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**Featuring Gregory M. Nixon's Work with
Commentaries & Responses**

Hollows of Memory



**From Individual Consciousness
to Panexperientialism and Beyond**

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Table of Contents

Article

Preface/Introduction <i>Gregory M. Nixon</i>	213-215
From Panexperientialism to Conscious Experience: The Continuum of Experience <i>Gregory M. Nixon</i>	216-233
Hollows of Experience <i>Gregory M. Nixon</i>	234-288
Myth and Mind: The Origin of Human Consciousness in the Discovery of the Sacred <i>Gregory M. Nixon</i>	289-337
.....	

Commentary

Brief Comment on Gregory Nixon's Hollows of Experience: Derrida <i>Frederick D. Abraham</i>	338-341
Playing With Your Food: Review of "Hollows of Experience" by Greg Nixon <i>William A. Adams</i>	342-345
Brief Commentary on Nixon's Three Papers <i>Roger Cook</i>	346-347
Commentary on Nixon's From Panexperientialism to Individual Self Consciousness <i>Stephen Deiss</i>	348-349
Nixon on Conscious and Non-conscious Experience <i>Gordon Globus</i>	350-351
Commentary on Nixon's From Panexperientialism to Individual Self Consciousness <i>Syamala Hari</i>	352-353
The Predictive Mind and Mortal Knowledge <i>Marc Hersch</i>	354-368
Consciousness as Shared and Categorized Result of Experience <i>Tim Jarvilehto</i>	369-371
Brief Comment on Gregory Nixon's Myth and Mind <i>Joseph McCard</i>	372-372
Commentary on Nixon's Three Papers <i>Marty Monteiro</i>	373-376

Brief Commentary on Nixon's "From Panexperientialism to Conscious Experience" <i>Richard W Moody</i>	377-378
Hollows of a Science of Consciousness? <i>Alfredo Pereira Jr.</i>	379-380
Comment on Gregory Nixon's "From Panexperientialism to Individual Self Consciousness" <i>Steven M. Rosen</i>	381-382
Consciousness, Non-conscious Experiences and Functions, Proto-experiences and Proto- functions, and Subjective Experiences <i>Ram L. P. Vimal</i>	383-389
.....	
<u>Response to Commentary</u>	
Response to the Commentary of Frederick D. Abraham <i>Gregory M. Nixon</i>	390-390
Response to the Commentary of William A. Adams <i>Gregory M. Nixon</i>	391-392
Response to the Commentary of Syamala Hari <i>Gregory M. Nixon</i>	393-394
Response to the Commentary of Marc Hersch <i>Gregory M. Nixon</i>	395-398
Response to the Commentary of Joseph McCard <i>Gregory M. Nixon</i>	399-399
Response to the Commentary of Steven M. Rosen <i>Gregory M. Nixon</i>	400-401

Article

Preface/Introduction

Gregory M. Nixon*

The question under discussion is metaphysical and truly elemental. It emerges in two aspects – *how did we come to be conscious of our own existence*, and, as a deeper corollary, *do existence and awareness necessitate each other?* I am bold enough to explore these questions and I invite you to come along; I make no claim to have discovered absolute answers. However, I do believe I have created here a compelling interpretation. You'll have to judge for yourself.

What follows is the presentation of three essays I have worked on over the past several years seeing publication for the first time. "Hollows of Experience" was written first as an invited chapter for a collection on the ontology of consciousness. However, when cuts became necessary, my chapter got the knife. Its length has prohibited it from publication in any print journal. "Myth and Mind" was written next as a journal article, but as my involvement with it grew so did its length, so it has also idled on my [websty](#) awaiting its call. "From Panexperientialism to Conscious Experience" was written most recently, but it is the only one to have been available to the public elsewhere than my own website. Under the name, "The Continuum of Experience", it was Target Article #95 on the recently closed Karl Jaspers Forum (for discussion purposes only).

I have put them in a different sequence here, for reasons of logical sense. Up first, "Panexperientialism" deals with an idea difficult for many to accept, namely that conscious experience is a particular mode of symbolically reflected experience that is largely unique to our species. However, I aver that experienced sensation in itself (as found, for example, in autonomic sensory response systems) goes "all the way down" into nature, and thus the title, panexperientialism.

Understanding this idea is helpful to dealing with the focus on language in Part I of "Hollows", next, since here speech and general symbolic interaction in general are found to be the catalysts for the creation of our consciously experienced world (our "lived reality"). In Part II, however, I explore how experienced sensations must be coeval with existence, and, with even greater temerity, how all this sensational existence might have arisen within some literally inconceivable background of awareness-in-itself that yet has a dynamism that occasionally breaks into existence as experiential events and entities. (The latter may sound wacky, but physicists and cosmologists are themselves attempting to come to terms with that which seethes with vast potential energy in what they refer to as the quantum vacuum.)

"Myth and Mind" was put third since it deals with a major lacuna in "Hollows" – that presumed prehistoric period when members of our species made the painful crossing of

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the symbolic threshold into the beginnings of cultural consciousness. Speech plays a central role here, too, but I look more at narrative structures from the dawn of self-awareness when ritual and myth became vital to human survival. Why would fantastic stories and bizarre rituals be necessary? I speculate that growing foresight led to the unavoidable realization of certain mortality, from which, in turn, emerged the secondary realization that we were now *alive*. In contrast to our yet-to-come death, we have life here and now, and by ritually identifying with a symbolically expanded mythic, i.e., sacred, reality, we may continue to live on after bodily death, just as our ancestors and loved ones must also do. Language and mythmaking are necessary to avoid mortal despair and they remain at the core of human consciousness.

As Ernst Cassirer (1944) has noted, language and myth are “twin creatures”, both metaphoric webs over a reality we can never wholly comprehend. We live in the symbolic and construct our works of imagination and wars of conquest to make life meaningful, to feel immortal, and to sense that we ourselves participate in a reality greater than ourselves. No doubt we do, but this does not mean our culturally constructed self-identities survive the death of our bodies, and it does not imply that our symbolic concepts can ever indicate the ultimate truth. We simply *must* symbolize an extended reality that was sacred to our ancestors: “Is it not our way, as illusory as it may be, to force continuance on our world and our life in the face of their inevitable ending? Are we not compelled to extend those imaginary horizons as far as we can despite the terror and the sometime joy their extension incites? Is their closure not a form of death?” (Crapanzano, p. 210)

Of course, this leaves me in the uncomfortable position of being forced to admit that this venture of mine must inevitably be another attempt at meaningful mythmaking. But what else could it be? This is certainly not a scientific proof though it is indeed an academically rigorous exploration. (Just try to count the citations!) I hope the reader will judge my thesis on the basis of its coherence, the sense of meaning it evokes, my intellectual responsibility, and, finally, the engagement it inspires. If you have read my expositions and found yourself immersed in the timeless questions I here call forth, I would call these writings successful (even if you violently disagree with my answers).

I am very grateful to Huping Hu for granting me this special issue of JCER in which to present my ideas in some detail. He has patiently dealt with my exuberant approach and allowed the many changes I kept coming up with right until the final publication date. I also wish to thank the many potential commentators who politely replied to my invitation, and, even more, I thank those who made time to write actual commentaries

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Contents

Preface/Introduction 213

From Panexperientialism to Conscious Experience:
The Continuum of Experience 216

Hollows of Experience 234

Myth and Mind:
The Origin of Human Consciousness in the Discovery of the Sacred 289

Article

From Panexperientialism to Conscious Experience

The Continuum of Experience

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Dionysos, god of unbridled experience, sailing with grapes and dolphins
(Greek vase, attributed to Exekias, c. 530 BCE)

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Abstract

When so much is being written on *conscious experience*, it is past time to face the question whether experience happens that is not conscious of itself. The recognition that we and most other living things experience non-consciously has recently been firmly supported by experimental science, clinical studies, and theoretic investigations; the related if not identical philosophic notion of *experience without a subject* has a rich pedigree. Leaving aside the question of how experience could become conscious of itself, I aim here to demonstrate that the terms *experience* and *consciousness* are not interchangeable. Experience is a notoriously difficult concept to pin down, but I see non-conscious experience as based mainly in momentary sensations, relational between bodies or systems, and probably common throughout the natural world. If this continuum of experience — from non-conscious, to conscious, to self-transcending awareness — can be understood and accepted, radical constructivism (the “outside” world as a construct of experience) will gain a firmer foundation, panexperientialism (a living universe) may gain credibility, and *psi* will find its medium.

Essay

Only then, when one has thrown light upon it and intellectualized it can one distinguish — and with what effort! — the shape of what one has felt. (Marcel Proust, 1934, p. 1014)

Among the many other binary forks in the road toward the *explanation* and *definition* of consciousness is the one in which some loosely identify consciousness with experience (and often, generously, with awareness too despite the fact that this term connotes less specificity and individually-limited attention), and others make a distinction between conscious experience and experience without the added quality of consciousness, i.e., *non-conscious experience*. It seems likely that the way we explain and define conscious experience directly affects the manner in which we consciously experience. Experience, *as we know it*, may well be a manifestation of our preconceptions of it. It is thus very important that we proceed cautiously when eliding similar definitions into one another.

Panpsychist philosopher Christian de Quincey (2002) calls the open or phenomenal understanding of consciousness the philosophical one: any microbiological twitch or sensation is understood as consciously experienced. The more closed (also known elsewhere as the subjective or cognitive) definition — in which consciousness is underlain by subconscious or unconscious mind or in which non-conscious or unconscious experience is reflected back upon itself through higher order processing and becomes conscious of itself — he calls the psychological one. (I’m applying my own terminology to what I take to be de Quincey’s intent.) The psychological definition he calls self-reflective awareness, but then this implies there is awareness that is not self-reflective, or, in my terms, does not have a subject or self to do the reflecting.

He’s right about the majority psychological practice here, but there are problems with his open philosophical definition of ‘consciousness all the way down’, including that many professional philosophers do in fact stand by what he calls the psychological

definition, but also that the open 'philosophical' or phenomenal definition does not leave room for non-conscious, subconscious, or preconscious processing (which might be understood as purely organic or even inorganic experience). It should further be borne in mind that *human conscious experience* is all we *know* of experience, so, when we use the term 'consciousness' for all forms of awareness, we can only be assuming our own conscious experience as the referent for all the other forms consciousness may take.

There are those who equate conscious experience with experience in all forms while distinguishing reflective or self-consciousness from both. Then there are others who distinguish conscious experience from experience *in itself* but identify reflective or self-consciousness with conscious experience itself. The previous sentence is worth reading again if you don't quite get it because it summarizes the two major conceptual positions that still contend for the final word in defining consciousness. A look at some of the publications that surround me illustrate these two contending sides in this subtle and important turf war of the mind.

Materialist-mysterian philosopher Colin McGinn (1999) defines consciousness as the property of any 'experiencing subject' and, for him, such subjectivity is present in dreaming states and in anything that experiences. So an entity such as a nematode that experiences momentary sensations, but does not have the capacity or symbolic tools to realize it is doing so, would nonetheless be understood as being conscious. The human capacity to become aware of one's own sensations and life in general adds nothing but reflection for McGinn; it is the experience not the knowing that counts: "To experience those sensations is not the same as to think that you experience them, or to say that you do. We do often reflect on our own experiences and tell each other about them. So we should not confuse consciousness with self-consciousness" (pp. 2-3). Velmans (2000) siding with McGinn, simply states, 'A person, or other entity, is conscious if they experience something; conversely, if a person or entity experiences nothing, they are not conscious' (p. 6).

Contrarily, David Cohen (1998), in his illustrated attempt to speak for mainstream psychology, states:

Although no broad consensus exists as to the precise meaning of consciousness, it can be described as the state of mind that allows us to 'know' our own mind, to entertain thoughts about thoughts, to monitor our selves and our environments, and to use this information to make plans and formulate hopes and fears (p. 67).

Like Cohen, those of the 'higher order' thought (HOT) or perception school of philosophy insist that *knowledge of one's own experiencing* is one step removed from that experience in itself and precisely equate consciousness with self-consciousness, as do the symbolists and phenomenologists (see Zahavi, 2005). Tor Nørretranders (1998) agrees, adding the qualities of self-consciousness to consciousness itself: 'Consciousness is the experience of experiencing, the knowledge of knowing, the sense of sensing' (p. i).

Up to this point, it seems almost a matter of choice, with the slight problem that we can know nothing *certain* about the experience of non-human entities or infants. Language

at least allows other persons to tell us of their experiencing. There are more considerations, however, that add a particular intensity to this question, since the uniqueness and autonomy of conscious experience are at stake.

Dictionaries, even specialist dictionaries, are not going to be of much help since they merely reflect the contraries of common usage. It may be a point worth noting, however, that the etymology of the term 'conscious' indicates its origin in the Latin *consciūs*: 'knowing with others, participating in knowledge' and is in accord with the first definition given by the Houghton-Mifflin Dictionary of the English Language (Morris, 1982) for 'Conscious: Having an awareness of one's own existence, sensations, and thoughts, and of one's environment.' Not only does this etymology suggest that consciousness implies knowing *of* one's own somatic feelings, sensations, and experiencing, but also knowing *with* others: *com-* together + *scire-* to know, suggesting the intersubjective intermingling of conscious selves. Non-*consciūs* experience is left as possibility in this definition. Needless to say, dictionary definitions indicating otherwise can be found.

Experience is another term so many of us assume to understand but which, on the contrary, proves to have a long history of variable meanings. Cultural historian, Martin Jay, recently did a history of philosophy survey of these often contentious meanings in western culture called *Songs of Experience* (2005). To frame his study, Jay early on explores the two German words with slightly different meanings that are both translated into English by the word 'experience'. One of them suggests 'raw' or 'pure' experience, unmediated by language or subjectivity so it remains unconscious of itself. The other equates more readily with the common English assumption that experience always implies conscious experience.

Erlebnis contains within it the root for 'life' (*Leben*) and, according to Jay, 'is often taken to imply a primitive unity prior to any differentiation or objectification. ... Although *Leben* connotes the entirety of a life, *Erlebnis* generally connotes a more immediate, pre-reflective, and personal variant of experience..' (p. 11). This implies a meaning for experience that does not necessarily accord with our assumed meaning for *conscious* in that *Erlebnis* is 'immediate, pre-reflective, and personal...'. In this case it can be seen that *Erlebnis* as *experience simpliciter* is not the same as reflective *conscious experience*. Like the unconscious of psychoanalysis, it may be thought of as non-conscious experience.

Erfahrung, the other German term we translate as experience, is on the other hand more associated with differentiating sense impressions or making cognitive judgments about them. 'But,' says Jay, 'it also came to mean a more temporally elongated notion of experience based on a learning process, an integration of discrete moments of experience into a narrative whole or an adventure'. Its roots are found in the German word for journey (*Fahrt*) that may connote a journey into the unknown (*Fahrt ins blaue*), like the journey through life: 'As such, it activates a link between memory and experience, which subtends the belief that cumulative experience can produce a kind of wisdom that comes only at the end of the day' (p. 11). *Erfahrung* seems to be more in accord with our common understanding of experience, as 'the best teacher' or as the

remembered present, which equates roughly with the consensus understanding of *conscious experience* (or consciousness, if you must).

Though Jay does not deal directly with the question of how *experience* and *conscious experience* may be related, if at all (which is a major lapse in a book whose intention is to explore all meanings of the term *experience*), some of the authors he reviews do take a stand for direct, non-conscious experience as the precursor and foundation of subjective consciousness. Jay refers to the ‘paradoxical notion’ (p. 129) of *experience without a subject* (or, sometimes, from another angle, *post-epistemological experience*) and notes the idea has been posited approvingly by no less than Schopenhauer, Heidegger, Benjamin, Adorno, Bataille, Foucault, Barthes, and possibly Oakeshott, Dewey, and the trickster of text, Derrida. Experience without a subject of that experience cannot easily be subsumed under the label of *consciousness*. It may be more along the lines of the non-subjective yet relational and experiential interaction between organism and environment (cf. Järvillehto, 2000, 2004).

Finally, some of the poststructuralist or deconstructive authors cited like Jacques Lacan insist that experience, as such, cannot be posited as a meaningful term at all. As Lacan’s translator, Alan Sheridan (1977) put it: ‘What is prior to the assumption of the symbolic, the real in its “raw” state (in the case of the subject, for instance, the organism and its biological needs), may only be supposed, it is an algebraic x' ’ (pp. ix-x). This simply implies that we cannot be conscious of non-conscious experience.

Another point toward considering conscious experience as distinct from experience *per se* is that we have by now much evidence for non-conscious experience and widespread – dare I say *subliminal*? – acceptance of it. Literary history is replete with finely drawn characters thinking they were guiding their lives by their rational conscious choices but were actually being driven by emotions or even instincts beyond the ken of their own subjective awareness, as the astute reader would observe. Other times, we all have witnessed characters – both in literature and in life – who have struggled mightily to avoid disturbing truths they sense subconsciously (as we say) or who overcompensate for certain semi-conscious deficiencies, e.g., the braggart or bully. (See appendix.)

For experience to become conscious, it must be readied for intellection. It must be sliced, diced, and made an object of the mind, as Marcel Proust (1934), that indefatigable investigator of memory, well knew:

One experiences, but what one has experienced is like those negatives which show nothing but black until they have been held before a lamp, and they, too, must be looked at from the reverse side; one does not know what it is until it has been held up before the intelligence. Only then, when one has thrown light upon it and intellectualized it can one distinguish – and with what effort! – the shape of what one has felt (p. 1014).

It’s hardly fair to say that Sigmund Freud (e.g., 1965) *discovered* the unconscious at the beginning of the last century. He did, however, bring it into the lexicon of daily human speech. Equating symbolic culture and cognition with consciousness, Freud’s deeper

epigonus, C.G. Jung (1971), who expanded the idea of the unconscious into the collectivity of all life, flatly declared: 'It is just man's turning away from instinct — his opposing himself to instinct — that creates consciousness,' adding, significantly, 'Instinct is nature and seeks to perpetuate nature, whereas consciousness can only seek culture or its denial' (p. 3). The term is misleading, however, in that *unconscious* has the connotation of a coma-like state, lacking both consciousness and experience.

There is not the space here to explore the great divide that allowed embodied experience to become conscious of itself, but Jung's suggestion is worth noting: The cultural communion of language is precisely the condition of applying symbolic categorizations to experience to make it seem objective to conscious subjectivity. Human culture is dependent on relationships in which those attaining conscious selfhood expect others in their culture world to do so too. This relationship is intersubjective in that it both sustains and draws forth conscious subjects of experience. We simply are not conscious of non-conscious experience until we, via the relationships of cultural intersubjectivity, make it so.

In his watershed book, Julian Jaynes (1976) made the point even more simply: 'Consciousness is a much smaller part of our mental life than we are conscious of, because we cannot be conscious of what we are not conscious of' (p. 23). He continued with an apt metaphor:

How simple that is to say; how difficult to appreciate! It is like asking a flashlight in a dark room to search around for something that does not have any light shining up on it. The flashlight, since there is light in whatever direction it turns, would have to conclude that there is light everywhere. And so consciousness can seem to pervade all mentality when actually it does not (p. 23).

It should be noted that no one is implying the line between the light of conscious apprehension and experiencing 'in the dark' is sharp or apparent or that there are not important degrees of difference within what I am calling non-conscious experience and conscious experience. Experience is a continuum, as Alfred North Whitehead explained. Neither between human individuals nor amongst species can the line of distinction be clearly drawn.

As one of the first philosophers (as distinct from psychoanalysts and literary authors) to make use of the distinction, Whitehead (1978) wrote:

Consciousness flickers; and even at its brightest, there is a small focal region of clear illumination, and a large penumbral region of experience which tells of intense experience in dim apprehension. The simplicity of clear consciousness is no measure of the complexity of complete experience. Also this character of our experience suggests that consciousness is the crown of experience, only occasionally attained, not its necessary base (p. 267).

As Whitehead indicates, consciousness is the proverbial tip of the iceberg of a whole world of experiencing whose bottom or origin, if there is one, is shrouded in mystery

and must be, by definition, unknowable. Consciousness itself, as self-consciousness, may be ‘the crown of experience’ since it is *that which knows* and seems to guide long term planning. However, whether the consciousness we daily experience is the ‘crown’ of all potential experiencing remains to be seen.

Uncomfortable as it may be to some, there is wide evidence that the conscious does not direct decisions in the immediate present. Not only current behaviours but even the flow of individual thoughts may be ignited from a source whose origin disappears beyond the light of consciousness. This is to say that the process of consciousness may less determine what we do or experience, even in the future, than it (consciousness) is itself determined by pre- or non-conscious experience. Non-conscious experience, unlike *the unconscious*, includes the term ‘experience’ because it is responsive and effectual (if not exactly efficient). In the end, however, the cycle must be mutually creative, consciousness taking aim and the unconscious powers working toward or against it in the present, the dialogue of how we become.

Arguments against distinguishing between experience as such and experience that has become conscious of itself have been stubborn and steadfast. They usually insist that experience *means* consciousness in everyday speech, and that’s that. I hope I have shown that the historical use of the term is not nearly so consistent. If something is experienced, it must have been consciously attended to, so the argument goes, otherwise it is merely something like autonomic activity. But non-conscious experience is not just autonomic. Non-attended (non-subjective) experience has *affect* — that is, it disturbs or creates emotions — and it has notable *effects*, too, on actual behaviour or on thought.

The late, highly respected physiology researcher Benjamin Libet noted this as early as 1965:

It has become generally accepted that a large, perhaps even a major part of our mental activities can take place without our being consciously aware of them. Though apparently unconscious, they are nevertheless part of significant mental experience since there is evidence that such activities can participate in later mental and behavioral manifestations — cognitive, affective, or conative (p. 77).

Consciousness is certainly dependent on the animal capacity for experience. If it were not, consciousness could not be experienced and consciousness without experience is difficult to conceive (though this may be the goal of AI research). Conversely, experience without consciousness — that is, experience as responsive interactions within an ecosystem or perhaps any complex system (as opposed to a culture) but without any sort of awareness of that experience — is less difficult. Experience without knowledge or conceptual cognition throws into doubt the whole assumption of there being any sort of internal, centralized experiencer (or subject of experience, the *homunculus*) in other natural organisms as we imagine there being in ourselves. Is there a little experiencing *bat-munculus* within bats?

Despite what many would argue, experiencing interaction with an environment in no way necessitates there being an inner representation of such an environment: The

interaction may itself be the mutual moment of experience, existing like a flash of electricity between entities not within them (or not necessarily in one centralized subjective location within). Experience may be modular and not centralized in 'lower' organisms but occurring in, say, a limb. Without memory or anticipation, the experience would consist only of the second or so of interaction in itself. (Louis Gidney, 2007, offers a more sophisticated version of this 'relational existing'.) We are not in the position to assume an organism is a self-contained monad warring with nature instead of it being *an aspect of nature experiencing itself* (as a sentient response system — or *systems*). As the cliché goes, the lights might be on, but there may be *no one* (no self or subjective centre) home. The body is the entity itself, one pole of dynamic sentient experience.

What we are conscious of is experience. The world is the experienced world, not a mechanical-material objective entity that is the same for all who experience it, perceptively or otherwise. Raw experience is changed when it attains the quality of being conscious of itself. It changes from a blindly felt reality process into an object of knowledge, an artifact of memory. By knowing it, we interpret it; we change it into symbols; we stabilize its dynamic mutability. We re-cognize it and make it our lived reality. Experience is divided into subject and object.

Conscious experience is understood here as a threshold that, once crossed, cannot be uncrossed without losing, in essence, consciousness. As Ernst Cassirer (1944) put it, noting that the threshold of the symbolic leads away from natural processes:

Yet there is no remedy against this reversal of the natural order. Man cannot escape from his own achievement. He cannot but adopt the conditions of his own life. No longer in a merely physical universe, man lives in a symbolic universe. Language, myth, art, and religion are parts of this universe. They are the varied threads which weave the symbolic net, the tangled web of human experience. (p. 25)

One may wonder, finally, what difference this distinction makes. When we already have terms like the unconscious mind or the convoluted *panprotopsychism*, what need have we to stress non-conscious experience? This question alone is worth another major essay to consider the options. As I indicated above, I see experience as Whitehead did, not really consisting of just two types, but as a continuum from momentary flashes into existence of 'occasions of experience' (probably related to quantum fluctuations) to the boundaryless experience which blossoms into transpersonal awareness. Many of us would not be willing to grant consciousness to a nematode or to a paramecium, much less to a subatomic pilot wave collapse, yet the former two at least are living entities that respond to changes in their environment. In fact the changes of one part of an ecosystem, in this case, an individual organism, causes changes in the entire ecosystem, so interrelated and connected are all the parts. Such responses by both organism and environment can be parsimoniously imagined as most likely concurrent with experiencing; this would explain the incredible balance and coherence of living and other systems. It also suggests that coherent systems, especially ecosystems, are harmonized by their multi-centric experiencing. Sub-atomic occasions of experience I

leave for Whiteheadians and quantum physicists like Henry Stapp (1979) to explore, though this is a rich field for speculation.

Radical constructivism has suffered criticism because naïveskeptics ask, ‘You mean the world out there is like that because we make it so? We could just change it at will?’ Some constructivists have tried some interesting contortions to explain why, if reality is a construction of conscious experience, we cannot just wish it to be what we want. Non-conscious experience better fits the explanation of our lived world being a world conditioned by experience, perceived as the result of past experience — and this would include the experience of species and all that evolved into our species and all that went before that and is still unfolding today.

The need of *psi* or so-called extra-sensory perception for non-conscious experience should be self-explanatory. In this view, *psi* phenomena probably happen to everyone all the time, since we are mimetic, relational, interconnected cultural creatures. This is denied by various attempts to demonstrate conscious control over such paranormal apperceptions or activities. But if the receiving, sending, sharing, or actively applying of paranormal *psi* phenomena is accepted within non-conscious experience both its elusiveness and reality can be explained.

The point here is that experience without consciousness or a subject of that experience opens the door to filling a major lacuna in the theorizing of panpsychists and radical constructivists, not to mention *psi* researchers. Panpsychism is related to animism, the ancient sense of a cosmos alive with minds in all entities and phenomena. A humanlike mind in all things is too much for most of us today to accept but a form of non-conscious experience may not be. David Skrbina (2009) has recently published a collection of philosophy essays mostly supporting panpsychism, but my review (2009) points out how pre-conscious panexperientialism would solve much confusion. This seems to be the idea of what the clumsy term *panprotopsychism* was attempting to conjure. A better suggestion is *panexperientialism*, apparently first used by D.R. Griffin (Cobb & Griffin, 1977) with reference to Whitehead’s process cosmology, though Whitehead himself would be best described as a panentheist because of his Godism. If panexperientialism seems to grant too much to sensation, try the agonized panprotoexperientialism so the presumed mechanical rudiments of experiencing appear everywhere on the scene first. However, only panexperientialism implies straightforwardly that the entire universe is in some way alive or has the potential of becoming so at any time anywhere.

One can see that the implications of universal experiencing are startling, perhaps even awe-inspiring. If rudimentary experience began with sensations derived from relational encounters between two fundamental entities, which later became internalized within each entity as its own via physiological memory traces (thus, in essence, creating an experiencing entity), as Deiss (2009) has suggested (though he still equates experience with consciousness), it seems to me some potential for such experience must precede or surround it. I suggest such a potential for relational experience pre-exists as universal awareness-in-itself, a sort of background radiation of the psyche that is without objects of awareness, intentionality, or self-direction (indeed *without self*). Any way we conceive of this unconscious yet aware potential existence must be insufficient, though I must

suggest any awareness without content cannot really be said to even *exist* as any sort of active principle or entity. Perhaps it is nearest to the void consciousness of the mystics that is without attributes, so about which nothing sensible can be said (and 'it' certainly resembles no known conceptions of God or gods). Yet from this slumbering source somehow spring both rudimentary entities and their experiential interactions (which thus incarnate this empty awareness-in-itself). Some few in science have also seen the need to conceive of this inconceivable semi-existent source. This fundamental, essential, yet invisible bond — the source, foundation, and end of all things — is thought to 'exist' as infinite energy potential everywhere in what has been called the quantum vacuum, quantum flux, quantum foam, ZPE, dark energy, Erwin Laszlo's Akashic Field (2004), and so on. Needless to say, such an invisible pan-present non-presence as *experience-in-waiting* (awareness-in-itself) would have zero dimensions (0-D) and remain at time-zero in the eternal present.

