw of socialism, and the reason for its frequent failure to attract and maintain democratic power (at least in Britain). Orwell said, essentially, that socialists did not really like the poor. They merely hated the rich.² His idea struck home instantly. Socialist ideology served to mask resentment and hatred, bred by failure. Many of the party activists I had encountered were using the ideals of social justice, to rationalize their pursuit of personal revenge.

Whose fault was it, that I was poor or uneducated and unadmired? Obviously – the fault of the rich, well-schooled and respected. How convenient, then, that the demands of revenge and abstract justice dovetailed! It was only right to obtain recompense from those more fortunate than me.

Of course, my socialist colleagues and I weren't out to hurt anyone – quite the reverse. We were out to improve things – but we were going to start with other people. I came to see the temptation in this logic, the obvious flaw, the danger – but could also see that it did not exclusively characterize socialism. Anyone who was out to change the world by changing others was to be regarded with suspicion. The temptations of such a position were too great to be resisted.

It was not *socialist* ideology that posed the problem, then – but ideology, as such. Ideology divided the world up simplistically into those who thought and acted properly, and those who did not. Ideology enabled the believer to hide from his own unpleasant and inadmissible fantasies and wishes. Such realizations upset my beliefs (even my faith in beliefs), and the plans I had formulated, as a consequence of these beliefs. I could no longer tell who was good and who was bad, so to speak – I no longer knew who to support, or who to fight. This state of affairs proved very troublesome, pragmatically as well as philosophically. I wanted to become a corporate lawyer – had written the Law School Admissions Test, had taken two years of appropriate preliminary courses. I wanted to learn the ways of my enemies, and embark on a political

career. This plan disintegrated. The world obviously did not need another lawyer, and I no longer believed that I knew enough to masquerade as a leader.

I became simultaneously disenchanted with the study of political science, my original undergraduate major. I had adopted that discipline so I could learn more about the structure of human beliefs (and for the practical, career-oriented reasons described previously). It remained very interesting to me when I was at junior college, where I was introduced to the history of political philosophy. When I moved to the main campus at the University of Alberta, however, my interest disappeared. I was taught that people were motivated by rational forces; that human beliefs and actions were determined by economic pressures. This did not seem sufficient explanation. I could not believe (and still do not) that commodities – "natural resources," for example – had intrinsic and self-evident value. In the absence of such value, the worth of things had to be socially or culturally (or even individually) determined. This act of determination appeared to me *moral* – appeared to me to be a consequence of the moral philosophy adopted by the society, culture or person in question. What people valued, economically, merely reflected what they believed to be important. This meant that real motivation had to lie in the domain of value, of morality. The political scientists I studied with did not see this, or did not think it was relevant.

My religious convictions, ill-formed to begin with, disappeared when I was very young. My confidence in socialism (that is, in political utopia) vanished when I realized that the world was not merely a place of economics. My faith in ideology departed, when I began to see that ideological identification itself posed a profound and mysterious problem. I could not accept the theoretical explanations my chosen field of study had to offer, and no longer had any practical reasons to continue in my original direction. I finished my three-year bachelor's degree, and left university. All my beliefs – which had lent order to the chaos of my existence, at least temporarily – had proved illusory; I could no longer see the sense in things. I was cast adrift; I did not know what to do, or what to think.

But what of others? Was there evidence anywhere that the problems I now faced had been solved, by anyone, in any acceptable manner? The customary behavior and attitudes of my friends and family members offered no solution. The people I knew well were no more resolutely goal-directed or satisfied than I was. Their beliefs and modes of being seemed merely to disguise frequent doubt and profound disquietude. More disturbingly, on the more general plane, something truly insane was taking place. The great societies of the world were feverishly constructing a nuclear machine, with unimaginably destructive capabilities. Someone or something was making terrible plans. Why? Theoretically normal and well-adapted people were going about their business prosaically, as if nothing were the matter. Why weren't they disturbed? Weren't they paying attention? Wasn't I?

My concern with the general social and political insanity and evil of the world – sublimated by temporary infatuation with utopian socialism and political machination – returned with a vengeance. The mysterious fact of the cold war increasingly occupied the forefront of my consciousness. How could things have come to such a point?

History is just a madhouse it's turned over all the stones and its very careful reading leaves you little that's unknown

I couldn't understand the nuclear race: what could possibly be worth risking annihilation – not merely of the present, but of the past and the future? What could possibly justify the threat of total destruction?

Bereft of solutions, I had at least been granted the gift of a problem.

I returned to university and began to study psychology. I visited a maximum security prison on the outskirts of Edmonton, under the supervision of an eccentric adjunct professor at the University of Alberta. His primary job was the psychological care of convicts. The prison was full of murderers, rapists, and armed robbers. I ended up in the gym, near the weight room, on my first reconnaissance. I was wearing a long wool cape, *circa* 1890, which I had bought in Portugal, and a pair of tall leather boots. The psychologist who was accompanying me disappeared, unexpectedly, and left me alone. Soon I was surrounded by shoddy men, some of whom were extremely large and tough-looking. One in particular stands out in my memory. He was exceptionally muscular, and tattooed over his bare chest. He had a

vicious scar running down the middle of his body, from his collarbone to his midsection. Maybe he had survived open-heart surgery. Or maybe it was an ax wound. The injury would have killed a lesser man, anyway – someone like me.

Some of the prisoners, who weren't dressed particularly well, offered to trade their clothes for mine. This did not strike me as a great bargain, but I wasn't sure how to refuse. Fate rescued me, in the form of a short, skinny, bearded man. He came up to me – said that the psychologist had sent him – and asked me to accompany him. He was only one person, and many others (much larger) currently surrounded me and my cape. So I took him at his word. He led me outside the gym doors, and out into the prison yard, talking quietly but reasonably about something innocuous (I don't recall what) all the while. I kept glancing back hopefully at the open doors behind us as we got further and further away. Finally my supervisor appeared, and motioned me back. We left the bearded prisoner, and went to a private office. The psychologist told me that the harmless-appearing little man who had escorted me out of the gym had murdered two policemen, in cold blood, after he had forced them to dig their own graves. One of the policemen had little children, and had begged for his life, on their behalf, while he was digging – at least according to the murderer's own testimony.

This really shocked me.

I had read about this sort of event, of course – but it had never been made *real* for me. I had never met someone even tangentially affected by something like this; had certainly not encountered anyone who had actually done something so terrible. How could the man I had talked to – who was so apparently normal (and so seemingly inconsequential) – have done such an awful thing?

Some of the courses I was attending at this time were taught in large lecture theaters, where the students were seated in descending rows, row after row. In one of these courses – *Introduction to Clinical Psychology*, appropriately enough – I experienced a recurrent compulsion. I would take my seat behind some unwitting individual and listen to the professor speak. At some point during the lecture, I would unfailingly feel the urge to stab the point of my pen into the neck of the person in front of me. This impulse was not overwhelming – luckily – but it was powerful enough to disturb me. What sort of terrible person would have an impulse like that? Not me. I had never been aggressive. I had been smaller and younger than my classmates, for most of my life.

I went back to the prison, a month or so after my first visit. During my absence, two prisoners had attacked a third, a suspected informer. They held or tied him down and pulverized one of his legs with a lead pipe. I was taken aback, once again, but this time I tried something different. I tried to imagine, really imagine, what I would have to be like to do such a thing. I concentrated on this task for days and days – and experienced a frightening revelation. The truly appalling aspect of such atrocity did not lie in its impossibility or remoteness, as I had naively assumed, but in its ease. I was not much different from the violent prisoners – not qualitatively different. I could do what they could do (although I hadn't).

This discovery truly upset me. I was not who I thought I was. Surprisingly, however, the desire to stab someone with my pen disappeared. In retrospect, I would say that the behavioral urge had manifested itself in explicit knowledge – had been translated from emotion and image to concrete realization – and had no further "reason" to exist. The "impulse" had only occurred, because of the question I was attempting to answer: "how can men do terrible things to one another?" I meant *other* men, of course – *bad men* – but I had still asked the question. There was no reason for me to assume that I would receive a predictable or personally meaningless answer.

At the same time, something odd was happening to my ability to converse. I had always enjoyed engaging in arguments, regardless of topic. I regarded them as a sort of game (not that this is in any way unique). Suddenly, however, I couldn't talk – more accurately, I couldn't *stand listening to myself talk*. I started to hear a "voice" inside my head, commenting on my opinions. Every time I said something, it said something – something critical. The voice employed a standard refrain, delivered in a somewhat bored and matter-of-fact tone:

You don't believe that. That isn't true. You don't believe that. That isn't true. The "voice" applied such comments to almost every phrase I spoke.

I couldn't understand what to make of this. I knew the source of the commentary was part of me – I wasn't schizophrenic – but this knowledge only increased my confusion. Which part, precisely, was me – the talking part, or the criticizing part? If it was the talking part, then what was the criticizing part? If it was the criticizing part – well, then: how could virtually everything I said be untrue? In my ignorance and confusion, I decided to experiment. I tried only to say things that my internal reviewer would pass unchallenged. This meant that I really had to listen to what I was saying, that I spoke much less often, and that I would frequently stop, midway through a sentence, feel embarrassed, and reformulate my thoughts. I soon noticed that I felt much less agitated and more confident when I only said things that the "voice" did not object to. This came as a definite relief. My experiment had been a success; I was the criticizing part. Nonetheless, it took me a long time to reconcile myself to the idea that almost all my thoughts weren't real, weren't true – or, at least, weren't mine.

All the things I "believed" were things I thought sounded good, admirable, respectable, courageous. They weren't my things, however – I had stolen them. Most of them I had taken from books. Having "understood" them, abstractly, I presumed I had a right to them – presumed that I could adopt them, as if they were mine: presumed that they were me. My head was stuffed full of the ideas of others; stuffed full of arguments I could not logically refute. I did not know then that an irrefutable argument is not necessarily true, nor that the right to identify with certain ideas had to be earned.

I read something by Carl Jung, at about this point, that helped me understand what I was experiencing. It was Jung who formulated the concept of *persona*: the mask that "feigned individuality." Adoption of such a mask, according to Jung, allowed each of us – and those around us – to believe that we were authentic. Jung said:

"When we analyse the persona we strip off the mask, and discover that what seemed to be individual is at bottom collective; in other words, that the persona was only a mask of the collective psyche. Fundamentally the persona is nothing real: it is a compromise between individual and society as to what a man should appear to be. He takes a name, earns a title, exercises a function, he is this or that. In a certain sense all this is real, yet in relation to the essential individuality of the person concerned it is only a secondary reality, a compromise formation, in making which others often have a greater share than he. The persona is a semblance, a two-dimensional reality, to give it a nickname."

Despite my verbal facility, I was not real. I found this painful to admit.

I began to dream absolutely unbearable dreams. My dream life, up to this point, had been relatively uneventful, as far as I can remember; furthermore, I have never had a particularly good visual imagination. Nonetheless, my dreams became so horrible and so emotionally gripping that I was often afraid to go to sleep. I dreamt dreams vivid as reality. I could not escape from them or ignore them. They centered, in general, around a single theme: that of nuclear war, and total devastation – around the worst evils that I, or something in me, could imagine:

My parents lived in a standard ranch style house, in a middle-class neighborhood, in a small town in northern Alberta. I was sitting in the darkened basement of this house, in the family room, watching TV, with my cousin Diane, who was in truth – in waking life – the most beautiful woman I had ever seen. A newscaster suddenly interrupted the program. The television picture and sound distorted, and static filled the screen. My cousin stood up and went behind the TV to check the electrical cord. She touched it, and started convulsing and frothing at the mouth, frozen upright by intense current.

A brilliant flash of light from a small window flooded the basement. I rushed upstairs. There was nothing left of the ground floor of the house. It had been completely and cleanly sheared away, leaving only the floor, which now served the basement as a roof. Red and orange flames filled the sky, from horizon to horizon. Nothing was left as far as I could see, except skeletal black ruins sticking up here and there: no houses, no trees, no signs of other human beings or of any life whatsoever. The entire town and everything that surrounded it on the flat prairie had been completely obliterated.

