Maps of Meaning: The architecture of belief (precis)

MAPS OF MEANING: THE ARCHITECTURE OF BELIEF
PRECIS

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ABSTRACT:

It is not clear either that the categories "given" to us by our senses, or those abstracted out for us by the processes of scientific investigation, constitute the most "real" or even the most "useful" modes of apprehending the fundamental nature of being or experience. It appears, instead, that the categories offered by traditional myths and religious systems might play that role, despite the initial unpalatability of such a suggestion. Such systems of apprehension present the world as a place of constant moral striving, conducted against a background of interplay between the "divine forces" of order and chaos (Peterson, 1999a). "Order" constitutes the natural category of all those phenomena whose manifestations and transformations are currently predictable. "Chaos" constitutes the natural category of "potential" – the potential that emerges whenever an error in prediction occurs. The capacity for creative exploration – embodied in mythology in the form of the "ever-resurrecting hero" – serves as the eternal mediator between these fundamental constituent elements of experience. Voluntary failure to engage in such exploration – that is, forfeit of identification with "the world-redeeming savior" – produces a chain of causally-interrelated events whose inevitable endpoint is adoption of a rigid, ideology-predicated, totalitarian identity, and violent suppression of the eternally-threatening other.

Keywords: Mythology, religion, neuropsychology, cybernetics, natural category, war, aggression, peace

1. We think we live in the "objective" world, but we do not. The objective world is something that has been conjured up for us recently – absurdly recently, from the perspective of evolutionary biology – by the processes of science operating over a span of five centuries (or, perhaps, to give the Greeks their due, over the last thirty centuries). This does not mean that the objective world is not real, even though theories about its nature are in constant flux. What it does mean is that the environment of human beings might well be regarded as "spiritual," as well as "material."

2. It is of course virtually impossible – even forbidden, at least implicitly – to use terms such as "spiritual" in a serious scientific discussion. How could it be that reality is "spiritual," rather than material, given the overwhelming practical success of the experimental sciences?

3. There are perhaps two answers to this question. The first concerns our capacity to categorize. It has become increasingly clear, at least since the time of Wittgenstein (1968), and perhaps also as a consequence of Piaget's work, that the categories we use to orient ourselves are at least as much action or significance-predicated as they are descriptive, which is to say contra Augustine that words are not labels for things as much as they are tools for the obtaining of goals. Since it is not precisely clear where the "object" ends and the "category" begins, perhaps it is the case that even those things we naturally perceive as "things" might be better regarded as tools for the obtaining of goals rather than as absolute entities in and of themselves. The second answer is somewhat more abstract, but is related conceptually to the first. It is clearly the case that our concept of situation or thing is context-dependent. What we parse out of the exceedingly complex "environment" that presents itself to us is always only a limited subset of that environment, and perhaps precisely that subset which serves our present purposes (as we attend to some few things, and ignore a multitude of others). We might say, then, that different purposes require different "objects", and that the highest and most general (and also therefore necessarily the most abstract and "long-term" and least immediately evident) purposes require us to parse out the highest and most general categories, tools, or conceptions. If what we extract from the environment are things more like tools than objects, it might be possible to take a radically fresh look at conceptual systems other than those of science, on the chance that what they are talking about are things which are more like tools than objects. As a consequence of adopting such a perspective, it may be possible to posit that we are no better at understanding our own past than we are at truly coming to grips with the conceptual systems of other cultures, and to remember or at least hypothesize that we really do not understand what our forebears meant when they used categories such as "spiritual" (any more than we understand what they meant when they said "virgin birth," for example, or "holy Trinity," or "resurrection of the Savior", or even "Tao"). If that is the case (which is the only alternative to presuming that everyone unfortunate enough to live prior to the dawn of the scientific age was pathetically ignorant, despite their incontrovertible success at surviving), then things may still be seriously other than we presently presume.

4. Is it not a peculiar and telling fact (at least from a radically biological or evolutionary standpoint) that non-empirical or non-experimental archaic cultures could exist in the absence of scientific truth within systems of ritual and belief

that maintained their stability for thousands or perhaps even tens of thousands of years? Telling and peculiar, particularly given the manifest instability of our own emergent twentieth century "rational" notions of political organization (communism, say, or fascism)? Doesn't this provide evidence of a certain incontrovertibility for the "truth" of archaic thinking, even though it is a truth that we cannot presently explicitly understand (and perhaps never did)?

5. What if we risk the presupposition that it is experience itself that is real – experience in all its aspects, including the (theoretically epiphenomenal) emotional and subjective – and conclude in consequence that the elaborate description of the objective world characteristic of science is not so much an investigation into the ground of reality but the parcelling out of certain aspects of experience in a systematic, universally acceptable and pragmatic manner? This suggests that science is not so much the formulation of theories about the absolute nature of the object, as the constant formulation of tools used with ever-increasing accuracy to hit ever-transforming targets. This does not mean, simplistically, that a hallucination and a table are both therefore real in the same manner (that is, that they validly occupy the same category); rather, it means that insanity is not the existence of the hallucination (which is something that could merely be imagination) but the erroneous conclusion that a purely private experience has become something public.

6. That still leaves the problem of the "spiritual" or "psychological", however – and this is no trivial problem, since it involves the very reason for doing things, including scientific things, even if it doesn't involve the idea of the "ground of reality", as I am arguing. What if it could be demonstrated, for example, that the mind or even the brain has adapted itself to an environment that can best be described in non-material categories? What if it were the case that human beings were adapted to the significance of things, rather than to "things" themselves? Wouldn't that suggest that the significance or meaning of things was more "real" than the things themselves (allowing that "what is adapted to" constitutes reality, which only means accepting as valid a basic implicit axiom of evolutionary theory: that the "organism" adapts to the "environment").

7. The most primary categorical distinctions drawn by human beings appear to involve a single axis: that of center vs periphery, or culture vs nature, or familiar vs foreign (Eliade, 1986). If this is true, then one might logically be driven to wonder just what is it that is "center, culture, and familiar" or "periphery, nature, and foreign", if everything that exists can be subdivided into just these two categories (which must by necessity be very complex to encapsulate so much reality into such small and undifferentiated domains). It is the answer to this very difficult query that allows us to make the radical claim that we live in a world that is more fundamentally "spiritual" than "material."

8. It appears to be the case, first, that the human brain has developed two large-scale specialized systems of adaptation (see Goldberg, Podell and Lovell (1994) for a parallel notion). The first of these, which we strive with all our might to keep activated, operates when we are in home territory. In home territory, we are secure. Friends and kin are there. Our position in the primate dominance hierarchy there, while not necessarily optimal, perhaps, is at least familiar. Our battles for position have been fought, and decided, even if not won, and we are not threatened by every move we make (or every move made by another). We know what to do in home territory – and, therefore, we might say that culture is where we know how to be. But where are you when you know where to be?

9. The second specialized system of adaptation operates when we do not know where we are. We strive with all our might to keep this system shut down, inhibited. Most of us are in the fortunate position of never having experienced its full activation (at least not within memory). We have never been shaken out of our beds in the middle of the night by mortal enemies, bent on our destruction. We have never found ourselves up against the predatory terrors of the primordial forest, unshielded by our cultural milieu. At most – except, perhaps, when we experience the death of someone loved – we suffer anxiety and grief, rather than terror and despair. We are not at the mercy of nature – at least so we think, as we continue to conquer the world with the tools of our knowledge. But grief and misery occur where we least expect them (and maybe that is nature, too).

10. Nature is concrete reality, we presume, something more real than abstraction. But if nature is more real than abstraction, what use is abstraction? Perhaps it is the case that abstraction is more real than "nature". Perhaps abstraction can be used to extend what is effortlessly given to us. Perhaps abstraction can be employed to usefully transform what is now presented to us without effort (Brown, 1986) as the object. Maybe we can perceive with our (collectively- expanded) imagination levels of reality that are hidden, not so much from our senses, as by our senses.

11. Here are two (abstract) domains, worthy of consideration: the place you are when you are not making a mistake, and the place that you are when you are making a mistake. But are these places? This is a difficult question. What is a place? Is a river a place (echoing Heraclitus)? The river after all is something that is always transforming – but it is still clearly a place (at least from certain valid and useful perspectives or frames of reference). A place could therefore be not so much an invariant object or situation (which is something that is merely a complex "object"), but a set of relationships that remain constant in the face of constant transformation. The place you are when you make a mistake is in this manner a place of abstracted and complex constants, which are no less real because of that complexity and abstraction: it is the transcendent space where

embarrassment, anxiety, humiliation lurk; where retreat offers itself as a viable option, where pride beckons ("I did not make a mistake!", offered because the "place of mistakes" is somewhere too terrible to admit the existence of). The place of mistakes is a place where the unknown lurks, so to speak, because the thing not done well produces consequences which are frightening potential (whose nature cannot precisely be determined). The place of mistakes is a place of unpredictable relationships, and transformations between these relationships – and, because that which is fallible is also human, the place of mistakes is dangerous. What is unpredictable might kill, and one should become carefully adapted to all those things that might kill, and learn how to operate in their presence.