With this in mind, I suggest the distinction between conscious experience (aka consciousness) and *experience as such* is well worth making. If the terminology offends, call it unconscious experience, consciousness without mind, core consciousness, or experience without a subject, as others have. The idea remains the same. What is it like to be a bat, to have non-conscious experience? We do it all the time, but we return with no memory of it or, at best, a shudder, a fading sensation, an evanescent image, a fleeting dream in the hollows of memory.

Appendix

TWENTY-ONE INDICATORS of Non-Conscious Experience

EMPIRICAL ABNORMAL

1. Blindsight. This is the premier example in the science community. When one feels oneself to be blind (in fact consciously blind) yet responds appropriately to certain visual stimuli, what can be said about that one's responses? How can we account for readings that indicate a brain in action, a body galvanically responding? Most important, how can we account for knowledge gained and displayed yet consciously denied? Must it not be said that one has seen non-consciously and that one has gained knowledge non-consciously? Of course. On the other hand it is clear that the total person has had a visual experience and can in some sense recall and refer to the information gained. To deny that one has *experienced* those visual impressions would be to deny that any information processing has occurred, which is clearly not the case. Ergo, the person has experienced non-consciously. (See, e.g., *Blindsight* (May 1999); Stoerig & Cowey, 1997; and of course Weiskrantz, 1986.)

2. Anton's Syndrome, the denial of blindness, almost the opposite of above, a type of anosognosia. Anosognosia 'denotes the inability to recognize a state of disease in one's own organism' (Damasio 1999, pp. 209-10). This is the situation where a person has become physiologically blind yet still consciously experiences a world of sight. The visual world is, apparently, projected from memory. This is hardly enough to deal with

the real world, so despite conscious denial, soma moves about, bumping into things, stumbling, falling, not sharing in the perceptions being discussed. The conscious mind continues to believe it is seeing, but here the living body is doubtlessly experiencing blindness and its the effects.

3. Prosopagnosia, the most dramatic form of anosognosia, facial anosognosia. Here consciousness can no longer recognize faces, even those once intimately known. Yet cases abound where brain activation and skin galvanization reveal that on some level the face is being recognized. In some cases, there are even strong emotional responses to the ‘forgotten’ face but the subject does not know why. In one case, a stroke victim with facial anosognosia was confronted with his brother with whom he had been very close. He sadly shook his head, asking the doctor who this person was. *But* his galvanic response became electric, nasal passages flared, eyes dilated, breathing became laboured, body temperature rose, he flushed, and his heart beat more rapidly. His non-conscious being — his body! — experienced full recognition. His conscious mind did not. Obviously, recognition is being non-consciously experienced. When one’s physical being is obviously experiencing a response, it would be sheer dualism to say *the person* is not, since it would exclude the body from the person! (See, e.g., Sacks 1985.)

4. Amnesia. Similar to the above, there are cases of physiological and emotional responses to people not consciously remembered. There are also confirmed cases of procedural memory recalled and acted upon though the conscious mind denies such acts are possible. Learning itself, in these cases, oftentimes takes place non-consciously. (See, e.g., Rosenfield, 1992; Schacter, 1987, 1996.)

5. Split Brain Experiments. After the division of the corpus callosum, most subjects function normally. As is well known, however, consciousness — according to the conscious subjects themselves — most often resides in the symbol processing left hemisphere. It does no good to explain the perception, learning, and responses centered in the right hemisphere as another sort of consciousness when the subject denies any sort of awareness of such experiences. Again, physiological and emotional response readings indicate that subjects are experiencing, but are not conscious of it. (See, e.g., Gazzaniga, 1970; Sperry, 1965, 1983.)

6. Sleepwalking. People will do things in a state of somnambulism — deep, non REM sleep, non-insane automatism — and later have no memory of such actions. Sleepwalkers encountered, however, sometimes appear to be perceiving and even feeling emotions (though they probably also look *absent*). Ken Parks, a Canadian, was found not guilty of murder for rising, driving his car 23 kilometres away, maiming his father-in-law and killing his mother-in-law because he was sleepwalking. However, Scott Falater, an Arizonan with a history of sleepwalking, who knifed his wife to death in the family pool in 1997 was found guilty as charged (see [Homicidal Somnambulism](#) in Wikipedia).

7. Dream Effects. There are many anecdotal reports of people's moods being altered by dreams of the night before, none of which have contents that can be explicitly recalled. There are after-effects & after *affect*. Were the dreams then not experienced?

Dream effects are not abnormal, but they are not *normally* considered an aspect of daily consciousness. (*cf.* Hillman, 1979; Laberge, 2004)

8. Alcohol/Drug Effects. There are *many* cases of someone being so bamboozled by drugs (including alcohol) that they walk, talk, emote, & suffer but the person everyone knows simply is not present. The lights appear to be on but there is nobody home, and later the individual retains no conscious memory or only fragments thereof. Obviously, somatic experience of some sort is occurring but to the conscious person, later, such experiences are dismissed as blackouts. Blacked out people are sometimes able to drive, travel, work and generally function in society, all the while operating without forming memory. Others are more obviously in a zombie state yet still moving about. (See, e.g., Sweeney & Liston, 2004.)

9. Post-Hypnotic Suggestion. People will do actions or experience feelings they have not consciously instigated under post-hypnotic suggestion. In fact consciousness reveals itself as the great rationalizer or excuse maker here: When a person suddenly awakes from a hypnotic suggestion to discover herself running down the hallway of a crowded auditorium, she improvises explanations on the spot for her actions, for she clearly has no idea why she was doing the action. Was she not experiencing but unconscious when under the influence of post-hypnotic suggestion?

EMPIRICAL NORMAL

10. Implicit Memory/Learning/Knowledge or Priming. Getting away from somewhat aberrant forms of experience, research in cognitive science has confirmed that there is a whole field of knowledge that is non-conscious but which continues to have effects on behaviour and cognitive associations. The knowledge is known, the memories remembered, the learning learnt – but implicitly, that is, non-consciously. These, and much more, are part of what has been called the ‘cognitive unconscious’ (Lakoff & Johnson, 1999). Even a hardline neurologist like J.A. Hobson (1999) accepts this. Subliminal memory priming should be included here (*cf.*, Schacter, 1987, 1989, 1996; Thomas, 1997). Polanyi (1958) called his epistemological version *tacit knowing*.

11. Subliminal Perception. Related to the above. In an infamous Republican ad from the U.S. Bush/Gore presidential election, the word ‘Democrat’ was shown then quickly the last three letters of the word were zeroed in on (RAT), magnified and flashed briefly across the TV screen too quickly to be consciously perceived by most. The hope, apparently, was that viewers would unconsciously connect ‘democrat’ with ‘rat’. The subliminal perception and response is non-conscious experience. (See, e.g., Kunst-Wilson and Zajonc, 1983; Merikle & Daneman, 1998.)

12. Habitual Behaviour. When one behaves automatically from behaviours so well learned that conscious attention is not necessary, one may be said to be experiencing the actions non-consciously (e.g., highway driving, riding a bicycle). Procedural memory itself often becomes unconscious. One need merely reflect upon one’s lived experience or see again, for example, Schacter, 1987, 1989, 1996.

13. Reflex Actions. Both the kind the nervous system does spontaneously — i.e., blinking, pulling back a digit from something hot — and the unusual reflex actions of someone in crisis. It would also include the best athletes who act before consciousness can process a plan or remember clearly such actions later. In the latter case, it may be said that non-conscious experience is an achievement. (See, e.g., Williams, 2004.)

THEORETICAL

14. Pre-Conscious and Feral Humans. Humans who have not learned any form of symbolic communication may be said to be experiencing non-consciously. There is no doubt of their somatic perceiving or their raw emotions, but mental experience, for them, verges on being contentless. As Helen Keller spoke about her state before awakening to other minds through symbolic communication: ‘I cannot hope to describe adequately that unconscious, yet conscious time of nothingness’ (1910, p. 113). Obviously an ‘unconscious, yet conscious time of nothingness’ is not unconscious like a rock, but it clearly is not consciousness as she came to it later. Were she here, I’d wager that Ms Keller would be grateful for the reconceptualization of ‘non-conscious experience’. This semi-neologism applies to infants as well. (Also see Candland, 1993; Shattuck, 1994.)

15. Non-Human Animals. In this way, the experience of infrahuman animals may be conceived. Though it cannot be proven since they refuse to talk to us, it appears non-mammals and mammals with limited cerebral cortices experience ‘in the dark’. Their experiencing, feeling, and acting may well be driven only by the evolved instinctual wisdom of their species. Complex nonhuman mammals may experience anomalous blips of individualized conscious awareness, especially those living in highly social environments with elaborate communication systems, e.g., cetaceans, or those brought up by humans. (See Budiansky, 1998; Kennedy, 1992.)

16. Psychoanalysis. Though Freudian theories and therapies have been much disparaged, they remain noteworthy for introducing the concept of the *unconscious mind* to a wide audience. There is little doubt that all of us suppress and even repress unpleasant memories and disguise our less pleasant motivations even from our selves (ego consciousness). Such repressions and disguises continue to affect us, so the non-conscious mind consists of experiences. Freud’s *epigoni* have not abandoned this central concept. For Lacan (1977), the unconscious is structured like a language, and Kristeva (1982) feels our repressed horror is the loss of Mother. (See, e.g., Freud, 1965; Brown, 1959; Sayers, 1993.)

17. The Collective Unconscious and Mythic Memory. Mythic images and tales tell of the creation of personhood and self-agency, whether these myths are heroic (Promethean fire-theft) or punitive (Adam and Eve’s expulsion). Some of Jung’s progeny like Neumann (1954) call upon world mythology as testimony to the defeat of non-conscious instinct (the *uroboros*) by culture-bringing heroes. Myth and language have been seen as ‘twin creatures’ which together have allowed us to symbolize our own experience and thus re-present it to ourselves consciously by such as Cassirer (1946). Here non-conscious experience would naturally arise from the archetypes of the collective unconscious (i.e., the *experience of the instincts*), and conscious experience

from the symbolization and communication of such primary experience as art, myth, narrative, exposition, and culture.

18. Panexperientialism. This theory derived from Whitehead posits that fleeting moments of experience occur ‘all the way down’ in Nature, right into momentary ‘occasions of experience’ in sub-atomic interactions. As evolution becomes more complex, experience is extended by compound organic entities. Only humans, however, have the freedom to become conscious of their own experiencing and to more or less control it. Also known as panprotopsychism (e.g., Hameroff & Penrose, 1996). (Also see Griffin, 1998b; de Quincey, 2002; Skrbina, 2009). Some panexperientialistic *Journal of Consciousness Studies* articles include Burns & Engdahl, 1998; Griffin, 1998a; de Quincey, 1994; de Quincey, 2000a; de Quincey, 2000b; and Seager, 1995.)

19. Physics and Quantum Potentia. Edging into more rarified theory yet related to the above, many of those who equate quantum phenomena with consciousness see non-conscious experience as the state of the organism before the *collapse* of the wave function (or before the backaction of the pilot wave in Bohm or before the opening of the quantum gate in Eccles) which leads to the enhancement of experience into conscious experience of a solid ‘external’ world. (See, e.g., Bohm, 1980; Stapp, 1979; Hameroff & Penrose, 1996; Penrose, 1994.)

20. H.O.T., Narrativists, and Phenomenology. Higher Order Thought or Higher Order Perception philosophers have long insisted that self-consciousness is not a specialized form of consciousness but is, in reality, consciousness itself. That leaves a whole realm of fauna from those who indulge in lower order cognition down to those who have no cognition at all that must be considered to be experiencing their existence non-consciously. (See, e.g., Carruthers, 1996; Gennaro, 1996; Lycan, 1997; Rosenthal, 1993.) Dewart (1989) and Kerby (1991) well represent other yet similar positions – *voluntary* speech assertion and narrative subjectivity respectively – which hold that some form of language use brings experience across the threshold into conscious agency. Dan Zahavi (2005) makes the case that for phenomenology and existentialism *all* human consciousness is contextualized by the self, i.e., is self-consciousness. Daniel Dennett (1991) sees selfhood as but *a narrative center of gravity*. It is a short stretch from here to the linguistic deconstructionists for whom all our conscious knowledge is but the play of language. As Émile Benveniste (1971) put it: ‘It is in and through language that man constitutes himself as a *subject*, because language alone constitutes the concept of “ego” in reality, in *its* reality which is that of the being’ (p. 224).

21. Psi, otherwise known as supersensory or extra-sensory perception. In the main, our culture denies this possibility so our experiences of extraordinary awareness are mostly left non-conscious. Most research (as well as countless everyday anecdotes) suggests everyone experiences veridical intuitions at least some of the time. Rarely are such insights given conscious attention, however. In this light Radin’s (1997) superlative study of *psi* phenomena, *The Conscious Universe*, might better have been called *The Experiencing But Only Occasionally Conscious Universe*. (Also see, for example, Tart, Puthoff, & Targ, 2002; Schmicker, 2002.)

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Article

Hollows of Experience

Gregory M. Nixon*



Illustration: Klossowski's (1969) labyrinth

“If being is to unveil itself,
it will be in the face of a transcendence and not an intentionality;
it will be brute being caught in the shifting sands,
a being that reverts to itself:
it will be the *sensible* hollowing itself out.”

Maurice Merleau-Ponty, *The Visible and the Invisible*, 1968, p. 210

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TABLE of CONTENTS

Abstract	... 236
Part I: Being and the Question of Its Conscious Quality	... 237
§1. Representation and Categorization	
§2. Conscious Epistemology of Consciousness	
§3. Non-Conscious Experience	
§4. Language	
§5. The Subject: Assertion, Narrative, Intersubjectivity	
§6. The Beyond of Language	
Part II: Being and Becoming: An Ontology of Experience	... 262
§1. The Future of Consciousness and the Origin of Experience	
§2. The Hollows of Experience	
References	... 279
Endnotes	... 285

Abstract

This essay is divided into two parts, deeply intermingled. Part I examines not only the origin of conscious experience but also how it is possible to ask of our own consciousness how it came to be. Part II examines the origin of experience itself, which soon reveals itself as the ontological question of Being. The chief premise of Part I chapter is that symbolic communion and the categorizations of language have enabled human organisms to distinguish between themselves as actually existing entities and their own immediate experience of themselves and their world. This enables them to reflect upon abstract concepts, including “self,” “experience,” and “world.” Symbolic communication and conceptualization grow out of *identification*, the act of first observing conscious experiencing and intimating what it is like, *mimesis*, a gestural protolanguage learned through imitation, and *reflection*, seeing oneself through the eyes of others. The step into actual intentional speech is made through *self-assertion*, *narrative*, and *intersubjectivity*. These three become the spiral of human cultural development that includes not only the adaptive satisfaction of our biological needs, but also the creativity of thought. With the mental-conceptual separation of subject and object – of self and world – the human ability to witness the universe (and each other) is the ground of our genuinely human quality. Consciousness gives human life its distinctively human reality. It is, therefore, one and the same ability that enables us to shape planet Earth by means of conceptual representations (rather than by means of our hands alone) while also awakening us to the significance of being.

Looking beyond human self-consciousness to investigate the origin and nature of awareness itself in Part 2, reductive objective materialism is found to be of little use. Direct experience also falls short in that, in order to be transformed into objective knowledge about itself, it must always be interpreted through and limited by the symbolic contexts of culture and the idiosyncratic conceptualizations of the individual. Awareness in itself must thus be considered ultimately unexplainable, but this may more indicate its inexpressible transcendence of all symbolic qualifiers than its nonexistence. It is suggested that awareness is not “self-aware” (as in deity) but is instead unknowing yet identical with the only true universal: the impetus of creative unfolding. Our human knowledge, as an expression of this unfolding, is seen to emerge from our conscious experiencing and, in turn, to have the power – and enormous responsibility – of directing that experience. Our underlying symbolic worldviews are found to be autopoietic: They limit or open our conscious experience, which, in turn, confirms those worldview expectations. As we explore a future of unforeseeable technological breakthroughs on an ailing planet who patiently copes with our “success,” truly *vital* decisions about the nature, meaning, and future of conscious experience will have to be made.

PART I: Being and the Question of Its Conscious Quality

§1. Representation and Categorization

*What if all this theory's the equivalent of nightmare, its menace
masquerading as philosophy?
... wouldn't anything I'd come up with have to be a monstrous mix of
substance and intention?
(C. K. Williams, "The Method," 1992, pp. 63-4)*

It is a curious thing to speak of *consciousness*, much less to enter a field commonly called *consciousness studies*. *Study* requires a separation from the object to be studied. It is curious enough to study the world with which we should be united through sensory links and telluric instincts, but, even more dubious, how can consciousness be separated from the conscious mind studying it? This methodological separation is expected to ensure impartiality, because only objects can be subjected in principle to validation by others. This applies even if the object is one's own subjectivity: Introspective analysis requires a conceiver to *conceive* him- or herself. In this case, the object of investigation is identical with the investigator. Surely the fantasy of unbiased objectivity becomes at this point impossibly strained. Surely both the "object" and "subject" of such an undertaking are altered through their mutual implication. Thus the postmodern poet C. K. Williams above questions this paradox in his collection, *A Dream of Mind* (1992).

Since theorizing about consciousness from the position of consciousness puts us in a unique position — one in which conscious experience is continually being created even while the object being studied transforms — the use of poetic expression seems to me well justified. To study this particular object is to change the way we think about *it*, and since both subject and object are aspects of consciousness, we become caught up in the polarities of a single circle or, better, a spiral. To study consciousness is to already engage in *poiesis*, a making or creating.

What is the "substance" of the conscious mind to which Williams refers if not the fundamental reality of consciousness, of being, itself? Consciousness in itself is not the "content of consciousness," even if one's own experience be that content. It is even questionable whether or not the "substance of mind" is a substance or if it might in some ineffable manner be, in itself, a dynamic process that yet supports such seemingly substantial content. But process or substance, it remains curious how such a subjective invisibility can yet observe itself as an object of study. It is just as curious to consider what sort of *intention* would drive one to do so. Despite philosophical hairsplitting on this term, it seems likely that the intentions of any organism can never veer too far from its innate evolved instincts for survival, predominance, and reproduction. The intention involved in dividing the mind from the world in the first place may be more understandable. In this way, we became masters of our territories, emerged as the predominant large animal on the planet, made nearly all environments habitable, and destabilized our planet. It is worth considering how this human intention to *know* — built upon instincts to predominate, grow, and complexify — might be infecting the primal "substance" which gave rise to it.

In all our endeavors, even those undertaken to obtain objective knowledge, we most often continue to be driven by those primal instincts of "survival and reproduction," that is, of environmental control. So when raw experience or generalized awareness becomes conscious experience, i.e., *self-consciousness*, and looks "back" upon its source to study and understand it, it continues to be subconsciously motivated by the desire to master and control. This implies that the desire to understand and explain the source of consciousness is in reality the desire to *explain it away* — to sever all ties with its own transpersonal source. It is thus that machine consciousness can be thought possible — it will have no attachment to Nature or instinctive sources and no "unconscious" mind or emotions. With this in mind, I suggest the best way to approach the mystery of the existence of awareness in this universe is to be indirect. We must first understand how we became conscious of such awareness. By first investigating the source of personalized awareness, that is, self-consciousness — an ability seemingly only possessed by humans, with some possible exceptions among higher mammals — we may begin to comprehend the possibilities and limitations of our language-based, conceptualized mode of knowledge-creation.

What has allowed us to conceive of the world "out there" as distinct from our selves or minds "in here"? It must be to do with the power of representation and the subsequent categorization of those representations. It is widely agreed that sensory input at some point in evolution led to representations, though it remains controversial whether these representations be understood as *inner* or, instead, as outer projections — the experienced reality of each creature according to its kind. Should an experienced reality even be termed a representation? Perhaps, but we can never be sure what exactly is being re-presented. Neither can we be certain of the nature of the lived reality of any other organism but our own, though we may conjecture that all organisms experience one. Not all organisms, however, enjoy representations, much less the power to categorize those representations.

All organisms have experience in the sense that a nematodeⁱ, say, can be said to *experience* a change in its environment. Its primitive alimentary structure in fact connects it with its environment so intimately that it is conceivable that the entire ecosystemic itself experiences these changes, these pursuits, these avoidances. At this evolutionary stage, it is unlikely that experiential categorization consists of anything more than the most primitive excitations of eat, hide, or fertilize, and there is no reason to think that there is any centralized processor necessary to decide which. The organism responds throughout itself automatically, as it were. The nematode has no sensory organs as such but like its predecessor, the cell, *prehends*ⁱⁱ its environment through its skin and labial protuberances. Lacking explicit sensory distinctions and a central processor, it is very likely the family of nematoda have need of neither representations nor categorizations.

As we climb the so-called evolutionary ladder,ⁱⁱⁱ distinct sensory organs do appear: sight, smell, sonar, and what have you. But we have no way of knowing at what stage the senses become capable of being *experienced* separately. Sense organs at this stage may combine in a kind of synaesthetic blur to carry out instinctual stimulus-response

patterns, as Cytowic (1993) has suggested. Since in this case experience likely remains without a central experiencer, it must also remain without sensory distinctions, categorizations, or representations. Yet the response cannot be understood without the stimulus — the evolution of gills or lungs is a response to the presence of oxygen in the environment — so it is difficult to conceive of adaptive experience as only occurring in the isolation of the organism. It may be even more atomized within responding modules of the organism *or* it may be seen more holistically as a dynamic quality of the life of the entire ecosystem of which the individual organism is but a part.^{iv}

Likely, more highly evolved nervous systems that feed into brains do have something akin to central processors, if not quite yet a self (even a somatic self). The creatures involved should now be able to focus on distinct senses if it helped them negotiate their environment. If their senses re-present the world such activity is unknown to them: All existence for them is their environment and that environment is as much created by their corporeal apprehensions as by the various energies and molecular combinations of the supra-sensible realm. So whatever categorizations of their experienced world would now be possible would be those drawn from the natural differences of their sensory modalities and, of course, there would be a few other categories possible within the realms of those senses. The physical entity would still note which stimuli are threats, which are prey, which might be mating potential, and which matter not at all. These categorizations continue to be primal response categories without the need for conscious decision-making.

The situation becomes more complex when we begin dealing with mammals that live in tightly-knit, highly competitive social groups. The same primal categories must now be applied to members of one's own species but several subcategories become activated as well. For instance, allies and troublemakers must be recognized and particular rituals observed to keep those alliances oiled and those troublemakers at bay. Yet once we have entered the arena of recognition, we have entered what might be called re-representation and response categorization. Mimicry becomes a possibility and emotional bonds of surprising intensity can be created, at least according to observers of such social animals (e.g., Moussaieff Masson & McCarthy 1995). However, their categorizations remain emotionally based, as well. It is hard to imagine nonsymbolic animals conceptually categorizing objects or themselves or their own experience, though some researchers have attempted to show precisely that. How, after all, could they do so?

With the arrival of speaking hominids, a net was thrown over the world and the entire progress of knowledge within the human species can be seen as a measure of the increasingly fine weave of the strands of that net. With the act of naming, each category can be further reduced to other categories and so on. What we call knowledge is based in increasing conceptual complexification involving both sub-sensory reduction and super-sensory expansion. From infinitesimal superstrings to universe-sized God above, we refine and define every possible category of knowledge and there is no sign of a slowdown on the epistemological horizon.

We have reduced the world to analysis and explanation. We have studied and

explained instinctive behaviour, even a great deal of human behaviour. It seems only natural that we should turn our reductive curiosity upon ourselves and wonder whence this particular awareness that *knows* it is aware and that we alone *seem* to have. Since it is our conscious selves studying our conscious selves, it is indeed curious that few seem to note that this “monstrous mix” must in some reflexive manner change both the way we see ourselves and, just as obviously, the way we feel ourselves *seen*.

By representing the world of experience – perceptually and conceptually – and then categorizing those representations, we reduce the world to objects of knowledge, the natural result of focusing on objects by subjects rather than experiences uniting both. As Jungian psychoanalyst Erich Neumann observed, vital components of direct experience get eliminated in this process of conscious division:

The conscious mind is a cognitive system whose emphasis on clarity and discrimination tends to sunder the world-continuum into opposites and at the same time to eliminate systematically the emotional component of all that is alive. Thus, the world’s aspect of unity and continuity, as well as its liveliness and significance, graspable for instance through feelings and through intuition, must be renounced and is lost in the presence of the ego’s restrictedly specialized conscious cognition. These same excluded elements, however, play an emphatic and leading role in extraneous psychic cognition (1989, p. 13).

The “excluded elements” are relegated to the unconscious while these oppositional dichotomies divisively create conscious knowledge.

To examine minds, we must consider the minds of others or each of our own minds as it exists at times different from the present examining. To do otherwise is not only to add a subjective factor to our attempts at impartial examination but to be overwhelmed by present world awareness, rather than concentrating on the cognitive dissociation necessary to do the task at hand. This again requires the abstracting powers of language. So we look at mind and ask questions that will lead us down one roadway instead of another, and that roadway too soon forks in the same way. This is the path of either/or, the construction of a mental realm reduced to but one half of oppositional pairs. Linguist Ferdinand de Saussure noted (1959) that all terms of language are built from these “binary oppositions” that refer essentially to each other. Through the relentless logic of the theorist or the experimentation of the researcher, we march down the fork in the road that we believe will lead us to truth, to knowledge of the real. When the march picks up speed, the quest is invigorating, but do we ever really forget or seal off the road not taken? Can one half of a polarity contain the meaning of the whole?

Yet on we march. We note that our sensations are directly connected to the sense organs of the body. When we hit our thumbs, we hurt. Mind and body are felt to be one. We bury our dead with tokens from this world for their further travels in the next. In the West, Platonism teaches us that the soul is separable from the body and Christendom takes it up. In the East, the main religions agree, adding that our bodies and the very material world they sense are illusions. The door is opened to dualism and idealism. Today, the same questions are asked by seeking individuals and students in Philosophy

of Mind 101 as have always been asked: Does the brain create mind? If not, then does mind create brain? If so, then spirituality or idealism is the path to take, for surely there is an *übermind* behind my own. If we answer that brain does create mind, then we must ask just how it does so and where in the brain mind is located. This is the problem for materialism and the most popular responses have been neural functionalism — that the computational networks of neural connections create a mind — and eliminative materialism — that there is no mind or that it really is *nothing but* neurons and their processes. There are paths which attempt to partake of more than one road at once: Perhaps the brain is not a producer of consciousness but a *transducer* which focuses diffuse mental “energies” into individual experience.

Each road, each choice, leads onward in one direction only until one becomes so comfortable on his theoretic one-way path that he is not concerned at all that the view is obscured on either side. Other possible paths seem to him at best mistaken and at worst stupid and dangerous. A moment’s view from an aerial perspective would show us all sorts of hominids enclotted in layers of conceptual certainties striding in all directions at once. What no perspective will reveal is that every traveller, be she pilgrim or conquistador, has made decisions and set herself on a path that will directly affect her conscious experience of life. The manner of her seeking or believing or accepting this or that as “reality” will accord with her daily sense of existence. The crawling snake does indeed twist around and bite its own tail.

Like other empirical studies, the “science of consciousness” has proceeded by division. Many have noted that it was not until fairly recently that the existence of a conscious agent with individual subjective intentions was even an acceptable discussion topic in many scientific circles. Cognitive science, among other new disciplines, has found a place for consciousness though it seems much more interested in the contents or effects of consciousness rather than phenomenological consciousness itself. Now that the conscious mind has been admitted to exist, questions may be asked along the lines mentioned above.