It started to rain mud, heavily. The mud blotted out everything, and left the earth brown, wet, flat and dull, and the sky leaden, even grey. A few distraught and shell-shocked people started to gather

together. They were carrying unlabelled and dented cans of food, which contained nothing but mush and vegetables. They stood in the mud looking exhausted and disheveled. Some dogs emerged, out from under the basement stairs, where they had inexplicably taken residence. They were standing upright, on their hind legs. They were thin, like greyhounds, and had pointed noses. They looked like creatures of ritual – like Anubis, from the Egyptian tombs. They were carrying plates in front of them, which contained pieces of seared meat. They wanted to trade the meat for the cans. I took a plate. In the center of it was a circular slab of flesh four inches in diameter and one inch thick, foully cooked, oily, with a marrow bone in the center of it. Where did it come from?

I had a terrible thought. I rushed downstairs to my cousin. The dogs had butchered her, and were offering the meat to the survivors of the disaster. I woke up with my heart pounding.

I dreamed apocalyptic dreams of this intensity two or three times a week for a year or more, while I attended university classes and worked – as if nothing out of the ordinary was going on in my mind. Something I had no familiarity with was happening, however. I was being affected, simultaneously, by events on two "planes." On the first plane were the normal, predictable, everyday occurrences that I shared with everybody else. On the second plane, however (unique to me, or so I thought) existed dreadful images and unbearably intense emotional states. This idiosyncratic, subjective world – which everyone normally treated as illusory – seemed to me at that time to lie somehow *behind* the world everyone knew and regarded as real. But what did *real* mean? The closer I looked, the less comprehensible things became. Where *was* the real? What was at the bottom of it all? I did not feel I could live without knowing.

My interest in the cold war transformed itself into a true obsession. I thought about the suicidal and murderous preparation of that war every minute of every day, from the moment I woke up until the second I went to bed. How could such a state of affairs come about? Who was responsible?

I dreamed that I was running through a mall parking lot, trying to escape from something. I was running through the parked cars, opening one door, crawling across the front seat, opening the other, moving to the next. The doors on one car suddenly slammed shut. I was in the passenger seat. The car started to move by itself. A voice said harshly, "there is no way out of here." I was on a journey, going somewhere I did not want to go. I was not the driver.

I became very depressed and anxious. I had vaguely suicidal thoughts, but mostly wished that everything would just go away. I wanted to lay down on my couch, and sink into it, literally, until only my nose was showing – like the snorkel of a diver above the surface of the water. I found my awareness of things unbearable.

I came home late one night from a college drinking party, self-disgusted and angry. I took a canvas board and some paints. I sketched a harsh, crude picture of a crucified Christ – glaring and demonic – with a cobra wrapped around his naked waist, like a belt. The picture disturbed me – struck me, despite my agnosticism, as sacrilegious. I did not know what it meant, however, or why I had painted it. Where in the world had it come from? I hadn't paid any attention to religious ideas for years. I hid the painting under some old clothes in my closet and sat cross-legged on the floor. I put my head down. It became obvious to me at that moment that I had not developed any real understanding of myself or of others. Everything I had once believed about the nature of society and myself had proved false, the world had apparently gone insane, and something strange and frightening was happening in my head. James Joyce said, "History is a nightmare from which I am trying to awake." For me, history literally was a nightmare. I wanted above all else at that moment to wake up, and make my terrible dreams go away.

I have been trying ever since then to make sense of the human capacity, my capacity, for evil – particularly for those evils associated with belief. I started by trying to make sense of my dreams. I couldn't ignore them, after all. Perhaps they were trying to tell me something? I had nothing to lose by admitting the possibility. I read Freud's Interpretation of Dreams, and found it useful. Freud at least took the topic seriously – but I could not regard my nightmares as wish-fulfillments. Furthermore, they seemed more religious than sexual in nature. I knew, vaguely, that Jung had developed specialized knowledge of myth and religion, so I started through his writings. His thinking was granted little credence by the academics I knew – but they weren't particularly concerned with dreams. I couldn't help being concerned by mine.

They were so intense I thought they might derange me. (What was the alternative? To believe that the terrors and pains they caused me were not *real*? Nothing is more real than terror and pain.)

Much of the time I could not understand what Jung was getting at. He was making a point I could not grasp; speaking a language I did not comprehend. Now and then, however, his statements struck home. He offered this observation, for example:

"It must be admitted that the archetypal contents of the collective unconscious can often assume grotesque and horrible forms in dreams and fantasies, so that even the most hard-boiled rationalist is not immune from shattering nightmares and haunting fears."

The second part of that statement certainly seemed applicable to me, although the first ('the archetypal contents of the collective unconscious") remained mysterious and obscure. Still, this was promising. Jung at least recognized that the things that were happening to me *could happen*. Furthermore, he offered some hints as to their cause. So I kept reading. I soon came across the following hypothesis. Here was a potential solution to the problems I was facing – or at least the description of a place to look for such a solution:

"The psychological elucidation of... [dream and fantasy] images, which cannot be passed over in silence or blindly ignored, leads logically into the depths of religious phenomenology. The history of religion in its widest sense (including therefore mythology, folklore, and primitive psychology) is a treasure-house of archetypal forms from which the doctor can draw helpful parallels and enlightening comparisons for the purpose of calming and clarifying a consciousness that is all at sea. It is absolutely necessary to supply these fantastic images that rise up so strange and threatening before the mind's eye with some kind of context so as to make them more intelligible. Experience has shown that the best way to do this is by means of comparative mythological material."

It has in fact been the study of "comparative mythological material" that made my horrible dreams disappear. The "cure" wrought by this study, however, was purchased at the price of complete and often painful transformation: what I believe about the world, now – and how I act, in consequence – is so much at variance with what I believed when I was younger that I might as well be a completely different person.

I discovered that beliefs make the world, in a very real way – that beliefs *are* the world, in a more than metaphysical sense. This "discovery" has not turned me into a moral relativist, however: quite the contrary. I have become convinced that the world-that-is-belief is orderly: that there are universal moral absolutes (although these are structured such that a diverse range of human opinion remains both possible and beneficial). I believe that individuals and societies who flout these absolutes – in ignorance or in willful opposition – are doomed to misery and eventual dissolution.

I learned that the meanings of the most profound substrata of belief systems can be rendered explicitly comprehensible, even to the skeptical rational thinker – and that, so rendered, can be experienced as fascinating, profound and necessary. I learned why people wage war – why the desire to maintain, protect and expand the domain of belief motivates even the most incomprehensible acts of group-fostered oppression and cruelty – and what might be done to ameliorate this tendency, despite its universality. I learned, finally, that the terrible aspect of life might actually be a necessary precondition for the existence of life – and that it is possible to regard that precondition, in consequence, as comprehensible and acceptable. I hope that I can bring those who read this book to the same conclusions, without demanding any unreasonable "suspension of critical judgment" – excepting that necessary to initially encounter and consider the arguments I present. These can be summarized as follows:

The world can be validly construed as a forum for action, as well as a place of things. We describe the world as a place of things, using the formal methods of science. The techniques of narrative, however — myth, literature, and drama — portray the world as a forum for action. The two forms of representation have been unnecessarily set at odds, because we have not yet formed a clear picture of their respective domains. The domain of the former is the "objective world" — what is, from the perspective of intersubjective perception. The domain of the latter is "the world of value" — what is and what should be, from the perspective of emotion and action.

The world as forum for action is "composed," essentially, of three constituent elements, which tend to manifest themselves in typical patterns of metaphoric representation. First is unexplored territory – the Great Mother, nature, creative and destructive, source and final resting place of all determinate things. Second is explored territory – the Great Father, culture, protective and tyrannical, cumulative ancestral wisdom. Third is the process that mediates between unexplored and explored territory – the Divine Son, the archetypal individual, creative exploratory "Word" and vengeful adversary. We are adapted to this "world of divine characters," much as the "objective world." The fact of this adaptation implies that the environment is in "reality" a forum for action, as well as a place of things.

Unprotected exposure to unexplored territory produces fear. The individual is protected from such fear as a consequence of "ritual imitation of the Great Father" – as a consequence of the adoption of group identity, which restricts the meaning of things, and confers predictability on social interactions. When identification with the group is made absolute, however – when everything has to be controlled, when the unknown is no longer allowed to exist – the creative exploratory process that updates the group can no longer manifest itself. This "restriction of adaptive capacity" dramatically increases the probability of social aggression and chaos.

Rejection of the unknown is tantamount to "identification with the devil," the mythological counterpart and eternal adversary of the world-creating exploratory hero. Such rejection and identification is a consequence of Luciferian pride, which states: all that I know is all that is necessary to know. This pride is totalitarian assumption of omniscience — is adoption of "God's place" by "reason" — is something that inevitably generates a state of personal and social being indistinguishable from hell. This hell develops because creative exploration — impossible, without (humble) acknowledgment of the unknown — constitutes the process that constructs and maintains the protective adaptive structure that gives life much of its acceptable meaning.

"Identification with the devil" amplifies the dangers inherent in group identification, which tends of its own accord towards pathological stultification. Loyalty to personal interest – subjective meaning – can serve as an antidote to the overwhelming temptation constantly posed by the possibility of denying anomaly. Personal interest – subjective meaning – reveals itself at the juncture of explored and unexplored territory, and is indicative of participation in the process that ensures continued healthy individual and societal adaptation.

Loyalty to personal interest is equivalent to identification with the archetypal hero – the "savior" – who upholds his association with the creative "Word" in the face of death, and in spite of group pressure to conform. Identification with the hero serves to decrease the unbearable motivational valence of the unknown; furthermore, provides the individual with a standpoint that simultaneously transcends and maintains the group.

Similar summaries precede each chapter and subchapter. Read as a unit, they comprise a complete but compressed "picture" of the book. These should be read first, after this preface. In this manner, the whole of the argument I am offering might come quickly to aid comprehension of the parts.

CHAPTER 1: MAPS OF EXPERIENCE: OBJECT AND MEANING

The world can be validly construed as forum for action, or as place of things.

The former manner of interpretation – more primordial, and less clearly understood – finds its expression in the arts or humanities, in ritual, drama, literature, and mythology. The world as forum for action is a place of value, a place where all things have meaning. This meaning, which is shaped as a consequence of social interaction, is implication for action, or – at a higher level of analysis – implication for the configuration of the interpretive schema that produces or guides action.

The latter manner of interpretation – the world as place of things – finds its formal expression in the methods and theories of science. Science allows for increasingly precise determination of the consensually-validatable properties of things, and for efficient utilization of precisely-determined things as tools (once the direction such use is to take has been determined, through application of more fundamental narrative processes).

No complete world-picture can be generated, without use of both modes of construal. The fact that one mode is generally set at odds with the other means only that the nature of their respective domains remains insufficiently discriminated. Adherents of the mythological world-view tend to regard the statements of their creeds as indistinguishable from empirical "fact," even though such statements were generally formulated long before the notion of objective reality emerged. Those who, by contrast, accept the scientific perspective – who assume that it is, or might become, complete – forget that an impassable gulf currently divides what is from what should be.

We need to know four things:

what there is.

what to do about what there is,

that there is a difference between knowing what there is, and knowing what to do about what there is

and what that difference is.

To explore something, to "discover what it is" – that means most importantly to discover its significance for motor output, within a particular social context, and only more particularly, to determine its precise objective sensory or material nature. This is knowledge, in the most basic of senses – and often constitutes sufficient knowledge.

Imagine that a baby girl, toddling around in the course of her initial tentative investigations, reaches up onto a counter-top to touch a fragile and expensive glass sculpture. She observes its color, sees its shine, feels that it is smooth and cold and heavy to the touch. Suddenly her mother interferes, grasps her hand, tells her *not* to *ever touch* that object. The child has just learned a number of specifically consequential things about the sculpture – has identified its sensory properties, certainly. More importantly, however, she has determined that approached in the wrong manner, the sculpture is dangerous (at least in the presence of mother); has discovered as well that the sculpture is regarded more highly, in its present unaltered configuration, than the exploratory tendency – at least (once again) by mother. The baby girl has simultaneously encountered an object, from the empirical perspective, *and its socioculturally-determined status*. The empirical object might be regarded as those sensory properties "intrinsic" to the object. The *status of the object*, by contrast, consists of its meaning – consists of its implication for behavior. Everything a child encounters has this dual nature, experienced by the child as part of a unified totality. Everything *is* something, and *means* something – and the distinction between essence and significance is not necessarily drawn.