12. The place where a mistake is not made is also a place of constants, but its "nature" differs. Predictable things happen there, and that is good (unless they are too predictable). The place where a mistake is not made is "explored territory", because explored territory is not an object or an array of objects. Explored territory is where habitual modes of action produce desirable consequences (and that means if what once worked no longer works, it is possible that you are no longer in Kansas). How might this be? We know from Einstein that the universe has a four-dimensional structure, which means that things which are stable in the three familiar spatial dimensions might still be (and certainly are) transforming themselves across the fourth, time. This means that the place you return to the second time is not precisely the same place. The constant relationships you identified there, which you used to orient yourself and regulate your emotions, may no longer hold. This becomes evident only when you make a mistake, and discover that you are now in the domain of nature, so to speak, and no longer at home.

13. We might imagine at the end of the twentieth century that we are adapted to the Einsteinian universe (which is objectively real, after all), even if we do not understand either that universe or our adaptation to it. In consequence, we might be able to detect when the flux of time has unfortunately invalidated our previous and dearly held presuppositions, which are both the categories we normally use to simplify and apprehend the world, and the action patterns we habitually use to bring about what we desire. One might hypothesize, therefore – out on this philosophical limb – that "anxiety" constitutes precisely that mechanism of detection. Anxiety is that which says "something is up" but also that which does not say precisely what it is that is up (perhaps just as a retinal motion detector might say of motion in the non-foveal periphery "please attend here" but does not say exactly why). One might also posit that nature in its abstracted form could more reasonably be considered the "flux that invalidates our presuppositions". This would make nature in the specific case the jungle at night but more generally

(and thus more really) that place where we instantly are when what we once did no longer works. This would make culture that which is set up in opposition to nature, as the place where our knowledge holds (in part because it is the place set up to ensure that our knowledge holds, the place defined by the social contract that implicitly or explicitly regulates interpersonal interaction, so that the forces of the unknown remain safely encapsulated, or trapped "underground").

14. We set up a goal in our imagination, like the goal of a game. We parse up the world, so that those objects and processes apparently irrelevant to hitting the target are eliminated from consideration (Miller, 1956; Lubow, 1989). We simplify our world to the domain of relevant tools with every presupposition and action, act out our model, and approach the goal. As we undertake to transform the present into the desired future (as we work to attain the goal), we observe the consequences of our actions and evaluate them. Is what we are producing in the course of our behavior something commensurate with our express desire? If so, then we are in explored territory, where things manifest themselves in accordance with our wishes. If not, then we are in unexplored territory, in nature, if you will (allowing the useful inexactitude of the "natural category"), where things and the relationship between those things has not yet been specified; where the current plan is no longer valid and should be, conservatively, interrupted. In such circumstances, we stop and retreat (in which case we have implicitly categorized the new territory as "something better avoided hurriedly by someone as vulnerable as me") – or we pause, and then explore, and generate new information as a consequence. This is essentially a pragmatic, cybernetic account (when it has been stripped of its dramatic and metaphorical accoutrements), which arises again and again outside psychology (Weiner (1948), von Bertallanfy (1975)), and within it, in assorted variants, ranging from the "psychoanalytic" precepts of Alfred Adler (1958), through the Soviet neuropsychology of Luria (1980), Sokolov (1969) and Vinogradova (1961, 1975), to the animal-experimental theories of Jeffrey Gray (1982, 1996), and the complex social psychology of Carver and Scheier (1982). We construct an abstracted target, act to transform our current state into that desired future, and stop, feel anxious, and explore (or retreat) when our plans do not lay out the world as we wish it to be. Since this process appears so fundamental (and applies not only to human beings but to animals and even to machines that have to regulate their own output), it appears reasonable to look in detail into the world it "engenders" and to give that world some consideration as "environment".

15. One might say that this "environment" is spiritual reality, since it is not precisely objective (and also for lack of a better word) and further, that it consists of two "places" and one "process." The first place is explored territory, which can be more "prototypically" defined as the known, which is where you are when

what you are doing is working. This means that the known is: (i) the place where your current conceptualization of the present is predicated on presuppositions that are valid, with regard to the current circumstance, according to all relevant evidence (that is, according to evidence provided by the consequences of the action patterns that comprise your current plan), (ii) the place where your means for obtaining a given end are appropriate (which means they are getting you to where you want to be), and (iii) the place of "realistic" desire (which means the place where a given potential future may well be actualized, given the current starting position and presently operative plans).

16. The second place is unexplored territory, which is where you are when what you are doing is not working, because "working" – that is, "functional" – is precisely what "explored" means, and its absence means "unexplored", even when "previously" familiar. This latter place can be more "prototypically" defined as the unknown. The unknown is both the "space" that emerges when a means fails (that is, when the execution of a plan produces an end that is neither predicted nor desired) or, more radically, the "space" that emerges when current conceptualizations of present and future themselves (that is, ends, and not merely means to specified ends) have to be painfully and anxiously dismissed and reconstituted for emotional stability and the maintenance of hope to continue. The difference between the former "normal" novelty and the latter "revolutionary" novelty, for example, might be the difference between failing to arrive on time for a given meeting on a given day (which is a failure of means, all things considered) and being unexpectedly dismissed from a promising and secure position of employment (which might be an event that casts past, present and future all simultaneously into the "terrible domain of chaos").

17. The process, finally, is the act of mediating between culture and nature, known and unknown. It is an act that can be undertaken successfully (in which case the domain of the known grows, or transforms, and the domain of the unknown shrinks or at least returns to invisibility), or unsuccessfully (in which case the reverse happens: the domain of the unknown gains some ground, as the mistake remains unrectified, and the structure of culture shrinks or becomes more unstable). The process might be defined as "consciousness", for the scientifically inclined (since consciousness is at least in part that faculty that focuses on novelty and transforms it into "knowledge" or perhaps even "wisdom," as well as being the related capacity for encapsulating the strange in the net of language, and communicating that encapsulation). But it is also the case that this process is spirit, as spirit is an active principle, dynamic and alive, rather than something fixed and static.

18. This is a very old story (and one might even say, it is the only true story): the cosmos is order versus chaos, and the expansive exploratory tendency of man

is the intermediary between these two great and eternal domains. The constituent elements of experience eternally remain "known", "unknown" and "knower". It is the possibility of the existence of such transcendent truth that allows a thinker with the capacity of Nietzsche to state, despite his reputation as a profound destroyer of religion: "Every age has its own divine type of naivety for whose invention other ages may envy it – and how much naivety, venerable, childlike and boundlessly clumsy naivety lies in the scholar's faith in his superiority, in the good conscience of his tolerance, in the unsuspecting simple certainly with which his instinct treats the religious man as an inferior and lower type that he has outgrown, leaving it behind, beneath him – him, that presumptuous little dwarf and rabble man, the assiduous and speedy head- and handiworker of 'ideas', of 'modern ideas!'" (Nietzsche, 1968, pp. 260-261).

19. We confuse our ignorance with sophistication, and denigrate traditions whose meanings are so invisible to us that the mystery they pose is not even detected. This means that not only do we not know the answers, but the questions themselves remain so far afield that the very act of their positing appears as something incomprehensible or even mystical. Religious thinking – ritual, mythology, narrative, drama – is not primitive science (regardless of what scientists, or the religious themselves, presently claim). The people who practised it were (are) not scientists. They did not have the tools of science, and lacked not only experimental methodology, which emerged only with the explicit formulations of Bacon and Descartes, but the very technology that makes accurate observation and measurement truly possible. We have not replaced a "primitive" conception of reality with a more sophisticated conception (or are the terrible political excesses of the twentieth century merely to be regarded as accidental?), but have instead replaced a meaning-predicated conception of being with an elaborate tool (and then we suffer existential angst, idiotically: "our tool provides us with no rationale for being", as though a hammer could describe how to live).

20. We have had more than a century of opportunity to carefully gather, contrast and compare the religious traditions of the world. It appears to be the case, in consequence, that for the first time in history we have developed some (provisional) explicit understanding of them. This is of course a dubious proposition, as the means for determining the validity of "understanding" in domains such as the literary (which might reasonably be considered analogous to that of mythology) remain unspecified, to the extent that the very idea of understanding itself in such domains has become a target of vehement criticism. But it is not reasonable to forego the very possibility of creative and useful thought merely because such thought has not in all situations reduced itself (or advanced itself) to a technique. It may be possible to suggest that the acquisition of knowledge regarding comparative religious thought might produce a certain

advancement, even though no formal "proof" of that advancement, acceptable to all, can be produced.