Such considerations have never held back the “advance of knowledge” or the “march of progress” in the past few centuries, especially by those who have benefitted the most from a rampant materialism. Those who have raised the study of consciousness into such widespread popularity today see no need now to consider the uroboric twisting involved in being a mind studying mind. Psychology has been at it for a century or more, but it has mostly been focused on behavioural statistics or emotional adjustment. Consciousness Studies, as a nascent discipline, is little more than a decade old and it has found the need to struggle for respectability by proclaiming itself as a science too. Indeed, the big Tucson conferences on consciousness wear the subtitle, “Toward a Science of Consciousness.”^v It seems to be accepted fact that we cannot gain certain knowledge of anything unless we study it empirically and impartially through scientific procedures. This split of the object to be studied from the subject studying it is already an ontological bifurcation.

If we accept the brain as the material cause of felt sensation and mind, we must then face the next fork in the road. Does just brain cause consciousness or is the brain merely

the apex of the entire nervous system which thus involves the whole body? Next, does the brain work through its genetic programming to naturally create mind or must it be prodded by circumstances in its environment? The next fork is whether those environmental circumstances, i.e., worldly experience, can change the brain or its synaptic connections. If the brain is as dynamic as the latter question implies (e.g., Damasio 1999; Deacon 1997; Edelman 1987, 1992; Edelman & Tononi, 2000; Ornstein 1991), we next must wonder just how adaptable the brain is, what are the limits allowed through its genetic constraints. And the biggest question of all remains: Just how does any material entity, even one as complex as a mammalian brain, ever create mind, consciousness, or even just experience?

The reader will see that we have gone full circle back to choice one: The fundamental division in approaches to the question of consciousness is whether the brain creates experience or experience the brain. Obviously the sciences lean toward the former, though the neuroscientific proposal of the dynamic brain that changes as a result of experience softens this stance. Experiential practices that accept any sort of transcendence of bodily limitations, such as *psi* or meditation, assume the latter in the sense that the origin of awareness beyond the brain may change neural processing within the brain. Any experience that precedes, exceeds, or transcends the brain is felt to be more real than the brain itself so the brain's reality can only be reactive. This is the question of consciousness and clearly any possible approach to it will be limited by primary contexts such as the medium of communication (in this case language) and the fundamental assumptions about reality with which we naturally begin.

§2. Conscious Epistemology of Consciousness

What might be said of the things in themselves, separated from relationships to our senses, remains for us absolutely unknown.
(Immanuel Kant 1787/1996, I.§8.i)

Two elements seem to me necessary for the study of mind to take place: language and time displacement (and the two are not unrelated^{vi}). Conceptual demarcation is made possible for us cultural critters through language. Consciously created symbols have made science possible. Conceptual language suggests that we conceive of consciousness as an entity, much as we previously birthed the world as object and the self as subject. The process is communication. When we speak, we act, and when we act, as George Herbert Mead (1963) wrote, we take the position of the other and act back toward ourselves. From the other's point of view, we become an object to ourselves and assume a mind that understands as we understand as the recipient of our communiqué. But it is the naming that demarcates: "Even as Adam in Holy Writ, we name one another. As those who bestow names, we are creating observers even as we participate in the behavior of everyday, and in our naming we, you and I, create our textual world" (Richardson 1989, p. 46).

Simultaneously, it must be considered that the naming which artifactually distinguishes one thing from another does so by creating a distance between the two, but this is not a spatial distance so much as a temporal one, suspending general

awareness in a brief time delay while we focus attention on one explicit object or another through the filter of memory and self-identity. This is to say that our minds are experienced in isolation: as distinct from the material world, from other minds, and from our own bodies through a delay in reaction time. Many Western philosophers (e.g., Nagel 1987), following Descartes, have declared that the one thing of which we can be certain is the experiencing of our sole self. However, the assumption of such fundamental solipsism may be yet another construction of an even more primary intersubjectivity, the illusion produced within the linguistic constraints of a culture that emphasizes individualism. The sense of an inner, isolated, private self has become commonplace for us — though such a private self may in reality be a cultural and autopoietic construction. Not only does language extend the present by devising memoried pasts and anticipated futures, but it holds the immediacy of experience in abeyance until, through words and memory, it can be literally re-recognized and reexperienced after it has been placed within our categories of expectation. Such conscious re-experiencing requires a fraction of a second of time delay, as Libet (1992) and others have shown.

Naming, conceptualizing our own experience, creates a conscious distance from it. It may well have fenced us into a new temporal space to which we have given the term “mind.” No longer immersed in unadulterated, living experience, we make experience conscious with the cognitive displacement of mind. When experience becomes conscious, it has itself become an object. No longer one with the environment, we now feel ourselves as distinct from it, opposed to it. In the same way, we become aware of ourselves in the world and self itself is objectified. Experience *simpliciter* does not know; it acts and reacts. Only with the added quality of consciousness does knowing begin. It is conscious experience that knows and it is through conscious experience that the world, or anything else, is known. Of course, since such knowledge is itself consensual, relative, and autopoietic, it may not equal absolute truth.^{vii}

And that is the curious thing. For can we know of anything outside of our conscious experience? Experience becomes conscious precisely because it becomes known. New knowledge must be constructed upon the previous foundations of the known so is always limited, narrow, and contingent. Both assuming the reality of the material world or believing in the primacy of the inner self are products of our conscious experiencing, of knowledge creation. In point of fact we do not and cannot know of anything outside of our conscious experiencing.^{viii} The act of knowing or even imagining is a conscious act. Of course, we may (consciously) assume or guess that there is a more ultimate reality beyond anything we can consciously experience, but such must remain, by definition, unknown and unknowable.

The master philosopher, Immanuel Kant, made this point almost unassailable in arguments as convincing as they are difficult. But difficult or not, we ignore his conclusions at our peril: “What might be said of the things in themselves, separated from relationships to our senses, remains for us absolutely unknown” (1787/1996, I.§8.i). Yet the “separation from the [subjectivity of the] senses” is precisely the imperative perspective of the sciences. A materialist-reductionist is expected to assume a position of absolute objectivity without any subjective presence because only thus, it is

imagined, can pure reason be untainted by subjective projection. It demands that we observe without the interpolation of an observer, which is, of course, impossible. This is the position clearly and simply defended by Thomas Nagel, especially in his aptly titled collection of essays, *The View from Nowhere* (1986) and elsewhere (1974, 1987). If my mind, or your mind for that matter, is not “out there” beyond itself, how can we pretend to have such a perfectly objective viewpoint? To objectify a mind-independent reality, then to look for mind in that mind-independent reality, is a bizarre sort of logic to say the least.^{ix} The fact of the matter is that we cannot observe without being a conscious observer; we cannot be rational without being a mind employing its sense of rationality. As George Zebrowski expressed it in *Omni*: “The dream of reason is to step outside the human skin and see reality plain, free from social and adaptive biological prejudices, to glimpse the ‘thingness’ of all the ‘otherness’ outside our minds that is not us. We can talk about it, but have we ever been ‘outside’, even for a moment?” (June 1994, p. 46)

More recently, Max Velmans (2009) has ably defended the notion that so-called objective reality is in fact our very consciousness – in that our sensory habits, memoried anticipations, and cultural contextualizing create the theatre of our experiences. This is not idealism that says the external world is unreal; it is instead mental realism, which claims the world we experience is in part created by that experience. Gordon Globus (1995) has noted that the brain itself is part of this perceiver-dependent world (but a quantum electrodynamic process in “real reality”). A reality distinct from our own is experienced by a bat, certainly, but also by an indigenous tribal person. The “material” reality we so assiduously study is continually created and changed by our conscious experience of it, in this view, and can never be known independently. A “real reality” of the “things in themselves” beyond all experienced realities is assumed to exist, but there can never be objective access to it.

On the other hand, the materialist would reply that, *obviously*, it is external reality that continually changes our conscious experience, but with the added assertion that consciousness itself is created by – is a product of – the material world and its interactions. It is indeed a “curious thing” to state that the material world has generated the consciousness which first revealed the lineaments of that world, but, curious or not, objective materialism, that is, science, has the track record to make a strong case for its claims. It all begins with the established laws of science, which its adherents claim have validity beyond any conscious awareness of them. In other words, the laws of science are “the things in themselves” or at least a part of them. Furthermore, the application of those laws have led us through an industrial revolution, into the age of technology, and onto the wave of the digital revolution. Who can argue with such material success?

The slag-heap of history is replete with the fallen idols and accepted truths that once germinated from such sources as faith, hope, fear, and, yes, even experience. Once these traditional facts and cosmic verities were exposed to tests of experimental verification, replication, and application, their fundamental unreality became apparent, at least from the perspective of science. The argument usually states that one need only consider the worldviews of preliterate peoples with their gods and demons confabulated to explain weather and sickness or even current testimonies of faith that continue their campaign against naturalistic causation as found in, for example, evolution, natural disaster, and

daily human behaviour. The sun, according to astronomy, is but an ordinary star among zillions. Earth itself is not flat but is instead but a spherical speck in an immeasurable cosmic sea. There is no life force or *élan vital*; life processes are but particular molecular arrangements influenced by unusual chemical reactions, according to biology. From the scientific explanation of the human body's functions and dysfunctions to the disappearance of the ether, phlogiston, souls, and magic, once dearly held convictions have been ruthlessly uprooted or atavistically clung to as folk beliefs or psychological security blankets. Based in the fundament of objective materialism and economic rapacity, progress of science and technology has been relentless in all spheres of human endeavor: Why should the mind or conscious experience be any less explainable from the same perspective? And is there any reason why that explanation should not find practical application in ever more complex, lifelike technology?

At least this seems to be the justification for the scientific study of consciousness. But the fact remains that the minds that have made such material progress possible have ignored their own existence and complicity. Marching relentlessly down the yellow brick road, they have failed to notice the wizard behind the curtain who has been pulling the strings on the puppet called rationality. Science, attempting absolute objectivity, takes "the view from nowhere." This "nowhere" of absolute objectivity is absolutely beyond subjective experience, by definition, so one is forced to imagine mentally that aforementioned mind-independent reality and imagine oneself within it. To imagine mind in a mindless nowhere is magical thinking indeed. We see that, to begin with, science assumes a worldview, a perspective outside of conscious experience, which is impossible and, finally, a fantasy.

In this way, the study of consciousness attempts to become thoroughly objective: One looks for signs of conscious experience in the material world (almost always the brain) and then attempts to trace it back to its triggers and traces. It is interesting to note that the usual scientific approach does not include looking "back" at one's own consciousness; presumably because this procedure would become tainted with subjective input and affect. For this reason, philosophical phenomenology and psychological introspectionism, not to mention meditation or the expressive practices of the arts, are considered to be of no *use*. The "inner scientists," the actual subjects doing the scientific studies, it must be assumed, exist as nothing but mechanical data recorders.^x Needless to say, the end result is *scientism*, a shriveled respect for human conscious experience. Since it is no longer seen as primary but as just another unusual phenomenon produced by the forces of evolution in a material world under the rule of natural law, it need not be given the high status we conscious experiencers have traditionally assigned to it.

This refusal to comprehend consciousness as the arbiter of all realities there may ever be – including the imagined "reality" of objective materialism – is necessary for the scientific-technological program to continue its materially successful march. If you cannot observe, get hold of, grasp, count, quantify, measure, or examine a phenomenon – and I mean here the phenomenon itself, not its effects – then such a phenomenon cannot be accepted as real. Thus strict scientific methodology is not going to be able to deal with awareness itself.^{xi} The only choices for materialism are to quantify, measure,

and examine the neural correlates and declare them to be the thing in itself, as in eliminative materialism, or to quantify, measure, and examine the qualitative effects and declare them to be the phenomenon itself, as in experimental psychology.

That awareness in itself is a different category of reality from its perceived sources or qualities has often been argued, but most often the argument is simply that mind is not matter, that consciousness is not neurons or synapses or microtubules, as in Chalmers (1996). It needs to be also emphasized that awareness is not the same as the qualities of which one is aware. Awareness itself is not feelings, memories, thoughts, perceptions, or apprehensions. It is what makes these phenomena possible. In Jaynes' (1976) metaphor, awareness is like the light of a flashlight in the dark that reveals objects and qualities but is not the same as those objects and qualities. Furthermore, the light cannot be shone upon itself, so one is left with attempts to try to understand it by studying the objects – the qualities and affects – it illuminates.

So what is awareness in itself? It is odd to realize that whatever answer to that question I attempted here would be equivalent to an attempt to shine a light upon itself. The assumption is, of course, that language can communicate anything without altering it. Perhaps it should be considered that to the extent that consciousness is defined, it is also defining. That is to say, our understandings and assumptions – our cognitive schemata – may reduce or shape nonspecific awareness into individual consciousness as much as do our particular perceptions. In this sense, language not only describes but constructs the object being observed. Awareness observed is reduced to consciousness created, that is, it conforms to its concept. Consciousness then proceeds as an autopoietic manifestation of itself. I will later submit that experience in itself is the result of sensations generated at the point where minute entities like cells or even atomic or subatomic systems interact, but for this birth of sensation in interactive friction to be possible, there must be some sort of awareness-in-itself, a universal background of awareness out of which such primordial experiencing can emerge. This background may be aware but aware *of* nothing, as though in deep, dreamless sleep, a field of infinite potential, waiting, so to speak, for time to begin. How else can we account for raw experiential sensations without falling into infinite regress?

Whether explaining, discovering, or describing such arcane mysteries as the origin of the universe, the nature of time, the emergence of life on Earth, or the enigma of our being here to experience it, it is so easily forgotten that our message is first and foremost found in our medium. Our algebraic notations, our geometric theorems, our words, even our “computer enhanced imagery” are all cultural icons. Energy itself remains a mystery beyond the breakthrough squiggle of $e=mc^2$ and certainly beyond the word “energy.” What we know is knowledge, knowledge that in some symbolized form has been made amenable to a thinking consciousness.

There is little doubt about the success of science in explaining the world or the even more obvious success of its offspring technology in creating a new one. The forward plunging prometheans who currently seem to be our cultural avatars no longer take the time to look back nostalgically at a *participation mystique* with nature or even pause to wonder just what it is we are building here or where we are heading. Our intricate

descriptions reach right down into the subatomic non-world of quantum physics and out into cosmic black holes in which the usual laws of physics disappear — forthrightly attempting conceptually to capture timeless and spaceless events. Still, since the observation and conceptualization of phenomena adapt them to fit into the mold of our current consciously experienced reality, it seems a contradiction to hope to explain the nature or origin of awareness itself.^{xii} Creating new objects of knowledge makes them part of the objective, material, spatial universe that is understood by science to be fundamental and mind-independent, so discovering and explaining awareness or experience in this way involves an unthinkable paradox. With this in mind, it seems titanic hubris to assume our physics is near to an all-inclusive Theory of Everything^{xiii} or that the end of science is nigh since all things are almost explained in their entirety, as John Horgan (1996) has written. Amidst this vast expansion of knowledge into the mathematically measured very small, very large, or very distant, there remains this disquieting apprehension that the essence of awareness, very near indeed, continues to evade our squiggly explanations or our fervour to build and control.

The very language of the possibility of absolute scientific knowledge is rife with cultural assumption and revelatory of the desire for omnipotence as much as omniscience. We cannot even properly think about the world alone without observers. How are we to twist our thinking back to encompass that which makes it possible? Perhaps the experience that undergirds consciousness is unthinkable. I foreshadow my purpose here: What if awareness or experience is as all-pervasive and foundational as universal background radiation? In that case, it makes all experienced phenomena possible (including conscious experience). No matter what strange shapes or sensations these phenomena may take, they are similar if they all arise from a fundamental be-ing or experiencing. It may be that, as Teilhard de Chardin (1959) phrased it, *there is a within to all things*. But no matter how it is phrased, it is wrong in that language is always insufficient and must be so. Being or experience in the material universe is so unexpected that it may be beyond or too pervasive or too slippery to be thought of as just one “phenomenon” among others at all. It may be beyond representation except as, for example, the condition that makes a universe possible.

Awareness itself may be beyond representation but, if so, the scientific study of consciousness must ignore it for science is just this: the quest for adequate representation. It reduces consciousness to a concept among concepts, a phenomenon among phenomena, a representation among representations, so in this way it can be empirically studied as an object from the third person perspective. Science has achieved wonders, but I trust I have shown that its knowledge can never be complete. None of us, as possessors of first-person experience, can ever attain to what Dennett (1991) has called third-person absolutism. Absolute objectivity in a world of subjective experience is an impossibility, as much a fantasy as the megalomania that assumes awareness can be created through appropriate software or that nature can be ultimately mastered by the power of the human mind.

§3. Non-Conscious Experience

[W]e experience the universe, and we analyze in our consciousness a minute selection of its details. (Alfred North Whitehead, Modes of Thought, 1938/1968, p. 121)

Among the many other binary forks in the road toward the *explanation* and *definition* of consciousness is the one in which some loosely identify “consciousness” with “experience” (and often, generously, with “awareness” too despite the fact that this term connotes less specificity and individually-focused attention), and others make a distinction between conscious experience and experience without the added quality of consciousness, i.e., *non-conscious* or *experience*. It seems likely that the way we explain and define conscious experience directly affects the manner in which we consciously experience. It is thus very important that we proceed cautiously when eliding similar definitions into one another.

Those of the higher order thought or perception school of philosophy equate consciousness with self-consciousness since our human type of consciousness, i.e., self-consciousness, is all we know first-hand of consciousness of any kind. Tor Nørretranders agrees, adding the qualities of self-consciousness to consciousness itself: “Consciousness is the experience of experiencing, the knowledge of knowing, the sense of sensing” (1998, p. i). In other words, self-consciousness is what we mean when we refer to the nominative *consciousness*, which elsewhere is known as *conscious experience*. Can we deconstruct this phrase by asking what is conscious experience if we extract the *conscious* modifier? We are left only with experience, that is, experience without the addition of a symbolic, culturally constructed self to reflect upon it.

For experience to become conscious, it must be readied for intellection. It must be sliced, diced, and made an object of the mind. In his watershed book, Julian Jaynes (1976, p. 23) made the point even more simply: “Consciousness is a much smaller part of our mental life than we are conscious of, because we cannot be conscious of what we are not conscious of.” He continued with an apt image:

How simple that is to say; how difficult to appreciate! It is like asking a flashlight in a dark room to search around for something that does not have any light shining up on it. The flashlight, since there is light in whatever direction it turns, would have to conclude that there is light everywhere. And so consciousness can seem to pervade all mentality when actually it does not.

Arguments against distinguishing between experience as such and experience that has become conscious have been stubborn and steadfast. They usually insist that experience *means* consciousness in everyday speech, at least most of the time. If something is experienced, it must have been consciously attended to, so the argument goes, otherwise it is merely something like autonomic activity. But non-conscious experience is not just bodily functioning. Non-attended experience has *affect* — that is, it disturbs or creates emotions — and it has notable *effects*, too, on actual behaviour or on thought.

Consciousness may also differ from experience-in-itself in that such experience

cannot be an unadulterated object of knowledge; it cannot be conceived without interpretation. Abstract conception is possible only with concepts; nothing can be known without knowledge. Experience, as such, can only be experienced (a similar situation to each of our isolated experiences of consciousness). In our talk about consciousness, we seek conceptual knowledge about that which creates conceptions. We may succeed in describing consciousness, but its “raw” experiential essence must escape the net of our conceptions. Yet we have far too many grounded theories and too much evidence for such primary experiencing to continue to be ignored. Conscious experience is understood here as a threshold that, once crossed, cannot be uncrossed without losing, in essence, consciousness. With this in mind, I suggest the distinction between consciousness and experience is worth making. If the terminology offends, call it the difference between mind or self consciousness and consciousness without mind (or self). The idea remains the same. What is it like to be a bat, to have non-conscious experience? We do it all the time but we return with only holes in our memory. Perhaps it is there we need to search for the hollows of experience out of which we emerged.

One may wonder how it was possible to first construct such a bridge to a self-conscious vantage point whence experience could view itself. I think the bridge is a symbolic bridge.

§4. Language

It is in words and language that things come into being and are.
(Martin Heidegger 1987, p. 13)

Canadian neuropsychologist Merlin Donald (1991) builds a strong case for the evolution of cognition in humans that could be adapted to the ontogenetic development of the individual toward consciousness in individuals. Donald’s explanation of “episodic culture” for nonhuman animals is mainly that they live in a timeless present of biological stimulus and response. Early prelinguistic hominids developed a “mimetic culture” and it is this that allowed *erectus* his million year span as a toolmaker and wanderer with few cultural advances of which to speak. Though not comparable to healthy adult animals, infants too seem to begin life in an undifferentiated present. Cohen writes that a “newborn baby is barely able to see. He or she knows nothing, cannot speak a word and has no idea what an idea might be. He or she has no sense of identity” (1998, p. 78). Its ability to suckle, cry, and such things is almost certainly a biological instinct that needs no triggers but birth itself

There is wide evidence of a baby’s early ability to imitate the facial expressions of others. There is no evidence to show that a baby knows what it is doing. Imitation may be part of the process of learning to manage its primary experience, that of embodiment. As it thrashes about, it learns over which of the things it feels or sees in the world it has control. It discovers there are certain sounds that it can control and others that it can’t. At first, this proprioceptive sense of its corporeal abilities and limitations is unclear and it experiments through unconscious imitation to test its control. What it is doing is learning to sense itself physically. This is the seed of self-identity and when this fundament is disturbed so are the memories of which the self consists, as was made

clear by Rosenfield in his discussion of a situation in which proprioception was lost: "Madame I's case shows, I believe, that there are no memories without a sense of self. Without knowledge of one's own being, one can have no recollections" (1992, p. 41).

Once "embodied", the infant remains curious about the movements and presence of its primary caregivers. It observes them acting in those complex patterns we recognize as culturally informed or conscious. Not understanding at this point, it feels itself mesmerized, as it were, and unconsciously absorbs a surprising number of subtle mannerisms from those caregivers, especially the mother. This is the stage of identification Freudians and other specialists in child development have noted. At this stage, the child's development parallels that of the mimetic hominids in that it cannot speak as yet but it assiduously strives to mimic, to be like, those who care for it. Mimesis, as Lev Vygotsky (1934/78) first noted and Maurice Merleau-Ponty (1973) agreed, is an essential forerunner of language acquisition and is not to be identified with imitation as such. Mimesis implies the patterns or structures of behaviour are assimilated but the individual often attempts to uniquely express himself or herself within them. It is this window of rudimentary experimentation that allowed *erectus* to be as successful as he was (Donald 1991). Such mimetic experimentation is precisely what leads the toddler to learn her first words.

As already foreshadowed above, it seems clear we learn who we are through interactions with other subjects — and for this language is the culmination and necessary final step. Proprioception, identification, and mimesis are the three essential foundations for language acquisition and thus true intersubjectivity. They indeed remain part of our linguistic interactions throughout life, as well as being part of our unique but changing sense or concept of self. But it remains this last step — the emergence of linguistic assertion and intentionality that leads one to the concept of a self, of an *I* who I am — that is fundamental to actual consciousness of self as both subject and object.

Prehistorically, we can never know exactly what led our ancestors across the symbolic threshold from mimetic gestures into actual speech with the syntax to indicate the long ago, the far away, the yet-to-come, and the invisible powers. This a mystery I hope to explore in the future, but at this point I can only guess that some existential crisis drove us, perhaps in desperate straits, to suddenly expand the horizons of our experience into what was previously not only unknown but unthinkable. We created consciousness out of a fearful need to be more than we are, biologically speaking. Perhaps the sacred awoke then, too, in mortal recoil.

§5. The Subject: Assertion, Narrative, Intersubjectivity

I'm in words, made of words, others' words. . .
(Samuel Beckett 1958, p. 386)

Thus does Samuel Beckett refute the God-created subject of Descartes and the transcendental ego of Husserl. It's not just that language creates conscious subjectivity, but that such subjectivity results from other persons through the internalization of the

language-process already used by them. By becoming conscious as an aspect of our crossing the symbolic threshold and entering into the language-world, we find ourselves in tune and resonating with the presence of other persons/other minds.

Other species and, likely, human infants participate in an almost mystical (to us) union with their environments. We do not. For us the environment has become the world, out there, in all its objective wonder or placidity. There is a huge difference between *environment* and *world*. Most of the world we experience is not even present at any particular time to our senses but is experienced *in absentia* through memory, knowledge, and imagination — all interior aspects of selfhood and symbol. Conscious *assertion of experience* sunders this primal unity into self and world. The animal and the object are both *of* the environment. Consciousness is not. Canadian philosopher Leslie Dewart notes that not only is the conscious quality of experience decisive but it is also divisive. Consciousness does not *represent* objects and bring them into its interiority, Dewart says. “Quite the contrary, what it achieves is to enable the experiencer to alienate him or herself, experientially, from objects, and therefore to relate itself to objects *as such*, that is, as other-than the experiencer” (May 1998).

Nonhuman animals seem to experience only their environments, and their behaviour is as much a part of it as are their bodies and sensory experience. There is simply no need to postulate a time-delayed central station in which conceptual cognition occurs. Their experience appears to be a continuum in which subject and object are united and all a part of environment. Their perceptions are experience, other-initiated events in the environment are experience, their responses are also experience — and it must be remembered that their signalling is always an environmental response. As the perspicacious novelist Walker Percy has put it: “A signing [read: *signalling*] organism can be said to take account of those segments of its environment toward which, through the reward and punishments of the learning process, it has acquired the appropriate responses. It cannot be meaningfully described as ‘knowing’ anything else. But a symbol-using organism has a world” (1975, p. 202).

And for experience of this *world* a self is required. With the discrimination of the objective from the subjective that is born with conscious experience and the symbolic interaction of language, world and self are created and are split into two entities, the essence of the Burnt Bridge from experience *simpliciter*. But this consciousness does not just happen accidentally: It must be *asserted*.

Assertion. In a work that has received far too little attention, Dewart (1989) lays out the case for consciousness and language emerging simultaneously from the background of non-conscious experience. To be precise, Dewart focuses on speech itself. Early on — perhaps both ontogenetically and phylogenetically — speech is heard and responded to with growing comprehension, even mimicked, but it is not until the individual asserts himself into the conversation that the sense or process of awakening to the fact that one is in the world and experiencing it and can comment upon it begins. Speech must be asserted before a body can become a self who speaks — the assertion of experience in speech is to find oneself as the subject of such speech. It is this assertion, according to Dewart, that allows experience to become conscious. Consciousness is not

in addition to experience but is instead the reflected *quality* of it: “The possibility bears exploring that, whereas the human organism determines *that* human beings are able to experience, while reality determines in all essential respects *what* they experience, their ability to speak determines *how* they typically experience — namely, consciously” (p. 16). Consciousness, then, is not a state of the organism, any more than speech is. It is the assertion of experience as separate from the natural environment (which then becomes world).

Speech did not evolve, according to Dewart, at least not in the usual sense of the term as genetic determinism. The first step in the transition from mere communication to assertive communication occurred when prehuman hominids began to experience the effects of their vocalizations as consequences of the vocalization. They could learn to do this in virtue of their highly evolved non-conscious perceptual, discriminatory, and integrative skills, and because the properties of vocal signalling, including lack of proprioceptive feedback, allowed the communicator to experience precisely what the communicand experienced in response to the communicator's vocal signalling and to identify that experience as the same experience he had when the same signal was communicated to him by another. There was probably no particular survival value in such an identification of the communicator with the communicand but the seeds of the mutuality of human culture had been sown. All cultures do any number of things that have no evolutionary survival value, including activities that are downright destructive to themselves. No point in building a list here but we need look no further than the proliferation of nuclear weapons in the current era for an example.