The significance of something – specified in actuality as a consequence of exploratory activity undertaken in its vicinity – tends "naturally" to become assimilated to the object itself. The object, after all, is the proximal cause or the stimulus that "gives rise" to action conducted in its presence. For people operating naturally, like the child, what something signifies is more or less inextricably *part* of the thing,

part of its magic. The magic is of course due to apprehension of the specific cultural and intrapsychic significance of the thing, and not to its objectively determinable sensory qualities. Everyone understands the child who says, for example, "I saw a scary man"; the child's description is immediate and concrete, even though he or she has attributed to the object of perception qualities that are in fact context-dependent and subjective. It is difficult, after all, to realize the subjective nature of fear, and not to feel threat as part of the "real" world.

The automatic attribution of "meaning" to "things" – or the failure to distinguish between them initially – is a characteristic of narrative, of myth, not of scientific thought. Narrative accurately captures the nature of raw experience. Things *are* scary, people *are* irritating, events *are* promising, food *is* satisfying – at least in terms of our basic experience. The modern mind, which regards itself as having transcending the domain of the magical, is nonetheless still endlessly capable of "irrational" (read motivated) reactions. We fall under the spell of experience whenever we attribute our frustration, aggression, devotion or lust to the person or situation that exists as the proximal "cause" of such agitation. We are not yet "objective," even in our most clear-headed moments (and thank God for that). We become immediately immersed in a motion picture or a novel, and willingly suspend disbelief. We become impressed or terrified, despite ourselves, in the presence of a sufficiently powerful cultural figurehead (an intellectual idol, a sports superstar, a movie actor, a political leader, the pope, a famous beauty, even our superior at work) – in the presence, that is, of anyone who sufficiently embodies the oft-implicit values and ideals that protect us from disorder and lead us on. Like the medieval individual, we do not even need the person to generate such affect. The icon will suffice. We pay vast sums of money for articles of clothing worn or personal items used or created by the famous and infamous of our time.

The "natural," pre-experimental, or mythical mind is in fact *primarily* concerned with meaning – which is essentially implication for action – and not with "objective" nature. The formal object, as conceptualized by modern scientifically-oriented consciousness, might appear to those still possessed by the mythic imagination – if they could "see" it at all – as an irrelevant shell: as all that was left after everything intrinsically intriguing had been stripped away. For the pre-experimentalist, the thing is mostly truly the significance of its sensory properties, as they are experienced in subjective experience – in affect, or emotion. And, in truth – in real life – to know what something *is* still means to know two things about it: the first is its *motivational relevance*; the second is the specific nature of its sensory qualities. The two forms of knowing are not identical; furthermore, experience and registration of the former necessarily precedes development of the latter. Something must have emotional impact before it will attract enough attention to be explored and mapped in accordance with its sensory properties. Those sensory properties – of prime import to the experimentalist or empiricist – are meaningful only insofar as they serve as cues for determining specific affective relevance or behavioral significance. We need to know what things *are* not to know what they are but to *keep track of what they mean* – to understand what they signify for our behavior.

It has taken centuries of firm discipline and intellectual training, religious, proto-scientific, and scientific, to produce a mind capable of concentrating on phenomena that are not yet or are no longer immediately intrinsically [instinctively (?)] gripping – to produce a mind that paradoxically regards *real* as something separable from *relevant*. Alternatively, it might be suggested that all the myth has not yet vanished from science, devoted as it is to human progress, and that it is this nontrivial remainder that enables the scientist to retain undimmed enthusiasm, while he endlessly studies his fruitflies.

How, precisely, did people think, not so very long ago, before they were experimentalists? What were things, before they were objective things? These are very difficult questions. The "things" that existed prior to the development of experimental science do not appear valid either as things, or as the meaning of things, to the modern mind. The question of the nature of the substance of sol – the sun – (to take a single example) occupied the minds of those who practiced the pre-experimental "science" of alchemy for many hundreds of years. We would no longer presume even that the sun has a uniform substance, unique to it, and would certainly take exception to the properties attributed to this hypothetical element by the medieval alchemist, if we allowed its existence. Carl Jung, who spent much of the latter part of his life studying medieval thought patterns, characterized sol:

"... the sun signifies first of all gold, whose [alchemical] sign it shares. But just as the "philosophical" gold is not the "common" gold, so the sun is neither just the metallic gold nor the heavenly orb. Sometimes the sun is an active substance hidden in the gold and is extracted [alchemically] as the *tinctura rubea* (red tincture). Sometimes, as the heavenly body, it is the possessor of magically effective and transformative rays. As gold and a heavenly body it contains an active sulphur of a red colour, hot and dry. Because of this red sulphur the alchemical sun, like the corresponding gold, is red. As every alchemist knew, gold owes its red color to the admixture of Cu (copper), which he interpreted as Kypris (the Cyprian, Venus), mentioned in Greek alchemy as the transformative substance. Redness, heat, and dryness are the classical qualities of the Egyptian Set (Greek Typhon), the evil principle which, like the alchemical sulphur, is closely connected with the devil. And just as Typhon has his kingdom in the forbidden sea, so the sun, as *sol centralis*, has its sea, its "crude perceptible water," and as *sol coelestis* its "subtle imperceptible water." This sea water (*aqua pontica*) is extracted from sun and moon....

The active sun-substance also has favourable effects. As the so-called "balsam" it drips from the sun and produces lemons, oranges, wine, and, in the mineral kingdom, gold..." ¹⁰

We can barely understand such a description, contaminated as it is in its entirety by imaginative and mythological associations, peculiar to the medieval mind. It is precisely this fantastical contamination, however, that renders the alchemical description worth examining – not from the perspective of the history of science, concerned with the examination of outdated objective ideas, but from the perspective of psychology, focused on the interpretation of subjective frames of reference.

"In it [the "Indian Ocean," in this example] are images of heaven and earth, of summer, autumn, winter, and spring, male and female. If thou callest this spiritual, what thou doest is probable; if corporeal, thou sayest the truth; if heavenly, thou liest not; if earthly, thou hast well spoken." The alchemist could not separate his subjective ideas about the nature of things – that is, his hypotheses – from the "things" themselves. His hypotheses, in turn – products of his imagination – were derived from the unquestioned and unrecognized "explanatory" presuppositions that made up his culture. The medieval man lived, for example, in a universe that was moral - where everything, even ores and metals, strived above all for perfection. ¹² Things, for the alchemical mind, were therefore characterized in large part by their moral nature - by their impact on what we would describe as affect, emotion, or motivation; were therefore characterized by their relevance or value (which is impact on affect). Description of this relevance took narrative form, mythic form – as in the example drawn from Jung, where the sulphuric aspect of the sun's substance is attributed negative, demonic characteristics. It was the great feat of science to strip affect from perception, so to speak, and to allow for the description of experiences purely in terms of their consensually apprehensible features. However, it is the case that the affects generated by experiences are real, as well. The alchemists, whose conceptualizations intermingled affect with sense, dealt with affect as a matter of course (although they did not "know" it - not explicitly). We have removed the affect from the thing, and can therefore brilliantly manipulate the thing. We are still victims, however, of the uncomprehended emotions generated by – we would say, in the presence of – the thing. We have lost the mythic universe of the pre-experimental mind, or have at least ceased to further its development. That loss has left our increased technological power ever more dangerously at the mercy of our still unconscious systems of

Prior to the time of Descartes, Bacon and Newton, man lived in an animated, spiritual world, saturated with meaning, imbued with moral purpose. The nature of this purpose was revealed in the stories people told each other – stories about the structure of the cosmos, and the place of man. But now we think empirically (at least we think we think empirically), and the spirits that once inhabited the universe have vanished. The forces released by the advent of the experiment have wreaked havoc within the mythic world. Jung states:

"How totally different did the world appear to medieval man! For him the earth was eternally fixed and at rest in the center of the universe, encircled by the course of a sun that solicitously bestowed its warmth. Men were all children of God under the loving care of the Most High, who prepared them for eternal blessedness; and all knew exactly what they should do and how they should conduct themselves

in order to rise from a corruptible world to an incorruptible and joyous existence. Such a life no longer seems real to us, even in our dreams. Natural science has long ago torn this lovely veil to shreds."¹³

Even if the medieval individual was not in all cases tenderly and completely enraptured by his religious beliefs (he was a great believer in Hell, for example), he was certainly not plagued by the plethora of rational doubts and moral uncertainties that beset his modern counterpart. Religion for the pre-experimental mind was not so much a matter of faith as a matter of fact — which means that the prevailing religious viewpoint was not merely one compelling theory among many.

The capacity to maintain explicit belief in religious "fact," however, has been severely undermined in the last few centuries – first in the West, and then everywhere else. A succession of great scientists and iconoclasts has demonstrated that the universe does not revolve around man, that our notion of separate status from and "superiority" to the animal has no empirical basis, and that there is no God in heaven (nor even a heaven, as far as the eye can see). In consequence, we no longer believe our own stories – no longer even believe that those stories served us well in the past. The objects of revolutionary scientific discovery – Galileo's mountains on the lunar orb; Kepler's elliptical planetary orbits – manifested themselves in apparent violation of mythic order, predicated as it was on the presumption of heavenly perfection. The new phenomena produced by the procedures of experimentalists could not *be*, could not exist, from the perspective defined by tradition. Furthermore – and more importantly – the new theories that arose to make sense of empirical reality posed a severe threat to the integrity of traditional models of reality, which had provided the world with determinate meaning. The mythological cosmos had man at its midpoint; the objective universe was heliocentric, at first, and less than that later. Modern man no longer occupies center stage. The world is, in consequence, a completely different place.

The mythological perspective has been overthrown by the empirical; or so it appears. This should mean that the morality predicated upon such myth should have disappeared, as well, as belief in comfortable illusion vanished. Friedrich Nietzsche made this point clearly, more than a hundred years ago:

"When one gives up Christian belief [for example] one thereby deprives oneself of the *right* to Christian morality.... Christianity is a system, a consistently thought out and *complete* view of things. If one breaks out of it a fundamental idea, the belief in God, one thereby breaks the whole thing to pieces: one has nothing of any consequence left in one's hands. Christianity presupposes that man does not know, *cannot* know what is good for him and what evil: he believes in God, who alone knows. Christian morality is a command: its origin is transcendental; it is beyond all criticism, all right to criticize; it possesses truth only if God is truth – it stands or falls with the belief in God. – If [modern Westerners] really do believe they know, of their own accord, 'intuitively', what is good and evil; if they consequently think they no longer have need of Christianity as a guarantee of morality; that is merely the *consequence* of the ascendancy of Christian evaluation and an expression of the *strength* and *depth* of this ascendancy: so that the origin of [modern] morality has been forgotten, so that the highly conditional nature of its right to exist is no longer felt."

If the presuppositions of a theory have been invalidated, argues Nietzsche, then the theory has been invalidated. But the "theory" survives. The fundamental tenets of the Judeo-Christian moral tradition continue to govern every aspect of the actual individual behavior and basic values of the typical Westerner – even if he is atheistic and well-educated; even if his abstract notions and utterances appear iconoclastic. He neither kills, nor steals (or, if he does, he hides his actions, even from his own awareness), and he tends, in theory, to treat his neighbour as himself. The principles that govern his society (and, increasingly, all others ¹⁵) remain predicated on mythic notions of individual value – intrinsic right and responsibility – despite scientific evidence of causality and determinism in human motivation. Finally, in his mind – even when sporadically criminal – the victim of a crime still cries out to heaven for "justice," and the conscious lawbreaker still *deserves* punishment for his or her actions.

Our systems of post-experimental thought and our systems of motivation and action therefore co-exist in paradoxical union. One is "up-to-date" – the other, archaic. One is scientific – the other, traditional, even superstitious. We have become atheistic in our description, but remain evidently religious – that is, *moral* – in our disposition. What we accept as true, and how we act, are no longer commensurate. We carry on, as if

our experience has meaning – as if our activities have transcendent value – but we are unable to justify this belief intellectually. We have become trapped by our own capacity for abstraction: it provides us with accurate descriptive information, but serves to undermine our belief in the utility and meaning of existence. This problem has frequently been regarded as tragic (it seems to me, at least, ridiculous) – and has been thoroughly explored, in existential philosophy and literature. Nietzsche described this modern condition as the (inevitable and necessary) consequence of the "death of God:"

"Have you not heard of that madman who lit a lantern in the bright morning hours, ran to the market place, and cried incessantly, 'I seek God! I seek God!' As many of those who do not believe in God were standing around just then, he provoked much laughter.

Why, did he get lost? said one. Did he lose his way like a child? said another. Or is he hiding? Is he afraid of us? Has he gone on a voyage? or emigrated? Thus they yelled and laughed.