21. One might still ask: does it make a great story? If that can be answered (hopefully in the affirmative), one might then posit that the capability to generate such an answer actually constitutes a valid indicator of the ability to evaluate stories (even if the nature of that ability has not yet become explicit, and the quality of judgement varies from person to person). After all, we can speak, without explicit knowledge of grammar, and we can walk, although we cannot explain how – and we do not doubt the validity of our implicit knowledge, because it cannot be verbally encapsulated. So we might start with a story which could be considered "great" on the basis of the historical evidence – at least in the judgement of thousands of individuals, across centuries of time – and attempt a provisional explanation, and generalize from that explanation, and see if this effort also produces a story that is at least "great" enough to motivate further exploration (if for no other reason than to attempt to prove the whole interpretive framework erroneous).

22. The oldest complete indubitably great story we have in our possession is the Sumerian creation myth, the Enuma elish. It is no easy matter to make this story appeal to the modern imagination, as modern individuals lack the implicit ritual and metaphysical "presuppositions" of the Sumerians (which surrounded and supported the Enuma elish, and brought it to life). We might perhaps substitute for this lack of implicit culture more explicit knowledge regarding the "natural categories" of mythology, and thereby extract from the Sumerian narrative something that still appears meaningful. We might then apply the same knowledge to a brief sequence of historically important myths, and see if that process of application not only appears meaningful, but actually reveals knowledge which appears revelatory (or at least useful, and not easily or obviously obtained by any other method).

23. The Enuma elish begins by presenting a great chthonic serpent, Tiamat, who is feminine – "she who gave birth to them all" (Heidel, 1965, p.18). Tiamat inhabits the unformed deep with her husband and consort Apsu, locked in an eternal and undifferentiated embrace. This sexual (read "creative") union gives rise to the elder Mesopotamian gods, who begin a cycle of ceaseless activity, including their multiplication, and disturb "the inner parts of Tiamat" (Heidel, 1965, p.19). Tiamat's irritation increases to the point where she conspires with her husband to destroy or devour their recently engendered divine offspring. One elder god, Ea, hears of this plot and slays Apsu, then fathers the primary hero of the story, Marduk, fire-speaker, sun-god, "the wisest of the wise, the wisest of the gods", filled with "awe-inspiring majesty" (Heidel, 1965, p.21).

24. Tiamat is pushed beyond tolerance by this act, and determines to rid the universe of her vexatious "children". She begins to produce horrible "soldiers", to aid her in battle, "bearing monster serpents Sharp of tooth and not sparing the fang. With poison instead of blood she filled their bodies. Ferocious dragons she clothed with terror, She crowned them with fear-inspiring glory and made them like gods, So that he who would look upon them should perish from terror" (Heidel, 1965, p.23).

25. The elder gods conspire, in defence, and send one after another of their members to stand against Tiamat. All fail. Finally, the gods meet in desperation, and ask Marduk to serve as their champion, suggesting that he quiet her with his "holy incantation" (Heidel, 1965, p.29). Marduk agrees, but insists that he must be elevated to the pinnacle of the gods, if he is successful: "'Lord of the gods, destiny of the great gods, If I am indeed to be your avenger, To vanquish Tiamat and to keep you alive, Convene the assembly and proclaim my lot supreme. When ye are joyfully seated together in the Court of Assembly, May I through the utterance of my mouth determine the destinies, instead of you. Whatever I create shall remain unaltered, The command of my lips shall not return, ... it shall not be changed"' (Heidel, 1965, pp.29-30).

26. Marduk's compatriots, facing imminent destruction, agree unhesitatingly, and confer great power on their champion. They place "the starry garment of the night sky"(Campbell, 1964, p.82) in their midst. At the command of Marduk's mouth – on his word – it appears; at his command, it disappears, "as the night sky on the passage of the sun" (Campbell, 1964, p.82). He sets off, after his election, to face his perfidious mother. Gathering his armaments, he fashions a net to enclose Tiamat, and sets himself ablaze. He raises the winds and the storms in his aid, using the forces of nature against nature itself. He dresses himself in a magical coat of mail, and wears "terror-inspiring splendor" on his head. He confronts Tiamat in her lair, accuses her of treachery, and challenges her to battle: "When Tiamat heard this, She became like one in a frenzy and lost her reason. Tiamat cried out loud and furiously, To the very roots her two legs shook back and forth. She recites an incantation, repeatedly casting her spell; As for the gods of battle, they sharpen their weapons. Tiamat and Marduk, the wisest of the gods, advanced against one another; They pressed on to single combat, they approached for battle" (Heidel, 1965, p.40).

27. Marduk fills Tiamat with "an evil wind", which distends her belly. When she opens her mouth, to devour him, he lets an arrow fly, which tears her interior, and splits her heart. He subdues her, completely, casts down her carcass, and stands upon it. His voluntary encounter with the forces of the unknown produce a decisive victory. He rounds up her subordinates and binds them with netting. Then he returns to Tiamat: "The lord trod upon the hinder part of Tiamat, And

with his unsparing club he split her skull. He cut the arteries of her blood And caused the north wind to carry it to out-of-the-way places.... He split her open like a mussel into two parts; Half of her he set in place and formed the sky (therewith) as a roof. He fixed the crossbar and posted guards; He commanded them not to let her waters escape. He crossed the heavens and examined the regions. He placed himself opposite the Apsu, the dwelling of Ea. The lord measured the dimensions of the Apsu, And a great structure, he established, namely Esharra [Earth]" (Heidel, 1965, pp.42-43).

28. Marduk then constructs the heavenly order, fashioning the year, defining the twelve-sign zodiac, determining the movement of the stars, the planets and the moon. Finally, he deigns to create man, so that "upon him shall the services of the gods be imposed that they may be at rest" (Heidel, 1965, p.46), and returns the gods allied with him to their appropriate celestial abodes. Grateful, they deliver him a present: "'Now, O Lord, who hast established our freedom from compulsory service, What shall be the sign of our gratitude before thee? Come, let us make something whose name shall be called "Sanctuary." It shall be a dwelling for our rest at night; come, let us repose therein!'" (Heidel, 1965, p.48). The dwelling is Babylon, center of civilization, mythic sacred space, dedicated in perpetuity to Marduk.

29. Tiamat is a dragon, a great serpent. According to Mircea Eliade (1978), the great historian of religions, the serpent or dragon represents virtuality, which must be conquered and transformed before the "world" can come into being. The dragon might be considered a "natural category", or a "root metaphor" (Sarbin, 1976) for that which prevails outside the domain of the explored and expected (and, as the unexpected, unknown or novel is the place from which all information emerges, as the great "mother" of all places and things (Neumann, 1955)). Why the dragon? Generally, primates easily hate and fear snakes, or objects reminiscent of snakes (Gray, 1987). Human beings may not be "innately" afraid of snakes, but learn rapidly to fear them. This rapidity of emotion- object association might be considered the birthplace of metaphor, as the snake becomes the symbol for things which arouse fear. The human imagination, however, is not limited in its representational capacity to the actual thing: the most apt serpent (the archetypal serpent) might therefore live underground, be large as a town, breathe fire, devour the innocent, live forever, and threaten the stability of the community. It might also, paradoxically, appear to hoard treasure (gold, virginal princesses, valuable jewels, magical implements). Why? Central to the category of all things that invoke fear is the class of all things not yet classified, the class of novel things (Gray, 1987), and lurking in the heart of novelty is value (that is, the new information which is generated when the unknown is voluntarily encountered, explored, and rendered habitable). Thus the dragon, metaphorical

embodiment of the unknown, easily becomes the terrible mother of all things, the temporal flux that always threatens to take back what it has produced, and the awe-inspiring chaos that gives rise to determinate objects, subjects and situations (Jung, 1967, 1968).

30. The femininity of the dragon in the Sumerian story is not precisely universal: the great serpent of chaos is generally something that transcends categories (as that which has not been explored is not named or categorized), to such a degree that not even gender is evident. But Tiamat is feminine in this story because she is the source of things, and "the feminine" is par excellence the phenomenon that gives rise to the new (and can therefore serve metaphoric duty as the birthplace of everything determinate).

31. The Sumerians believed that man was "created in order to serve the gods, who, first of all, needed to be fed and clothed" (Eliade, 1978, p.59). What does this fragment of information mean? It means, potentially, that the Sumerian gods (the elder gods, children of Tiamat and Apsu) embodied the forces which shaped and directed human existence. In modern parlance, we might consider these gods personified motivational states – as Mars/Ares was the Greco-Roman god of aggression and war, and Venus was the goddess of erotic attraction – although such gods were more accurately the class of stimuli that gave rise to motivated behavior, as well as the state of motivation itself (as the stimulus is not easily distinguishable from the drive – think of erotic beauty, for example, which appears "external" but is clearly not "objective"). Such motivational state/ stimulus complexes predates and "exists" in a manner superordinate to that of any specific individual (which predates and exists in a manner superordinate to that of all individuals). Blood-lust, hunger, sexual attraction, terror, and thirst are all reasonably conceptualized as transpersonal forces, with a developmental history longer than that of our mammalian and even reptilian precursors (as the origins of our motivational drives are lost in an evolutionary prehistory millions of years old).