The next step, and the important one that led across the symbolic threshold, for Dewart, is when the communicator began to experience the neuro-somatic antecedents of his signalling. He experienced himself as a communicator who had control over his assertions. This inner awareness and the intentionality of speech allowed him to use his speech within himself. He became his own communicand and, in the process, began the internalization of speech we now know as thought. It is only now, when the speaker found he could communicate by *intending* to communicate, that what Dewart calls “thematic speech” appeared and the communicator became aware of himself, i.e., became conscious of his experiencing. His cognition became, in essence, recognition, including the recognition of other minds.^{xiv}

For the first speakers, this must have been a laborious process. It was, after all, the beginning of cultural evolution as opposed to biological evolution and was, in that sense, *unnatural*. Still, the communication of inner experience must have been useful or at least interesting enough so that it was continued, probably only some of the time,^{xv} through succeeding generations. This cultural selection for the best thematic speakers and interlocutors would have correlated with the reentrant mapping (Edelman 1987, 1989, 1992; Edelman & Tononi, 2000) of the brain's neural networks and, over a long stretch of time, could have well have led to permanent biological evolutionary changes in the brain's structure, especially the prefrontal cortex. Terrence Deacon (1997) has argued precisely this, citing the evolutionary theory of American psychologist Mark Baldwin from a century ago as its origin.

Now, as any developmental psychologist or speech therapist will tell you, the child learns grammar and speech readily as the result of the inborn language capacity of the brain. But it is not just biological, as Dewart has noted:

Whereas now, after the species has appeared, the genesis of the individual consciousness results from the prior existence of the socio-cultural environment and speech, the genesis of consciousness in the species must have been contemporaneous, and indeed identical, with the genesis of assertive communication and of cultural society of the specifically human sort. Thus a theory of the origin of consciousness in the species must be at the same time a theory of the origin of cultural societies and of speech (1989, p. 176).

Dewart writes that “an unsocialized humanoid organism — whether an ordinary infant or a mature feral adult — is not a conscious self..” (p. 170). Evolution of the dynamic brain in response to experience, i.e., Baldwinian evolution, indicates that culture has by now become as natural an attribute of the human as packing is to wolves. In our world, to live outside of culture is not to live as a human *person*. To be without language is to be without conceptual thought. Humanity in the “state of nature” (instinctually driven, no self-conception) simply is not humanity. There seems to be no path back to pure experience.

Narrative. The second aspect in the creation of human subjectivity is the narrative reshaper of experience. As noted, mimesis and memory seem to precede and be foundational to the emergence of language. Perhaps, in turn, it is the combination of narrative and memory that produce the human experience of linear time. The great hermeneutic philosopher, Paul Ricoeur, begins his magnum opus in just this way: “Time becomes human time to the extent that it is organized after the manner of a narrative; narrative, in turn, is meaningful to the extent that it portrays the features of temporal existence” (1984, vol 1, p. 3).

If the brain has indeed structurally co-evolved with language over the centuries, it would explain how human experience has come to have not only a conscious narrative quality but a pre-reflective prenarrative quality. Life as we experience it daily, in momentary events, has what literary theorist Stephen Crites (1986) has called a *quasi-narrative quality* and Ricoeur a *prenarrative quality*. This may well be because of the way consciousness overlays the subtle but continuous awareness of time. For human persons, experience does not just take place in an eternal present. Ricoeur is ready “to accord already to experience as such an inchoate narrativity that does not proceed from projecting, as some say, literature on life but that constitutes a genuine demand for narrative” (1984, vol. 1, p. 74). As the brain is ready for speech, only awaiting the appropriate trigger, according to the Chomskyites, so experience is ready for narrative, only awaiting a narrator.

Subsequent to the emergence of primary selfhood following upon the first assertion of experience in speech, it is now suggested that the narrative quality of language leads to the peculiar quality of self-recognition that we humans enjoy. A. P. Kerby makes the strong claim that “the self is perhaps best construed as a character not unlike those we

encounter almost every day in novels, plays, and other story media. Such a self arises out of signifying practices rather than existing prior to them as an autonomous or Cartesian agent” (1991, p. 1). The recognition of the self is, in a sense, the objectification of the subject by the subject; it is the birth of ego: the self we feel ourselves to be. Conversely, feeling that we know who we are objectively also changes the constitution of our decision-making strategies. The subjective self becomes reconstituted through the ongoing narrative of memory and self in interaction with other selves. It is an aspect of the hermeneutic circle that the self is in *dynamic process* amidst the intersubjective experience of narration.

Subjectivity, then, is the experience of being the implied subject of discourse. We learn of and become ourselves from outside-in, as it were. Before we are capable of the rather advanced skill of narrating our own life-stories, we are already living a narrative. Kerby insists that “much of our self-narrating is a matter of becoming conscious of the narratives that we already live with and in – for example, our roles in the family and in the broader sociopolitical arena. It seems true to say that we have already been narrated from a third-person perspective prior to our even gaining the competence for self-narration” (p. 6). Of course, our self-narratives must emerge out of these circumstances. Kerby concludes, “Such external narratives will understandably set up expectations and constraints on our personal self-descriptions, and they significantly contribute to the material from which our own narratives are derived” (p. 6).

One of the first linguists to note the creative power of narrative was Émile Benveniste who maintained that the subject of speech is identical to the subjective self we each experience: “ ‘I’ signifies the person who is uttering the present instance of discourse containing ‘I’ ” (1971, p. 218).^{xvi} Benveniste’s pronouncement on this matter has become famous in some circles and is worth citing again in its entirety:

It is in and through language that man constitutes himself as a *subject*, because language alone constitutes the concept of ‘ego’ in reality, in *its* reality which is that of the being. . . . The ‘subjectivity’ we are discussing here is the capacity of the speaker to posit himself as ‘subject.’ It is defined not by the feeling which everyone experiences of being himself (this feeling, to the degree that it can be taken note of, is only a reflection) but as the psychic unity that transcends the totality of the actual experiences it assembles and that makes the permanence of the consciousness. Now we hold that ‘subjectivity,’ whether it is placed in phenomenology or in psychology, as one may wish, is only the emergence in the being of a fundamental property of language. ‘Ego’ is he who *says* ‘ego.’ This is where we see the foundation of ‘subjectivity,’ which is determined by the linguistic status of ‘person’ (p. 224).

To lose our ability to narrate our lives and to interpret that narrative is to lose our identity. More frightening than the thought of physical death is the thought of the death of the self. As witness to this, we might consider the many religions that espouse an eternally living self after the carnal form has returned to Earth. We might also consider the nervous anxiety or even anger that results in many people when they are confronted with the idea that the self they know themselves to be emerged within language through narrative acts. A brief observation of our species in the world is enough to be convinced

of the enormity of the lengths to which people will go to convince themselves of either the eternal or, what amounts to the same thing, the transcendental nature of the self.

Oliver Sacks (1985) tells the “clinical tale” of a patient with amnesia as the result of Korsakov’s Syndrome. From moment to moment, he cannot remember anything of his actual past or what has just occurred and, as a result, has no continuing sense whatsoever of who he is. The patient is, according to Sacks, a nonstop talker who must make up his past every second in order to feel himself as existing in a world that has value and, it is to be supposed, reality. It is ironic that to give himself and the world some sense, the patient must manically tell nonsensical stories about himself; he “must literally make himself (and his world) up every moment” (p. 110).

Without a narrated inner self, somewhat actual or actually fictitious, we must exist in a meaningless placidity or go mad without a world. Self-narration reveals to us our values and the very purpose we have for living and is capable of changing them as well. In this sense the hermeneutic circle that is the link between narrated self and languaged world may seem to be a vicious circle indeed; however, it should not be forgotten that narrative, and for that matter language itself, needs at least two “to tango.” Human minds, no matter how much they wish or fear that it were not the case, do not exist in isolation.

No doubt there is more to the self than its narration. Dan Zahavi (2007) argues that self and other must pre-exist their narrativization, but only their relationship leads to such identification. In fact, he seems to lead toward the primary intersubjectivity of Gallagher (2001). Intersubjective relations lead to the sense of self and other, Zahavi avers, and it is that sense of identity that is formed by narratives of the self (and other).

Intersubjectivity. When the explanations for consciousness are reduced to material causes they ignore a great deal of our real-life experience. The origins of consciousness must then be sought *down* the evolutionary ladder, perhaps with the beginning of central nervous systems or perhaps even with the advent of life itself (or, for the panexperientialist, within the inorganic). Conversely, when one turns inward so the perspective of subjective experience becomes the only focus, the empirical and objective become so ignored that all the important research in neuro- and cognitive science is not enough to keep consciousness on this planet. For the subjectivist, conscious origins tend to take off for more ethereal regions, *above* into the Great Beyond of transcendent spirituality. This is not the way we come to consciousness nor the way we experience it drawn through time. Percy, for example, sees conscious experience as evolving neither from third person materialism nor pre-existing in first person spirituality. He writes that “there has come into existence a relation which transcends the physico-causal relations obtaining among data. This relation is intersubjectivity. It is a reality which can no longer be understood in the instrumental terms of biological adaptation” (1975, pp. 271-2). One might call intersubjectivity the second person perspective.

Psychoanalysis, though often disparaged as a credible mode of consciousness research by both objectivists and subjectivists, is itself an intersubjective process. It is

through the depth researches of this practice that the development of personal identity has been laid bare as the reflection of the young child's perception of and relationship with significant others. The French psychoanalyst, Jacques Lacan (1977), has observed that children pass through a mirror stage at about four to six years old during which a proto-self appears that is then drawn out through *identification* into full-fledged selfhood: "This jubilant assumption of his specular image by the child at the *infans* stage, still sunk in his motor incapacity and nursing dependence, would seem to exhibit in an exemplary situation the symbolic matrix in which the I is precipitated in primordial form, before it is objectified in the dialectic of identification with the other, and before language restores to it, in the universal, its function as subject" (p. 6). This "dialectic of identification" is the interiorization of the self-identity perceived by *identifying with the viewpoint of other significant persons upon one's own being*.

In his researches into the phenomenology of memory, Edward Casey found himself agreeing that psychoanalysis reveals that "mind is *ineluctably intersubjective in origin and import*. Such is the implication of the idea of identification itself" (1987, p. 243). Subjectivity is relational. It results from the expectation of discovering a subjectivity similar to one's own in others of our species.^{xvii} Mothers will coo and talk to their children until the child responds accordingly to the anticipated emergence of its own selfhood.

This is not to say that the child does not act as an original being before it becomes intersubjectively self-aware. The child exists and does interact with its environment as a unique entity, but it does not "contain" the *knowledge* of its unique selfhood. As Merleau-Ponty described it: "The consciousness of a unique 'incomparable' self does not exist in the child. This self is certainly lived by him, but is not thematically grasped in all cases. Other people are essential for the child. They are the mirror of himself and that to which his self is attached" (1973, p. 37).

No human person can exist in isolation. Reared by nonhuman animals or brought up relationally deprived (whether by design or damage), the child may be said not to have achieved personhood. All our values, moral and otherwise, emerge from within the matrix of sociocultural relations. Our emotions, built upon the animal basics of arousal/placidity and fight or flight, are not to be found in nature in the same form as we experience them. We consciously experience all emotions, especially the "higher" ones, through the lens of linguistic interpretation; even the basal emotions most often become transfigured or transmogrified through cultural experience. John McCrone (1991, p. 214) states that "cultural evolution has built extensions out of language to give us our complex human emotions," and I think he is correct. However, emotionally-based "knowledge" is the defining factor of what Donald (1991) labels as *mythic culture*, the first cultural stage of humanity after language acquisition but before mass written literacy. Such literacy — with the addition of the experimental method and logical skepticism — ushers in *theoretic culture*. The latter is apparently where we are now, but it must be pointed out that mythic thinking is still rife amongst us, especially when we use concepts for metaphysical ideas or experiences that have no referents in the real world before us.

There is much that should be added to do with the transition from the mythic to the theoretic, but it would be a digression from my focus upon individual stages of development. It may suffice for me to note that the mythic mind is a tribal mind, sympathetically participating with others in the emotional well-being of the community. Here, intersubjectivity is not a theory but a lived reality. One *feels* with others and intuitively accepts mythic memories and the felt resonance of unseen presences as reality. In a stirring essay, E. Richard Sorenson (1998) calls this communal mind “pre-conquest consciousness” and describes it in almost paradisaical terms as being emotionally and intuitively driven toward the general contentment of the tribe. To this end, changing circumstances may provoke (or *invoke*) shifting mythic memories or deific interventions; that is, abstract knowledge is in the service of tribal meaning and harmony. After the shock of conquest by European arms and theoretic rationality, however, mythic intersubjectivity shatters and – there being no abstracted, private self (such as we have culturally constructed) into which to retreat – individuals become utterly lost. Sorenson records that both tribal and individual memory radically dissipates. We moderns, on the other hand, use knowledge for its own sake, perhaps as a form of conquest or as the lucre of individual competition. Perhaps we also tend to forget our intersubjective origins and the well being of our tribe.

To close this section, let me repeat that to imagine consciousness without a subject to do such imagining is, well, unimaginable. The subject we have each come to know so intimately as “myself” is the result, first, of the primary discovery of *proprioception* and the subsequent *identification* with and *mimicry* of significant others. Language acquisition is the final threshold, which requires the *assertion* of experience in speech and a consequent sense of subjectivity, *narrational practice* and its pronouns that make reference to such subjectivity, and the *intersubjective dynamic* by which we recognize and help create subjects in other persons (and who reflexively affect our own subjectivity). This is our world: a world of persons, culture, and intimate mental relations. At best, it seems able to become a world imbued with unconditional love. At worst, such subjectivity can lead to psychotic isolation. Is there any way out?

§6. The Beyond of Language

*They said, ‘You have a blue guitar,
You do not play things as they are.’
The man replied, ‘Things as they are
Are changed upon the blue guitar’.*

(Wallace Stevens, “The Man with the Blue Guitar,” 1954, p. 165)

Language creates categories of understanding. For understanding to grow in this way, language must continually complexify, creating ever new categories and subcategories. We soon find ourselves living in a world of language-altered experience attempting to listen beyond the blue guitar for whispers from directly experienced reality.

Our language, however, was not created *ab nihilo* but is instead, as indicated, a reflection of experience back upon itself. Our primary experience in this world is the one

of embodiment, incarnation, so it should be no surprise that an examination of the words, phrases, and idiomatic expressions commonly used betray such embodiment, as George Lakoff (1987) has compellingly shown. The categories of language, according to Lakoff, reveal the mind as arising from the “cognitive unconscious” of embodied experience. With Mark Johnson, Lakoff (Lakoff & Johnson 1999) has even attempted to show that philosophy itself is finally impossible since, when all is said and done, it can only express the body’s own experience in the living environment that exceeds it. But can we *know* beyond our words?

“There is nothing outside the text,” poststructuralist philosopher Jacques Derrida (1976, p. 163) has written and his fans have wriggled ferociously ever since to explain to us that he didn’t *really* mean what he said. William Haney (1998) would have us believe that Derrida is in fact a sort of trickster-guru whose deconstruction of *différance*^{xviii} opens the doorway from the enclosure of language to the realms of bliss dreamt of in Eastern religions and the contemplative tradition. Haney’s subtitle is “The Question of Unity” and, in his view, Derrida’s project is to deconstruct “the unity of language and consciousness” while actually inviting “a nonconceptual response similar to that of an aesthetic experience” (Haney, p. 19). What would a nonconceptual response be? Not that such don’t occur, but how could such a *nonconceptual* response be conceptualized? It can be seen that such suppositions immediately run into contradiction — and contradiction and “the free-play of signifiers” is Derrida’s forte. In other words, reading Derrida is slippery and to impute to him a straightforward intention or message is dangerous, at best.

Derrida remains a highly controversial figure both in philosophy and literary studies.^{xix} He is very difficult to read in that his writing frustrates the desire to get to the point. But how could he write in a straightforward, positivist fashion when his whole project is to show that the intended meaning in straightforward, positivist textual manifestoes always contradicts itself? In fact, his whole deconstructive project may be said to reveal that our presumption of meaning-making in speech and writing is illusory. The meaning that we anticipate is always deferred. It is the sense of continuous approach toward a “final saying” that carries us confidently along, but we cannot arrive. We cannot, because such final saying is culturally relative in that it assumes a unique “transcendental signifier.” As an example, for Moslems, Allah is revealed in the Koran. In all speech, the Koran is the mostly unspoken transcendental signifier that gives meaning and value to one half of an oppositional polarity over the other (man over woman, prayer over play, etc.). The terms of language are constructed from fluid pairs of opposites that refer essentially to themselves (Saussure 1988). These are Derrida’s binary oppositions, one of which is always culturally privileged (by its assumed closer relation to the transcendental signifier) and the other, denigrated.^{xx} The deconstruction is the attempt to rend such oppositions apart. What is revealed by such rendering, if anything, cannot be thought or said but it must be a type of consciousness beyond binary thinking or cultural privilege.

Derridean deconstruction reveals that language and thought will never lead us to transcultural realizations beyond language and thought. We might be lured in by the

structures imposed by our particular culturally determined transcendental signifier and feel we have found absolute knowledge by applying those structures to that which we perceive and analyze (much the way early anthropologists analyzed “primitive” cultures), forgetting that our very perception and analysis are also conditioned by those same cultural structures. It is these previously-assumed-to-be-universal structures that Derrida and the poststructuralists “deconstruct.”

Just as Gödel in the field of mathematics showed beyond doubt that nothing can be “shown beyond doubt” within a closed system, so Derrida undermines any sort of finality to linguistic assertions. According to Gödel and, later, Gregory Chaitin, number theory itself must be riddled with randomness. Derrida, the Gödel of language, pulls away the curtain and reveals that no theory or philosophy or science can ever cast the net of language over the whole of existence, or much else, and satisfactorily explain it.

It is dangerous to speculate on what Derrida or the other deconstructionists “really mean” since they claim to be deconstructing meaning itself. To encapsulate deconstruction in a nutshell is a contradiction in terms, as John Caputo points out: “Nutshells enclose and encapsulate, shelter and protect, reduce and simplify, while everything in deconstruction is turned toward opening, exposure, expansion, and complexification..., toward releasing unheard-of, undreamt-of possibilities *to come*, toward cracking nutshells wherever they appear” (1997, p. 31). It is not to be assumed, as some have averred, that Derrida is thus a nihilist. He may only be negative in the sense of a *via negativa* opening out possibilities. “Deconstruction ... is the endless, bottomless affirmation of the absolutely undeconstructible” (Caputo, p. 42). Derrida did write that his “critique of logocentrism is above all else the search for the ‘other’ and ‘the other of language’” (1984, p. 123).

Can anything be assumed about this “other”? Obviously, to assume anything is to create categories and draw experience into language. But oblique clues can be found. Derrida (1992) himself has described the deconstruction as the “experience of the impossible”. From our perspective, raw experience must be an “impossible” unity without substance or form, that is, a great paste of nothingness. But it is not *nothing*: “If Being is always to be let be, and if to think is to let Being be, then Being is indeed the other of thought” (Derrida 1978, p. 141). Being in itself or experience as such out of which our conscious experience arose is perhaps possible to identify with some attributes of the cultural construct we know as “nature”. We are vaguely — wistfully or uncomfortably — aware of it, but know nothing of it directly: Nor can we know, for knowledge and rationality, as such, are only found within language. Nothing can be said about that which lies beyond language. At this point, *at this time*, in our genetic or cultural evolution, nothing can be *consciously* experienced which lies entirely beyond language without losing our humanity and our minds. To know that we are experiencing or what we are experiencing is to draw the emotional sense into the realm of the symbolic, since *knowing that* or *identifying what* requires symbolic objectification. Conscious knowing demands a conscious knower who was originally constructed within the symbolic, as I have argued.^{xxi}

There is some irony and some regret in the poet Robert Graves (1927/66, p. 45)

when he notes the impossibility of our escape from the language-world:

*There's a cool web of language winds us in,
Retreat from too much joy or too much fear:
We grow sea-green at last and coldly die
In brinness and volubility.*

In his view, the expanse of raw experience is no longer available to us. We live adequately without either too much fear or too much joy. Dare we even try to escape the “clutches” of language? What would happen?

*But if we let our tongues lose self-possession,
Throwing off language and its watery clasp
Before our death, instead of when death comes,
Facing the wide glare of the children's day,
Facing the rose, the dark sky and the drums,
We shall go mad no doubt and die that way.*

In a very real sense, we are all exiles. There is no way back across the bridge we constructed from raw experience into symbol and culture; the linguistic creation of the solo self has burnt it behind us. To recross the crevasse would be to undo the self which knows and remembers. All we have left of the memory of selfless immersion in sensual spontaneity are vague myths about a lost paradise, like the mythical Eden. Maybe this is a good thing, a necessary consequence of intimate community and environmental control. “The organism who speaks has a world and consequently has the task of living in the world” (Percy 1975, p. 204). If we are prisoners, we are prisoners of our own device.

If this is so, the dream of awakening the natural unconscious, of escaping to a purer realm *before* or beneath language is misguided. The view of primordial self-existence derives no doubt from the *reification* of the sense of self, the assumption that the self exists before language and communicates through language as another cultural tool. If this were so, a few quiet moments on the back porch would be sufficient to escape linguistic enclosure.

Lacan (1977) makes it clear that, for whatever reason, it is an error of immense proportion to simply assume that there is a world of experience “out there” or “in here” previous to or beneath or beyond language to which we have access. In fact, the world (not the environment) anticipates and forecloses us. For Lacan, we find ourselves created in the net of language and have no sense whatsoever of the creation or the end of the self we “find” ourselves to be. Birth and death are abstract concepts beyond *reality* because the self is only experienced between them; yet, as Kerby indicated, this self has had its linguistic creation prepared for it before its biological birth and it will leave linguistic echoes after its biological demise.

Lacan deals with biological non-conscious experience with his conception of the “real”. It is not to be confused with “reality” which, for Lacan, is the phantasmatic world

of symbolically reflected (conscious) experience itself. Alan Sheridan, in a translator's note to Lacan's *Ecrits* (1977), explains this important concept this way:

The 'real' ... stands for what is neither symbolic nor imaginary, and remains foreclosed from the analytic experience, which is an experience of speech. What is prior to the assumption of the symbolic, the real in its 'raw' state (in the case of the subject, for instance, the organism and its biological needs), may only be supposed, it is an algebraic x (pp. ix-x).

We can't return; we can only look behind from where we've come and *imagine* what it must be like prelinguistically. But it seems likely that, for us, all that is outside of language is non-conscious experience in a *reality* that is largely a construction of our biological human sensory and memory systems relating to the things in themselves.

We have the sense of directing our behaviour and even our thoughts but the evidence is strong that such top down management is an illusion. The mistake occurs in our present era when we find ourselves already in language and making continuous references to oneself as the creator of language and thought in such common expressions as "I think" and "I feel". When we say "I think", we often take it to imply that "I" – me, myself, in here – now am reaching into my vocabulary bag to present to you what I *choose* to think right now. This is the basic Cartesian error. Thought is built within language and language is the activity of a people. It won't do to imagine our speaking through a language tool when there could be no speakers without a language in the first place. "Ego' is he who *says* 'ego'," as Benveniste declares.

So what does conscious experience actually *do*? The famous experiments of Benjamin Libet (e.g., 1992), though questioned by some, have persuasively revealed that most conscious decision making takes place an entire half-second after brain activation readings show that subconscious neural processing has begun, indicating the actual decision takes place preconsciously. Subjects attempting to be spontaneous have shortened this time but not obliterated it. This does not necessarily imply that consciousness is epiphenomenal since consciousness, as the apex of experience, may be the guide of long term planning where the "aim" of current behaviour is chosen. Consciousness shades into the unconscious, into non-conscious experience, with vistas of information arriving both preconsciously and departing postconsciously. In this sense, the conscious ego could conceivably be the switching station where trains of thought already on the move arrive, but such trains may be stopped, reversed, or switched to other tracks. New destinations may be chosen; new aims set.

Dennett (1991) has famously insisted that consciousness does not even do that, that it is not even real but a mere side effect of language, the intentional fallacy. It seems clear, however, that even side effects have some reality. For Velmans (2009), consciousness has the vital role of making existence, things in themselves, real for us: "It is only when we *experience* entities, events and processes for ourselves that they become *subjectively real*. It is through consciousness that we *real-ise* the world. That, and that alone, is its function" (p. 260). Nørretranders (1998) refers to "I" consciousness as "the user illusion": Just as we interact with our computers and the internet with a carefully

constructed interface or “command control” for ease of use but remain unaware of the complex programming that goes on behind the scenes (including the programming of the “user-friendly” interface itself), so “I” consciousness dreams it is at the helm of its corporeal behaviour and experience. Could it be that consciousness in itself has been greatly overrated?

I think it’s worth considering that the primary role of consciousness is to capture information and to change that information into symbolic formulae. It is a net of knowledge which continually expands. Our world becomes such a flood of information that no individual can contain it. The mind *rationalizes* and lays claims to immediate experience, time-delaying and channeling it into categories acceptable to consciousness. In that way, it achieves a sense of subjective mastery and, like a bombastic orator, grows inflated with its own rhetoric. Disquietingly, it seems to grow ever more independent, ever more demanding of further information and thus control. Like a bubble formed over an ocean that imagines it is the ocean, consciousness often seems to imagine that it contains, in itself, all experience. We must not forget that no matter how we try to deflect the knowledge, we *know* that the self is the source of selfishness, the ego of egotism, and vanity or pride of narcissistic inflation. Consciousness has the need to categorize everything, to reduce everything to explanation, so it can be mastered and directed.

It is part of my thesis that this is precisely the source of the drive to develop the “science of consciousness” and to explain away sub- or trans-conscious experience itself. I submit that this sundering of self from the bottomless unconscious is apocalyptically dangerous to our species, our planet, and to our experience of the world. The creative source is too all-pervasive ever to be entirely mastered and directed so we simulate such mastery through technological advancement. It is like putting up artificial trees to decorate one’s yard — trees that have neither roots nor life. The yard has sacrificed all that is vital and sacred for material appearances. It looks alive and prospering, but it is neither.

PART II: Being and Becoming: An Ontology of Experience

§1. The Future of Consciousness and the Origin of Experience

*For the listener, who listens in the snow,
And, nothing himself, beholds
Nothing that is not there and the nothing that is.*
(Wallace Stevens, “The Snowman,” 1954, p. 10)

It makes perfect sense to test the winds of the present and speculate on the possible futures of conscious experience, or, as it has become known, consciousness alone, an entity unto itself. Still today, we humans continue to guide our experience within such divergent positions as the scientific, religious, or even none at all, content with apathy. But the road of our human journey is inevitably forking again and the paths chosen are

divergent indeed. The major differences in attitude are found in the opposing lure of concepts such as “nature” and “progress.” Assumptions about the significance of consciousness turn out to be central here.

As we lurch into the 21st century, it appears the road of our human journey has come to a crossroads where the choices go in opposite directions: one “back to Nature”, the other forward toward its technological conquest. Those in the human community who take the former road deeply feel our lost connection to all that is natural and note with horror the predictions of the environmental catastrophe that awaits. They yearn for the sensual lost paradise of spontaneously living by instinct and intuition alone, materially impoverished but spiritually awakened. The wisdom of the heart is sought while the knowledge of the mind is distrusted. They feel it is time to dethrone our vaunted singular “I” consciousness, to recognize its hubris and hunger for information accumulation, and find a way to unite atavistically with those preconscious, transpersonal vistas in the immediacy of experience with the ever-experiencing world.

Others choose the latter road, however, taking the perspective outlined above that consciousness is a late and unexpected byproduct of unguided, non-conscious evolutionary processes. It is an epiphenomenon whose defence at best is unnecessary. Since the conscious mind is the inevitable result of complex neural processing alone, it has no relation to the natural order based in primary, organic experience. There are no higher yearnings, lower desires, repressed emotions, and there is no unconscious mind. For them, human “I” consciousness does not rest upon a sea of non-conscious experience (consciousness is *removable* from experience), and intersubjective relations are only for communication from isolated self to self. The way into the future is total commitment to scientific and technological progress that will eventually overcome any current imbalance between population and resources.^{xxii} Many scientific-technological visionaries have gone further and proclaimed that the time fast approaches when we will pass the flame of intelligence onto inorganic processors that will work with so much more speed, power, and efficiency than mere human consciousness could ever master.