The madman jumped into their midst and pierced them with his glances. 'Whither is God' he cried. 'I shall tell you. We have killed him – you and I. All of us are his murderers. But how have we done this? How were we able to drink up the sea? Who gave us the sponge to wipe away the entire horizon? What did we do when we unchained this earth from its sun? Whither is it moving now? Whither are we moving now? Away from all suns? Are we not plunging continuously? Backward, sideward, forward, in all directions? Is there any up or down left? Are we not straying as through an infinite nothing? Do we not feel the breath of empty space? Has it not become colder? Is not night and more night coming on all the while? Must not lanterns be lit in the morning? Do we not hear anything yet of the noise of the grave-diggers who are burying God? Do we not smell anything yet of God's decomposition? Gods too decompose.

God is dead. God remains dead. And we have killed him. How shall we, the murderers of all murderers, comfort ourselves? What was holiest and mo st powerful of all that the world has yet owned has bled to death under our knives. Who will wipe this blood off us? What water is there for us to clean ourselves? What festivals of atonement, what sacred games shall we have to invent? Is not the greatness of this deed too great for us? Must not we ourselves become gods simply to seem worthy of it?¹⁶,"

We find ourselves in an absurd and unfortunate situation – when our thoughts turn, involuntarily, to consideration of our situation. It seems impossible to believe that life is intrinsically, religiously meaningful. We continue to act and think "as if," however– as if nothing fundamental has really changed. That does not change the fact that our integrity has vanished.

The great forces of empiricism and rationality and the great technique of the experiment have killed myth, and it cannot be resurrected – or so it seems. We still *act out* the precepts of our forebears, however, although we can no longer justify our actions. Our behavior is shaped (at least in the ideal) by the same mythic rules – *thou shalt not kill, thou shalt not covet* – that guided our ancestors, for the thousands of years they lived, without benefit of formal empirical thought. This means that those rules are so powerful – so necessary, at least – that they maintain their existence (and flourish, and expand their domain) even in the presence of explicit theories that undermine their validity. That is a mystery – and here is another:

How is it that complex and admirable ancient civilizations could have developed and flourished, initially, if they were predicated upon nonsense? (If a culture survives, and grows, does that not indicate in some profound way that the ideas it is based upon are valid? If myths are mere superstitious proto-theories, why did they work? Why were they remembered? Our great rationalist ideologies, after all – fascist, say, or communist – demonstrated their essential uselessness within the space of mere generations, despite their intellectually compelling nature. Traditional societies, predicated on religious notions, have survived – essentially unchanged, in some cases, for tens of thousands of years. How can this longevity be understood?) Is it actually sensible to argue that persistently successful traditions are based on ideas that are simply wrong, regardless of their utility?

Is it not more likely that we just do not know how it could be that traditional notions are *right*, given their *appearance* of extreme irrationality?

Is it not likely that this indicates modern philosophical ignorance, rather than ancestral philosophical error?

We have made the great mistake of assuming that the "world of spirit" described by those who preceded us was the modern "world of matter," primitively conceptualized. This is not true – at least not in the simple manner we generally believe. The cosmos described by mythology was *not* the same place known to the practitioners of modern science – but that does not mean it was not *real*. We have not yet found God above, nor the Devil below, because we do not yet understand where "above" and "below" might be found.

We do not know what our ancestors were talking about. This is not surprising, because they did not "know," either (and it didn't really matter that they did not know). Consider this archaic creation myth¹⁷ from Sumer – the "birthplace of history":

"So far, no cosmogonic text properly speaking has been discovered, but some allusions permit us to reconstruct the decisive moments of creation, as the Sumerians conceived it. The goddess Nammu (whose name is written with the pictograph representing the primordial sea) is presented as "the mother who gave birth to the Sky and the Earth" and the "ancestress who brought forth all the gods." The theme of the primordial waters, imagined as a totality at once cosmic and divine, is quite frequent in archaic cosmogonies. In this case too, the watery mass is identified with the original Mother, who, by parthenogenesis, gave birth to the first couple, the Sky (An) and the Earth (Ki), incarnating the male and female principles. This first couple was united, to the point of merging, in the *hieros gamos* [mystical marriage]. From their union was born En-lil, the god of the atmosphere. Another fragment informs us that the latter separated his parents.... The cosmogonic theme of the separation of sky and earth is also widely disseminated."

This myth is typical of archaic "descriptions of reality." What does it mean to say that the Sumerians believed that the world emerged from a "primordial sea," which was the mother of all, and that the sky and the earth were separated by *the act of a deity*? We do not know. Our abysmal ignorance in this regard has not been matched, however, by a suitable caution. We appear to have made the presumption that stories such as these – myths – were equivalent in function and intent (but were inferior methodologically) to empirical or post-experimental description. It is this fundamentally absurd insistence that, above all, has destabilized the effect of religious tradition upon the organization of modern human moral reasoning and behavior. The "world" of the Sumerians was not objective reality, as we presently construe it. It was simultaneously more and less – more, in that this "primitive" world contained phenomena that we do not consider part of "reality," such as affect and meaning; less, in that the Sumerians could not describe (or conceive of) many of those things the processes of science have revealed to us.

Myth is *not* primitive proto-science. It is a qualitatively different phenomenon. Science might be considered "description of the world with regards to those aspects that are consensually apprehensible" or "specification of the most effective mode of reaching an end (given a defined end)." Myth can be more accurately regarded as "description of the world as it *signifies* (for *action*)." The mythic universe is *a place to act*, not *a place to perceive*. Myth describes things in terms of their unique or shared affective valence, their value, their motivational significance. The Sky (An) and the Earth (Ki) of the Sumerians are not the sky and earth of modern man, therefore; they are the Great Father and Mother of all things [including the thing – En-lil, who is actually a process – that in some sense gave rise to them].

We do not understand pre-experimental thinking, so we try to explain it in terms that we do understand—which means that we explain it away, define it as nonsense. After all, we think scientifically—so we believe—and we think we know what that means (since scientific thinking can in principle be defined). We are familiar with scientific thinking, and value it highly—so we tend to presume that that is all there is to thinking (that all other "forms of thought" are approximations, at best, to the ideal of scientific thought). But this is not accurate. Thinking also and more fundamentally is *specification of value*—is specification of implication for behavior. This means that *categorization*, with regards to value—determination (or even perception) of what constitutes a single thing, or class of things—is the act of *grouping together according to implication for behavior*.

The Sumerian category of Sky (An), for example, is a domain of phenomena with similar implications for behavioral output, or for affect; the same can be said for the category of Earth (Ki), and all other mythic categories. The fact that the "domain of the Sky" has implications for action – has motivational significance – makes it a deity (which is something that controls behavior, or at least that must be served).

Comprehension of the fact that such a classification system actually has meaning necessitates learning to think differently (necessitates, as well, learning to think about thinking differently).

The Sumerians were concerned, above all, with how to act (with the value of things). Their descriptions of reality (to which we attribute the qualities of proto-science) in fact comprised their summary of the world *as phenomena with meaning* – as place to act. They did not "know" this – not *explicitly* – any more than we do. But it was still true.

The empirical endeavor is concerned with objective description of $\underline{what is}$ – with determination of what it is about a given phenomena that can be consensually validated and described. The objects of this process may be those of the past, the present, or the future, and may be static or dynamic in nature: a good scientific theory allows for prediction and control of becoming (of "transformation") as well as being. However, the "affect" that an encounter with an "object" generates is not a part of what that object \underline{is} , from this perspective, and therefore must be eliminated from further consideration (along with anything else subjective) – must be at least eliminated from definition as a *real aspect of the object*.

The painstaking empirical process of identification, communication and comparison has proved to be a strikingly effective means for accurately specifying the nature of the relatively invariant features of the collectively apprehensible world. Unfortunately, this useful methodology cannot be applied to determination of value - to consideration of what should be, to specification of the direction that things should take (which means, to description of the future we should construct, as a consequence of our actions). Such acts of valuation necessarily constitute moral decisions. We can use information generated in consequence of the application of science to guide those decisions, but not to tell us if they are correct. We lack a process of verification, in the moral domain, that is as powerful or as universally acceptable as the experimental (empirical) method, in the realm of description. This absence does not allow us to sidestep the problem. No functioning society or individual can avoid rendering moral judgment, regardless of what might be said or imagined about the necessity of such judgment. Action presupposes valuation, or its implicit or "unconscious" equivalent. To act is literally to manifest preference about one set of possibilities, contrasted to an infinite set of alternatives. If we will live, we must act. Acting, we value. Lacking omniscience, painfully, we must make decisions, in the absence of sufficient information. It is, traditionally speaking, our knowledge of good and evil, our moral sensibility, that allows us this ability. It is our mythological conventions, operating implicitly or explicitly, that guide our choices. But what are these conventions? How are we to understand the fact of their existence? How are we to understand them?

It was Nietzsche, once again, who put his finger on the modern problem, central to issues of valence or meaning: not, as before "how to act, from within the confines of a particular culture," but "whether to believe that the question of how to act could even be reasonably asked, let alone answered":

"Just because our moral philosophers knew the facts of morality only very approximately in arbitrary extracts or in accidental epitomes – for example, as the morality of their environment, their class, their church, the spirit of their time, their climate and part of the world– just because they were poorly informed and not even very curious about different peoples, times, and past ages – they never laid eyes on the real problems of morality; for these emerge only when we compare many moralities. In all 'science of morals' so far one thing was *lacking*, strange as it may sound: the problem of morality itself; what was lacking was any suspicion that there was something problematic here." ¹⁹

This "problem of morality" – is there anything moral, in any realistic general sense, and if so, how might it be comprehended? – is a question that has now attained paramount importance. We have the technological power to do anything we want (certainly, anything destructive; potentially, anything creative); commingled with that power, however, is an equally profound existential uncertainty, shallowness and confusion. Our constant cross-cultural interchanges and our capacity for critical reasoning has undermined our faith in the traditions of our forebears – perhaps for good reason. However, the individual cannot live without belief – without action and valuation – and science cannot provide that belief. We must nonetheless put our faith into something. Are the myths we have turned to since the rise of science more sophisticated, less dangerous, and more complete than those we rejected? The ideological structures that dominated social relations in the twentieth century appear no less absurd, on the face of it, than the older belief systems they supplanted; they lacked, in addition, any of the incomprehensible mystery that necessarily remains part of

genuinely artistic and creative production. The fundamental propositions of fascism and communism were rational, logical, statable, comprehensible – and terribly wrong. No great ideological struggle presently tears at the soul of the world, but it is difficult to believe that we have outgrown our gullibility. The rise of the New Age movement in the West, for example – as compensation for the decline of traditional spirituality – provides sufficient evidence for our continued ability to swallow a camel, while straining at a gnat.

Could we do better? Is it possible to understand what might reasonably, even admirably, be believed, after understanding that we must believe? Our vast power makes self-control (and, perhaps, self-comprehension) a necessity – so we have the motivation, at least in principle. Furthermore, the time is auspicious. The third Christian millenium is dawning – at the end of an era when we have demonstrated, to the apparent satisfaction of everyone, that certain forms of social regulation just do not work – even when judged by their own criteria for success. We live in the aftermath of the great statist experiments of the twentieth century, after all, conducted as Nietzsche prophecied:

"In the doctrine of socialism there is hidden, rather badly, a 'will to negate life'; the human beings or races that think up such a doctrine must be bungled. Indeed, I should wish that a few great experiments might prove that in a socialist society life negates itself, cuts off its own roots. The earth is large enough and man still sufficiently unexhausted; hence such a practical instruction and *demonstratio ad absurdum* would not strike me as undesirable, even if it were gained and paid for with a tremendous expenditure of human lives."²⁰

There appears to exist some "natural" or even – dare it be said – some "absolute" constraints on the manner in which human beings may act as individuals and in society. Some moral presuppositions and theories are *wrong*; human nature is not infinitely malleable.