32. The sexual/ creative union of the most fundamental of deities, Tiamat and Apsu, gives rise to less primordial, but still transhuman figures (the elder Mesopotamian gods). But what of Apsu? The Enuma elish itself gives very little information about his nature. We know he is the masculine counterpart of the reptilian and chthonic chaos that gives rise to all things, and threatens to take them back. It is only comparative analysis, and a fragment of the plot of the Enuma elish, that sheds light on his nature. All hell does not break loose for the elder gods, until Ea carelessly slays Apsu. The masculine counterpart of the feminine deity of the origin – that is, the masculine counterpart of generative chaos, of nature, or the unknown – is culture, the known, patriarchal structure. This is a result of the innate male-predicated social ordering pattern we share not

only with other human cultures but with chimpanzees, our nearest biological relatives (de Waal, 1989; Wrangham and D. Peterson, 1996). When our dominance-hierarchies are destructured, and the patriarchal systems which protect and oppress us are violated, the chaos from which we are guarded reappears, and threatens to devour us.

33. None of the elder gods prevail against Tiamat, who defeats all comers. This subplot may be regarded as "implicit knowledge" on the part of the Sumerians, with regard to the insufficiency of "basic instinct." The philosophy of the drives, in Nietzsche's (1968, pp.203-204) terminology, is not complex enough to solve all problems: the constant reappearance of the chaos of the unknown poses a challenge that neither instinct nor habit can reliably solve. It is therefore not until the appearance of Marduk (who is born immediately after the death of Apsu, when the birth of the hero who might regenerate the damaged cultural structure constitutes an event that might most devoutly be desired) that hope for the continuance of the cosmos appears justified. We know that Marduk, although a late-born god, is someone remarkable – someone categorically equivalent to the light, to the re-emergence of the morning sun from the terrifying darkness of the night; someone identified with technological sophistication (mastery of fire) and linguistic ability (the capacity for the holy incantation, which dispels that which is destructive). Thus the great gods turn to the power of the word and technology to master the generative but dangerous unknown, and elect Marduk to rule permanently over them all.

34. Marduk faces Tiamat, the great dragon, voluntarily, and splits her into two halves, making the world from her pieces. He is therefore part of the pantheon of heroes who engenders the cosmos, as a consequence of creative but dangerous confrontation with chaos. Marduk is also Namshub, "the bright god who brightens our way" (Heidel, 1965, p.53) and Asaru, the god of resurrection, who "causes the green herb to spring up" (Heidel, 1965, p.53). Whatever Marduk represents is also considered central to creation of rich abundance, mercy, justice, and familial love, and, most interestingly, to the "creation of ingenious things" from the "conflict with Tiamat" (Heidel, 1965, pp.54-57). The Mesopotamians addressed this central deity by fifty names. Each name appears to have signified a once independently conceptualized valuable property or ability (perhaps at one time separate gods), which came over time to be regarded as mere attributes of Marduk's mode of being. It seems evident that the attribution of these fifty names to Marduk parallels the movement towards monotheism described in the Enuma elish itself (with all the gods organizing themselves voluntarily under Marduk's dominion), occurring in Mesopotamian society at the historical human level. But what precisely does this latter, historical and human process signify?

35. Marduk is elevated by his peers to the highest place in the Mesopotamian heaven. But this is really of secondary interest to us. What is of primary and perhaps overwhelming significance is the role this tale played in establishing and supporting the notion of sovereignty among the ancient Sumerians. The Sumerian emperor was sovereign only insofar as he embodied the spirit of Marduk on earth (Eliade, 1978). He stood in relation to earth as Marduk stood to heaven, and it was this "equivalence to Marduk" that justified his sovereignty. What does this all mean? It means that the Sumerians managed to capture in their images and narratives of sovereignty the great and still insufficiently comprehended idea that the process of creative exploration – the process that generates order out of chaos – is something to which all other considerations must be rendered subordinate, whether those considerations are instinctual (as in the case of the "elder gods"), or whether they are interpersonal (as in the ordering of Mesopotamian society under the "guidance" and rule of the emperor). This implies that the Mesopotamians "acted out" the idea of the sovereignty of the creative hero, long before they (or we, for that matter) explicitly understood the significance of that action pattern. It also implies that the idea of sovereignty itself is firmly embedded in the more primordial notion of the exploratory hero. One might object: "where then did this knowledge come from, if itwas not represented explicitly, or 'understood'"? – but it can easily be said that the exploratory and creative individual, mastering the chaos in his own narrower personal domain (and appearing admirable and worthy of emulation and representation in consequence) becomes elevated in a temporally-extended iterative process to the "highest position", as the nature of what makes him admirable and worthy of emulation becomes more clearly encapsulated in the good and then the great and then the archetypal story.

36. An examination of the ritual and secondary conceptualization that characterized ancient Egyptian society sheds additional light on the structure and meaning of this "spiritual" world. In the earliest known Egyptian cosmology (circa 2700 B.C.) the god Ptah, a spiritualized manifestation of Atum, the all-encircling serpent, creates "by his mind (his "heart") and his word (his "tongue")" (Eliade, 1978, p.89). Eliade states: "In short, the theogony and the cosmogony are effected by the creative power of the thought and word of a single god. Here we certainly have the highest expression of Egyptian metaphysical speculation. As John Wilson observes, it is at the beginning of Egyptian history that we find a doctrine that can be compared with the Christian theology of the Logos [or Word]" (Eliade, 1978, pp.89-90).

37. The Egyptians implicitly realized that what we would call consciousness and linguistic ability were vital to the existence of things – precisely as vital as the unknowable matrix of "material" being. Despite its centrality to Judeo-Christian thinking, this idea has still not fully permeated our explicit understanding (since

we attribute the existence of things purely to their "material" substrate). The Egyptians viewed Ptah – he spermatic word – as the original, or primordial (read "heavenly" king). As in Mesopotamia, Ptah ceded his power in the earthly domain to his successor, the pharaoh. The creative power thus transferred was literally defined by the Egyptians as the ability to put order (Ma'at) "in the place of Chaos" (Eliade, 1978, p.91). Ma'at replaces the disorder of heresy, or falsehood, and appears to be a term that occupies the same "categorical space" as the notion of theemergence of the sun in the morning (or at the dawn of creation), or the appearance of the pharaoh at a state function or festival (both of which are described by the verb "khay", to shine) (Eliade, 1978). Ma'at means truth, good order, justice, right, and describes a state of being characteristic of the Golden Age, prior to the emergence of sin and the descent of man from the promise and perfection of the time of beginning (Eliade, 1978). The pharaoh who incarnates ma'at is, like Marduk, the target for the ritual emulation of his people. It is this ritual emulation that liaterally makes him a leader, makes him sovereign (and it is his veridical embodiment of ma'at that provides the basis of and justification for his power).

38. It should also be noted that the pharaoh's political activity is assimilated to the actions of the solar god who nightly and eternally repels the great dragon of chaos (Eliade, 1978, p.104, fn. 48). This is a fact whose central importance can hardly be overstated. The pharaoh protects the borders of his land from the barbarians without, who are directly apprehended as (not secondarily defined as) equivalent to precosmic chaos. This chaos is the virtuality from which order is drawn, and by which it is constantly threatened. Deep understanding of this level of conceptualization, which is by no means limited to the ancient Egyptians, reveals the nature of the profound and fundamental motivation underlying social conflict: those who occupy unexplored territory are not "human inhabitants of a different state". They are perceived directly as part of the serpentine, reptilian power that constitutes all things yet unknown and threatening. This means that the "natural" human mind apperceives the foreigner as indistinguishable from all that must be heroically overcome to establish the norms and customs that define culture, or the sacred space in which life can flourish (Peterson, 1999b). There seems little doubt that this might be regarded as an abstracted variation of the same instinctive level of "ideation" that makes the chimpanzee patrol its borders, and respond to the existence of same-species individuals outside its dominance hierarchy with a brand of aggression that can only be described as motivated and murderous (Wrangham and D. Peterson, 1996).

39. The ideas of sovereignty, exploratory activity and the establishment/ renewal of the state are described in a more sophisticated way in the central myth of Osiris, which served as an alternative basis for Egyptian theology. The story of

Osiris, and his son Horus, is more complex than the Mesopotamian creation myth, and describes the interactions between the "constituent elements of experience" in exceedingly compressed form. Osiris was a primeval king, a legendary ancestral figure, who ruled Egypt wisely and fairly. His evil brother, Seth, who he did not understand, rose up against him (Eliade, 1978, p.100, fn. 41). Seth killed Osiris (that is, sent him to the underworld, where he lived a vague and partial existence) and dismembered his body, so that it could never be "found".