Such a prospect sounds absurd to many of us and the construction of conscious machines still seems a long way off, but is it impossible? It must be if consciousness is only the apex of experience, connected to all of nature through eons of often haphazard evolutionary eco-relations. In this case, consciousness equates with *conscious experience*; it is the lighthouse eye emerging from a sea of non-conscious experience. As Dreyfus (1992) argues, consciousness without an unconscious is not possible so computers cannot attain it. We are conscious, and our very existence is rooted in the organic earth, so *inorganic mind* seems to us a contradiction in terms. But if Dreyfus is wrong — if consciousness is in some way separable from experience — this may not be so.

If consciousness can be *defined* in slightly altered ways — from a third-person perspective, to be sure — it may become much easier to declare its presence. We already have advanced computers that do calculations of such speed and power no human being can compete. Indeed, the previously unbeaten Gary Kasparov was thumped by an implacable chess playing program called Deep Blue in 1997.^{xxiii} This is not

consciousness, yet, but the idea is that with very powerful, very complex parallel processing networks, the computer becomes able to *learn* rapidly from mistakes, i.e., “experience”. It will adjust its own subsequent processing in response to the results of its first efforts and thus “anticipate” the future. Many programs simulate these things already, of course, but few would be so bold as to insist on their consciousness. Aside from *reflexive information processing that learns*, there seem to be two more requirements for inorganic consciousness. One is that the processing must have goals or what philosophers might call intentionality. The other is that such processors or processing networks will have to be put into mobile containers so as to interact with their environments and perhaps even each other.

This is the serious vision of a whole block of the artificial intelligence community, aided and abetted by functionalist “neurophilosophers” (e.g., Churchland 1987). If consciousness is already nothing but the isolated result of complex processing, it should be transferable to or created upon any complexly processing substrate. Evolution is not avoided as a subject by these prophets, but it is now seen as eminently purposeful: Evolution steadily moves toward more powerful intelligence. Now with the advent of thinking machines, we humans must prepare ourselves for our obsolescence as more intelligent robots take over the running of the world. This proposal was made years ago by science fiction writer Arthur C. Clarke and has been propagated by others such as Jastrow (1981), Minsky (1985), Dennett (1991), Paul and Cox (1996), Dyson (1998), and Kurzweil (2000). An interesting feature of many of these authors is their use of terms like “spiritual” or “transcendent” when discussing computerized robot intelligence, which may indicate the old human yearning to escape from the limitations and destiny of incarnation. In this sense, machine consciousness would be the ultimate fulfillment of the dream of egocentric “I” consciousness: escape from all that nasty, limited, and perhaps even sinful organicism.

No one has taken this vision of a non-human future to the extremes that MIT robotics researcher Hans Moravec has. In two books, *Mind Children* (1988) and *Robot* (1999) with the last of the trilogy on the way, he has envisioned a future in which super robots transcend Earth and use their vast powers to rearrange the very fundament of the cosmos to their own ends. One must wonder just what these “ends” could possibly be! By working at the quantum level, he surmises these vast machines will use sub-atomic energy fields to, in a manner of speaking, recreate the universe in their own image. When confronted with the question of how these super-processing behemoths could actually be conscious without a connection to life, without eons of experience, and without natural processes like emotion and sensitivity, Moravec simply replies that the question makes no sense because we cannot even be sure any one else but our own dear self is conscious in this way. To my mind, this does not answer the question. The super robots would either have conscious experience or no consciousness we would recognize as such at all. Bill Joy (April 2000), cofounder and Chief Scientist of Sun Microsystems and cochair of the presidential commission on the future of IT research, agrees but thinks such advances may indeed be possible. He counsels humanity — for the sake of its own preservation — against pursuing them.

For me, the idea of sterile “consciousnesses” grinding along beyond a largely

obsolete Earth in pursuit of their own peculiar ends is unspeakably chilling. If the harrowing life experiences of those who hear only their own internal monologues and have lost all connection to other persons, actual events, and natural emotions are any indication, such robotic super-brains might eventually break down in frenzies of psychopathological destruction.

The contrary path cannot hope to include such anti-life ratiocinations since it meanders within the relational dynamics of that which we name life. But resistance to the successes of the past and the successes to come of high technology (or just “hitech” in the wired world) will not be easy. Technology as the offspring of science seems to prove scientific assumptions to be true, again and again. Would robotic minds therefore *prove* that consciousness really is a computational function? Or will consciousness in a material world remain unexplainable?

The former “return to earthly paradise” sounds on the surface much more pleasant. The yearning is universal and certainly very real. But the problem is that no matter how much one plays at being one with nature — doing away with abstract knowledge and excess materiality and living guided only by spontaneous instinct and intuition — such an actual throwback is humanly impossible. As I’ve maintained above, to really lose touch with one’s developed ego consciousness, one would have to recross the symbolic threshold, the bridge that was burnt when we left life as an animal. Perhaps it’s too strong to call this impossible since it happens occasionally in clinical cases of psychotic breakdown or total amnesia in which all cognitive powers have been lost. But these are examples of regression into a “state of nature” with consequent loss of personhood. A glance at such thoroughly regressed cases or those unfortunates reared by wild beasts should convince us that humanity is essentially a noble attainment. Human experience is unique, as Cassirer declares, and, further, the symbolic crossing is indeed final: “Yet there is no remedy against this reversal of the natural order. Man cannot escape from his own achievement... He has so enveloped himself in linguistic forms, in artistic images, in mythical symbols or religious rites that he cannot see or know anything except by the interposition of this artificial medium” (1944, p. 25).

There is no return to the paradise of instinctual impulsion. But there are currently attempts to reconnect to natural rhythms and become attuned to the subtle motions of the unconscious that are much more effective than was Rousseau’s attempt to get back to nature by moving to a patron’s estate in the French countryside. These are creative, not regressive, and include activities from outdoor adventure treks to various sorts of meditation. Such temporary rending of the barrier between conscious experience and experience in itself, i.e., the so-called unconscious, has been done since time immemorial by shamans, seers, and ritual ecstasies, not to mention the more gentle permeation of artists, bards, poets, and musicians.^{xxiv} But, like Theseus entering the labyrinth with his unwinding thread, consciousness is never entirely lost, only its limits expanded. The silent observer remains. It is the deep respect or reverence for the natural modes of non-conscious or pre-conscious experience that allows the space for such paradisaical yearnings in the first place. The mystery of consciousness becomes transposed to the mystery — or wonder — of being and its origins. Is the source of experience explainable by science or must it be of non-material spiritual quality?

David Chalmers (1996) has made a name for himself by developing the notion of the Hard Problem of consciousness. As hinted above consciousness *itself* (*qua* awareness) has never and probably can never be explained (though the “easy problems” to do with such things as neural correlates, attributes, qualia, or learning may well be). As the reader should by now be aware, I do not feel that it is the conscious quality of experience which is the Hard Problem, the unexplained mystery; it is the fact of experience itself which resists being plumbed.^{xxv} Consciousness, I have suggested, is the name we give to the reflection of experience back upon itself through symbolic interaction and intersubjectivity. But it is not experience in itself.

This difference was adroitly noted as far back as 1879 when psycho-neurologist John Tyndall conceptualized the impossible rift:

The passage from the physics of the brain to the corresponding facts of consciousness is unthinkable. Granted that a definite thought and a definite molecular action in the brain occur simultaneously; we do not possess the intellectual organ, nor apparently any rudiment of the organ, which would enable us to pass, by a process of reasoning, from one to the other (in Seager 1995, p. 272).

The Hard Problem of experience may be the only one that *needs*, if not an explanation, a response. An explanation would have enormous — surely world-shaking — consequences for our experience of self, each other, and the shaken world itself, it seems to me. On this grand level, the Hard Problem is "Did experience simply evolve from non-experiencing organic interactions?" or "Did experience 'dirempt' or 'focus' from some sort of nonspecific, pre-organic, experiential potentiality that was part of a universe of all possibilities?" On the personal level, the Hard Problem might be phrased as "Was I in some way conscious before my memory of consciousness begins?" or "Was the experiential groundwork for my individual consciousness already present before 'I' began?" There are, of course, many ways to approach each question, and no final answers appear to be forthcoming. But with some already watching for the necessary obsolescence of humanity, the question requires a response. What else needs to be asked?

Aside from those who will insist dualistically that person-consciousness precedes embodiment (that is, the basic form of self-aware consciousness we experience on a daily basis existed as a soul before this life and will exist after it), researches in the multidisciplinary sciences have generally explained the forerunners, appearance, and development of consciousness pretty well through purely evolutionary emergentism. The Hard Problem, then, turns out to be really to do with the limits and ontological assumptions of science.

The evolutionary story is, I think, the majority view (though I have left the neuroscience angle out of it). It has been well-told by such luminaries as Scott (1995), Dewart (1989), Humphrey (1992), Ornstein (1991), and McCrone (1999). No "Hard Problem" for them and no need for the arabesques of quantum physics or any other sort of *deus ex machina*. Consciousness, here, is clearly an evolved *product* of various forces

in an otherwise non-conscious, non-living universe.

The Hard Problem deals with a logical "category error": defining conscious experience from a position outside of it and using terminology embedded in the objective world to explain that which must be always prior — sensation, awareness, subjectivity — to any knowledge of this objective world. But it is more than this. Merely *assuming* the material, objective world must have preceded awareness does not make it so. The sciences have no way to prove experimentally that some sort of core of non-differentiated awareness (or even undetectable life) either precedes or coincides with the outer, objective universe. The sciences can only begin with what they have learned is reality: the impersonal, outer, objective, material world. As I suggested above, the material or spatial world itself is a product of perceptual construction that was preceded by non-perceptual experience within the vicissitudes of temporal duration: Experience of time precedes perception of space (or material). I am not saying that some sort of experiencing actually does take place before or beyond or around the life on this planet, but I am saying there is no logical reason to exclude this possibility.^{xxvi}

I can only admit I do not know,^{xxvii} but this does seem to me to be the true heart of the Hard Problem: Did consciousness evolve through natural, materialistic processes in an otherwise non-conscious, non-experiencing universe? To answer "yes" is simply to take a stand with unprovable assumptions. Certainly the *form* of our individualized consciousnesses has become what it is through random mutations and complex evolutionary and cultural adaptations over the years. But what of the background of awareness (Jaynes' flashlight) that makes such a particular form possible? Is it more logical merely to assume that a non-miraculous *creatio ex nihilo* (creation out of nothing, or at least nothing remotely similar) must be the "natural" way of things, or to ask whether or not there might some other hidden dimension not visible to the rationalist eye? I can only add that it is in no way "mystical" to ask such a question. It is, in fact, only logical to do so — a fact recognized by few philosophers or scientists.

We seem to be able to account for the all the *attributes* we can phenomenologically and psychologically list as contents of conscious experience through this emergence from basic biological and cultural evolutionary processes. However, no matter how far back into primitive life-forms we imagine the earliest experience or *felt* sensation appearing, the leap from totally non-experiential biological interactions has not been satisfactorily explained and it is difficult to see how it could be.

If we metaphorize the first appearance of experience as the appearance of light (not uncommon in the literature), the image we have is the sudden, random, and unnecessary emergence of a tiny spark of this preconscious experiencing light within some primitive life form. Take your pick: bacterial, cellular, amoebic, paramecial — or even vertebrate, reptilian, or mammalian. This pinpoint is imagined to evolve slowly or to leap in punctuated bursts into the bright light of consciousness we humans most often experience. But this is to lean on miracles or at least dualistic interventions.

No matter how excruciatingly infinitesimal we picture that first point of light to be — no matter how purely mechanical we imagine that first emergence of experience from

non-experiencing biological matter to be — it still must be understood as some sort of miraculous creation since experiencing is so absolutely different in kind from non-experiencing chemical or biological interactions subject to the laws of physics. As long as we imagine that experience (as such) must involve an *experiencer* and something *experienced*, this first appearance of experiential light can only be understood as a supra-rational miracle. It simply does not compute.

All these responses to the quandary of the existence of experience in a non-experiencing material world are without doubt somewhat related. To deal with the enormity of the quandary it should not be surprising that each is a radical leap in its own way. Panpsychism would count among these though it is no longer widely accepted since few will accept that thermostats and stones have minds. A recent and carefully thought out version of this, and one that is much more palatable, suggests that the first appearance of experience among organic modules may simply be a complexification of an already ongoing process of momentary experiencing at the sub-atomic level: an externally non-detectable^{xxviii} added dimension to all that is. This suggestion has been called *panexperientialism* by David Ray Griffin (in Cobb & Griffin 1977; *cf.*, de Quincey 1994; Griffin 1998) or the more contorted panprotopsychism. Deriving from Whitehead, this view sees all present interactions, including the sub-atomic, as “occasions of experience” that draw past “objective” occasions into a new event or entity that lasts but a moment until it too passes into the past. “The many become one and are increased by one” was Whitehead’s (1978, p. 26) formulation.^{xxix} In this view, time and process with ongoing flashes of experience precede perception of a static, spatial world.

Griffin (1998) points out that all things, as such, do not have experience. The idea that rocks, thermostats, etc. are conscious disappears with panpsychism, as normally conceived. This view is more in line with that of some versions of pantheism or perhaps even the holistic anthropic principle. The explicitly Whiteheadian doctrine, clarified and extended by Charles Hartshorne (*cf.*, 1972), states that experience is not created in space but in time. And not only experience: Whitehead’s process view of reality (1978) considers the sciences to err in their view of matter as static, spatial entities. Both experience and matter consist of events in an endless state of becoming. They are, in this view, one thing. Occasions of experience occur only in flashing moments of the ongoing present process. Active, experiencing energy then becomes configured into passive, non-experiencing matter. In some sense, the whole is experiencing through its monads. Such primary experiencing may even be identifiable with creativity itself, since we are faced with the startling possibility that this whole may actually be creating matter by transforming dynamic occasions of experience into non-experiencing “objective entities,” Whitehead’s term for the bound energy we call matter. Objective entities or events still contain their original creativity but are active only through influencing oncoming experiencing events. The *concrecence* of the experiencing moment or event draws from a number of these past or objective occasions to have its own moment of experience. Then it, too, enters the past and becomes objective, a part of the many that will be drawn together to become another one. Physically, this can be seen at the sub-atomic level, where energy fields are drawn together to create a microsecond of experience for, say, an electron. This may be conceptualized as the famous collapse of the state vector or wave-potential into actual particles postulated in the Copenhagen

interpretation of quantum physics, a process that never ends.

In this way, it can be seen that the more complex events and entities would have more extended occasions of experience. For inorganica, like rocks, occasions of experience aggregate within but remain disconnected microsecond subatomic events. Plants and animals (including humans) are synchronized cooperatives of such momentary experiences and are called “compound individuals” by Hartshorne. Such individuals are emergent, whole experiencers. Living in organic unity with a shared purpose, beyond symbiosis, the experience of the physical particles is harmonized into the experience of organelles, which is harmonized into the experience of cells, which is harmonized into the experience of organs, and so on up to the individual. A plant or animal draws all these events and entities together to extend occasions of experience into a continuity of experience through time. More complex mammals have memories and anticipations that may lead to some degree of conscious experiencing. Human animals, of course, have symbolic memories and imaginations that are capable of detaching themselves from current sensory input and ranging over space and time far from the present moment. For us, conscious experience most often seems to run in accordance with narrative memory and rational expectation. The self-consciousness we each know and often feel isolated within is a cultural construction working in tandem with the culturally-influenced evolution of the brain. But, according to panexperientialism, it must not be forgotten that such self-consciousness is only possible as the concrescence of innumerable experiencing events and entities that work in organic harmony as the backlit points of awareness that are focused into the light of mind. It should also not be forgotten that such background experience also includes the unconscious (as non-conscious experience).

Since panexperientialism implies greater creativity in more complex minds (those that have, through conscious memory, extended their occasions of experience into most of a lifetime), there is no predicting what future mind might be like. A mind that opened to its experiential other — perhaps the other as collective unconscious going “all the way down” — would be a mind awakened or reawakened. A mind that transcended its linguistically restricted linear sense of self-in-time to experience consciously much of what had previously been experienced non-consciously would be less encumbered, less enclosed, and more aware of the underlying orchestra of harmonizing experiences that subtend it. This would be less a position of irrationality than super-rationality since intuition and response would return to their rightful place at the centre of the human journey. The guidance and control of knowledge and information would still be there, but displaced to the side, as it were, and not allowed to deny humanity the fullness of experience.

Another position derived from a combination of quantum physics and far from equilibrium thermodynamics sees experience of any sort creating *experienced worlds* from the chaos or semi-chaos of the unknown and non-experienced — the Kantian “things in themselves.” This implies that the universe before life and consciousness was not “dead” and totally “non-experiencing”, but neither was it “alive” and having experiences. It can be thought of as being in a sort of superposition containing all possibilities. In this image, the first, infinitesimal point of light (of experience) was not

really absolutely new within time and space, but was the first *particular* embodiment of an already present but not yet organized potential continuum of universal experience. To contort the metaphor, the first point of light was but the previously existing dark electromagnetic spectrum made manifest.

As mentioned earlier, another suggestion is related to ecopsychology, referring to the creativity of nature itself. The cautious extrapolations of Järvihehto (2000) suggest that the emotional foundations of experience are the expressions of environment-organism relations. The psychotherapist Gendlin (1998) sees the unconscious as consisting largely of the natural life process within each of us. Mathews (1991) asserts that all ecosystems — from smaller ones like cells within our bodies, to bodies, to environmental niches, to Earth, and the universe itself — have “selves” that respond and experience, selves within selves. For her, quasi-Einsteinian geometrodynamics explains the One substance; whether God, Tiamat, or Vishnu, we are of the body of the One, geometrodynamic as it may be.^{xxx}

But all this remains speculation. The best that can be logically inferred is the likelihood of the “objective psyche,” as Jung called it and physicist Wolfgang Pauli agreed (*cf.*, Atmanspacher & Primas 1996). The source of consciousness, the collective unconscious, is right here, all around us. Our inner subjectivity rests within the outer, objective world as a formally unmeasurable dimension. But the origin of experience or existence is not discoverable by us beings created within it. Knowledge and non-conscious experiencing are contradictory concepts, and transconscious states of awareness *sans* egoistic fixation remain, for most of us, larger scale unknowns. Semantic categories of consciousness simply do not apply here, *by definition*. Consciousness through the self we know well, but it may be that it is our cherished self-consciousness that isolates us from the world or, in Derrida’s sense, from *being-in-itself* — the “other” of language. I doubt that we can ever rediscover immediate experience, that is *being*, from our position “atop” it, looking back on it as the water bubble looks back on the ocean. What, then, could be a new way of knowing beyond or evolving beyond the egocentric perspective of “I” consciousness to an inclusive awareness of “other”?

§2. The Hollows of Experience

*Death of the self in a long, tearless night,
All natural shapes blazing unnatural light.*
(Theodore Roethke, “In a Dark Time”, 1966, p. 231)

Throughout this chapter, I have argued that both objective and subjective knowledge are limited. I maintain that objective, scientific knowledge in principle cannot embrace its own beginnings; it cannot account for its own ontological assumptions. Furthermore, I have stated that we are “prisoners of our own device” within the realm of the symbolic. As such, nonsymbolic experience — even of a profound or transformative nature — is unable to produce literal knowledge of itself. It must be re-recognized and re-remembered, later or even while actually occurring, and this taints it with the variable contexts of learning, culture, language, and individual psychology.

(This situation reconfirms the importance of philology and the preservation of languages that have been marginalized by dominant cultures.) It is curious that a scientist who fully accepts the metaphysics of objective materialism will almost certainly experience consciousness within those parameters. Her worldview will shape her conscious experience. Conversely, her conscious experience will continually confirm her assumptions and beliefs. In the same way, someone who accepts the metaphysics of spirituality will be more likely to consciously experience confirming spiritual encounters. This is not to imply that such experiences are necessarily illusions. Physicist and noted science interpreter F. David Peat has commented on this connection: “An expanded vocabulary is evidence of access to an expanded reality and the need to discriminate subtly different states of consciousness and reflect on encounters with energies and powers of other worlds” (2000, p. 121). The manner of our seeking or believing or accepting this or that as “reality” will accord with our daily sense of existence. The uroboric serpent does indeed twist around and bite its own tail. It is no wonder that such virulent disagreement about consciousness is waged in the intellectual trenches: each one of us “knows” — from both belief and experience — that one’s worldview is true.

Such contradictions are not simultaneously sustainable, of course — we can’t all be right. So where, if anywhere, are final answers to be found? What substance is first or what wizard hides behind the sensory curtain? First of all, it must be admitted that any words or images used to indicate transconscious ultimates are projections of cultural-political realities and will not answer the question. Any final or subtending Truth must surely be beyond any symbolization of it. The map is indeed not the territory (Korzybski 1993) and all symbols of any sort can literally do is to indicate other symbols, though they may also inspire in unexpected ways.^{xxxix} The question of conscious experience is both an epistemological and an experiential question, but it seems the two are mutually contradictory: Total immersion in present experience excludes the knowing mind, which *takes time* to know. Conscious knowledge-creation excludes total immersion in the present moment of experience. Drawing pure experience into the web of knowledge creates new knowledge but disguises and alters the experience — or, to be more exact, the memory of the experience. Symbolism both reveals and conceals, as Cassirer (1944) has pointed out: It creates knowledge but conceals the essence of that which is symbolized. Bringing our analytic knowledge-creating mind across the boundary into what should be pure emotional (or transemotional) experience inevitably taints the purity or “rawness” of the experience. The observer cannot permit itself to lose that objectivity by “letting go” into the ecstasy of the moment. Yet there must be *something* or *some process* that is foundational to both conscious knowing and overwhelming experience else I could not speak of them in the same sentence.

Having said this and drawing together the overall evidence of this chapter, it seems to me that the only conceivable *ultimate* is creativity itself.^{xxxix} For humans, symbolic interaction makes possible our conscious experiences, which in turn take their cue from background knowledge to advance in novel directions. Errant creativity reveals itself in the adaptations and, even more, the mutations of evolutionary theory. Creativity as such is evident even beyond the organic once we consider the eternal activity within the inorganic as revealed by subatomic physics in this century. Whence this chaotic

dynamism, which is the core of all reality? Creativity begins in the chaos behind all order and in the unbound energy behind all matter. It unites opposites in ways that defeat all words but poetry, myth, or, perhaps, postmodern irony. It is neither objective nor subjective, but makes each possible: “The world is inseparable from the subject, but from a subject which is nothing but a project of the world, and the subject is inseparable from the world, but from a world which the subject itself projects” (Merleau-Ponty 1962, p. 430).

Thus, as I proposed above, consciousness is the result of autopoiesis, as is the worldview that is the other part of the cycle of experience and knowledge. This is not easily recognized for we must live from within our worldviews: the beliefs and attitudes that make daily life possible. We nurture their confirmation and find a special place in self-fulfilling narratives for those experiences we regard as having created or affirmed our ontological knowledge. We cannot create creativity, however, and often resist even releasing it. It takes courage to create, as Rollo May has insisted, for certainty and meaning are always put into jeopardy:

Creative people, as I see them, are distinguished by the fact that they can live with anxiety, even though a high price may be paid in terms of insecurity, sensitivity, and defenselessness for the gift of the “divine madness,” to borrow the term used by the classical Greeks. They do not run away from non-being, but by encountering and wrestling with it, force it to produce being. They knock on silence for answering music; they pursue meaninglessness until they can force it to mean. (1975, p. 93)

Creativity requires a loosening of the purely symbolic grip, a flirtation with elusive pre-conscious experience prior to language. The creative person learns from the active unconscious. The creative phase of initial inspiration dilutes the separation of subject and object, and also does away with the vistas of past and future into which we commonly stretch our daily conscious existence. Humanist psychologist Abraham Maslow has observed:

The creative person, in the inspirational phase of the creative furor, loses his past and his future and lives only in the moment. He is all there, totally immersed, fascinated and absorbed in the present, in the current situation, in the here-now, with the matter-in-hand.... This ability to become “lost in the present” seems to be a *sine qua non* for creativeness of any kind. But also certain prerequisites of creativeness — in whatever realm — somehow have something to do with this ability to become timeless, selfless, outside of space, of society, of history. (1977, p. 58)

Eliade explains that poetic and literary creation imply an abolition of time because such creative artists try to alter ordinary language or image by substituting a private and personal language that “tends towards the recovery of the paradisiac, primordial situation; of days when one could *create spontaneously*, when the *past* did not exist because there was no consciousness of time, no memory of temporal duration” (1967, p. 36).

The spontaneous present is experienced as the return to paradise. The unity of subject

and object and the qualities Maslow cites are among those I described above as being created through the stages of development into personhood through speech assertion, narrativity, and intersubjectivity. Autopoiesis creates the qualities of human conscious experience. Creativity, at least in its inspirational phase— its “furor” — seems largely to undo the most often cautiously preserved social and cultural structures of the conscious “I” or self and unite our activity with a source larger than ourselves or the linguistic environments that shape us.

Why such anxiety? From the terminology I have been developing, it is because the creator is not only loosening the grip of the purely symbolic, opening the hermeneutic circle into the spiral of possibility, but she is also opening herself to the pre-creation chaos of nothing at all, what the prophetic Norman O. Brown referred to as: “A pregnant emptiness. Object-loss, world-loss, is the precondition for all creation. Creation is in or out of the void: *ex nihilo*” (1966, p. 262).

The artist of reality allows the sense of the conscious “I” to wither under a hurricane of forces unleashed from the unconscious. Unsettling as it is to permeate the walls of ego-self, we must remember that the symbolic interaction that allowed us to conceive ourselves in the first place also gave us the imagination to access the creative itself. “Our ability to use language means that we have an unlimited creativity inside of us” (Peat 2000, p. 116). What can be more ultimate than the “unlimited”? How much of our lives can be given over to the purely creative without disturbing the contexts needed for daily survival is unknown and will vary amongst cultures and individuals. All we can be certain of is that the well of creativity is deep indeed. “Should we not call it bottomless?” asked Thomas Mann (1934, p. 19) looking into the past for its origins.

I am suggesting that the *creative impetus may be the ultimate source not only of consciousness or experience but also of all existence*, pre-existing all realities as potential. Siler has suggested that we ourselves are evidence of universal creativity even as we are the medium through which new possibilities are further created. He writes that the “universe imparts its creative processes to us. We, in turn, impart our creative processes to the things we create. Our creations reveal the nature of our minds directly and so the universe indirectly. This is the great current of influences that changes our lives in accord with the lifeful changes in the universe” (1990, p. 17).

Of course, the view of dynamic processes behind all substance — and infinite potential behind those processes — is not new. Henri Bergson (1911/83) delighted those of his time who were dismayed at the growth of scientific rationality with his demonstration of creative evolution. Whitehead took this even further and made creativity the only ultimate behind and within his process cosmology: “‘Creativity’ is the universal of universals characterizing ultimate matter of fact. It is that ultimate principle by which the many, which are the universe disjunctively, become the one actual occasion, which is the universe conjunctively” (1978, p. 26).