It has become more or less evident that pure, abstract rationality, for example, ungrounded in tradition – the rationality which defined Soviet-style communism from inception to dissolution – appears absolutely unable to determine and make explicit just what it is that should guide individual and social behavior. Some systems do not work, even though they make abstract sense (even more sense than alternative, currently operative, incomprehensible, haphazardly evolved systems). Some patterns of interpersonal interaction – which constitute the state, insofar as it exists as a model for social behavior – do not produce the ends they are supposed to produce, can not sustain themselves over time, or even produce contrary ends, devouring those who enact them and profess their value. Perhaps this is because planned, logical and intelligible systems fail to make allowance for the irrational, transcendent, incomprehensible and often ridiculous aspect of human character, as described by Dostoevsky:

"Now I ask you: what can be expected of man since he is a being endowed with such strange qualities? Shower upon him every earthly blessing, drown him in a sea of happiness, so that nothing but bubbles of bliss can be seen on the surface; give him economic prosperity, such that he should have nothing else to do but sleep, eat cakes and busy himself with the continuation of his species, and even then out of sheer ingratitude, sheer spite, man would play you some nasty trick. He would even risk his cakes and would deliberately desire the most fatal rubbish, the most uneconomical absurdity, simply to introduce into all this positive good sense his fatal fantastic element. It is just his fantastic dreams, his vulgar folly that he will desire to retain, simply in order to prove to himself – as though that were so necessary – that men still are men and not the keys of a piano, which the laws of nature threaten to control so completely that soon one will be able to desire nothing but by the calendar.

And that is not all: even if man really were nothing but a piano-key, even if this were proved to him by natural science and mathematics, even then he would not become reasonable, but would purposely do something perverse out of simple ingratitude, simply to gain his point. And if he does not find means he will contrive destruction and chaos, will contrive sufferings of all sorts, only to gain his point! He will launch a curse upon the world, and as only man can curse (it is his privilege, the primary distinction between him and other animals), may be by his curse alone he will attain his object - that is, convince himself that he is a man and not a piano-key! If you say that all this, too, can be calculated and tabulated, chaos and darkness and curses, so that the mere possibility of calculating it all beforehand

would stop it all, and reason would reassert itself, then man would purposely go mad in order to be rid of reason and gain his point! I believe in it, I answer for it, for the whole work of man really seems to consist in nothing but proving to himself every minute that he is a man and not a piano-key! It may be at the cost of his skin, it may be by cannibalism! And this being so, can one help being tempted to rejoice that it has not yet come off, and that desire still depends on something we don't know?"²¹

We also presently possess in accessible and complete form the traditional wisdom of a large part of the human race – possess accurate description of the myths and rituals that contain and condition the implicit and explicit values of almost everyone who has ever lived. These myths are centrally and properly concerned with the nature of successful human existence. Careful comparative analysis of this great body of religious philosophy might allow us to provisionally determine the nature of essential human motivation and morality – if we were willing to admit our ignorance, and take the risk. Accurate specification of underlying mythological commonalities might comprise the first developmental stage in the conscious evolution of a truly universal system of morality. The establishment of such a system, acceptable to empirical and religious minds alike, could prove of incalculable aid in the reduction of intrapsychic, interindividual and intergroup conflict. The grounding of such a comparative analysis within a psychology (or even a neuropsychology) informed by strict empirical research might offer us the possibility of a form of convergent validation, and help us overcome the age-old problem of deriving the *ought* from the *is*; help us see how *what we must do* might be inextricably associated with *what it is that we are*.

Proper analysis of mythology, of the type proposed here, is not mere discussion of "historical" events enacted upon the world stage (as the traditionally religious might have it), and it is not mere investigation of primitive belief (as the traditionally scientific might presume). It is, instead, the examination, analysis and subsequent incorporation of an edifice of meaning, which contains within it hierarchical organization of experiential valence. The mythic imagination is concerned with the world in the manner of the phenomenologist, who seeks to discover the nature of subjective reality, instead of concerning himself with description of the objective world. Myth, and the drama that is part of myth, provide answers in image to the following question: "how can the current state of experience be conceptualized in abstraction, with regards to its meaning?" [which means its (subjective, biologically-predicated, socially-constructed) emotional relevance or motivational significance]. Meaning means implication for behavioral output; logically, therefore, myth presents information relevant to the most fundamental of moral problems: "what should be? (what should be done?)" The desirable future (the object of what should be) can only be conceptualized in relationship to the present, which serves at least as a necessary point of contrast and comparison. To get somewhere in the future presupposes being somewhere in the present; furthermore, the desirability of the place travelled to depends on the valence of the place vacated. The question of "what should be?" (what line should be travelled?) therefore has contained within it, so to speak, three subqueries, which might be formulated as follows:

- 1) what is? what is the nature (meaning, the significance) of the current state of experience?
- 2) what should be? to what (desirable, valuable) end should that state be moving?
- 3) <u>how should we therefore act?</u> what is the nature of the specific processes by which the present state might be transformed into that which is desired?

Active apprehension of the goal of behavior, conceptualized in relationship to the interpreted present, serves to constrain or provide determinate framework for the evaluation of ongoing events, which emerge as a consequence of current behavior. The goal is an imaginary state, consisting of "a place" of desirable motivation or affect – is a state that only exists in fantasy, as something (potentially) preferable to the present. (Construction of the goal therefore means establishment of a theory about the ideal relative status of motivational states – about the *good*.) This imagined future constitutes *a vision of perfection*, so to speak, generated in the light of all current knowledge (at least under optimal conditions), to which specific and general aspects of ongoing experience are continually compared. This vision of perfection is the promised land, mythologically speaking – conceptualized as a spiritual domain (a psychological state), a political utopia (a state, literally speaking), or both, simultaneously.

We answer the question "what should be?" by formulating an image of the desired future.

We cannot conceive of that future, except in relationship to the (interpreted) present – and it is our interpretation of the emotional acceptability of the present that comprises our answer to the question "what is?" ["what is the nature (meaning, the significance) of the current state of experience?"].

We answer the question "<u>how then should we act?</u>" by determining the most efficient and self-consistent strategy, all things considered, for bringing the preferred future into being.

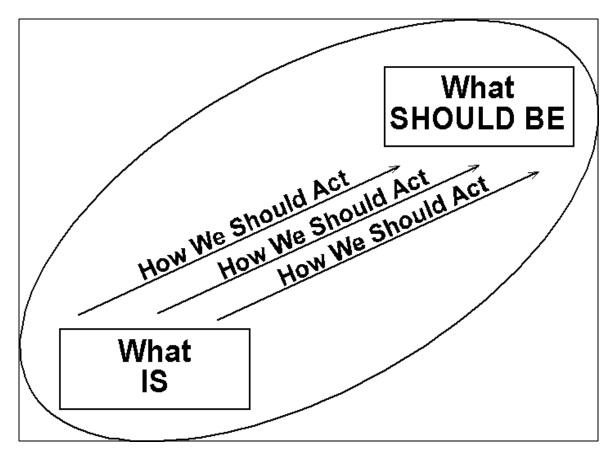


Figure 1: The Domain and Constituent Elements of the Known.

Our answers to these three fundamental questions – modified and constructed in the course of our social interactions – constitutes our knowledge, insofar as it has any behavioral relevance; constitutes our knowledge, from the mythological perspective. The structure of the mythic known – what is, what should be, and how to get from one to the other – is presented in *Figure 1: The Domain and Constituent Elements of the Known*.

The known is explored territory, a place of stability and familiarity – is the "city of God," as profanely realized. It finds metaphorical embodiment in myths and narratives describing the community, the kingdom, or the state. Such myths and narratives guide our ability to understand the particular, bounded motivational significance of the present, experienced in relation to some identifiable desired future, and allow us to construct and interpret appropriate patterns of action, from within the confines of that schema. We all produce determinate models of what is, and what should be, and how to transform one into the other. We produce these models by balancing our own desires, as they find expression in fantasy and action, with with those of the others – individual, families and communities – that we habitually encounter. "How to act," constitutes the most essential aspect of the social contract; the domain of the *known* is, therefore, the "territory" we inhabit with all those who share our implicit and explicit traditions and beliefs.

Myths describe the existence of this "shared and determinate territory" as a fixed aspect of existence – which it is, as the fact of culture is an unchanging aspect of the human environment.

"Narratives of the known" – patriotic rituals, stories of ancestral heroes, myths and symbols of cultural or racial identity – describe established territory, weaving for us a web of meaning that, shared with others, eliminates the necessity of dispute over meaning. All those who know the rules, and accept them, can play the game – without fighting over the rules of the game. This makes for peace, stability, and potential prosperity – a good game. The good, however, is the enemy of the better; a more compelling game might always exist. Myth portrays what is known, and performs a function that if limited to that, might be regarded as paramount in importance. But myth also presents information that is far more profound – almost unutterably so, once (I would argue) properly understood. We all produce models of what is, and what should be, and how to transform one into the other. We change our behavior, when the consequences of that behavior are not what we would like. But sometimes mere alteration in behavior is insufficient. We must change not only what we do, but what we think is important. This means reconsideration of the nature of the motivational significance of the present, and reconsideration of the ideal nature of the future. This is a radical, even revolutionary transformation, and it is a very complex process in its realization – but mythic thinking has represented the nature of such change in great and remarkable detail.

The basic grammatical structure of transformational mythology, so to speak, appears most clearly revealed in the form of the "way" (as in the "American Way of Life"). The great literary critic Northrop Frye comments upon the idea of the way, as it manifests itself in literature and religious writing:

"Following a narrative is closely connected with the central literary metaphor of the journey, where we have a person making the journey and the road, path, or direction taken, the simplest word for this being 'way.' Journey is a word connected with *jour* and *journee*, and metaphorical journeys, deriving as they mostly do from slower methods of getting around, usually have at their core the conception of the day's journey, the amount of space we can cover under the cycle of the sun. By a very easy extension of metaphor we get the day's cycle as a symbol for the whole of life. Thus in Housman's poem 'Reveille' ("Up, lad: when the journey's over/ There'll be time enough to sleep") the awakening in the morning is a metaphor of continuing the journey of life, a journey ending in death. The prototype for the image is the Book of Ecclesiastes, which urges us to work while it is day, before the night comes when no man can work...."

The word 'way' is a good example of the extent to which language is built up on a series of metaphorical analogies. The most common meaning of 'way' in English is a method or manner of procedure, but method and manner imply some sequential repetition, and the repetition brings us to the metaphorical kernel of a road or path.... In the Bible 'way' normally translates the Hebrew derek and the Greek hodos, and throughout the Bible there is a strong emphasis on the contrast between a straight way that takes us to our destination and a divergent way that misleads or confuses. This metaphorical contrast haunts the whole of Christian literature: we start reading Dante's Commedia, and the third line speaks of a lost or erased way: "Che la diritta via era smarita." Other religions have the same metaphor: Buddhism speaks of what is usually called in English an eightfold path. In Chinese Taoism the Tao is usually also rendered 'way' by Arthur Waley and others, though I understand that the character representing the word is formed of radicals meaning something like 'head-going.' The sacred book of Taoism, the *Tao te Ching*, begins by saying that the Tao that can be talked about is not the real Tao: in other words we are being warned to beware of the traps in metaphorical language, or, in a common Oriental phrase, of confusing the moon with the finger pointing at it. But as we read on we find that the Tao can, after all, be to some extent characterized: the way is specifically the 'way of the valley,' the direction taken by humility, self-effacement, and the kind of relaxation, or non-action, that makes all action effective."22

The "way" is the path of life, and its purpose.²³ More accurately, the content of the way is the specific path of life. The form of the way, its most fundamental aspect, is the apparently intrinsic or heritable possibility of positing or of being guided by a central idea. This apparently intrinsic form finds its expression in the tendency of each individual, generation after generation, to first ask and subsequently seek an answer to the question "what is the meaning of life?"

The central notion of the way underlies manifestation of four more specific myths, or classes of myths, and provides a more complete answer, in dramatic form, to the three questions posed previously [what is the nature] (meaning, the significance) of current being?, to what (desirable) end should that state be moving? and, finally, what are the processes by which the present state might be transformed into that which is desired?] The four classes include:

- (1) Myths describing a current or pre-existent stable state (sometimes a paradise, sometimes a tyranny);
- (2) Myths describing the emergence of something anomalous, unexpected, threatening and promising into this initial state:
- (3) Myths describing the dissolution of the pre-existent stable state into chaos, as a consequence of the anomalous or unexpected occurrence;
- (4) Myths describing the regeneration of stability [paradise regained (or, tyranny regenerated)], from the chaotic mixture of dissolute previous experience and anomalous information.