40. The death of Osiris signifies two important things: (i) the tendency of (static) ruling ideas, systems of valuation, or particular stories – no matter how initially magnificent or appropriate – to become increasingly irrelevant with time; and (ii) the dangers which necessarily accrue to a state that "forgets" or refuses to admit to the existence of the immortal "deity" of evil. Seth, the king's brother and opposite, represents the mythic "hostile twin" or "adversary" who eternally opposes the process of creative encounter with the unknown, and signifies a pattern of adaptation characterized by absolute opposition to the establishment of divine order. When this principle gains "control" – that is, usurps the throne – the "rightful king" and his kingdom are necessarily doomed. Seth, and figures like him – often represented in narrative by the corrupt "right hand man" or "advisor to the once-great king" – view human existence itself with contempt. Such figures are motivated only to protect or advance their position in the power hierarchy, even when the prevailing order is clearly counterproductive. Their actions necessarily speed the process of decay, endemic to all social/ cognitive structures. Osiris, although great, was nevertheless naive, and blind to the existence of "immortal" evil. This blindness, and its resultant incaution, hastens his demise.

41. Osiris has a wife, as befits the "king of order". Isis, as Osiris' mythic counterpart, represents the positive aspect of the unknown (a force equivalent to the creative aspect of Tiamat). Isis is possessed of great magical powers, and gathers up Osiris' scattered pieces, using his dismembered phallus to make herself pregnant. This exceedingly concretized story makes a profound abstract point: the degeneration of the "state" or "domain of order" and its "descent" into chaos serves merely to fructify that domain and to make it "pregnant". In chaos lurks potential. When a great organization disintegrates, the pieces might still usefully give rise to something else, perhaps something more vital, and still greater. Isis therefore gives birth to a son, Horus, who returns to his "rightful kingdom", and confronts his evil uncle.

42. Horus fights a difficult battle with Seth, and loses an eye in the process. Seth is defeated, nonetheless, and Horus recovers his eye. The story could stop there, with the now-whole and victorious Horus' well-deserved ascension to the throne. This would be the familiar story of the "re-ascension of the rightful son of the true king to the endangered kingdom". Horus, however, does the unexpected,

descending voluntarily to the underworld to find his father. It is representation of this move, reminiscent of Marduk's voluntary journey to the "underworld" inhabited by Tiamat, that constitutes the most brilliant and original contribution of Egyptian theology.

43. Horus discovers Osiris, extant in a state of post-existence torpor. He offers his recovered eye to his father, so that Osiris can "see" once again. They return, united and victorious, and establish a revivified kingdom. The kingdom of the "son and father" is an improvement over that of the father or the son alone, as it unites the hard-won wisdom of the past (that is, of the dead) with the adaptive capacity of the present (the living).

44. Marduk, the Mesopotamian supreme god, carves the familiar world from the unfamiliar, creating order from chaos. That capacity, which is theoretically embodied in the form of the Mesopotamian emperor, lends temporal authority its rightful power. The same idea applies in Egypt, but is elaborated substantively. Osiris constitutes the old state, once great, but now dangerously anachronistic. Horus partakes of the essence of tradition (he is the son of his father), but is vivified by an infusion of "new information" (his mother, after all, is "the positive aspect of the unknown"). As an updated and aware version of his father, he iscapable of dealing with the emergent evil represented by his uncle. Victorious over his uncle, he is nonetheless incomplete, as his youthful spirit lacks the wisdom of the past. So he journeys into the unknown, where his father rests, "lifeless", without embodiment or active incarnation in the present. Horus unites himself with his father, and becomes the "ideal ruler", incorporating the "consciousness" of present youthful life and the wisdom of tradition.

45. The "dead" Egyptian pharaoh, the ruler whose death preceded the ascension of the current pharaoh, was assimilated by the Egyptians to Osiris (that is, the "dead pharaoh" occupied the same "categorical space" as Osiris). This meant that the dead pharaoh was regarded as equivalent to "the spirit that founded the state" – the archetypal creator-god or legendary ancestor whose courageous actions had cosmogonic significance. The current ruler (who depended for much of his power on the traditions of his predecessors, modified when necessary) was regarded as equivalent to Horus, and to Re, the sun-god. The ruling pharaoh was therefore the power that generated order from chaos (as Re), and the power that rejuvenated order, once it had degenerated into unthinking authoritarianism or too-rigid (and blind) tradition. Furthermore, however, the pharaoh was the rejuvenated Osiris (who was the "dead pharaoh"), so he was tradition, given sight. The sophistication of this idea of reputable leadership – creative power, regenerative power, and revivified tradition – cannot be regarded as anything but remarkable. It is also of overwhelming historical interest and modern relevance that the Egyptians increasingly came to regard Osiris-Horus as an exemplar, not just of the pharaoh,

but of every individual in the kingdom. Eliade states, with regard to later Egyptian burial practice: "The texts formerly inscribed on the walls of the hidden chambers in the pyramids erected for the pharaohs are now reproduced inside the coffins of the nobility and even of totally unprivileged people. Osiris becomes the model for all those who hope to conquer death. A Coffin Text proclaims: 'Thou art now the son of a king, a prince, as long as thy heart (i.e., spirit) shall be with thee.' Following Osiris' example, and with his help, the dead are able to transform themselves into 'souls', that is, into perfectly integrated and hence indestructible spiritual beings. Murdered and dismembered, Osiris was 'reconstituted' by Isis and reanimated by Horus. In this way he inaugurated a new mode of existence: from a powerless shade, he became a 'person' who 'knows', a duly initiated spiritual being." (Eliade, 1978, p.100)

46. This development might also be regarded as an illustration of the increasing "psychologization", "abstraction" and "internalization" of religious ideation: in the earliest stages of representation, deities are viewed as pluralistic, and as individualistic and fractious members of a supracelestial (that is, transpersonal and immortal) community. Later, they are incorporated into a hierarchy, as the culture becomes more integrated, more sure about relative valuation and moral virtue – and a single god, with a multitude of related features, comes to dominate. The development of monotheism thus parallels intrapsychic and intracultural moral integration. As the average citizen identifies more and more clearly with this monotheistic, integrated pattern, its "external" nature, as an attribute of the gods, recedes. It becomes more clearly an attribute of the human being, per se, rather than a characteristic of the extra-individual world – and more like what we would conceive of as a psychological trait. The god's subjective aspect – his or her intrapsychic quality – becomes more evident, at least to the most sophisticated of intuitions, and the possibility of "personal relationship" with the deity emerges as a prospect at the conceptual level of analysis. The process is just beginning, in abstraction, in Mesopotamia and Egypt: it was the ancient Israelites who brought it most clearly to fruition, with potent and lasting effect. It does not seem unreasonable to regard this development as a precursor to the Christian revolution, which granted every individual the status of "son of god", and to our modern notion of the "human right", which is the metaphysically-predicated presumption that everyone, regardless of "earthly status", has a value to which temporal authority must bow.

47. The Egyptian pharaoh, like the Mesopotamian king, served as material incarnation of the process that separates order from chaos; simultaneously, he embodied the state. Finally, the pharaoh/ king was the rejuvenator of his own "father". The "ideal" pharaoh/ king was therefore the exploratory process that gave rise to the state, the state itself, and the revivifying (exploratory) process that

updated the state, when it was in danger of too-conservative ossification. This massively complex and sophisticated conceptualization is given added breadth and depth by consideration of its "psychological" element. The "state" is not merely cultural; it is also "spiritual". As custom and tradition is established, it is inculcated into each individual, and becomes part of their intrapsychic structure. The "state" is therefore personality and social organization simultaneously; personality and social order conjoined in the effort to keep the terror of chaos at bay (or, better still, united in the effort to make something positively useful of it). This means that the hero/ king who establishes, embodies and updates the social world is also the same force that establishes, embodies and updates the intrapsychic world, the personality, and that one act of update cannot necessarily or reasonably be distinguished from the other. In "improving" the world, the hero improves himself; in improving himself, he sets an example for the world.

48. Initially, the "personality of state" was in fact a ritual human model (a hero) to observe and imitate (an entity represented in behavioral pattern); then a story about such ritual models (an entity represented in imagination), and, finally, and much later, an abstract construction of rules describing the explicit rights and responsibilities of the citizenry (an entity of words, the "body" of law). This increasingly disembodied and detailed construction develops as a consequence of processes ranging in abstraction from imitation to verbal representation, and comprises rules and schemas of interpretations useful for maintaining stability of interpersonal interaction. It is the establishment of these rules and schemas that gives determinate meaning to human experience, by bringing predictability to all social situations (to all things encountered interpersonally). The same thing might be said from the psychological perspective. It is incorporation of the "personality of state" – dominated by the figure of the hero – that brings order to the inner community of necessity and desire, and to the generative chaos of the soul.

49. The Mesopotamian culture-hero/ deity Marduk represents the capacity of the process of exploration (the unknown, eternally promising and threatening) to generate the world of experience. The Egyptian gods Horus-Osiris represent the extended version of that capacity, which means not only generation of the world from the unknown, but transformation of the pattern of adaptation which constitutes the known, when such transformation becomes necessary. It is the integrated totality of these processes that manifests itself in the Judeo- Christian tradition as the mythic Word of God (and which is embodied in Christ, the Christian culture-hero): "In the beginning was the Word, and the Word was with God, and the Word was God. The same was in the beginning with God. All things were made by him; and without him was not any thing made that was made. In him was life; and the life was the light of men. And the light shineth in darkness; and the darkness comprehended it not." (John 1:1-4).