As Neumann understood, the ultimate effect of conscious creation is the creation of more consciousness:

The nature of creativity in the extra-human as well as in the human realm is always the incorporation, that is, the turning into form [*Gestaltwerdung*], of what until then had been just formless dynamic energy. The liberating element of creativity for the psyche consists in transforming unformed dynamic energies — which create unrest as drive, urge, or emotion — into that form which possesses a direction toward consciousness; for within this form a vector is urging the comprehension of its inherent luminosity and thus, finally, the increased comprehension of meaning. (1989, p. 41)

Many others with serious scientific credentials have found non-mechanical, creative autopoiesis at work behind the unfolding of all that is, from the biological autopoiesis of Maturana and Varela (1987), Ho (1998), and Shel Drake (1995) to the self-organization (Kelso 1997) and strange attractors (Van Eenwyk 1997) of chaos theory and complex dynamic systems to, finally, the ultimate interactive creativity of matter and mind as found in the observer effect of quantum physics (*cf.*, Bohm & Peat 2000; Schrödinger 1992). But the fundamental ontological question remains: What is this creativity that makes autopoiesis, self-organization, or strange attraction possible? And how can we draw more of it into our lives to enrich awareness and add previously unimagined possibilities to our habitually narrow spectrum of reality?

What creativity is, in itself, cannot be known since it is not anything at all until it manifests in things or processes of this world. To attempt even to imagine a pre-existent unity, being, or substance without its differentiation and manifestation into a many is an impossibility. Any attribute we can give this unthinkable oneness adds to it and draws it, and our conception, into multiplicity. This “one” would make everything equivalent to nothing since even by imagining “it” existing adds an attribute. Attempts have hesitantly been made to suggest this Ultimate beyond (or infused within) creation with terms like Anaximander’s *apeiron*, the gnostics’ *pleroma*, the *cosmic conatus* of Spinoza, *existenz* of phenomenologists, or perhaps especially the super-natural *God*. This is but semantic play, however, since these are and must be conceptions without objective referents. By Kantian syllogism and basic logic, something must at least occasionally manifest within space and time to be recognized as possessing the primary quality of existence. Something must be manifest in — or *as* — the universe to be *any thing*. If it is beyond all qualities, especially space and time, it does not exist. We can only be conscious *of* or know *of* that which exists. We know and can know nothing objectively of unmanifest creative potential or of a God who is beyond existence.

On the other hand, negative conceptions provide a way to indicate potential existence by pointing to what is not. In created spacetime, where indeed can the true void — absolute nothingness or vacuum — be found? Peat (2000) reveals that our conceptual “nothing” is not quite what it linguistically implies, explaining recently discovered dark or *vacuum energy*: “The vacuum state is the void. It is pure silence. But it is also a bubbling sea in which elementary particles are constantly dancing in and out of existence” (p. 94). Even more unsettling, the potential energy in this void is as unlimited as creativity itself: “It turns out that the energy within one cubic centimeter of the vacuum state would vastly exceed the energy content of our entire universe. ... So this void, this nothingness, this cosmic silence, is pure potential” (p. 96). Could it be the

ultimate “source” of the creative principle within everything is *nothing* — that is, the infinite potential energy of the void?

In the same way, it would be the most diabolical sort of hubris to insist that the symbolic conceptions of objective knowledge have the power to determine which experiences are real and which are not, or to state flatly that nonconceptual, non-objective awareness is an impossibility (precisely because it is not literally conceivable). It has been the thrust of my whole argument that certain subjective experiences and states of awareness do occur that are beyond conception and cannot, therefore, become objects of knowledge without becoming drastically particularized and limited. The most profound ontological reality that we can come to know objectively is found in natural processes; and nature at its core is, as physics teaches us, ceaseless dynamism. With Herakleitos (*ca.* 500 B.C.), I must agree that eternal change is the first and fundamental principle of all that is: “The ordered universe (*kosmos*), which is the same for all, was not created by any one of the gods or of mankind, but was ever and is and shall be ever-living Fire, kindled in measure and quenched in measure” (Frag. 30, in Freeman, 1983, p. 26). This living fire was sometimes called by Herakleitos “change” and other times “strife,” but as that which brings the new, it is always creative.

I can only confess that the verbal symbol “creativity” does not do justice to the unfathomable and everlasting dynamism that is not a thing in itself but is, instead, that which makes all things possible. I ask the reader to take the term “creativity” as a metaphor for the unnameable dance of the eternal present and not to test the metaphor against dictionary definitions. Many other metaphors have been attempted. This “ever-living fire” suggests the transpersonal ultimacy of desire that is implied by Lacan and other poststructuralists. Such non-substantial, poetically conceivable creativity in itself is indicated by the Derridean reference to the unspeakable “other” of deconstruction. Creativity is further the process behind the drive into novelty that allows for panexperientialism. Finally, I am left with nothing but to indicate the intricate yet profound works of Alfred North Whitehead, especially *Process and Reality* (1978), to see one map of how ultimate creativity ever-manifests in our turning world. The metaphoric image is one of ultimate dynamism, a non-manifest potentiality that itself manifests first into what we call time. Holonomic autopoiesis is enfolded in every event and entity of the world, as suggested by quantum physicist David Bohm (1980), as well as in all moments of consciousness, as indicated by neuroscientist Karl Pribram (1977). Creativity is the dynamic, eternal *now*, uncreated in itself yet present in all times and places, as T. S. Eliot (1944a) expressed it, noting that the universal absolute of

...the light is still
At the still point of the turning world (p. 18).

Yet this still point is

Quick now, here, now, always— (p. 20).

Nørretranders (1998) sees creative earthly experience overwhelming the “I” consciousness, if we have the courage to let it be. The loss of narcissism may be

frightening because it implies such imponderables as the acceptance of personal death and necessarily feeling attuned to a wounded environment. But Nørretranders makes the point that this is also the way to something far more deeply interfused: “Experience can be more than subliminal,” he writes. “It can be sublime. The sublime experience is the one where we draw on our entire apparatus for experiencing and dare to mark the world as it really is: chaotic and contradictory, dread-provoking and menacing, painful and merry” (p. 415). However, the promise of such deep experiencing is not without pain:

Experiencing the state of the planet can generate angst and disquiet, because there are problems on the globe. But perhaps precisely this is the way to getting something done about the problems: Trust that we dare take our own experience seriously is the way to daring to experience *what is*, even if it is unpleasant. (p. 415)

It is not that we must crush self-awareness to become aware of this “sublime,” but we must be able to use it to go beyond itself, as in creative endeavors or certain spiritual practices: “There is no real conflict between consciousness and the sublime, for consciousness is the way to the sublime; discipline is the way to improvisation; stability is the way to surprise; cohesion is the way to openness” (p. 415).

The need of the conscious for *rationalizing* its subconscious routines, if not for actual *rationality* as a means to understanding, is conspicuous. But this need may have enveloped us over-civilized creatures in these early stages of mental and cultural development in which the sources of life themselves are continually being isolated, fragmented, and “explained away.” The radical continental philosophers seem most able to comment on our predicament but at the cost of appearing obfuscatory or (the same thing) oracular.

Heidegger, before his time, calls rationalism a “cybernetic frenzy” and claims there is another way to think: “Perhaps there is a thinking which is more sober-minded than the incessant frenzy of rationalization and the intoxicating quality of cybernetics. One might aver that it is precisely this intoxication that is extremely irrational” (1977, p. 391).

Derrida too suggests that it is habituated reason which is actually irrational: “But this crisis in which reason is madder than madness — for reason is non-meaning and oblivion — and in which madness is more rational than reason, for it is closer to the wellspring of sense, however silent or murmuring — this crisis has always begun and is interminable” (1978, p. 62).

Merleau-Ponty prophesies that awakening to an experiencing world is not a connection we can *consciously* seek. He enigmatically writes: “If being is to unveil itself, it will be in the face of a transcendence and not an intentionality; it will be brute being caught in the shifting sands, a being that reverts to itself: it will be the *sensible* hollowing itself out” (1968, p. 210). It hardly needs saying that such hollows must have everything to do with memory, felt memory — the frame of reference that shapes experience. The hollows of experience are not to be explained or accessed either through

some objective knowledge-creation *or* through an atavistic return to animal nature. It seems to me that Merleau-Ponty and even Derrida to some extent suggest that it is within the “hollows” of experience that we can reconnect *experientially* with primal creativity. Knowledge or interpretation must come after.

I have argued above that even experience that is felt to be profound needs to be interpreted to become knowledge, so most experiences within meditation and prayer do not escape from projected expectation and subsequent culturally specific explanation. However, there may be an exception in the type of meditation known as “vispassana,” “mindfulness,” or, simply, “awareness.” In this type of practice no goal is sought, no spiritual struggle is undertaken, no attempt is made to change one’s cognitive routines. However, a space or time is created wherein the sitter merely impassively observes her own mind as it produces the usual cycle of thoughts and images. This alone — this sitting in “the still point of the turning world” looking out — is said to open out a “hollow” within the otherwise light-resistant cycle of habit routines. This is one way to open to the ontology of creative process.^{xxxiii}

This is not to abnegate “I” consciousness but to suggest instead another way of being conscious,^{xxxiv} one that allows for both vital experience and for awareness of that experience. Heidegger has declared this “new” consciousness to be “poetic.” We might interpret this as an expressive, creative, spontaneous conscious awareness that analyzes less but responds more attuned with others and the deep emotional chorus of the dynamic environment — a porous “mind” that neither fears nor forecloses emotional trains arriving from world experience but instead uses cultural knowledge to make them manifest: Life as improvisation, as in experimental theatre or with a freestyle jazz combo — attunement without predefined parameters; life as art.^{xxxv}

Awareness practice and artistic improvisation are two ways to bring out the creative from the hollows of experience. I would like to suggest that an *embodied* return to an aesthetic awakening of the senses attuned to the already creative rhythms of our world is another way to discover more life in those fertile hollows. This latter is best associated with wilderness experience where natural rhythms alone still ride the airwaves. This is the position of much environmentalist philosophy such as Abram’s *The Spell of the Sensuous* (1996) and Sewall’s *Sight and Sensibility* (1999) and it is suggested by the recent work of Järvillehto (2000). This is eternal return, yes, but it is also to “know the place for the first time” (Eliot 1944b, p. 59) since one is conscious of the returning. It is not an “old” way of being aware,^{xxxvi} as much as such authors suggest its similarity to tribal sorts of awareness. It might be metaphorized as a return to pristine experience but with the added quality of consciousness, a vast “knowing together.” Knowledge, opened to embrace metaphor and expression with culturally specific modes, must be central to such awakening. A true global awareness sometimes seems to be emerging that is, well, something new on Earth. And it is *down to earth*, as Sewall’s (1999, p. 274) last lines indicate: “My prayer is that we get down, that we get down and dirty.”^{xxxvii} Getting down from the heights of our disembodied material *and* spiritual aspirations is one more way, maybe the best way, to rediscover the spontaneous present.

Consciousness beyond self is already all around us, its centre everywhere. What is required is that we find a way through the hollows revealed by a deconstruction of our egocentric self-enclosure and give creative form to the chaotic energy unleashed there. Exposure to such a violent storm may be frightening, a momentary dark night of the soul, but the artist or artists of being must ride this cyclone, creating form. Conscious being manifests all around us in dynamic interplay on the sphere of awareness we call world. Each of us knows this already, on some level, as the bottomless and formless source of memory within the hollows of experience.

Of course, we may choose to define consciousness as a biological byproduct isolated from primordial experience and so continue to forge a future guided by the triumph of technology with a humanity “all watched over by machines of loving grace” (Brautigan 1967). As much as the symbolic mode of being conscious allows us to guide our own autopoiesis, I choose instead — and I hope others do, too — a conscious return to the hollows of experience. Each of us knows this place already as the soul’s yearning, as the inchoate memory of *différance* we must trust even though it is beyond *grasp*. As Mnemosyne is the mother of the Muses, so such pre-conscious memory of infinite possibility is the mother of creativity. And when one awakens to creative potential, who shall stop the ex-static spread of awe-full wonder?

*The pure serene of memory in one man—
A ripple widening from a single stone
Winding around the waters of the world.*
(Roethke, “The Far Field”, p. 195)

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ENDNOTES

i “Nematodes are the most numerous multicellular animals on earth. A handful of dirt will contain thousands of the microscopic worms, many of them parasites of insects, plants or animals. Free-living species are abundant, including nematodes that feed on bacteria, fungi, and other nematodes, yet the vast majority of species encountered are poorly understood biologically. There are nearly 20,000 described species classified in the phylum Nemata. Nematodes are structurally simple organisms. Adult nematodes are comprised of approximately 1,000 somatic cells, and potentially hundreds of cells associated with the reproductive system. Nematodes have been characterized as a tube within a tube; referring to the alimentary canal which extends from the mouth on the anterior end, to the anus located near the tail. Nematodes possess digestive, nervous, excretory, and reproductive systems, but lack a discrete circulatory or respiratory system. In size they range from 0.3 mm to over 8 meters.” ([What is a Nematode?](#))

ii Prehension is A. N. Whitehead’s term for experience that “can include, as part of its own essence, any other entity” (1967, p. 234). Such primary experience is unlike conscious cognition in that neither objective perception nor any distinction between self and other (subject and object) necessarily takes place. Initially what is prehended is change (time) not substance or things (space), and such occasionally prehended time is the organism’s entire reality.

iii More like a thick bush, spreading into complexity, than a ladder of progress.

iv This notion of a rudimentary [eco-psyche](#) has been seriously explored from a number of approaches, including the perceptual-aesthetic conservatism of David Abram (1993) and Laura Sewall (1999), the organization-emotion approach of Timo Järvillehto (2000), the primacy of life-process in Eugene Gendlin (1998), and even the metaphysical in Freya Mathews (1991). We may anthropomorphically err by conceiving of experience as only occurring within individual organisms.

v It may be pertinent to note that the last sessions at “Tucson 2000: Toward a Science of Consciousness” were about the need to go in a direction promising practical benefits and potential fiscal return so as to encourage investment, grants, and other benefits to the researchers in the field.

vi The narrativist school of philosophy and literary theory has persuasively argued that the conception of time is itself an aspect of the linearity of narrative that requires a beginning, middle, and end. See, for example, Paul Ricoeur, *Time and Narrative* (1984-8).

vii “Truth is by nature the offspring of dialectic thought. It cannot be gained, therefore, except through a constant cooperation of the subjects in mutual interrogation and reply. It is not therefore like an empirical object; it must be understood as the outgrowth of a social act” (Cassirer, 1944, p. 5).

viii When shamanism, mysticism, paranormality, or chemically altered states are considered, potential conscious experience may be understood as very broad and deep indeed.

ix I owe the inspiration for this sentence to Herbert Müller (1997).

x This is not to impugn the personhood of scientists themselves but to note the ideal of the scientific worldview. Many scientists are religious or otherwise spiritual and many seriously appreciate the effects of their own subjectivity.

xi Since I defined consciousness above as reflective knowing, including knowing that one is experiencing, I will employ the term “awareness” here for all possible levels of experience from preconscious to unitive conscious states.

xii *The Journal of Consciousness Studies* and others have called for a multidisciplinary but still scientific investigation of conscious experience. It has made the optimistic suggestion that conscious experience may at last be rationally understood and explained. The very language of such a suggestion is rife with cultural assumption. Rationality must in some way be seen as antecedent to conscious experience and not a product of it if consciousness is to be so understood.

xiii Edelman (1992) does not deny that a ToE is possible, “But a ‘theory of everything’ will certainly have to include both a theory of the mind and a fuller theory of the observer” (p. 208).

xiv This was recognized by Percy in 1975: “Every conscious perception is in the nature of a recognition, a pairing, which is to say that the object is recognized as being what it is. To amend the phenomenologist: It is not enough to say that one is conscious of something; one is also conscious of something as being something” (pp. 272-3).

xv It has been suggested elsewhere (Eliade, 1963) that such times were sacred times; the speaking on these occasions was formal and ritualized and the lack of individuality and undeveloped self-awareness led speakers to communicate not for utilitarian purposes or for themselves, but *from* and *for* their cultural unit. When speech was spoken, it was with the “voice” of the culture, experienced as divine in origin. Jaynes (1976) considers early inner speech also to have been experienced as the voice of the gods.

xvi In this perspective, Arthur Deikman’s “I = Awareness” (1996), is simply mistaken. It is, in fact, the “I” which changes experiential awareness into narrative consciousness and prevents the reunification of immediate sensory experience with consciousness.

xvii This is the opposite of the isolated Cartesian subject assumed by psychologists and philosophers who argue over which form of the “theory of mind” (simulation-theory or theory-theory) the infant or toddler uses to infer minds like its own in others. Instead such notions as primary intersubjectivity (Gallagher 2001) begin with a self relational before it learns to be isolated. I cannot conceive of a relational entity before it is an entity so I agree with Lacan (above) and later phenomenologists like Merleau-Ponty (1973) in taking the step of assuming the initial identification with the primary caregiver(s) — obvious in the case of the fetus in the mother but continuing for the infant. With the sense of limited embodiment, the journey toward the private self begins.

xviii Derrida’s neologism to metaphorize our existence, suggesting both the power of words to endlessly differentiate and that full disclosure/enclosure of meaning is always deferred or postponed.

xix Derrida was nominated to receive an honorary degree from Cambridge University in 1992 but such a protest arose that it had to be voted on by the Cambridge dons, passing 336 to 204.

xx The etymology of the very term “denigrate” reveals our privileging of light over darkness.

xxi This perspective has been resisted almost as much as it has been misunderstood. There are no *things* outside the text of language: As I have indicated in the section above, “The Subject,” objects only come to exist, as such, with their naming and recognition. Non- or preconscious experience does not take place in world of objects but only of actions and reactions, sensations and emotions. This is true of situations even where language itself seems to be completely lost. One example is someone too involved in critical action even to think, such as the sailor friend who told of rapidly and “mindlessly” making adjustments to his craft to stay afloat during a storm at sea. Another example is temporary language anosognosia, during episodes of which a scientist correspondent claimed he can neither understand nor speak words. Once he had to do a little dance to assure his wife that he was okay. In both of these cases, it should be easy to see that neither the life-saving responses of the sailor nor the communicative performance of the scientist would have been possible if they had not already crossed the threshold of the symbolic. The actions of the sailor and self-awareness of the scientist were originally learned through symbolic interaction though they had by now passed into subconscious schemata. The scientist’s little dance was itself symbolic. I should add that, yes, much of a powerfully deep nature is non-consciously experienced beyond the realm of the symbolic; however, this is inner experiencing, unshared with others, primarily unremembered, and without literal reference in the outer world of recordable events. So here again there is indeed raw experience beyond language, outside of the text, but such experience in itself is doomed to disappear into oblivion as soon as it ceases — without becoming conscious. To be remembered the experience must be made into an object of memory, that is, drawn into the contexts of the symbolic: memory, language, culture, and psychological projection (*cf.*, Nixon 1999). This certainly applies in the realm of experiences we term spiritual. Anyone who has felt personally dissolved into such a rapture cannot doubt its reality, but it is a reality without substance or temporality until we objectify it. The great religious historian, Mircea Eliade (1969, p. 19), no stranger to direct experience of the sacred, asserts that “there is no such thing as a ‘pure’ religious fact. Such a fact is always also a historical, sociological, cultural, and psychological fact, to name only the most important contexts.” Even our labels like “spiritual” and “sacred” draw distinctions that are not there when there is only experience. “It is impossible to imagine how consciousness could appear without conferring a meaning on man’s impulses and experiences. Consciousness of a real and meaningful world is intimately linked with the discovery of the sacred,” adds Eliade (1982, p. 153). Beyond this are the varied extraordinary claims that must be impossible within the ontology of scientific realism. These include such things as NDEs (near death experiences), OBEs (out of body experiences), and on up to widespread claims of being abducted and held for experimentation within alien spaceships. The people who have had such experiences often are utterly

sincere so one cannot doubt that they experienced *something*; however, no such experience has been veridically verified to the extent that it has been accepted as observable, historical fact. All they had to apply to their inexplicable moments are the contexts from the real daily world of space and time and these, it seems, just won't do. A good example is those who claim to have re-experienced their actual physical birth (despite the lack of development of the brain's memory capacity at this time) during "rebirthing" regression. They could well have undergone the profound initiatory pattern of death-transition-rebirth that Eliade regards as universal to human experience; but did they in fact psychically return to experience again their literal discharge from the womb of their mothers? It seems much more likely that such is a rationalization of the highly-charged emotions of a transformative experience. It is this sort of after-the-fact interpretation that draws non-conscious experience within the symbolic realm of human conscious reality.

xxii This viewpoint is more widespread than the public news media note. See, for example, any issue of *21st Century Science & Technology*, or sit in on board meetings of any expanding technological corporation.

xxiii Kasparov declared he felt an "intelligence" at work against him. We must assume Deep Blue remained as utterly indifferent to this outcome as Kasparov was utterly frustrated.

xxiv I need to emphasize that such experiential "permeation" of the presymbolic barrier can only produce knowledge and demonstrable effects with symbolic interpretation.

xxv Chalmers *seemed* to suggest this in one article: "The really hard problem of consciousness is the problem of experience" (Dec 1995, p. 80).

xxvi Christian de Quincey (2000) elucidated this problem well by boldly suggesting the universe experiences itself through the relational dynamics of its monads, including us. In some ineffable sense the Big One is itself "alive" in its totality and we are *of it*.

xxvii As I have argued, experience as experience can only be experienced. To *know* experience is to undertake the conscious act of knowing — to make experience conscious, symbolized, and no longer "pure" experience.

xxviii From the outside.

xxix Aside from the notion of momentary experience, Whitehead has proved to be astonishingly prescient in anticipating the discoveries of the quantum physics. See. e.g., Stapp, 1979.

xxx Geometro-dynamics envisions the universe as one solid block, so to speak, in which all space and all time already exist. This is the very opposite of a universe of creative unfolding, as I am here presenting.

xxxi Gaston Bachelard remonstrates, "How unjust is the criticism which sees nothing in language but an ossification of internal experience! Just the contrary: language is always somewhat ahead of our thoughts, somewhat more seething than our love. It is the beautiful function of human rashness, the dynamic boast of the will; it is what exaggerates power....Without this exaggeration, life cannot develop. In all circumstances, life takes too much in order that thought may have enough. The will must imagine too much in order to realize enough" (1987, p. 30).

xxxii Having said this — and breaking the taboo of the language philosophers to even mention an "ultimate" — I must admit to appearing to valorize one side of a binary opposition, the other denigrated side being stasis, order, control. As Derrida warned us (above), a word represents only the more valued half of a polarized pair and so can never indicate ultimacy or being-in-itself. However, I would like to plead for creativity as a process, not an independent force, that begins in potentials within chaos and ends in order and harmony. The dependable work of carpenters, electricians, and plumbers are as much a part of the architectural vision as are the first "inspired" sketches — and the building so constructed is expected to endure as statically as possible.

xxxiii I confess I am taking the word of others to some degree. My own experiences with awareness meditation have been limited so I can claim little personal knowledge of such sitting. An excellent short list of sources for the practice is found in Varela, Thompson, & Rosch, 1996, Appendix C, pp. 259-60.

xxxiv Or *being-consciousness*: a pervasive, immediate awareness — and awe — of existence.

xxxv If this sounds just too saccharine, be reminded that anyone who has done theatric improv or played in a freestyle jazz combo knows how keenly competitive such play can be.

xxxvi Though it could be argued that Jung's concept of individuation is a forerunner.

xxxvii Ancient Lao Tsu advised staying with *terra firma* too: "Mask your brightness,/Be at one with dusty Earth" (1972, chap. 56, lines 7-8).

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Article

Myth and Mind

The Origin of Human Consciousness

in the Discovery of the Sacred

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Contents

Abstract	... 290
1. Introduction	... 291
2. Human Consciousness	... 293
3. The Mythic Mind	... 296
4. Thresholds of the Self	... 300
5. Approaching the Existential Crisis	... 307
6. The Symbolic Crossing	... 311
7. The Prehistoric Moment	... 315
8. Myth and Language	... 319
9. Afterword: Prehistoric Speculation	... 329
References	... 330

Images

- i. The Sacred Tree (Babylonian seal, ca 4.5 – 2.5 kya, now in the British Museum, London), title page
- ii. Venus of Laussel (stone wall carving, ca. 25 kya, now in the *Musée d'Aquitaine*, Bordeaux, France), end of Afterword

Abstract

By accepting that the formal structure of human language is the key to understanding the unicity of human culture and consciousness and by further accepting the late appearance of such language amongst the Cro-Magnon, I am free to focus on the causes that led to such an unprecedented threshold crossing. In the complex of causes that led to human being, I look to scholarship in linguistics, mythology, anthropology, paleontology, and to creation myths themselves for an answer. I conclude that prehumans underwent an existential crisis, i.e., the realization of certain mortality, that could be borne only by the discovery-creation of the larger realm of symbolic consciousness once experienced as *the sacred* (but today we know it as *the world* – as opposed to the immediate natural environment of ourselves and other animals). Thus, although we, the human species, are but one species among innumerable others, we differ in kind, not degree. This quality is our symbolically enabled self-consciousness, the *fortress* of cultural identity that empowers but also imprisons awareness.

§1. Introduction

Innumerable theses, guesses, or claimed revelations purport to explain the origin of human be-ing, none accepted by everyone. Here I offer another. Though what follows is not an absolutely original thesis seeing first light of print, perhaps this statement will present a new synthesis on this most ancient of questions, as well as endorsing certain minority positions that inhere in my conclusions. I recognize that causal explanations are themselves mythic in that they tend to narrate a linear domino-effect story that disguises a network of causal processes.

That said, herein I state that being in the human sense first awoke with the departure from the sensory focus within the natural environment and the entrance into an entirely new world of the symbolic mind. This transformation into openended syntax and active imagination was experienced as an awakening to the sacred — not merely to new survival tactics, technological possibilities, or social enhancement. Sacred awareness is of the felt dimension of invisible powers and presences and is here understood to include the apprehension of a *far beyond* in time and space (the latter including the vertical polarities of supernatural heights and subterranean depths). This awareness warrants the term ‘sacred’, however, not for its content alone but more for its affective tone, though the two are not finally separable. In a way that is almost lost to us, the supersensory images of the sacred, ‘by whose vision man was overcome, must have produced ecstasy, devotion, allegiance, and exaltation’ (Otto, 1965, p. 15). A vast emotional yearning had arisen, a need for *meaning* that ritual and myth, if not fulfilled, at least assuaged. In short, in a teleological sense the need for myth made language,¹ which is to say, myth made humanity.

Controversial assumptions I touch upon in what follows include the notion that central to human being are self-awareness and communal intersubjectivity, both impossible before the crossing of Walker Percy’s (1975) ‘symbolic threshold’ (*cf.* Deacon, 1997). I also adhere to the reasonable surmise of the existence of a millions of years long intermediate period between direct animal-natural experience and the crossing of the symbolic threshold during which earlier hominid species learned to use protolanguage,² were subliminally conscious (of their own existence), and in that sense were *protohuman*. Finally, upon balanced consideration of the widely disparate evidence and expert opinion on it, it seems likely that the moment of awakening *within symbolic forms* must have occurred in the Upper Paleolithic amongst the people we currently designate as late *Homo sapiens* (*H. sapiens sapiens*), the Cro-Magnons, approximately 35 to 55 kya (thousand years ago),³ though this is highly controversial.

However, equating symbol-using humans with the Cro-Magnon is incorrect since scattered symbol-use appears in the fossil and archeological records of humans before

¹ Hauser, Chomsky, & Fitch (2002) refer to FLB, the faculty of language in the broad sense, that many animals have, & to FLN, the faculty of language in the narrow sense, that only humans have. When I speak of ‘formal language’ or ‘human language’ throughout, I refer to the latter.

² *Protolanguage* as explained by Bickerton (1995), not as *first language* (*cf.* Ruhlen, 1994).