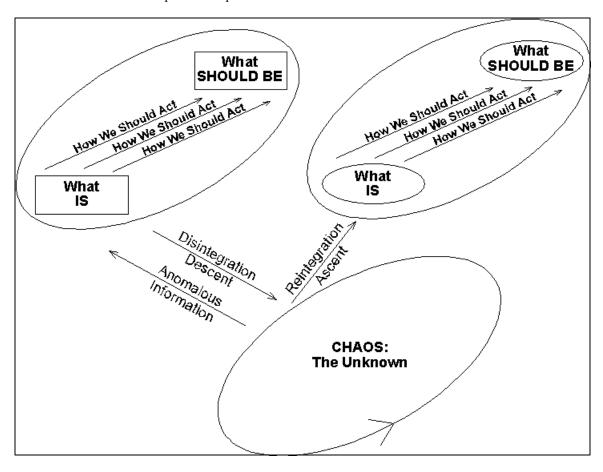


Figure 2: The Metamythological Cycle of the Way

The meta-mythology of the way, so to speak, describes the manner in which specific ideas (myths) about the present, the future, and the mode of transforming one into the other are initially constructed, and then reconstructed, in their entirety, when that becomes necessary. The traditional Christian (and not just Christian) notion that man has fallen from an original "state of grace" into his current morally degenerate and emotionally unbearable condition – accompanied by a desire for the "return to Paradise" – constitutes a single example of this "meta-myth." Christian morality can therefore be reasonably regarded as the "plan of action" whose aim is re-establishment, or establishment, or attainment (sometimes in the "hereafter") of the

"kingdom of God," the ideal future. The idea that man needs redemption – and that re-establis hment of a long-lost Paradise might constitute such redemption – appear as common themes of mythology, among members of exceedingly diverse and long-separated human cultures. This commonality appears because man, eternally self-conscious, suffers eternally from his existence, and constantly longs for respite.

Figure 2: The Metamythological Cycle of the Way schematically portrays the "circle" of the way, which "begins" and "ends" at the same point – with establishment of conditional, but determinate moral knowledge (belief). Belief is disruptible, because finite – which is to say that the infinite mystery surrounding human understanding may break through into our provisional models of how to act, at any time, at any point, and disrupt their structure. The manner in which we act as children, for example, may be perfectly appropriate, for the conditions of childhood; the processes of maturation change the conditions of existence, introducing anomaly where only certainty once stood, making necessary not only a change of plans, but reconceptualization of where those plans might lead, and what or who they refer to, in the present.

The known, our current story, protects us from the unknown, from *chaos* – which is to say, provides our experience with determinate and predictable structure. The unknown, chaos – from which we are protected - has a nature all of its own. That nature is experienced as affective valence, at first exposure, not as objective property. If something unknown or unpredictable occurs, while we are carrying out our motivated plans, we are first surprised. That surprise - which is a combination of apprehension and curiosity comprises our instinctive emotional response to the occurrence of something we did not desire. The appearance of something unexpected is proof that we do not know how to act – by definition, as it is the production of what we want that we use as evidence for the integrity of our knowledge. If we are somewhere we don't know how to act, we are (probably) in trouble – we might learn something new, but we are still in trouble. When we are in trouble, we get scared. When we are in the domain of the known, so to speak, there is no reason for fear. Outside that domain, panic reigns. It is for this reason that we dislike having our plans disrupted. So we cling to what we understand. This does not always work, however, because what we understand about the present is not always necessarily sufficient to deal with the future. This means that we have to be able to modify what we understand, even though to do so is to risk our own undoing. The trick, of course, is to modify and yet to remain secure. This is not so simple. Too much modification - chaos. Too little modification - stagnation (and then, when the future we are unprepared for appears – chaos).

Involuntary exposure to chaos means accidental encounter with the "forces that undermine the known world." The affective consequences of such encounter can be literally overwhelming. It is for this reason that individuals are highly motivated to avoid sudden "manifestations of the unknown" – for this reason that individuals will go to almost any length to ensure that their protective cultural "stories" remain intact.

CHAPTER 2: MAPS OF MEANING: THREE LEVELS OF ANALSIS

Human beings are prepared, biologically, to respond to anomalous information – to novelty. This instinctive response includes redirection of attention, generation of emotion (fear, first – generally speaking – then curiosity), and behavioral compulsion (cessation of ongoing activity, first – generally speaking – then active approach and exploration). This pattern of instinctive response drives learning – particularly, but not exclusively, the learning of appropriate behavior. All such learning takes place – or took place originally – as a consequence of contact with novelty, or anomaly.

What is novel is of course dependent on what is known – is necessarily defined in opposition to what is known. Furthermore, what is known is always known conditionally, since human knowledge is necessarily limited. Our conditional knowledge – insofar as that knowledge is relevant for the regulation of emotion—consists of our models of the emotional significance of the present, defined in opposition to an idealized, hypothetical or fantasied future state. We evaluate the "unbearable present" in relationship to the "ideal future." We act, to transform "where we are" into "where we would like to be."

When our attempts to transform the present work as planned, we remain firmly positioned in the domain of the known (metaphorically speaking). When our behaviors produce results that we did not want, however – that is, when we err – we move into the domain of the unknown, where more primordial emotional forces rule. "Small-scale" errors force us to reconstruct our plans, but allow us to retain our goals and our conceptualizations of present conditions. Catastrophic errors, by contrast, force us not only to re-evaluate our means, but our starting-points, and our ends. Such revaluation necessarily involves extreme emotional dysregulation.

The "domain of the known" and the "domain of the unknown" can reasonably be regarded as permanent constituent elements of human experience — even of the human environment. Regardless of culture, place and time, human individuals are forced to adapt to the fact of culture (the domain of the known, roughly speaking) and the fact of its ultimate insufficiency (as the domain of the unknown necessarily remains extant, regardless of extent of previous "adaptation"). The human brain — and the higher animal brain — appears therefore to have adapted itself to the eternal presence of these two "places"; the brain has one mode of operation, when in explored territory, and another, when in unexplored territory. In the unexplored world, caution — expressed in fear and behavioral immobility — initially predominates, but may be superseded by curiosity — expressed in hope, excitement and, above all, in creative exploratory behavior. Creative exploration of the unknown, and consequent generation of knowledge, is construction or update of patterns of behavior and representation, such that the unknown is transformed from something terrifying and compelling into something beneficial (or, at least, something irrelevant). The presence of capacity for such creative exploration and knowledge generation may be regarded as the third, and final, permanent constituent element of human experience (in addition to the domain of the "known" and "unknown").

Mythological representations of the world – which are representations of reality as a forum for action—portray the dynamic interrelationship between all three constituent elements of human experience. The eternal unknown – nature, metaphorically speaking, creative and destructive, source and destination of all determinant things – is generally ascribed an affectively ambivalent feminine character (as the "mother" and eventual "devourer" of everyone and everything). The eternal known, in contrast – culture, defined territory, tyrannical and protective, predictable, disciplined and restrictive, cumulative consequence of heroic or exploratory behavior – is typically considered masculine (in contradistinction to "mother" nature). The eternal knower, finally – the process that mediates between the known and the unknown – is the knight who slays the dragon of chaos, the hero who replaces disorder and confusion with clarity and certainty, the sun-god who eternally slays the forces of darkness, and the "word" that engenders creation of the cosmos.

2.1. Normal and Revolutionary Life: Two Prosaic Stories

We tell ourselves stories about who we are, where we would like to be, and how we are going to get there. These stories regulate our emotions, by determining the significance of all the things we encounter and all the events we experience. We regard things that get us on our way as positive, things that impede our progress as negative, and things that do neither as irrelevant. Most things are irrelevant – and that is a good thing, as we have limited attentional resources.

Inconveniences interfere with our plans. We do not like inconveniences, and will avoid dealing with them. Nonetheless, they occur commonly – so commonly, in fact, that they might be regarded as an integral, "predictable," and constant feature of the human environment. We have adapted to this feature – have the intrinsic resources to cope with inconveniences. We benefit, become stronger, in doing so.

Ignored inconveniences accumulate, rather than disappear. When they accumulate in sufficient numbers, they produce a catastrophe – a self-induced catastrophe, to be sure, but one that may be indistinguishable from an "act of God." Inconveniences interfere with the integrity of our plans – so we tend to pretend that they are not there. Catastrophes, by contrast, interfere with the integrity of our whole stories, and massively dysregulate our emotions. By their nature, they are harder to ignore – although that does not stop us from trying to do so.

Inconveniences are common; unfortunately, so are catastrophes – self-induced and otherwise. We are adapted to catastrophes, like inconveniences, as constant environmental features. We can resolve a catastrophe, just as we can cope with an inconvenience – although at higher cost. As a consequence of this adaptation, this capacity for resolution, catastrophe can rejuvenate. It can also destroy.

The more ignored inconveniences in a given catastrophe, the more likely it will destroy.

Enough has been learned in the last half-century of inquiry into intellectual and emotional function to enable the development of a provisional general theory of emotional regulation. Description of the role reaction to novelty or anomaly plays in human information processing is clearly central to such a theory. A compelling body of evidence suggests that our affective, cognitive and behavioral responses to the unknown or unpredictable are "hardwired"; suggests that these responses constitute inborn structural elements of the process of consciousness itself. We attend, involuntarily, to those things that occur contrary to our predictions – that occur in spite of our desires, as expressed in expectation. That involuntary attention comprises a large part of what we refer to when we say "consciousness." Our initial attention constitutes the first step in the process by which we come to adjust our behavior and our interpretive schemas to the world of experience – assuming that we do so; constitutes as well the first step we take when we modify the world, to make it what we desire, instead of what it is currently.

Modern investigation into the role of novelty in emotion and thought began with the Russians – E.N. Sokolov, O. Vinogradova, A.R. Luria (and, more recently, E. Goldberg) – who adopted an approach to human function that is in many ways unique. Their tradition apparently stems from Pavlov, who viewed the reflex arc as a phenomenon of central importance, and from the Marxist intellectual legacy, which regarded work – creative action – as the defining feature of man. Whatever the specific historical precedents, it is most definitely the case that the Russians have regarded motor output and its abstract equivalents as the critically relevant aspect of human existence. This intellectual position distinguished them, historically, from their western counterparts, who tend(ed) to view the brain as an information-processing machine, akin to the computer. Psychologists in the west have concentrated their energies on determining how the brain determines what is out there, so to speak – out there, from the objective viewpoint. The Russians, by contrast, have devoted themselves to the role of the brain in governing behavior, and in generating the affects or emotions associated with that behavior. Modern animal experimentalists – most notably Jeffrey Gray²⁵ – have adopted the Russian line, with striking success. We now know, at least in broad outline, how we respond to those (annoying, irritating, frightening, promising) things that we do not expect.

The pioneering Russian psychophysiologist E.N. Sokolov began work on the "reflex basis" of attention in the 1950's. By the early 60's, this work had advanced to the point where he could formulate the following key propositions – $\underline{\text{first}}$:

"One possible approach to analyzing the process of reflection is to consider the nervous system as a mechanism which models the external world by specific changes that occur in its internal structure. In this sense a distinct set of changes in the nervous system is isomorphic with the external agent that it reflects and resembles. As an internal model that develops in the nervous system in response to the effect of agents in the environment, the image performs the vital function of modifying the nature of behavior, allowing the organism to predict events and actively adjust to its environment."²⁶

and second:

"My first encounter with phenomena which indicated that the higher divisions of the central nervous system form models of external agents involved the study of reactions to "novel" [stimulus features. I characterized these reactions as] *orienting reflexes*. The peculiar feature of the orienting reflex is that after several applications of the same stimulus (generally five to fifteen) the response disappears (or, as the general expression goes, "is extinguished"). However, the slightest possible change in the stimulus is sufficient to awaken the response.... Research on the orienting reflex indicates that it does not occur as a direct result of incoming excitation; rather, it is produced by signals of discrepancy which develop when afferent [that is, *incoming*] signals are compared with the trace formed in the nervous system by an earlier signal."

Sokolov was concerned primarily with the modelling of the events in the objective external world – assuming, essentially, that when we model, we model *facts*. Most of the scholars who have followed his lead have adopted this central assumption, at least implicitly. This position requires some modification. We do model facts, but we *concern* ourselves with valence, or value. It is therefore the case that our maps of the world contain what might be regarded as two distinct types of information – sensory, and affective. It is not enough to know that something *is*. It is equally necessary to know what it *signifies*. It might even be argued that animals – and human beings – are *primarily* concerned with the affective or emotional significance of the environment.

Along with our animal cousins, we devote ourselves to fundamentals: will this (new) thing eat me? Can I eat it? Will it chase me? Should I chase it? Can I make love to it? We model facts – there is no doubt about that. But we model facts to keep track of meaning. We *may* model facts, and it is no doubt useful to do so. We *must* model meanings, however, in order to survive. Our most fundamental maps of experience – maps which have a narrative structure – portray *the motivational value of our current state*, conceived of *in contrast to a hypothetical ideal*, accompanied *by plans of action*, which are our pragmatic notions about how to get what we want.