50. This "Word" is the seminal force that serves to generate subject and object from the primordial chaos (and which therefore predates the existence of both); the force that engenders the tradition which makes vulnerable existence possible, in the face of constant mortal threat; and the force that updates protective tradition, when it has become untenable and tyrannical on account of its age. The "Word" is, as well, the force identified with man by God in Genesis, when man is created in God's image, and the process offered to man as pattern for ritual emulation – for the solution of the eternal existential crisis of the individual – in the corporeal form of Christ, the central culture hero of Christianity.

51. The Sumerian, Egyptian and Judeo-Christian myths portray ideas of exceeding complexity, in ritual (dramatic) and imagistic form. This form is not purposeful mystification, but the manner in which ideas emerge, before they are sufficiently developed to be explicitly comprehensible. Our forefathers acted out and provisionally formulated complete, "impressionistic" models of the world of experience, long before the "contents" of such models could be understood, in the way we currently conceive of understanding.

52. The Sumerians, ancient Egyptians and Old Testament Hebrews settled by all accounts on a world-story that made of existence and experience the eternal battleground of order and chaos, mediated by the heroic aspect of consciousness – the Logos, the Word, truth, light, enlightenment, illumination. In the east, this is the path of Tao, the Way, extant on the border between yin and yang, feminine generative chaos and masculine order. But it was the Christians, drawing on a tradition made concrete by the ancient Zoroastrians, who elaborated what might be the most illuminating mythology of all, describing the process that exists in absolute opposition to the power of the Logos, the Word, encapsulating that description in the person of the eternal adversary, Satan, the first-born "son of God".

53. We believe that we have dispensed with the necessity for an image of evil in this most enlightened of centuries. But even casual exposure to the literature describing the horrors perpetrated in the modern concentration camp, for example (and not only there) must necessarily convince even the most skeptical that there are important things that we still do not understand about the central nature of man. It might therefore be conservatively suggested that it may be unwise to dismiss centuries of speculation about the dark side of human nature without making every attempt to unlock the wisdom contained in that speculation.

54. Perhaps we might close this discussion, in consequence, by drawing on another source of potential knowledge which while not yet formalized might still be sufficiently meaningful to be worthy of attention. Aleksandr Solzhenitsyn, the Russian author, regarded the Nuremburg trials as the crowning achievement of the twentieth century (Solzhenitsyn, 1975, p.616). He said this because he believed

that the events of the holocaust were so terrible that they made it possible for human beings to unite over and above their conditional differences to state with conviction that "this was so wrong that no conditional difference could ever be utilized to justify its existence". While considering such events, recently, I made my way into a bookstore specializing in "extreme" literature the other day while considering such events, and found in a magazine (which I immediately put down) the description of an event so shocking (and perhaps not veridical) that it produced a week-long obsessional state within my consciousness. The book described a film made by the Japanese invaders of China during the initial stages of the Second World War, which documented "medical" experiments conducted upon Chinese prisoners of war. In one experiment, a Chinese woman was shackled outside in subzero weather to a device like a stock that held her arms out in front of her, parallel to the ground, encircled by a restraining device that fit around her upper arms. The medical experimenter poured freezing water over her extended arms, until they were frozen, and then brought her into the "laboratory" to then pour hot water over her frozen limbs, and then repeated the procedure until in front of the horrified victim's eyes her skin loosened and could be stripped off both arms leaving them bare and lifeless and useless and utterly terrifying to apprehend (that of course being the point of the experiment, and certainly not the "knowledge" that such a procedure generated). Whether or not this description is true, it is certainly something a human being could (and did) imagine doing, and it is true as well that everything horrifying imaginable has been practiced on the captive victims of foreign invaders at some point in the last one hundred years (see Chang, 1997, for an endless litany of similar examples).

55. This is partly because we "naturally" view the denizens of foreign states as partaking of the essence of the terribly threatening state of chaos, but also because of something more profound and frightening and revolting. It is one thing to understand that human beings are territorial, and that we "naturally" view all things that make up or inhabit the domain outside present understanding as threatening (because what we understand regulates our emotions; because everything we do not understand, including the foreign "other", threatens that regulation). It is another to understand that human beings will pursue the destruction and torture of the foreign other to the point where such pursuit itself endangers the stability and predictability of everything theoretically held dear by the pursuer. This is something truly mystifying: why would an individual risk the very ground he stands upon, merely to ensure the suffering of another? Documented evidence for this sort of behaviour certainly exists.

56. It seems clear that both the Nazis and the Stalinists, for example, were motivated by the desire to consolidate and expand the "territory", psychological and material, which their respective ideologies dominated. As a consequence of

this motivation, it seems logical to presume that the slave labour employed during the process of consolidation and expansion would be employed in a manner commensurate with this goal (a goal clearly within the realm of general human understanding: even if my enemy is pursuing his own interests, which I do not share, I may at least come to some comprehension of his goal-directed purposes, merely in the light of our shared humanity). But this logical presumption appears wrong, so perhaps it is the case that the motivating forces underlying Nazi and Stalinist action are not so clear, not so easily or comfortably or even familiarly comprehended. Solzhenitsyn describes, for example, the construction process of the Belomor canal, uniting the White Sea to Leningrad, undertaken from September 1931 to April 1933 (a canal one hundred and forty kilometers in length, excavated primarily by hand through land alternatively peppered with boulders and swamps, with no delay even for the harsh Russian winter). By Solzhenitsyn's estimation, 100,000 workers perished the first winter, and 250,000 died, in total. He cites Vitkovsky, a White Sea Canal work supervisor: "At the end of the workday there were corpses left on the work site. The snow powdered their faces. One of them was hunched over beneath an overturned wheelbarrow. He had hidden his hands in his sleeves and had frozen to death in that position. Someone had frozen with his head bent down between his knees. Two were frozen back to back leaning against each other. They were peasant lads and the best workers one could possibly imagine. They were sent to the canal in tens of thousands at a time, and the authorities tried to work things out so no one got to the same subcamp as his father; they tried to break up families. And right off they gave them norms of shingle and boulders that you'd be unable to fulfill even in summer. No one was able to teach them anything, to warn them; and in their village simplicity they gave all their strength to their work and weakened very swiftly and then froze to death, embracing in pairs. At night the sledges went out and collected them. The drivers threw the corpses onto the sledges with a dull clonk. And in the summer bones remained from corpses which had not been removed in time, and together with the shingle they got into the concrete mixer. And in this way they got into the concrete of the last lock at the city of Belmorsk and will be preserved there forever." (Solzhenitsyn, 1975, p.99)

57. Perhaps this story is no more terrible than any of the many others that could be told about human political behavior in the last one hundred years, except for one far from trivial and potentially overlooked detail. Solzhenitsyn visited the Belomor canal in 1966, only three decades after its completion, and found it abandoned, silent, unused: "There was no traffic on the canal nor in the locks. There was no hustle and bustle of service personnel. There were no steamer whistles. The lock gates stayed shut. It was a fine, serene June day. So why was it?" (Solzhenitsyn, 1975, p.101). [The chief of the guard explained:] "'It's so

shallow ... that not even submarines can pass through it under their own power; they have to be loaded on barges, and only then can they be hauled through."

58. Addressing the spirit of the dead Stalin, Solzhenitsyn cries: "And what about the cruisers? Oh, you hermit-tyrant! You nighttime lunatic! In what nightmare did you dream up all this? And where, cursed one, were you hurrying to? What was it that burned and pricked you – to set a deadline of twenty months? For those quarter-million men could have remained alive. Well, so the Esperantists struck in your throat, but think how much work those peasant lads could have done for you! How many times you could have roused them to attack – for the Motherland, for Stalin! 'It was very costly,' I said to the guard. 'But it was built very quickly!' he answered me with self-assurance. Your bones should be in it! That day I spent eight hours by the canal. During this time there was one self- propelled barge which passed from Povenets to Soroka, and one, identical in type, which passed from Soroka to Povenets. Their numbers were different, and it was only by their numbers that I could tell them apart and be sure that it was not the same one as before on its way back. Because they were loaded altogether identically: with the very same pine logs which had been lying exposed for a long time and were useless for anything except firewood. And cancelling the one load against the other we get zero. And a quarter of a million to be remembered." (Solzhenitsyn, 1975, p.102)

59. Daniel Jonah Goldhagen (1996) has also taken pains to demonstrate that Jewish concentration camp labour was also far from productive – not only that, but wasteful in a manner clearly not even in the theoretically ideologically-motivated interests of the Germans themselves. Such labour was torture, a parody of work, instituted merely as a prelude to death. Buchenwald prisoners carried sacks of wet salt from one useless location, to another, and then back again, merely so they could be engaged in the precise opposite of creative activity – that defining hallmark of the free individual – and humiliated thereby. Goldhagen states: "The phenomenon of Jewish 'work' was such a triumph of politics and ideology over economic self-interest not only because the Germans killed irreplaceable workers, but also in the more profound sense that even when they were not killing them, Germans, owing to the character of their racial antipathy, had great difficulties employing Jews rationally in the economy. The words and deeds of Heydrich, Himmler, and countless others reveal the real relationship between Jewish 'work' and Jewish death in Germany. Work put into motion beings whom the Germans themselves had already condemned to death, socially dead beings with a temporary lease on socially dead life. In its essence, Jewish 'work' was not work in any ordinary sense of 'work' – but a suspended form of death – in other words, it was death itself." (Goldhagen, 1996, p.323)

60. Only those who were possessed by a true aesthetic of evil could become so engaged in the torturing of a helpless victim that even self-interest might be suspended (and, one might comment, the sacrifice of one's own interest to the torture of others can be regarded as the most poetic expression of the force whose sole aim is the elimination of everything vulnerable, and therefore worthy of contempt, from the surface of the planet).