³ I find the ‘kya’ (thousand years ago) or ‘mya’ (million years ago) designations less confusing than the B.C.E. & C.E. designations, & certainly less so than the B.C. & A.D. traditional ones.

entering France (or even Eurasia) where the Cro-Magnon cave is found. Anthropologist Richard Klein (2002) makes the case for an east African origin of symbolic interaction based on the discovery of human-made ostrich eggshell beads, ca 50 kya, but since then older ostrich eggshell beads have been discovered at Diepkloof Rock Shelter, a cave in South Africa (Texier *et al.*, 2010). The oldest, but still controversial, evidence for symbol-use comes from excavations from the at Blombos Cave in South Africa (Henshilwood *et al.*, 2001), where incised cross hatchings on stone and signs of iron oxide ochre use have been found, originating more than 70 kya in the Middle Paleolithic. Some have seen these scratchings as early signs of language, but the problem with equating these early African findings with the crossing of the symbolic threshold into concept-creating humanity is that these are but scattered islands of discovery (at least at this writing). They are as anomalous as the cave drawings from Panaramitee in Australia (ca. 45 kya) that exist in isolation without precedent or continuance. To judge from the lack of similar evidence of symbolic-use in nearby times or places, such 'symbol use' appeared randomly and did not survive to spread to descendents or other human groups. There is no strong evidence of long-term immersion in a symbolic culture that depended on the faculty of language in the narrow sense (FLN) for its survival. At least at this writing, I submit that the only indubitable evidence for long-term (over tens of thousands of years) immersion in a culture of imaginative extravagance based on the symbolic interaction of the FLN is still found in the Upper Paleolithic era in southern Europe (And I do not believe such an objective review of the evidence makes me *Eurocentric*.)

My preference for the recent origin of the human symbolic capacity is a rational assessment based on admittedly second-hand evidence from the testimony of well-known experts who shall be cited later. However, the debate over early or recent origins is for paleoanthropic specialists and is a peripheral issue to this study. The nature of human symbolic processes, whenever they first came to light, is the focus. The trend in current studies has been decidedly toward the quantitative, that is, to consider the symbolic capacity largely as the ability to make tools, retain social organization, and leave records of such marks as may be termed symbolic in the sense that they *represent* in the abstract something that exists in the concrete (including the passage of time). Such may be included, but I understand the symbolic as more related to the intersubjectivity that is indicated in the social science phrase, *symbolic interaction* (Blumer, 1962), which is in essence human culture. Such a system is not primarily representational at all, but is instead driven by autopoietic (self-creative) processes.

My use of the term *symbolism*, as such, is drawn from Cassirer (1954-7, 1946a, 1946b), Eliade (1963, 1978-85), Bachelard (1987), Barfield (1977), and Ricoeur (1967). Though these individuals often disagree, their views in general accept that symbolism is especially the use of nonrepresentational sounds, icons, etc. to refer to other sounds, icons, etc., as well as to abstracted concepts, images, or feelings, and even to nothing but the imaginary bounds of space or time — meaning the *beyond-the-horizon* or the *yet-to-come* (Crapanzano, 2004). The symbolic threshold is a departure from the concrete here-now world of perceptual response experience. Symbolism in this sense is always self-referential and does not merely reproduce an outer object within one's mind. With what may be called the first *leap of faith*, symbolism provided the bridge to apperceive

existence where and when it was not, in the strict sense, perceived.⁴ The point to be emphasized here is the gulf between ‘symbolic’ *representation* (which copies or counts the environment) and symbolic *interaction* (the liminal intersubjective ‘space’ in which cultural worlds are created). The felt realisation that presences exist well beyond the duration of this moment or the space of current observation can be equated with the dawn of imagination — projecting (or *receiving*) symbolic images from invisible times and places. Thus, the symbolic is not representation but discovery — discovery of the imagined forms of *mythic reality*, still the core of human consciousness. The mythic and the sacred are thus the *realising* (the making real) of *cosmos*, that is, the greater order of things, and the awful task of ascertaining our place within it. In any case, this is at least the thesis I am now setting out to build a case for.

§2. Human Consciousness

To claim that humans are the only living things on this planet that are conscious sounds grand to some but repugnant to others. Today such a claim is often called anthropocentric arrogance, especially since, as mentioned above, the sciences are finding more and more continuity between the biology and behaviours of nonhuman species and our own. Not only is neuroscience unable to locate a neural module or major cerebral lobe unique to humans,⁵ but tool use and toolmaking, warfare, complex cognition, and complex communications have been observed amongst birds and other mammals. Other more subtle traits once thought to belong solely to humanity have been inferred, including creativity and art, symbolic interaction (language use), abstract (or symbolic) cognition, imagination, deception (implying a ‘theory of mind’), reminiscence, self-identity or self-concept, social emotions, and even culture (*cf.* Beamish, 2004; Dunbar, 1998; Gallup, 1987; Moussaieff Masson & McCarthy, 1995; Pepperberg, 2000; Povinelli, 1999; Savage-Rumbaugh & Lewin, 1997). No one that I know of, however, has ever claimed for nonhuman animals any form of pictographic or written language.

Humans are animals but a particular sort of animal, one that has *cultivated* self-awareness.⁶ But arguing against the Cartesian view that animals do not *feel* should be

⁴ This conception has been rather arbitrarily dismissed as *literary* or psychologistic even *romantic* in many academic circles these days, but psyche is real is all the same. In this view, we are surrounded by it: It is our world.

⁵ The evolutionarily sudden growth spurt of the frontal lobes and the whole cerebral cortex some 150-250 kya is explained by Wills (1993) as a *quantitative* change due to environmental change, leaps in technology, or fire use. Since Raymond Dart made the first cranial endocasts of hominid fossil skulls, others such as Philip Lieberman (1998) have increased the sophistication of the practice, but cranial endocasts are unable to reveal the *qualitative* change in human experience catalyzed by concept & symbol.

⁶ There is not the space here to deal specifically with infant mimicry, Gallup’s famed ‘red dot test’ (1970), or claims of primate (Savage-Rumbaugh & Lewin, 1997) or cetacean (Beamish, 2004) symbol use. Suffice to say that such symbol *use* is at best *indexical* and has nothing to do with conceptual participation in a self-referential formal language structure (see Deacon, 1997). Fitch and Hauser (2004) denied that a nonhuman animal brain has the computational power for syntactical language. Gallup himself (1987) noted that such facial self-recognition in a chimp ‘does not presuppose that it is able to conceive of itself as a separate, independent entity with an identity of its own’ (p. 3). The basic mistake in interpreting such neonate or nonhuman animal experiments is likely an underappreciation of the pervasive power of *mimesis* and *proprioception*, the *preconscious body-image* that develops rapidly with the growing infant and which a few primates appear to discover and explore in mirrors or video monitors.

unnecessary. Animals do feel, and warm-blooded social mammals probably have evolved emotions not that different from our own foundational repertoire. How else could we communicate so readily with our pets? Groups of elephants have even been observed spending days over the bones of a once-proud matriarch, moving and caressing the remains with every sign of deep mourning (Moussaieff Masson & McCarthy, 1995). This suggests that they are aware of the finality of death. Perhaps. But whatever the case for our animal brethren, we have no reason to suspect that their emotional knowledge is reflectively applied to themselves. That is to say, for example, there is no sign that the finality of death they observe around them confronts each of them with the *inevitability* of their own ‘personal’ demise or that of their loved ones.

But beyond that, the conflict whether humanity is utterly different in kind from the rest of the animal kingdom can only be resolved by assuming a perspective. It can be seen that we can be readily placed into the Darwinian scheme of biological evolution. Physiologically, we are just another beastie evolved in the primate line that lives off the killing and processing of other organisms, that is host to a plethora of minute parasites, and that is ultimately, like all living things, a symbiotic compound of cells and bacteria. Now those who study human culture and its variations will be very unlikely to consider the way whale pods sing unique songs or groups of chimps vary in their grooming habits or termite fishing as indications of distinct cultural complexes within those species. For such, humanity is not just one-of-a-kind because it is *our* species, but because it engages in planning and constructing environments to suit its desires rather than merely making modifications or itself becoming adapted (over generations) to a particular environment.⁷ Can both or neither be correct? The unspoken fundamental assumptions of either perspective are unprovable and in that sense not arguable. In short, any *perspective* assumed is already a mythic worldview. Since we cannot *become* nonhuman animals to discover firsthand if *it is like anything* to be one, we cannot directly know in what way our experience differs, if it does, or if it is beyond any possible comparison. Is there no perspective I could take that permits me to base my thesis on stating that our experience is conscious to itself in a way that is not possible for any other animal?

There are at least two objective paths to getting around this conundrum. One might attempt to imagine the perspective of a Martian arriving here, as Percy (1975) suggested. Assuming this Martian is of appropriate size and can perceive what has happened on planet Earth, he would soon see that one particular ‘naked ape’ has overrun the surface and is even making ventures beyond it. Not only are our numbers *unnaturally* high, but our structures and industrial activities have practically resurfaced the face of old Mother Earth. Signs of our presence can be seen from the moon, at least at night. Beginning with the control of fire, humanity *makes* things far beyond what is necessary for basic survival. On the matter of *human works* two great philosophers of myth and symbol agree. Cassirer (1944) states: ‘Man’s outstanding characteristic, his distinguishing mark, is not his metaphysical or physical nature — but his work’ (p. 68). Eliade (1978) agrees that ‘what matters is not the anatomico-osteological structure of the Paleanthropians

⁷ If *learning* to feed, groom, or vocalize in a particular manner is identified with culture, then many birds & mammals can be so entitled. Many nonhuman animals adapt their behaviour as the result of learning from their group, but these are cultural learning adaptations based in mimicry not symbolic exchange.

(which is similar, to be sure, to that of the primates) but their *works*; and these demonstrate the activity of an intelligence that cannot be defined otherwise than as “human” (p. 5). The other path that is astonishingly ignored across a wide variety of disciplines is that of theoretical linguistics, possibly because we are so immersed in language that we can never step back far enough to catch it action. This is, of course, a topic of its own, but allow me to suggest that the study of the less concrete but very near to hand symbolic carapace of the human mind — the interweave of music, dance, myth, language, art, even organized sport, etc. — reveals beyond question that we humans experience our own existence in a way unknown and unknowable to other species, and that way is a conscious way.⁸

My thesis that human conscious experience appeared suddenly, at one point in time, depends only partially on the acceptance of the closed or psychological conception of consciousness. In the closed definition, conscious experience is unique to humans (the reasons for which will be examined in the final section), but that by no means implies that other animals are automatons. What it does depend on is the recognition of the great rift dividing human from infrahuman experience, name it how you will.⁹ I prefer the explanation for the great rift advanced by Dewart (1989) that on one side is nonhuman (or prehuman) nonconscious (or preconscious) experience and on the other experience with the added quality of consciousness, i.e., human experience. Conscious experience, like some singular primordial deity or demiurge subdividing or giving forth a fertile fluid, ‘gives birth’ to the world of things and divides interior selfhood from it. Self and world come to be simultaneously. Conscious experience is autopoietic since we have magically (i.e., beyond the ways of Nature) *conceived our selves*.

Experience (or *life*) is somatic sensations, raw responsive sentience, or even emotion, but these are only *consciously recognized* as such by the human mind, which has somehow abstracted itself enough to *know* and *name* them — and the experienced world of objects too. At least one well-respected physiological and consciousness researcher has recognized nonconscious experience. Benjamin Libet (1965) wrote:

It has become generally accepted that a large, perhaps even a major part of our mental activities can take place without our being consciously aware of them. Though apparently unconscious, they are nevertheless part of significant mental experience since there is evidence that such activities can participate in later mental and behavioural manifestations — cognitive, affective, or conative. (p. 77)

⁸ The inherent syntactic creativity of most human sentences and the symbolic reference to concepts (beyond symbolic *representations* of reality) are enough to set human language apart from all other modes of communication. Worth noting is that d’Errico *et al.*, 2003, claim inscribed symbols amongst archaic *H. sapiens* & with less evidence, Neandertals, ca. 75 to 200 kya.)

⁹ This threshold is recognized under a variety of other terminologies, including Edelman’s (1992) primary to higher order consciousness, Damasio’s (2000) core to extended consciousness, Bickerton’s (1995) primary to secondary representational systems, Donald’s (1991) leap from the episodic to the mythic stages of cognition, McCrone’s (1999) awareness and self-awareness, Rosenthal’s (1993) transitive and state consciousness, or the common but redundant ‘conscious of consciousness’.

So if the reader insists on employing the open, all-the-way-down definition for ‘consciousness’, I assume s/he means to specify human-only consciousness by explaining it as ‘self-consciousness’ or ‘reflective consciousness’. Since the *name* applied to the uniqueness of human experience is not a point on which my thesis rises or falls, I will not quibble¹⁰ — as long as it is also accepted that the *self* is not just an extra item of *which* we are conscious but is instead that which is present in all conscious experience. We experience *through* the self. Everything we do, think, or say is tinged with the evanescent presence of the (often kibitzing) inner observer. Our whole world is a reflected world, and we are each the mirror, smoked or clear, for that reflection. We no longer even perceive the original perceiver, the animal eyes that looked into the mirror in the first place. We can be said to have fallen under an unnatural spell of the symbolic¹¹ to find we have *become* the mirror, looking out at the image of the world and of our own embodiment from within the magic mirror of our own conjuration. This is the topic of my excursus: Whence this self, this reflection, this conscious quality of experience? But first we must digress to get a feel for the uniqueness of mythic¹² consciousness within the larger frame of human consciousness.

§3. The Mythic Mind

The conscious mind itself may be further classified into epochs. The conscious mind that forms myths and lives them — that is, experiences such myths and associated rituals as reality — is not the same as our own culturally constructed conscious mind. Immersed in tribal memory and feeling, the quality of consciousness is less particular and more general. In some ways, the light of mind is dimmer for mythic consciousness because there is much less focus on an isolated individual self that regulates attention and from within which, we imagine, our actions spring forth. E.R. Sorenson (1998), in a study of the ‘pre-conquest consciousness’ of the tribal mind, admits that ‘liminal awareness was the principal focus of mentality in the pre-conquest cultures contacted, whereas a supraliminal type that focuses logic on symbolic entities is the dominant form in post-conquest societies’ (p. 82). The mythic mind lacks the isolation in the sort of *preternaturally lit interiority* that is necessary for the analytic processes of modern consciousness. The latter requires a certain diffraction of natural light into a subjective nebula of self-centred thoughts and memories — in other words, a Promethean theft of fire. Within the horizon of primitive¹³ reality, this theft has not yet taken place. In a way that is difficult for us to *analyse*, subject and object are not yet fully distinct. The world is not experienced as object, as *other*, ‘out there’, from which we withdraw for the sake of its identification and categorization.

¹⁰ Except to say that I think these terms remain inappropriate. According to Leslie Dewart (1989), my mentor in this area of philosophy, experience becomes conscious to itself in dim apprehension *before* a sense of self or reflective thought is established.

¹¹ Compare Abram’s *The Spell of the Sensuous* (1996), which views the same idea from outside the mirror, as it were: the human animal within the mind drawn into the spell of the symbolic.

¹² Some would say ‘mythopoeic’ or ‘mythopoetic’ (mythmaking) would be the proper term to describe consciousness, but that would be to give consciousness a reified priority. I mean to imply that consciousness itself is as much a product as a cause of *mythos*.

¹³ that is, ‘original’ or ‘archetypal’, the primitive meaning of ‘primitive’.

On the other hand, the *light* of mythopoeic awareness may be metaphorized as much more widespread for those same reasons. This light has not been withdrawn to an intense focal point in one's head but remains unencompassed all around in the surrounding ecosystem: one's individual self is not an inner object to be watched and guided and the world is not an outer object to be manipulated but the active physical presence with *whom* one is deeply and inescapably bound. This one fact (which cannot be biologically or analytically observed) is the skeleton key to understanding the other unique facets of mythopoeic reality that will be listed in a moment. The source of consciousness for the mythic mind is reality and reality is the natural environment that *incorporates* individual and tribe, though some degree of variation between identification with nature and creeping individualism is bound to exist within the expanse of what is here being referred to as the mythic mind.

In contrast, the source of consciousness for modern educated humanity is the bright focal point of one's self, the 'ego complex', through which the world can be minutely studied as 'information' but only dimly and indirectly experienced. The consciousness of educated 21st century humanity may be imagined as a city¹⁴: a dense collection of thousands of tiny, distinct points of light. Compare this to the more decentred effulgence of a tribal village in the rain forest at dawn. No light source can be discerned, yet everything is awakening and becoming clear in equal measure *from the outside in*. Only the moving shadows are left to suggest mythic presences more felt than seen.

Of course, even within the 'space' of what I am calling mythic experience there is evolution and transformation as well, though not to the extent of the categorical changes which preceded it and which followed. As mentioned above, this writer attributes the growth of literacy and, later, the alphabet to the spread of the rationalism that allowed our ancestors to doubt the existence of their gods¹⁵ and put them on the path toward the distancing from the world as required in objectivity and the simultaneous inflation of subjectivity toward empirical philosophy. There are other perspectives certainly on how mythic reality was breached. The great literary mythologist, Joseph Campbell (1969), considered the growth of 'hieratic city states' as the first authoritarian systems of top down social control. This enforced cohesion of codified belief systems by royalty and/or priests (occasionally priestesses) is then the unhappy condition that led humankind down the garden path from the realm of myth and legend. Both writing and authoritarianism negate two important qualities of a purely mythic comprehension: a graphic system lessened the dependence on the spell of images by creating a codified record of historical events (i.e., a non-participatory external memory), and the need to *enforce* social control with threats of punishment for disobedience is exactly the opposite of the communal identity that once brought about tribal cohesion and conformity.

¹⁴ 'Educated thought today resembles a smoggy great metropolis. "The man in the street" has a million streets, squares, pedestrians, flashing lights, manholes, roundabouts, skyscrapers, newspapers, boulevards, banks, signage, theories, monuments, computers, TV screens, shopping malls, pawnshops, freeways, and alleyways — all steaming with pollution — inside his head! Cross-section almost any human cranium and you'll find Babylon' (Eliot, 1990, p. 11).

¹⁵ Though E.R. Dodds (1973) makes the case that the 'irrational' was preserved in Greek philosophy.

These early city-states — some of which grew into empires in various places across the ancient world with external memory for keeping records and measuring time, literacy for the few, authoritarian power structures, improved technology for farming, husbandry, and city-building, early sciences such as astrology/astronomy, and soldiers trained for war — had already begun to enter Merlin Donald's (1991) theoretic cultural level of secular progress and rational competition. But even though their myths and rituals had become codified into sacred texts and formal practices, these empires and kingdoms¹⁶ still took their religions seriously enough for the gods to play an important role in daily life, so they may be said to still have one foot in mythic culture and the other in the self-centred individualism of Donald's theoretic stage.

That which preceded mythic experience, as such, is difficult to discern because nobody can agree when specifically human experience itself began. There certainly was a long stretch of time during which it is possible to guess — by extrapolation from the recovered evidence — that hominid experience became more complex and included elements of behaviour deriving from abstract realities beyond the immediacy of sensory perception that are lacking in other in other animal species. This is to say that before mythic narratives were articulated humans or prehumans¹⁷ reacted to unusual natural phenomena or creative breakthroughs (in survival skills or social activity) with such heightened emotion it became *manifest* in visionary images. Such images, it has been suggested, were experienced as nothing less than revelation — perhaps of the deity behind the phenomenon or at least of previously unknown *powers*.

According to the highly respected husband-wife team of ancient Near East studies, Henri and H.A. Frankfort (1949), 'primitive man' was unable to distinguish between events and perceptions 'out there' and those 'in here': 'Hence the distinction between subjective and objective knowledge is meaningless to him. Meaningless, also, is our contrast between reality and appearances. Whatever is capable of affecting mind, feeling, or will has thereby established its undoubted reality' (p. 20). In some imagistic, emotional but not yet truly symbolic fashion, early humans dwelt in a mythic world — as opposed to mainly stimulus-response infrahuman episodic existence without abstract images — *before* such mythic experience became conceptually conscious to itself.

Cassirer (1946a) indicates that in a general sense religion begins here. After such seizures of consternation, awe or terror, the cause is collectively felt to be unseen, unnamed, and uncanny *presences*. 'Momentary deities refer to sensed power, coming and going like the emotion that spawned them' (p. 19). Noesis is itself naught but these intuitive apprehensions that evolve into images. Cassirer explains 'that before man thinks in terms of logical concepts, he holds his experiences by means of clear, separate, mythical images' (p. 37). Over time, a vague sense of a particular deity or demon might cohere allowing for differentiation from other such emotional coherences, and thus reify into a numinous image of tribal memory. So, in this sense, the beginning of mythic

¹⁶ I mention 'kingdoms' and not realms of the Goddess or possible matriarchies since these seem to have mainly vanished by the era of city-states. The many 'Venus' figurines found, however, indicate that goddess worship pre-existed agriculture (*e.g.*, Gimbutas, 1988).

¹⁷ This applies to *H. erectus* but probably also to archaic *H. sapiens* and *H. neanderthalensis*.

experience in a sacred reality predates the sense of myth as nominalizing or narrative verbalizations.

We could say that sudden overwhelming emotions or moments of spontaneous creativity are some of the ways in which this (super)natural reality is known to consist of ‘more than meets the eye’, but only if we can comprehend that such emotional apprehensions and creative breakthroughs were *not* experienced as subjective in origin. With a diminished — one might almost say *occasional* — sense of self as *inner distinctness* and a concurrent open (if not quite unbounded) identity with the tribal unit and even with all that which we designate as ‘nature’, the preverbal mythic mind experienced all such extraordinary emotions and, more importantly from our perspective, such creative behaviours or breakthrough imagistic in-sights as *unsought arrivals*, received by humanity but sent by the gods. We may be proud of *our own* insights and creative spontaneity because we take full credit as their author, but Cassirer (1946a) points out that ‘mythic conception shows exactly the opposite tendency, namely to regard all spontaneous action as receptive, and all human achievement as something merely bestowed’ (p. 60).

It appears there was at least one very early preclimactic threshold crossed between our fundamentally direct primate experience and the climactic threshold that first created conscious apprehension of ourselves as experiencing beings in a potentially objective world.¹⁸ The primordial threshold of experience would not have resulted in such conscious apprehension of ourselves but it would certainly have drawn a line in the snow between our ancestors and the rest of the flora and fauna. These proto-persons would have been able to indicate a limited expansion in time and space, some degree of yet-to-come, what-has-been, or what to anticipate over the next hill, but they would not yet have been ready or able to speculate into the unknown beyond these perceptual extrapolations. Other attributes posed as unique to mythic consciousness by recognized experts in the field can usually be placed on either side of this first borderline.

For example, Eliade’s (1954) demonstration of the eternal recurrence of cosmic cycles of time certainly applies to the mythic mind in general, but it is unknown how a presymbolic culture could share or even conceive of such an idea. It may have observed the cycle of the seasons or changes in the moon but it could not measure them without a means to do so. Shamanism as a topic of research and conversation was brought into the universities by Dodds (1973), Eliade (1964), and others, where its ‘ecstatic journeys’ were often proclaimed as the origins of mythologems or archetypal images and sometimes of human consciousness itself, especially when spurred on by psychedelic plants, as McKenna (1993) would have it. Since psychogenic substances as well as hollow logs for drumming have been present since life got rolling, there is no reason to assume shamanism was not practiced amongst hominid species that preceded *sapiens* and Neandertal. Gesture, mimicry, vocalizations, and movement would have been sufficient to communicate the content of such journeys and perhaps to relive them in what became ritual. This phenomenon will be brought up again in the next section.

¹⁸ Of course there have been a multitude of more minor leaps and stumbles, some into oblivion.

In the same way, gesture and vocal sound communication could lead to advanced forms of mimicry that result not only in toolmaking — very rare amongst nonhuman animals — but also the forerunners of music including (if the study of remaining tribal groups in the last century is any clue) rhythmic or contrapuntal breath or vocal sounds, rhythmic ‘drum’ beating,¹⁹ and even synchronized group movements, the forerunner of dance — all of which are ingredients of ritual behaviour and any of which would bring one to a standstill if observed amongst nonhuman animals. Adaptations of these modes of communication and expression, in their complexity distinct to humans, likely were learned with awe and even fear since presymbolic humanity²⁰ was extraordinarily conservative in technology, survival tactics, and very likely in social arrangements. To change from the wisdom of tradition was to risk death. But consider that these shared activities were never felt as one’s own or the group’s experimental inventions but were, instead, *received* (perhaps as gifts) from the surrounding whole or from demiurges within it. The resulting ‘music and dance’ likely led, on one end, to creative elaborations of territory marking, mating displays, or even war dances; but also, on the other, to a such deep transpersonal communion with one’s tribemates that such was experienced as transport back into the realm of origins, of the sacred.²¹ Communion of this depth is not seen elsewhere in nature, to our knowledge. It apparently was something new on Earth, preceding self-consciousness and personal identity. The foregoing demonstrates how primary intersubjectivity (see, e.g., Gallagher, 2001) is the garden from within which individual subjectivity later sprouts.²²

§4. Thresholds of the Self

Aside from the minority who in the face of good evidence will continue to insist that human conscious experience is no different in kind from the ‘consciousness’ of a naked mole rat, most elementary textbooks share a common list of the major steps hominids have taken toward ‘the ascent of man’.²³ Others might have added or removed or reinterpreted some thresholds, but this first glance is to only to note the standards. It’s safe to say that the metaphor of ‘steps’ on a journey toward a seemingly preordained goal tends to prejudice us into thinking of slow, laborious, quantitative advances on the road to our inevitable incarnation as fully conscious beings. Then, however, three possible *moments* in the awakening of the mythic mind will be discussed, making clear

¹⁹ It has been suggested that certain indentations on stalagmites in caves show a regularity of impressions over time that could have been made by ‘drumsticks’ for experiments in sound (e.g., Chauvet, Deschamps, & Hillaire, 1996).

²⁰ Again, this term probably includes all related species since *erectus*.

²¹ Whether this sacred was *discovered* (Eliade) or *created* (Cassirer) is finally a moot point. Who is *right* — we who see creativity as a personal talent & possession, or archaic humanity who felt creative images arise as *received* revelations from forces of Nature?

²² ‘Theory of Mind’ or ‘mindreading’ propositions (e.g., Povinelli, 1999; Premack, 2004) assume the primacy of a private subjectivity which must at a very young age somehow reason its way to comprehending other minds because others behave ‘like me’. Primary intersubjectivity makes such ideas unnecessary.

²³ The status of evolution in textbooks of certain U.S. states — such as Arkansas, Louisiana, & North Carolina — tends to fluctuate.

where I think the evidence (such as it is) indicates qualitative leaps — in the unlikely event the reader has not already discerned my drift.

Without going into the fossil record or the relentless quarrels over speciation and dating, it's reasonably safe to say that the first differentiation from other primates is the regular upright posture and bipedal gait of our evolutionary forerunners, the Australopithecines. Such uprightness, however, would allow a completely new perspective on the environment and one's place in it. Standing above the African savannah,²⁴ the animal's orientation would become more vertically aligned with the result that the sky above and the earth below would gain in significance. The freed hands and thumbs made handling and throwing objects much easier, no doubt. This change alone, however, is no difference *in kind* from other animals.

Tool use of some sort has been widely detected among our animal brethren, but the singled-edged stone choppers that were made by the first known members of the genus *Homo*²⁵ are unique due to the fact of the species' apparent dependence upon them. Such dependence on stone tools already makes a clear distinction between hominids and the rest of the animal kingdom, but there is no reason to suspect their basic life experience was much altered from the instinctual struggle to survive in the given environment. This can be said about technology in general. Even with the improvements of the hand shaped stone axes of *H. erectus* that demanded a first level of abstraction by making tools according to a mental template, or the later transition to the Mousterian stone culture, there is no reason to expect that the inner life of such prehumans was much transformed. Clearly, though, by having to remember the ax making technique, the *beginning* steps into abstract cognition had been taken.