Description of these three elements – current state, future state, and means of mediation – constitute the necessary and sufficient preconditions for the weaving of the most simple <u>narrative</u>, which is a means for describing the valence of a given environment, in reference to a temporally and spatially bounded set of action patterns. Getting to point "b" presupposes that you are at point "a" – you can't plan movement in the absence of an initial position. The fact that point "b" constitutes the end-goal means that it is valenced more highly than point "a" – that it is a place more desirable, when considered against the necessary contrast of the current position. It is the perceived improvement of point "b" that makes the whole map meaningful – that is, affect-laden; it is the capacity to construct hypothetical or abstract end points, such as "b" – and to contrast them against "the present" – that makes human beings capable of using their cognitive systems to modulate their affective reactions. ²⁸

Narratives mediate between belief and emotion. "Normal" narratives tell us where we are, where we are going, and how we are going to get there. "Revolutionary" narratives, by contrast, describe the process by which "normal" narratives are transformed, when that becomes necessary. There is no strict qualitative distinction between the two narrative "types," as we shall see, later; it is more a matter of degree. Nonetheless, they may be usefully considered as separable entities, for the purposes of introductory explication (as the extremes of a continuum might be regarded as opposites, for the sake of argument).

The "domain" mapped by a functional narrative (one that, when enacted, produces the results desired) might reasonably be regarded as "explored territory," as events that occur "there" are predictable. Any place where enacted plans produce unexpected, threatening or punishing consequences, by contrast, might be regarded as "unexplored territory." What happens "there" does not conform to our wishes. This means

that a familiar place, where unpredictable things start happening, is no longer familiar (even though it might be the same place with regards to its strict spatial location, from the "objective" perspective). We know how to act in some places, and not in others. The plans we put into action sometimes work, and sometimes do not work. The experiential domains we inhabit – our "environment," so to speak – are therefore permanently characterized by the fact of the predictable and controllable, in paradoxical juxtaposition with the unpredictable and uncontrollable. The universe is composed of "order" and "chaos" – at least from the metaphorical perspective. Oddly enough, however, it is to this "metaphorical" universe that our nervous system appears to have adapted.

Although the work of Sokolov and his colleagues²⁹ has generated a substantial amount of interest in the West, its effect on modern theories of human motivation and affect has been more limited than appears appropriate. The present discussion has been designed to rectify that situation, and to expand upon Sokolov's initial ideas, to the degree that is presently empirically and theoretically justifiable. What Sokolov discovered, to put it bluntly, is that human beings (and other animals, far down the phylogenetic chain) are characterized by an innate response to what they cannot predict, do not want, and can not understand. Sokolov identified the central characteristics of how we respond to the unknown – to the strange category of *all events that have not yet been categorized*. The notion that we respond in an "instinctively patterned" manner to the appearance of the unknown has revolutionary implications. I would like to begin this discussion in a manner somewhat removed from normal scientific discussion, but appropriate to the topic at hand: by telling two stories.

2.1.1. Normal Life

"If problems are accepted, and dealt with before they arise, they might even be prevented before confusion begins. In this way peace may be maintained." 30

You work in an office; you are climbing the corporate ladder. Your daily activity reflects this superordinate goal. You are constantly immersed in one activity or another, designed to produce an elevation in your status, from the perspective of the corporate hierarchy. Today, you have to attend a meeting that may prove vitally important to your future. You have an image in your head, so to speak, about the nature of that meeting, and the interactions that will characterize it. You imagine what you would like to accomplish. Your image of this potential future is a *fantasy* – but it is based, insofar as you are honest, on all the relevant information, derived from past experience, that you have at your disposal. You have attended many meetings. You know what is likely to happen, during any given meeting, within reasonable bounds; you know how you will behave, and what effect your behavior will have on others. Your model of the desired future is clearly predicated on what you currently know.

You also have a model of the present, constantly operative. You understand *your* (somewhat subordinate) *position* within the corporation, which is your importance relative to others above and below you in the hierarchy. You understand the significance of those experiences that occur regularly while you are during your job: you know who you can give orders to, who you have to listen to, who is doing a good job, who can safely be ignored, and so on. You are always comparing this present (unsatisfactory) condition to that of your ideal, which is you, increasingly respected, powerful, rich, and happy, free of anxiety and suffering, climbing towards your ultimate success. You are unceasingly involved in attempts to transform the present, as you currently understand it, into the future, as you hope it will be. Your actions are designed to produce your ideal – designed to transform the present into something ever more closely resembling what you want. Your are confident in your model of reality, in your story; when you put it into action, you get *results*.

You prepare yourself mentally for your meeting. You envision yourself playing a centrally important role – resolutely determining the direction the meeting will take, producing a powerful impact on your co-

workers. You are in your office, preparing to leave. The meeting is taking place in another building, several blocks away. You formulate provisional plans of behavior designed to get you there on time. You estimate travel time at fifteen minutes.

You leave your office, on the twenty-seventh floor, and you wait by the elevator. The minutes tick by more and more of them. The elevator fails to appear. You had not taken this possibility into account. The longer you wait, the more nervous you get. Your heart rate starts increasing, as you prepare for action (action unspecified, as of yet). Your palms sweat. You flush. You start berating yourself for failing to consider the potential impact of such a delay. Maybe you are not as smart as you think you are. Your model of yourself begins to undergo a revision. No time for that now: you put such ideas out of your head, and concentrate on the task at hand.

The unexpected has just become manifest – in the form of the missing elevator. You planned to take it to get where you were going; it did not appear. Your original plan of action is not producing the effects desired. It was, by your own definition, a bad plan. You need another one – and quickly. Luckily you have an alternate strategy, at your disposal. The stairs! You dash to the rear of the building. You try the door to the stairwell. It is locked. You curse the maintenance staff. You are frustrated and anxious. The unknown has emerged, once again. You try another exit. Success! The door opens. Hope springs forth from your breast. You still might make it on time. You rush down the stairs – all twenty-seven floors – and onto the street.

You are, by now, desperately late. As you hurry along, you monitor your surroundings: is progress towards your goal continuing? Anyone who gets in your way irritates you – differently-abled elderly ladies, playful, happy children, lovers out for a stroll. You are a good person, under most circumstances – at least in your own estimation. Why, then, then do these innocent people aggravate you so thoroughly? You near a busy intersection. The cross-walk light is off. You fume and mutter away stupidly on the sidewalk. Your blood pressure rises. The light finally changes. You smile, and dash forward. Up a slight rise you run. You are not in great physical shape. Where did all this energy come from? You are approaching the target building. You glance at your watch. Five minutes left: No problem. A feeling of relief and satisfaction floods over you. You are there; in consequence, you are not an idiot. If you believed in God, you would thank Him.

Had you been early – had you planned appropriately – the other pedestrians and assorted obstacles would not have affected you at all. You might have even appreciated them – at least the good-looking ones – or may at least not have classified them as obstacles. Maybe you would have even used the time to enjoy your surroundings (unlikely), or to think about other issues of real importance – like tomorrow's meeting.

You continue on your path. Suddenly, you hear a series of loud noises behind you – noises reminiscent, for the sake of argument, of a large motorized vehicle hurtling over a small concrete barrier (a barrier much like a kerb). You are safe on the sidewalk – or so you presumed, a second ago. Your meeting-fantasies vanish. The fact that you are late no longer seems relevant. You stop hurrying along, instantly, arrested in your path by the emergence of this new phenomenon. Your auditory system localizes the sounds in three dimensions. You involuntarily orient your trunk, neck, head and eyes towards the place in space from which the sounds apparently emanate.³¹ Your pupils dilate, and your eyes widen.³² Your heart-rate speeds up, as your body prepares to take adaptive action – once the proper path of that action has been specified.³³

You actively explore the unexpected occurrence, once you have oriented towards it, with all the sensory and cognitive resources you can muster. You are generating hypotheses about the potential cause of the noise even before you turn. Has a van jumped the kerb? The image flashes through your mind. Has something heavy fallen from a building? Has the wind overturned a billboard or street sign? Your eyes actively scan the relevant area. You see a truck loaded with bridge parts heading down the street, just past a pothole in the road. The mystery is solved. You have determined the specific motivational significance of what just seconds ago was the dangerous and threatening unknown, and it is zero. A loaded truck hit a bump. Big deal! Your heart slows down. Thoughts of the impending meeting re-enter the theatre of the your mind. Your original journey continues, as if nothing has happened.

What is going on? Why are you frightened and frustrated by the absence of the expected elevator, the presence of the old woman with the cane, the carefree lovers, the loud machinery? Why are you so emotionally and behaviorally variable?

Detailed description of the processes governing these common affective occurrences provides the basis for proper understanding of human motivation. What Sokolov and his colleagues essentially discovered was that the unknown, experienced in relationship to your currently extant model of present and future, has a priori motivational significance – or, to put it somewhat differently, that the unknown could serve as an unconditioned stimulus.

What is the *a priori* motivational significance of the unknown? Can such a question even be asked? After all, the unknown has not yet been explored – by definition. Nothing can be said, by the dictates of standard logic, about something that has not yet been encountered. We are not concerned with sensory information, however – nor with particular material attributes – but with *valence*. Valence, in and of itself, might be most simply considered as bipolar: negative or positive (or, of course, as neither). We are familiar enough with the ultimate potential range of valence, negative and positive, to place provisional borders around possibility. The *worst* the unknown could be, in general, is death (or, perhaps, lengthy suffering followed by death); the fact of our vulnerable mortality provides the limiting case. The *best* the unknown could be is more difficult to specify, but some generalizations might prove acceptable. We would like to be wealthy (or at least free from want), possessed of good health, wise and well-loved. The greatest good the unknown might confer, then, might be regarded as that which would allow us to transcend our innate limitations (poverty, ignorance, vulnerability), rather than to remain miserably subject to them. The emotional "area" covered by the unknown is therefore very large, ranging from that which we fear most to that which we desire most intently.

The unknown is, of course, defined in contradistinction to the "known." Everything "not understood" or "not explored" is unknown. The relationship between the oft- (and unfairly) separated domains of "cognition" and "emotion" can be more clearly comprehended in light of this rather obvious fact. It is the absence of an expected satisfaction, for example, that is punishing, hurtful³⁴ – the emotion is generated as a default response to sudden and unpredictable alteration in the theoretically comprehended structure of the world. It is the man expecting a raise because of his outstanding work – the man configuring a desired future on the basis of his understanding of the present – who is hurt when someone "less deserving" is promoted before him ("one is best punished," after all, "for one's virtues"). The man whose expectations have been dashed – who has been threatened and hurt – is likely to work less hard in the future, with more resentment and anger. Conversely – the child who has not completed her homework is thrilled when the bell signalling class end rings, before she is called upon. The bell signals the absence of an expected punishment, and therefore induces positive affect, relief, happiness.

It appears, therefore, that it is *the image of a goal* (a fantasy about the nature of the desired future, conceived of in relationship to a model of the significance of the present) that provides a good part of the framework determining the motivational significance of ongoing current events. The individual uses his or her knowledge to construct a hypothetical state of affairs, where the motivational balance of ongoing events is optimized: where there is sufficient satisfaction, minimal punishment, tolerable threat, and abundant hope, all balanced together *properly* over the short and longer terms. This optimal state of affairs might be conceptualized as a pattern of career advancement, with a long-term state in mind, signifying perfection, as it might be attained profanely (richest drug dealer, happily married matron, chief executive officer of a large corporation, tenured Harvard professor). Alternatively, perfection might be regarded as the absence of all unnecessary things, and the pleasures of an ascetic life. The point is that some desirable future state of affairs is conceptualized, in fantasy, and then used as a target point for operation in the present. Such operations may be conceived of as links, in a chain (with the end of the chain anchored to the desirable future state).

A meeting (like the one referred to previously) might be viewed by those participating in it as one link in the chain which might hypothetically lead to the paradisal state of corporate Chief Executive Officer (or to something less desirable, but still good). The (well-brought-off) meeting, as *subgoal*, would therefore have the same motivational significance as the goal, although at lesser intensity (as it is only one small part of a large and more important whole). The *exemplary* meeting will be conceptualized in the ideal – like all target states – as a dynamic situation where, *all things considered*, motivational state is optimized. The meeting is imagined – a representation of the desired outcome is formulated, and a plan of behavior designed to bring about that outcome is elaborated and played out. The "imagined meeting" is fantasy, but

fantasy based on past knowledge (assuming that knowledge has in fact been generated, and that the planner is able and willing to use it).