61. It is not sufficient explanation to argue that those engaged in the process were frightened, or were victims of the totalitarian spirit who were following orders, or were motivated by economic or other rational considerations (as if any of these explanations would justify the process, in any case). In the latter days of World War II, for example, when the Nazis had clearly been defeated but had not yet entirely capitulated, Himmler explicitly ordered those serving as guards in the concentration camps to stop the torture and killing (merely to decrease the likelihood of Allied retaliation for the commission of such crimes). But the killing did not stop, in spite of orders from the ideological and political leaders. The most straightforward explanation is that the killing was so implicitly satisfying to those involved that it did have to be either condoned or encouraged for any other (secondary) reason. And so the phenomenon of the "death march" spontaneously emerged: death camps were emptied of their prisoners, who were then forced by their jailers to march without direction (excepting that direction whose end point was the grave). Goldhagen states: "Viewing the maps of some... death march routes should be sufficient to convince anyone that the meanderings could have had no end other than to keep the prisoners marching. And the effects were calculable – and calculating. The Germans in charge of the marches, who, cut off from their headquarters, were almost always on their own while under way, were under no compulsion to trek aimlessly; they could have chosen to remain in one place, feed their prisoners, and deliver them to the Allies, who, no matter what, were bound to reach them in a few days or weeks. As far as is known, this never occurred. The death marches were not means of transport; the marching transports were means of death." Goldhagen, 1996, pp.336-337)

62. Why would individuals, theoretically motivated to protect the group identity that lent structure to their existence, dispense with what was after all pragmatically useful captive creative labour, just so they could further the torment of the captives? Why would individuals, theoretically obedient and thoroughly encapsulated within the confines of a totalitarian regime, dispense with their obedience, just at the moment when could have dropped their "enforced" brutality and still have maintained a patriotic facade? A rationally self-interested individual would not sacrifice his own security to ensure the suffering of others. The merely obedient and frightened individual would not work to maintain a system dedicated

to torture in the face of official orders to desist. Another level of explanation – indeed, another kind of explanation – must be sought.

63. We work to maintain and extend the boundaries of the stories which regulate our social existence, our individual goals, and our emotions, and to extend the boundaries of the stories which we embody and represent abstractly. Such stories have an integrity, at least in principle, which enables them to "make sense" of our past and present, and to structure those actions that take us into the future. Our stories are "true" to the extent that they allow us to utilize the wisdom we have generated in the course of our experience. But such wisdom is always incomplete. The transformations of the present invalidate the static knowledge of the past, and we are in consequence continually faced with the emergence of the unexpected. When confronted with anomalous information – which threatens the structure of our stories, the structure of our very identities – we must necessarily choose between two responses. In the first case, we admit to our eternal insufficiency, and mine the source of emergent anomaly for redemptive information. This means that we must tolerate the anxiety and uncertainty that necessarily emerges when the structures that regulate our emotions disintegrate, prior to their (potential) re-establishment. This pattern – the voluntary transformation of the "simple story" – has been conceptualized most simply as "steady state, breach, crisis, and redress", and appears central to the underlying structure of narrative itself (Bruner, 1986; Campbell, 1968; Jung, 1967, 1968). The same pattern appears to underlie rituals of initiation (Eliade, 1958) and transformations of explicit theory (Kuhn, 1970), and to provide structure for traditional systems of "thought", such as Christianity or Buddhism (Jung, 1967, 1968, 1969; Eliade, 1982). Our most profound stories and compelling dramas are predicated upon the archetype of transformation: "paradise, encounter with chaos, fall and redemption".

64. But the anomalous, frightening and revolutionary does not have to be met head-on. It can be avoided – not so much repressed, as the Freudians might have it, but at last not explored (or, if embodied in the actions or opinions of another, violently suppressed, even eliminated, as if the challenge dies when the messenger dies). The second pattern of response represents a voluntary failure to update the narrative structure guiding ongoing action, prompted by the desire to avoid intermediary chaos. In the long term, however, this failure means existence in a frame or box ever more like the medieval torture chamber: the room of little ease,. The room of little ease is too low for the prisoner to stand up in, and too narrow for the prisoner to lie down in. There is no comfort in the room of little ease. There is no comfort in the room of little ease.

65. Self-deception is generally considered to be the capacity to hold two conflicting notions in mind at the same time (Sackeim and Gur, 1978). This

conception is predicated on the misapprehension that the structured story and the anomaly which arises to challenge it have the same ontological status. This appears unlikely to be true. When an anomaly is signalled, at least initially, all that reveals itself is the insufficiency of the current conceptualization. This may be signalled only in emotion, in the activation of an internal state, devoid of content except for the "message": be cautious (then explore) (Gray, 1982; Damasio, 1996). The detailed manner in which that insufficiency exists, however, may only be revealed as a consequence of active exploratory behavior (behavior which risks the unpleasant revelation of further error, at more profound and important levels of presupposition). This means that the lie may be something as simple as "failure to explore a meaningful but threatening occurrence" – may be something more reminiscent of a sin of omission, rather than a sin of commission. But this does not lessen its seriousness.

66. What are the consequences of failure to explore? It is, after all, the exploratory creative process that makes "cosmos" out of "chaos". So the consequence of failure to participate in this process is the creation of an "imbalance" in the "divine" forces underlying experience. Failure to explore therefore means: (i) eradication of identity with the Logos, the creative Word – and, therefore, sacrifice of the process of adaptation in the desperate hope of maintaining the (no-longer valid) past consequences of that process; (ii) increasingly frantic rigidification of the boundaries between "what is known" and "what is unknown", in the hope of eliminating from contact or consideration anything, no matter how trivial, whose existence casts doubt on the increasingly-totalitarian structure of current belief; and (iii) the generation of a morass of unstructured potential around the now- walled-in individual, bereft of creative resources, and increasingly threatened by the self-induced re-animation of the terrible dragon of chaos: "The Marabout draws a large circle in the dirt, which represents the world. He places a scorpion, symbolic of man, inside the circle. The scorpion, believing it has achieved freedom, starts to run around the circle – but never attempts to go outside. After the scorpion has raced several times around the inside edge of the circle, the Marabout lowers his stick and divides the circle in half. The scorpion stops for a few seconds, then begins to run faster and faster, apparently looking for a way out, but never finding it. Strangely enough, the scorpion does not dare to cross over the line. After a few minutes, the Marabout divides the half circle. The scorpion becomes frantic. Soon the Marabout makes a space no bigger than the scorpion's body. This is "the moment of truth." The scorpion, dazed and bewildered, finds itself unable to move one way or another. Raising its venomous tail, the scorpion turns rapidly 'round and 'round in a veritable frenzy. Whirling, whirling, whirling until all of its spirit and energy are spent. In utter hopelessness the scorpion stops, lowers the poisonous

point of its tail, and stings itself to death. Its torment is ended." (Edwardes and Masters, 1963, p.124)

67. The individual who has sacrificed the best in himself in order to maintain a belief he knows is no longer tenable has placed himself in a position in which constant torment is inevitable. His domain of competence necessarily shrinks, as he pulls away from contact with everything that threatens but simultaneously renews; his capacity for flexible action deteriorates, as he continually defines and redefines himself as that which must run away from all that is unknown. As he surrounds himself with an ever-growing "domain of unexplored chaos", he increases the probability that all hell will break loose around him at some unspecified but ever-looming future point: "Him the Almighty Power/ Hurled headlong flaming from the ethereal Sky/ With hideous ruin and combustion down/ To bottomless perdition, there to dwell/ In Adamantine Chains and penal Fire" (Milton, 1961, p.38, part 1:44-48).

68. Under such circumstances, feelings of resentment and hatred will multiply, waiting to be released upon an unsuspecting, innocent and therefore more worthwhile target. Such feelings will express themselves in an archetypal pattern, through actions dedicated to the destruction and violation of existence itself: "- for whence/ But from the author of all ill could spring/ So deep a malice, to confound the race/ Of mankind in one root, and Earth with Hell/ To mingle and involve, done all to spite/ The great Creator?" (Milton, 1961, p. 71, part 2:380-385).

69. The human desire to be right, above everything – to assume omniscience (in the well-guarded guise, for example, of patriotic identity with the state) – generates a manner of being absolutely opposed to the process of creative exploration and the regeneration of the father. This manner of being has been represented most explicitly in Christian conceptions of the world (prefigured in part by the Zoroastrians), as the spiritual insurrection of Lucifer – "prince of lies" – who is motivated by the desire to dispense with the necessity of the creative Word. Such "maladaptive" identification induces personal suffering, of the most meaningless and therefore unbearable sort; this pointless suffering breeds intense resentment and the overwhelming desire to lash out, in vengeance. When calls for the "defense of the state" ring forth, therefore, in compelling and emotion-laden language, the already-totalitarian-in-spirit leap forth, to defend the right against all comers, to cloak their desperate desire for the generation of misery in the disguise of rectitude, and to fulfill their blackest fantasies: "With cohesion, construction, grit and repression/ Wring the neck of this gang run riot!" (Mayakovsy, cited in Solzhenitsyn, 1973, p.41).

70. Human beings, "made in the image of God", construct their familiar territory, their cosmos, out of chaos – the unknown – and then strive to maintain the dynamic equilibrium of what they have constructed and now inhabit. The

capacity to engage in such activity is "incarnation of the divine Logos", embodiment of the creative, exploratory "Word", whose activity finds eternal dramatic representation in the figure of the hero, the dragon-slaying savior. Rejection of the process of exploration and update of action-predicated belief is equivalent to identification with the mythical Adversary, whose credo was explicitly elaborated by Goethe: "The spirit I, that endlessly denies./ And rightly, too; for all that comes to birth/ Is fit for overthrow, as nothing worth;/ Wherefore the world were better sterilized;/ Thus all that's here as Evil recognized/ Is gain to me, and downfall, ruin, sin/ The very element I prosper in" (Goethe, 1979, p.75).

71. This means: the human story is the battle between good and evil, played out against a background of the dynamic interplay of order and chaos, fought for the redemption of fallen and painfully self-conscious man. This is a psychology grounded not merely in one hundred years of experimental science, nor in four hundred years of post-enlightenment rational thought, but in forty or more centuries of dramatic self-analysis, nested in a ritual-centered prehistory, which extends back perhaps to our non-human primate ancestors, and beyond.

REFERENCES

Adler, A. (1958). What life should mean to you. New York: Capricorn Books.

Brown, R. (1986). Social psychology: The second edition. New York: Macmillan.

Bruner, J. (1986). Actual minds, possible worlds. Cambridge: Harvard University Press.

Campbell, J. (1964). Occidental mythology: The masks of God. London: Penguin Books.

Campbell, J. (1968). The hero with a thousand faces. Princeton: Princeton University Press.

Carver, C.S. & Scheier, M.F. (1982). Control theory: A useful conceptual framework for personality, social, clinical, and health psychology. 'Psychological Bulletin', 92, 111-135.

Chang, I. (1997). The rape of Nanking: The forgotten holocaust of World War II. New York: Basic Books.

Damasio, A.R., (1996). The somatic marker hypothesis and the possible functions of the prefrontal cortex. Philosophical Transactions of the Royal Society of London (Biological Science), 351, 1413-1420.

de Waal, F. (1989). Peacemaking among primates. Cambridge: Harvard University Press.

Edwardes, A. & Masters, R.E.L. (1963). The cradle of erotica. New York: Julian Press.

Eliade, M. (1958). Rites and symbols of initiation: The mysteries of birth and rebirth. New York: Harper-Colophon.

Eliade, M. (1978). From the stone age to the Eleusinian mysteries. A history of religious ideas (Vol. 1.). Chicago: Chicago University Press.

Eliade, M. (1982). From Gautama Buddha to the triumph of Christianity. A history of religious ideas (Vol. 2.). Chicago: Chicago University Press.

Eliade, M. (1986). Images and symbols: Studies in religious symbolism. Princeton: Mythos.

Goethe, J.W. (1979). Faust, part one (P. Wayne, Trans.). London: Penguin Books.

Goldberg, E., Podell, K., and Lovell, M. (1994). Lateralization of frontal lobe functions and cognitive novelty. Journal of Neuropsychiatry and Clinical Neuroscience, 6, 371-378.

Goldhagen, D.J. (1996). Hitler's Willing Executioners: Ordinary Germans and the Holocaust. New York: Alfred Knopf.

Gray, J.A. (1982). The neuropsychology of anxiety: An enquiry into the functions of the septal-hippocampal system. Oxford: Oxford University Press.

Gray, J.A. (1987). The psychology of fear and stress. Problems in the behavioral sciences (Vol. 5.). Cambridge: Cambridge University Press.

Gray, J.A., and McNaughton, N. (1996). The neuropsychology of anxiety: Reprise. Nebraska Symposium on Motivation, 43, 61-134.

Heidel, A. (1965). The Babylonian genesis. Chicago: Chicago University Press (Phoenix Books).

Jung, C.G. (1967). Symbols of transformation: an analysis of the prelude to a case of schizophrenia. Collected Works. (Vol. 5). Translated by R.F.C. Hull. Princeton: Princeton University Press.

Jung, C.G. (1968). Psychology and alchemy. Collected Works (Vol. 5.).Translated by R.F.C. Hull. Princeton: Princeton University Press.

Jung, C.G. (1969). Psychology and religion: west and east. Collected Works (Vol. 13.). Translated by R.F.C. Hull. Princeton: Princeton University Press.

Kuhn, T. (1970). The Structure of Scientific Revolutions. Chicago: University of Chicago Press.

Lubow, R.E. (1989). Latent inhibition and conditioned attention theory. Cambridge: Cambridge University Press.

Luria, A.R. (1980). Higher cortical functions in man. New York: Basic Books.

Miller, G. A. (1956). The magical number seven, plus or minus two: Some limits on our capacity for processing information. Psychological Review, 63, 81-97.

Milton, J. (1961). Paradise lost (and other poems). New York: New American Library.

Neumann, E. (1955). The great mother: An analysis of the archetype (R. Manheim, Trans.). New York: Pantheon Books.

Nietzsche, F. (1968). Beyond good and evil. In W. Kaufmann (Ed. and Trans.) The basic writings of Nietzsche (pp.181-438). New York: Random House.

Peterson, J.B. (1999a). Maps of Meaning: The Architecture of Belief. New York: Routledge.

Peterson, J.B. (1999b). 'Individual motivation for group aggression: psychological, mythological and neuropsychological perspectives.' In Kurtz, L.

(Ed.). Encyclopedia of Violence, Peace and Conflict (pp. 529- 545). San Diego:
Academic Press.

Sackeim, H. A., & Gur, R. C. (1978). 'Self-deception, self-confrontation, and
consciousness.' In G. E. Schwartz & D. Shapiro (Eds.), Consciousness and self-
regulation, advances in research and theory: Vol. 2 (pp. 139-197). New York:
Plenum Press

Sarbin, T.R. (1976). 'Contextualism: a world view for modern psychology.'
Nebraska Symposium on Motivation, 24, 1-41.

Sokolov, E.N. (1969). 'The modeling properties of the nervous system.' In
Maltzman, I., & Coles, K. (Eds.), Handbook of Contemporary Soviet Psychology
(pp. 670-704). New York: Basic Books.

Solzhenitsyn, A.I. (1973). The Gulag Archipelago: An Experiment in Literary
Investigation (Vol. 1.). (T.P. Whitney, Trans.). New York: Harper and Row.

Solzhenitsyn, A.I. (1975). The Gulag Archipelago: An Experiment in Literary
Investigation (Vol. 2.). (T.P. Whitney, Trans.). New York: Harper and Row.

Vinogradova, O. (1961). The orientation reaction and its neuropsychological
mechanisms. Moscow: Academic Pedagogical Sciences.

Vinogradova, O. (1975). 'Functional organization of the limbic system in the
process of registration of information: facts and hypotheses.' In Isaacson, R., and
Pribram, K. (Eds.), The hippocampus, neurophysiology, and behaviour (Vol. 2,
pp. 3-69). New York: Plenum Press.

von Bertallanfy, L. (1975). Perspectives on General Systems Theory. New York:
George Braziller.

Wiener, N. (1948). Cybernetics : or, Control and communication in the animal
and the machine. Cambridge, Mass: Technology Press.

Wittgenstein, L. (1968). Philosophical investigations (3rd ed.) (G.E.M.
Anscombe, Trans.). New York: Macmillan.

Wrangham, R., and Peterson, D. (1996). Demonic males: Apes and the origins of
human violence. New York: Mariner Books.