The affective systems that govern response to punishment, satisfaction, threat and promise all have a stake in attaining the ideal outcome. Anything that interferes with such attainment (little old ladies with canes) will be experienced as threatening, and/or punishing; anything that signifies increased likelihood of success (like an open stretch of sidewalk) will be experienced as promising³⁷ or satisfying. It is for this reason that the Buddhists believe that everything is *Maya*, or illusion:³⁸ the motivational significance of ongoing events is clearly determined by the nature of the goal towards which behavior is devoted. That goal is conceptualized in episodic imagery – in fantasy. We constantly compare the world at present to the world idealized in fantasy, render affective judgment, and act, in consequence. Trivial promises and satisfactions indicate that we are doing well, are progressing towards our goals. An unexpected opening in the flow of pedestrians appears before us, when we are in a hurry; we rush forward, pleased at the occurrence. We get somewhere a little faster than we had planned, and feel satisfied with our intelligent planning. Profound promises or satisfactions, by contrast, validate our global conceptualizations –indicate that our emotions are likely to stay regulated, on the path we have chosen. Trivial threats or punishments indicate flaws in our means of attaining desired ends. We modify our behavior accordingly, and eliminate the threat. When the elevator does not appear at the desired time, we take the stairs. When a stop-light slows us down, we run a bit faster, once it shuts off, than we might have otherwise. Profound threats and punishments (read: trauma) have a qualitatively different nature. Profound threats or punishments undermine our ability to believe that our conceptualizations of the present are valid and that our goals are appropriate. Such occurrences disturb our belief in our ends (and, not infrequently, in our starting points).

We construct our idealized world, in fantasy, according to all the information we have at our disposal. We use what we know to build an image of what we could have and, therefore, of what we should do. But we compare our interpretation of the world as it unfolds in the present to *the desired world*, *in imagination*, not to mere expectation; we compare what we have (in interpretation) to what we *want*, rather than to what we merely think *will be*. Our goal-setting, and consequent striving, is motivated: we chase what we *desire*, in our constant attempts to optimize our affective states. (Of course, we use our behavior to ensure that our dreams come true; that is healthy "adaptation." But we still compare what is happening to what we want – to what we desire to be – not merely to what we cold-bloodedly expect.)

The maps that configure our motivated behavior have a certain comprehensible structure. They contain two fundamental and mutually interdependent poles, one *present*, the other, *future*. The present is sensory experience as it is currently manifested to us – as we currently understand it – granted motivational significance according to our current knowledge and desires. The future is an image or partial image of perfection, to which we compare the present, insofar as we understand its significance. *Wherever there exists a mismatch between the two, the unexpected or novel occurs* (by definition), grips our attention, and activates the intrapsychic systems that govern fear and hope. ³⁹ We strive to bring novel occurrences back into the realm of predictability, or to exploit them for previously unconsidered potential, by altering our behavior, or our patterns of representation. We conceive of a path connecting present to future. This path is "composed" of the behaviors required to produce the transformations we desire – required to turn the (eternally) insufficient present into the (ever-receding) paradisal future. This path is *normally* conceived of as linear, so to speak, as something analogous to Thomas Kuhn's ⁴⁰ notion of *normal science*, wherein known patterns of behavior operating upon an understood present will produce a future, whose desirability is an unquestioned given.

Anything that interferes with our potential means, to a specified end, is punishing or threatening, in the rather trivial sense described previously. Encounter with punishments or threats of this category merely oblige us to choose an alternative mean, from among the number we generally have present. A similar situation obtains for promises and satisfactions. When a means produces the end desired (or furthers progress along that path) we experience satisfaction (and hope – as an interim end *accomplished* also signifies increased likelihood of success, farther out in the future). Such satisfaction brings our particular behaviors to an end; we switch goals, and continue into the future. Modification of our means, as a consequence of the motivational significance of the outcomes of those means, might be considered *normal* adaptation. The structure of normal adaptation is schematically portrayed in *Figure 3: Normal Life*. We posit a goal, in image and word, and we compare present conditions to that goal. We evaluate the

significance of ongoing events in light of their perceived relationship to the goal. We modify our behavioral outputs – our means – when necessary, to make the attainment of our goal ever more likely. We modify our actions within the game, but accept the rules without question. We move in a linear direction from present to future.

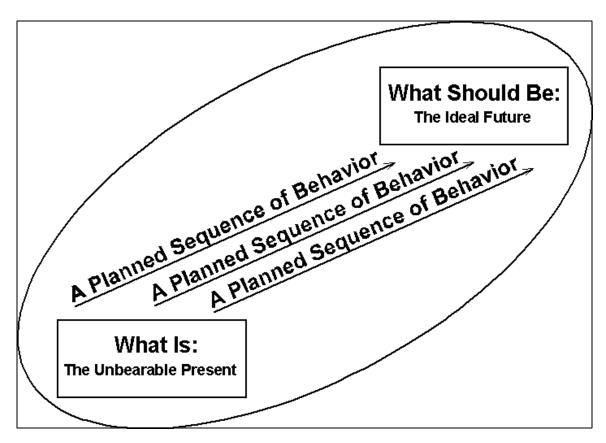


Figure 3: Normal Life

2.1.2. Revolutionary Life

The *revolutionary* model of adaptation – again, considered akin to Kuhn's ⁴¹ *revolutionary science* – is more complex. Let us presume that you return from your meeting. You made it on time and, as far as you could tell, everything proceeded according to plan. You noticed that your colleagues appeared a little irritated and confused by your behavior, as you attempted to control the situation, but you put this down to jealousy on their part – to their inability to comprehend the majesty of your conceptualizations. You are satisfied, in consequence – satisfied temporarily – so you start thinking about tomorrow, as you walk back to work. You return to your office. There is a message on your answering machine. The boss wants to see you. You did not expect this. Your heart rate speeds up a little: good or bad, this news demands *preparation for action*. What does she want? Fantasies of potential future spring up. Maybe she heard about your behavior at the meeting, and wants to congratulate you on your excellent work. You walk to her office, apprehensive but hopeful.

You knock, and stroll in jauntily. The boss looks at you, and glances away somewhat unhappily. Your sense of apprehension increases. She motions for you to sit, so you do. What is going on? She says, "I have some bad news for you." This is not good. This is not what you wanted. Your heart rate is rising unpleasantly. You focus all of your attention on your boss. "Look," she says, "I have received a number of

very unfavorable reports regarding your behavior at meetings. All of your colleagues seem to regard you as a rigid and overbearing negotiator. Furthermore, it has become increasingly evident that you are unable to respond positively to feedback about your shortcomings. Finally, you do not appear to properly understand the purpose of your job, or the function of this corporation."

You are shocked, beyond belief – paralyzed into immobility. Your vision of the future with this company vanishes, replaced by apprehensions of unemployment, social disgrace and failure. You find it difficult to breathe. You flush, and perspire profusely; your face is a mask of barely suppressed horror. You cannot believe that your boss is such a bitch. "You have been with us for five years," she continues, "and it is obvious that your performance is not likely to improve. You are definitely not suited for this sort of career, and you are interfering with the progress of the many competent others around you. In consequence, we have decided to terminate your contract with us, effective immediately. If I were you, I would take a good look at myself."

You have just received unexpected information, but of a different order of magnitude than the petty anomalies, irritations, threats and frustrations that disturbed your equilibrium in the morning. You have just been presented with incontrovertible evidence that your characterizations of the present and of the ideal future are seriously – perhaps irreparably – flawed. Your presumptions about the nature of the world are in error. The world you know has just crumbled around you. Nothing is what it seemed; everything is unexpected and new again. You leave the office in shock. In the hallway, other employees avert their gaze from you, in embarrassment. Why did you not see this coming? How could you have been so mistaken in your judgment?

Maybe everyone is out to get you.

Better not think that.

You stumble home, in a daze, and collapse on the couch. You can't move. You are hurt and terrified. You feel like you might go insane. Now what? How will you face people? The comfortable, predictable, rewarding present has vanished. The future has opened up in front of you like a pit, and you have fallen in. For the next month, you find yourself unable to act. Your spirit has been extinguished. You sleep and wake at odd hours; your appetite is disturbed. You are anxious, hopeless and aggressive, at unpredictable intervals. You snap at your family, and torture yourself. Suicidal thoughts enter the theatre of your imagination. You do not know what to think, or what to do: you are the victim of an internal war of emotion.

Your encounter with the terrible unknown has shaken the foundations of your world-view. You have been exposed, involuntarily, to the *unexpected and revolutionary*. Chaos has eaten your soul. This means that your long term goals have to be reconstructed, and the motivational significance of events in your current environment, re-evaluated – literally: revalued. This capacity for complete revaluation, in the light of new information, is even more particularly human than the aforementioned capability for exploration of the unknown and generation of new information. Sometimes, in the course of our actions, we elicit phenomena whose very existence is impossible, according to our standard methods of construal (which are at base a mode of attributing motivational significance to events). Exploration of these new phenomena, and integration of our findings into our knowledge, occasionally means reconceptualization of that knowledge⁴³ (and consequent re-exposure to the unknown, no longer inhibited by our mode of classification).⁴⁴ This means that simple movement from present to future is occasionally interrupted by a complete breakdown and reformulation: is occasionally interrupted by re-constitution of what the present is and what the future should be. The ascent of the individual, so to speak, is punctuated by periods of "dissolution and rebirth." The more general model of human adaptation – conceptualized most simply as steady state, breach, crisis, redress⁴⁶ – therefore ends up looking like Figure 4: Revolutionary Adaptation. The processes of revolutionary adaptation, enacted and represented, underly diverse cultural phenomena. ranging from the rites of "primitive" initiation⁴⁷ to the conceptions of sophisticated religious systems.⁴⁸ Indeed, our very cultures are erected upon the foundation of a single great story: paradise, encounter with chaos, fall and redemption.

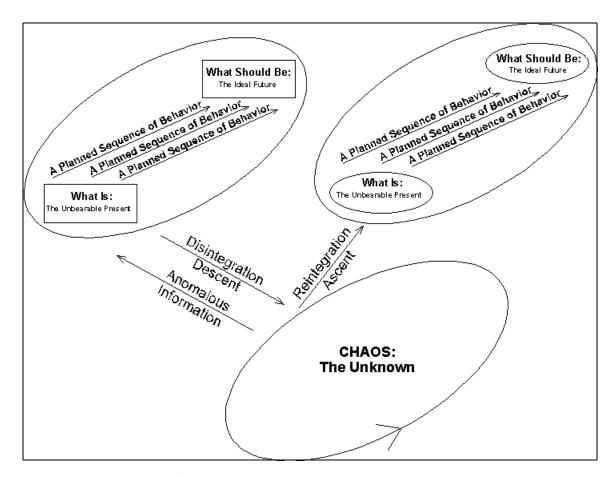


Figure 4: Revolutionary Adaptation

A month after you were fired, a new idea finds its way into your head. Although you never let yourself admit it, previously, you didn't really like that bloody job. You only took it because you felt that it was expected of you. You never put your full effort into it, because you really wanted to do something else – something other people thought was risky, or foolish. You made a bad decision, a long time ago. Maybe you needed this blow, to put you back on the path. You start imagining a new future – one where you are not so "secure," maybe, but where you are doing what you actually want to do. The possibility of undisturbed sleep returns, and you start eating properly again. You are quieter, less arrogant, more accepting – except in your weaker moments. Others make remarks, some admiring, some envious, about the change they perceive in you. You are a man recovering from a long illness – a man reborn.

2.2. Neuropsychological Function: The Nature of the Mind

It is reasonable to regard the world, as forum for action, as a "place" – a place made up of the familiar, and the unfamiliar, in eternal juxtaposition. The brain is actually composed, in large part, of two subsystems, adapted for action in that place. The right hemisphere, broadly speaking, responds to novelty with caution, and rapid, global "hypothesis-formation." The left hemisphere, by contrast, tends to remain "in charge" when things – that is, explicitly categorized things – are unfolding according to plan. The right hemisphere draws rapid, global, valence-based "metaphorical" pictures of novel things; the left, with its greater capacity for detail, makes such pictures explicit and verbal. Thus the exploratory capacity of the brain "builds" the world of the familiar (of the known), from the world of the unfamiliar (the unknown).