Fire, what a compelling mystery! The true story of its mastery and the psychological repercussions must be marvellous indeed, if only it could be told. With this accomplishment — and it was an accomplishment — humankind irrevocably distinguished itself from all other animals. We know little enough about the cause or consequences of controlling the flame, but it is undeniable that it has been a *fire* to the imagination ever since then. Myths worldwide are associated with this feat, very often similar to the Promethean paradigm wherein fire was stolen from the hearth of the gods or was a gift from same. Primordial sexual intercourse between founding divinities was sometimes thought to bring with it fire. There are few sacred rituals that did not involve fire in some form; certainly it is the central feature of the sacrifice and 'burnt offerings'.²⁶ Fire as metaphor is irresistible; in Christianity, forexample, it is found both in the candlelight of the holy and in the hellfire of the infernal (not even to consider the burning away of sins in Roman Catholic purgatory). Further, all fires are essentially one fire, as evidenced in the manner in which they *enthusiastically* (re)join each other. Our forebears may have felt that in their preserved little flamethey held a bodily part or even

²⁴ Recent fossil findings indicate bipedalism preceded the spread of the savannah but it is still a good example of 'one of our evolutionary *exaptations*: 'Features that arose in one context but were later co-opted for use in another...' (Tattersall, 1998, p. 108).

²⁵ Usually considered as *H. habilis*.

²⁶ Just as it is central to many current religious rituals.

a child of the 'Mother of all Fire'. Aside from its association with sexuality, it also suggests intelligence or even enlightenment (as in so many depictions of the Buddha or Shiva). Is it too much to speculate that the external fire that produced so many survival advantages was mirrored by an internal fire of the mind?

The first seemingly incontrovertible evidence for the use of fire was found in the Zhoukoudian cave in China, dating from 500 kya. Also present were fossils of *H. erectus*, which gives us a species and a timeline. However, Johanson and Johanson (1994) note that fellow paleoanthropologist Bob Brain has found in the South African Swartkrans cave numerous animals bones that appear to have been burnt in a campfire. In the Johansons' opinion, these 'burnt bones at Swartkrans appear to be direct and dramatic evidence of fire, perhaps the first use of fire anywhere' (p. 168). Alert should be given that dating the first use of fire to 1 mya parallels the appearance of *H. erectus* beyond Africa into Java and the colder climates Europe and Asia (Scarre, 1993).²⁷ Could the mastery of fire have made possible such migrations?

But Tattersall (1998) notes that the control of fire is so rare in the archeological record that its use may have been opportunistic — still on the fearful side of control. He claims the first clear evidence of the regular use of firepits as hearths (in the first *constructed* shelters) can only be dated to 400 kya from the Terra Amata site in France of the species he identifies as *H. heidelbergensis*, the likely ancestor of both the Neandertal and Cro-Magnon. The later date increases the possibility of fire being experienced not just for its utility but for its relation to what has been called the sacred. Anyone who has stared into the dancing flames of an outdoor campfire, especially when others are silently doing so too, has felt an inkling what silent communion before a great mystery can be. How much more intense *their* awe would have been, lacking the rational carapace of ego-identity to withdraw back into! Such gathering around the hearth in the dark would certainly give a tribal centre to their experiencing and encourage the sense of community identity so necessary for the complex communications that intensify the interactive experience necessary to approach the symbolic threshold. Fire, like the sacred, has the uncanny aspect of drawing one closer while forbidding actual contact; it invites and denies. Immersion in it is the dissolution or sacrifice of worldly existence for the sake of a supernatural transubstantiation. For these reasons, fire must be recognized as a major threshold, the first real step out of the fireless Eden of animality.

The ability to make more deadly weapons by hardening spear points and root diggers in the flames is part of this threshold in more than one way. It no doubt helped create 'man the hunter' who could now go after bigger game and be less dependent on scavenging carcasses. Weapons could now be employed as missiles and no longer demand the dangerous close encounters of stabbing spears. Eliade (1964, 1978) has suggested that such the use of such projectiles opened the imagination to magical flight, such as is described in shamanic journeys of riding an arrow to other worlds. The guile and coordination needed to act as cohesive hunting units would also involve

²⁷ There have been findings & new theories since these statements were written, but since paleoanthropology is not my focus, I will not attempt an update (see, e.g., d'Errico *et al.*, 2003, or Henshilwood *et al.*, 2001, on signs of campfires amongst Archaic *H. sapiens* in South Africa.)

communication skills in the form of signals heretofore unnecessary. This sort of coordinated movement and signalling, along with the increased leisure time around the campfire after a successful hunt, could easily have evolved into the primitive forms of dance and music, as mentioned above.

These activities around the fire, already extraordinary phenomena, seem very likely to coincide with the birth of the sacred (or the *awareness* of the sacred), so it is conceivable that preconsciously motivated ritual activity began at some point with *H. heidelbergensis*. The exact nature of such ritual unaccompanied by myth can only be guessed, but Cassirer, Eliade, and others have perceived that such ritual was 'profoundly' irrational, based in the needs, desires, and fears of the tribe — and such fears would have increased exponentially if it was *felt* the burning light had previously been the property of the gods or the source of life. Finally though, gathering and hunting at this time was unlikely to have broken entirely from scavenging and nomadism, so — along with the lack of ability or means for anything beyond gestural-iconic-indexical communication — there was not the 'leisure time' to transform such experiential invoking of the sacred into religious cult.

The problem with considering fire use and big game hunting as the advent of human consciousness, however, is that there is no indication of explicit symbolic activity that might have accompanied such among the species that precede or accompany *H. sapiens*. Without archeological markers that indicate such activity or at least a species-wide fossil record of rounded skull bases that indicate the fallen larynx necessary for complex speech, there is no reason to guess that the leap into reflective conscious experience has been made. Even the rare indications of human interment amongst the Neandertals are not necessarily signs of the symbolic imagination that would posit some sort of life after death.

Tattersall (1998, 2002) accepts that some few Neandertal burials have indeed taken place but notes that none of these have yet been located that contain the sorts of weapons, tools, food items, or ornamentation that might be thought to be useful to the deceased in the next life. Some remains are of individuals who would have been unable to supply their own basic needs so indicate some sort family or tribal compassion. The famous Neandertal 'flower burial' of Shanidar IV has since been convincingly repudiated in the *Cambridge Archaeological Journal* (Sommer, 1999) as the result of natural causes. The shallowness of other burials and the curled up postures could reasonably be interpreted as the simplest means of disposing of corpses that experience had shown soon become unpleasant company. Tattersall (1998) concludes that 'it is difficult to sustain the notion that Neandertal burial represented symbolic activity, as opposed to the simple expression of grief and loss' (p. 161).

Earlier burials from our own species have been found in Israel ca 100 kya but the 'ritual remains' (boar jawbone and deer antlers) are so scant as to be open to interpretation, according to Tattersall (1998) — not to mention the fact that they are alone in that time period. No unequivocal evidence of symbolic grave remains appears in the record until the extravagant Cro-Magnon burial found in what is now European Russia 28 kya. By this period, the mythic mind of modern humans clearly makes itself

evident, as Tattersall proclaims: 'Nothing like this appears in the record left by any earlier humans. Truly, a new kind being was on Earth' (p. 10). The question is, what occasioned this transformation?

Beyond posture, tools, fire, and simple interment, there is another candidate for the gate opener that made humans human, and it is related both to the sacred ritual and to the hunting of our prehuman ancestors. It is a powerful theory accounting for the epic ego inflation as well as the epic guilt that is so deeply embedded in our unconscious drives that we continue to carry out irrational actions,²⁸ including disguised rituals, at its altar today. I refer to the archetypal *cultural act* of killing, which later became transposed into sacrificial rites. Eliade (1978) claims that

the 'mystical solidarity' between the hunter and his victims is revealed by the mere act of killing: the shed blood is similar in every respect to human blood. In the last analysis, this 'mystical solidarity' with the game reveals the kinship between human societies and the animal world. To kill the hunted beast or, later, the domestic animal is equivalent to a 'sacrifice' in which the victims are interchangeable. (p. 5)

This is the view of 'man the killer' was first suggested by Raymond Dart in the early 20th century and popularized by Robert Ardrey (1966) and Konrad Lorenz (1966). More recently this thesis has been positively propounded as the foundation of culture by classicist Walter Burkert in *Homo Necans* (2002) and negatively approached as something to be cured by cultural consensus in René Girard's *Violence and the Sacred* (1979). As seen above, no less an authority than Eliade agrees that killing and blood sacrifice are natural and perhaps necessary stages in humanity's encounter with the sacred. Burkert agrees and demonstrates how early planting cultures subsumed hunting practices in the form of blood sacrifices.

Taking the opposite view from Sorenson's (1998) cuddling primitives in a pre-conquest paradise, psychoanalyst Wolfgang Giegerich seems to glory in our bloodletting. In his article 'Killings' (1993), he asserts that 'humanization came about precisely through man's killing activities. The birth of the Gods, piety, soul and consciousness, culture itself did not merely arise from the spirit of killing but from actual killings' (p. 8).

By this Giegerich means early hunting with weapons was 'unnatural' for our ancestors, no matter what species they may have been. The act was a decisive break with nature whose importance became underlined when human culture became more settled with pastoral or agricultural pursuits and still found the need for blood sacrifices to reawaken the shock of death. Such killing would have preceded verbalized mythic revelations, at least in the beginning, but its main purpose, according to Giegerich, was not to simply provide food but the 'more radical purpose of effecting the breakthrough into a qualitatively new dimension, that of the mind and the soul, of consciousness' (p.

²⁸ I call them irrational because they either predate the structural logic demanded by myth or continue to be disguised by what are essentially mythic rationalizations.

10). This goes beyond Eliade who sees in such killing the creation of images that usually dwell in the unconscious. Burkert seems to have understood the sacrifice as an act of *continuing* our biological relationship with Nature. But Giegerich is clear: ‘The soul first made itself through killing. *It killed itself into being*’ (p. 12). Aside from the powerplay of transcending our own ‘human nature’, how could this act lead humankind into self-awareness? Because, Giegerich says, at this point the act of causing death and feeling horror with the victim will have engaged the existential crisis and exceeded the limits of purely biological experience:

For with this tremendous deed he logically broke through life’s boundary to death, by which boundary the living organism is completely enclosed; he thus inflicted the experience of death upon himself, *while* still in life, and made this experience the basis of his own, no longer merely-biological life. (p. 12)

These are powerful and disturbing suggestions, yet they are not unrelated to a second experiential explanation for the leap across the threshold into particularly human conscious experience. I refer to shamanism, touched on briefly above. Certainly shamanic journeys have provided images for subsequent mythmaking and thus expanded our linguistic repertoire, but shamans themselves, if modern research into the continuing phenomenon is any indication, have been the storytellers of their own ecstasies to the upper and lower worlds. According to Eliade’s groundbreaking work (1964), the shaman was so powerful and yet so feared because he or she went through death while still in life. The shaman’s initiation on a near universal basis involves the imagery of death and dismemberment — sometimes in form of sinking to the bottom of the sea or being eaten by ravenous beasts. S/he returns from this period only partially, now being considered a social outsider with one foot in the spirit world or (according to Abram, 1996) the wild world of Nature. It is unknown how shamanic journeys or ecstasies were first begun, but there is no reason to believe they were/are cultural constructions based in linguistic belief systems. It is a phenomenon that can be expected to far exceed in time past the lyrical images on Upper Paleolithic cave paintings that so strongly indicate long established shamanistic traditions. As expressed above, shamanism would be unlikely to be accepted amongst the roving bands of conservative *H. erectus*, but may well have appeared amongst prelinguistic archaic *H. sapiens* or the possible intermediate species of *H. heidelbergensis*. The cause of such errant inspired madness will forever remain unknown, but it seems more likely related to mushroom or mold ingestion or the smoke from unique weeds cast upon the fire than to such modern projections as epilepsy or psychopathology or painful life crises like starvation or isolation.

What has shamanism or killing to do with human conscious experience as we ‘know’ it today? Both are means of responding to the potential debilitation of the existential crisis — the undesired certainty of mortality. Either provides a way to deal with or *repress* unacceptable conclusions derived first from immediate perception and secondarily by the ability to abstract one or two steps to apply such perceptions to oneself or, more likely, to one’s group or tribe. In short, the crisis is knowledge that death always comes to our prey and to ourselves, *even if we can postpone it*. Ritual sacrifice hints at, if not control over, at least participation with the forces of darkness

that bring death. Shamanism is evidence that some few, the ‘specialists of the sacred’, can transcend the boundary of death and even return lost souls to their owners. Such killings and such journeys were means of repressing such intolerable knowledge by seeking to identify with the invisible destroyer.

Eliade (1990) noted his thoughts on this matter in his private journal. It is such a fully *realised* statement I have been unable to edit it for brevity:

The role of the shaman appears even more decisive in what we could term the *experiential knowledge of death*. The shaman learns to know death in the course of his initiation, when he goes for the first time into the underworld and is tortured by spirits and demons. After initiation, he knows how to descend into Hell, in order to search for the soul of the sick man (stolen away by demons) or to guide the souls of the dead to their new abode — and he succeeds in reaching there and returning to earth because *he knows the way*. The ecstatic experiences of the shaman have contributed in large measure to the establishment and articulation of a mythical geography of death, together with a mythology specific to death. ... To *see* and to *describe* the conditions of postmortem existence reduces the terror of death. ... Thus, the unknown and terrifying world of death *takes form*, acquires a structure and even a geography. The infernal personages become *visible*; death is equated with a rite of passage into a new mode of being, a ‘spiritual’ one; that is, it ends by constituting an *initiation*. (pp. 180-1, from undated notes, 1952)

In the cases both of blood sacrifice and shamanic journeys, life is affirmed even in the face of its inevitable end. Either or both of these activities — which share the encounter with the impossible conception, death, and an overwhelming sense of hidden powers, the sacred — are likely intensifiers on the last pitch toward the unknown summit²⁹ of symbolic self-realisation, but neither constitutes the threshold in itself. It should be noted that both continued and even thrived after the summit was attained or threshold crossed. Blood sacrifice and shamanic trips continue even today, though most often in forms disguised by the culturally imposed rationalizations of the conscious mind and the traditional institutions of society.

But until such primordial actions as the above became anything more than emotional responses to the dimly conceived horror of killing other bloodletting creatures or the unnamed terror of *realising* death comes to all who are born, something more was necessary to give these feelings form and even transmute them into the hope and awe that are the beginnings of religion and the creative encounter with the sacred. As I trust has been shown, experience itself had already departed from the ‘merely biological’ and spent a few million years of slow intensification in the *no-man’s-land* of the family Hominidae with evolutionary false starts and dead ends toward the sudden transmutation of that intensate experience into an awakened world of image, symbol,

³⁰ Again, ‘summit’ is not meant as a value judgment but only as metaphor for an unforeseen and sudden change of state.

and myth.³⁰ It is only with myth in its first spontaneous stirring that we enter the realm of consciously apprehended experience,³¹ that is, experience made conscious through its transformation into metaphor and story, a transformation that required the corequisite transformation of facial, gestural, protolinguistic communication into the fully fledged self-referential system that earns the name 'language'.

§5. Approaching the Existential Crisis

Once understood that only humans can build a symbolic system and confront their own life experience in time, it can be *realised* that humanity has had to face some disturbing truths. There surely could be no more disturbing fact for any healthy animal to contemplate than that of its own mortality; luckily only one animal is faced such an overwhelming burden. *Such a revelation of the hopelessness of the struggle can conceivably be so disturbing that it threatens to overwhelm the fundamental survival instinct of a whole species.* If this is the case, any response against such despair is a response toward life maintenance and, therefore, can be considered within the paradigm of evolutionary adaptation — for there are many other aspects of myth, ritual, & metaphor that appear as direct negations of the drive to survive and perpetuate one's genomic code.

Such an existential crisis is reserved for humans. The enormity of this situation cannot be overemphasized. This crisis is the very torrent that runs through the chasm between human and nonhuman experience, and it is the key to understanding humanity's entrance into the symbolic realm of language, myth, and culture. Though evolution itself cannot be described as a force, it is the imperative to survive within the heart of every creature, often against impossible odds, that is the driving force within the evolutionary mandate. The basic instinct to overcome and live at all costs need not be selfish, of course, for it is also seen in such things as maternal protection of the young or the defence of the group by hearty younger males. The life crisis that arises with the realisation that the struggle to survive is always doomed to failure can only be cataclysmic. From our position as advanced and complex cultural beings who matter-of-factly surround all natural crises in layers of formalised routine, it is difficult to comprehend how hair-raising the slow dawning awareness of the unavoidable inevitability of dark death might have been. That this is an especially fertile area of speculation for understanding ourselves is made clear when we appreciate that this *existential crisis was concomitant upon the also dawning awareness of oneself as a unique experiencing entity.* Indeed, the two must be impossibly entwined in origin: One feels the wonder of becoming conscious of oneself as an existing, experiencing being and of others as similar such beings even as the wonder of the moment is umbered by its cause: death comes to all — even 'us', even 'me'. One *realises* that one is a living entity the moment the dark mirror of death forces such a reflection upon us. Egocentric

³¹ And again, this in no way is meant to imply that evolutionary processes are directional or predetermined; only that on the bush of life that somehow led to us, increasing complexity, better cognition, & more elaborate means of communication proved to be advantageous.

³² Terminological difficulties must again be noted, for, though conscious, this is not yet true 'self-conscious experience' in the individual sense, though it may qualify if 'self' is generalized to tribe.

consciousness is the polarity of death consciousness, each inside the other: The self is founded with death at its core.

Speech and narrative are finally the means by which we enter into the subjective experience of time, which includes the awareness of the mortality of selfhood and the disturbing sense that one had a beginning ‘once upon a time’, a while ago in the past. Such uses of language demonstrate why this existential chasm has also been described as the symbolic threshold (Deacon, 1997; Percy, 1975); notwithstanding, there are good reasons for the educated guess that this realisation was not initially thought out but was instead an emotionally-charged apperception. First of all, sites of ancient hominid burials have been discovered. Such sites do not prove the knowledge of death’s inevitability, but judging from the exquisite ceremonials involving the adornment and placement of the body as well as the addition of all sorts of flowers, jewellery, and artifacts that accompanied such ritual interment, there is more involved here than fond farewells. The individual tribal member must have felt some sort of stake in the funeral participation – at times to the point of self-sacrifice (or being *chosen* for same) to accompany the deceased on the journey into the afterlife. By sending off the corpse and attendants to a spiritual afterlife, the community itself felt renewed and secure in time.

The time that formal language (FLN) emerged remains a subject of volatile dispute with some insisting that nonhuman animals have languages of their own with the more serious debate between those of the early or late school of hominid language origins.³² Richard Leakey (1994) imagined *Homo erectus* (ca. 2 mya - 100 kya) conversing freely. However, though not denying the existence of advanced systems of communication and even the rudiments of iconic language before *Homo sapiens*, it seems the balance of authority has shifted toward the *sapiens* hypothesis – especially when one adds that only some form of writing, i.e., visual recordkeeping, could allow language to concretely *appear* so it could be perceived in the world then conceived as an object, thus allowing humanity in the same way to conceive of its own objective existence (see note 9).

Philip Lieberman (1998) claims that *Homo sapiens neanderthalensis* (200 - 25 kya) had what it takes, though its successor, archaic *H. sapiens* (ca. 100 - 150 kya), had significant speech-oriented improvements.³³ The move toward an even more recent origin by identifying formal language forms with complex symbols and iconic representations was given a boost by William Noble and Iain Davidson (1991, 1996) who made a study of cave art and prehistoric sculpture and concluded that languages can be traced back with certainty only about 32,000 years. Others who generally agree may

³² ‘I mean language in the following very generic sense: a mode of communication based upon symbolic reference (the way words refer to things) and involving combinatorial rules that comprise a system for representing synthetic logical relationships among these symbols’ (Deacon, 1997, p. 41). Deacon allows these ‘core attributes’ apply to music, mathematics, rules of etiquette, etc. but not to animal communication – which may be infinitely more complex yet still not fulfill the requirement of symbolic reference. More on this in the next section.

³³ Lieberman assumes that the quality of stone tools & brain size equate with the piecemeal emergence of language. He apparently ignores or does not *realise* that most specialists agree there can be no partial formal language or that even a protolanguage is not much more than a collection of names.

now go somewhat further back, perhaps to do with wider acceptance that the ‘petroglyphs (rock engravings) found at Panaramitee [Australia], around 45,000 years old, are the earliest known examples of rock art in the world’ (Scarre, 1993, p. 45) and the discovery of the Chauvet Cave in France, claiming the oldest known paintings in the world at over 30 kya (Chauvet, Deschamps, & Hillaire, 1996). Henshilwood *et al.* (2001) have found rock incision patterns dating from more than 70 kya in South Africa, though their symbolic reference remains mysterious. Keeping in mind the close relationship between image and symbol, between rock art and symbolic representation (as part of the larger process of symbolic interaction), it can be seen how important the final determination of such rock scratchings can be. If the scratchings once held a *meaning*, existence was becoming conscious of itself. Narrative had succeeded the mere guttural-gestural nominatives of protolanguage (Bickerton, 1995). The human life story had begun and the mythic mind was telling it.

Robin Dunbar (1998) is among those arguing for a more recent invention when groups of our species became so large they replaced grooming with gossip. Donald Johanson (1994), the paleontologist who discovered Lucy, suggests that language may have led to ‘some kind of neurological leap forward, a biological re-wiring in the brain 40,000 or 50,000 years ago that enabled humans to manipulate culture and the environment in a way — and to an extent — never possible before’ (p. 302). Christopher Wills (1993) suggests that more than ‘re-wiring’ is conceivable. After giving evidence for morphological evolution within our own species, *H. sapiens sapiens*, he states it ‘seems not improbable that brain evolution has taken place as well’ (p. 303), major changes indeed. These are among the reasons I find the thesis of Ian Tattersall (1998, 2002) to be the most compelling. For him, the confirmation of a creative surge in late modern *H. sapiens* (aka, *Homo sapiens sapiens*), fundamentally as seen in western Asia and amongst the Cro Magnons of Europe, is the first prehistoric time frame in which we can be certain of sophisticated symbolic exchange — language — taking place. These humans were just like us physically, and they also had art, religion, and a social structure. Not only did things have an indication or name, but they had an existence, perhaps even their own story in that they symbolized something beyond their mere material existence. With symbolic meaning, we have the precursor of writing. With proto-writing, our mythmaking begins; we now can tell the story of the things in the world, how they came to be and what they really are. Myth, mind, and language awaken together with life-charged animistic presence.³⁴

³⁴ Steven Pinker (1994), language maven of M.I.T. and a proponent of evolutionary genetics, insists that culture is too multifaceted to be used for dating the origin of language: ‘It depends on there being a single “symbolic” capacity underlying art, religion, decorated tools, and language, which we now know is false’ (pp. 353-4). It is false, he claims, because the isolation of certain neurolinguistic afflictions like Williams syndrome reveals the brain’s intrinsic modularity. ‘Chatterboxes’ (Pinker’s term for victims of this syndrome) are often extraordinarily articulate while also being grievously impaired cognitively. Similarly, his neurogenetic assumptions lead him to believing that the evolution of the ‘language instinct’ is so distinct it has little or nothing to do with thinking. Deacon (1997) dusts this all away with his proposal that language, brain, and culturally-influenced mind *co-evolved*, Baldwin style, so there should be little wonder that, over time, generalized neural nets of symbolic activity became specialized into modular subdivisions.

Before this time, as surmised above, there was only a protolanguage of corporeal gesture using hands, eyes, posture, and even vocalisations — a limited vocabulary of names for concrete, present (non-abstract) entities would be indicated by sound-gestures. The things thus indicated likely remained *things*, that is, just what they are in the material, real world. Something is needed to link these sound-gesture names into a pattern that draws upon other parts of speech and phraseology to indicate the long ago and far away, as well as the invisible-but-present and that which is yet-to-come. In other words, for nominatives to become narratives, formal language was needed. Many agree that the inexplicable birth of the ‘deep structures’ (Chomsky, 1975) of syntax are what allowed phrases, sentences, themes — in short, narratives — to transform protolanguage into formal language.

With the beginnings of FLN language visible as markings, *out there*, in the world, one could *hold* an idea in mind because it was concretely sensible and others could share in that same idea. From that basis, the human impulse *to know* or *to change* would unconsciously use the innate computerlike codes of biological functioning to expand the thought *held* by concrete reproduction into the next, until speculation would explosively grow like the fulsome Tree of Life (or a spreading mushroom cloud).

As I have argued above, one of the first compulsions of awakening humanity was to deal with the existential crisis — inevitable death, suffering, and the loss of loved ones (not to mention the mystery of birth) — and in that compulsion is my theme that the sacred needed to *realised*, that myths needed to be made, so language *needed* transformation into narrative. A fundamental narrative structure is certainly kept functional by largely oral cultures (Havelock, 1986; Lord, 1960; Ong, 1982), but it is only with recorded narratives that cultural memory achieves continuity and stability (not to mention hierarchy, aristocracy, and oppression: see Barthes, 1972; Kolakowski, 1989). With some method of recording or indicating the mythologem, shamanism moves literally into the realm of cult, the sacred into ritual, myth into liturgy.

Still, until the language can be found to narrate the symbol or the experience of ritual, we cannot merely assume a mind aware of itself. Myth, as a term, after all, derives from the Greek *muthos*, ‘word’ (traceable to the Indo-European root ‘mu-’ that is also, suggestively, the likely source of mute, mime, memory, and mystic, and mystery (Watkins, 1982). Cassirer (1946b) has fortified one of my themes by stating that this interstitial period of powerful emotional awakening, activity, and transformation from the unreflecting feelings of nonhuman animals to the emotional realisation of the existential condition that becomes concept through myth (including the emotions of ritual performance) is likely more a dreamtime of human preconsciousness than one of fully conscious experience: ‘We may and must, indeed, continue to speak of the mechanism of emotions as a “psychic” mechanism. But psychic life is not to be confused with conscious life. Consciousness is not the whole; it is only a small and vanishing fraction of psychic life; it cannot reveal, it rather masks and disguises its essence’ (p. 30).

We see in ontogenetic comparison that human beings obviously feel before they think. It seems that emotion underlies conception and cognition, as Greenspan and

Shankar (2004) have convincingly shown, just as ritual often precedes myth. The move from emotion to thought is still happening and may extend indefinitely into the past. So my thesis here is not dependent on the exact time or place of language origin. This admittedly cannot be known and its origins, lost in time as they are, may have been dispersed throughout many times and places.

§6. The Symbolic Crossing

Now it is widely accepted that nonhuman animals live their lives episodically, that is, aware of and responding only to that which is immediately present to their senses. Do they live in the eternal now? Not quite, it would seem, though their sensory immediacy must be much more intense and vital than ours, cognitively time displaced to an unprecedented degree as we are. Abram (1996), building on Merleau-Ponty, has made this case: 'For meaning, as we have said, remains rooted in the sensory life of the body' (p. 80). Lakoff and Johnson (1999), and others of the primary embodiment school, have revealed how the foundations of our cognitive time displacement are in our bodily, sensory experience. However, we must recognize that even the reality-building that perception allows, different realities for each species, still takes time. It also takes time for the sensations of the perceptual organs to mingle with memory to build representations from whatever *things in themselves* are really out there or whatever archetypes are really in here. In other words, the actual present can only be experienced by psychic immersion in it. Along with the lack of extension in time, in itself, the actual present can have no form or substance, no extension in space. It is indeed the time of beginnings, the sacred time when gods walked among people, when all things were possible — *in illo tempore*, as Eliade called it.

Still, given all that we know of our isolated private selves (and some say that is all we really do know), it must be wondered how archaic humans could transcend such private subjectivity to improvise rituals and myths in the first place. It must be understood that until shamans became charlatans and prophets became priests, rituals were likely subject to new input — ongoing alteration through inspiration — just as myths change in each telling according to circumstance.

The acceptance of such changes in the realm of the sacred would take more than the archaic equivalent of an edict from Rome, i.e., more than a pronouncement from those in power. Each revelation or inspiration must have been felt by everyone, to one degree or another. The *participation mystique* of each body in the tribal mind made it not only possible but inevitable that the experienced truth of the sacred, as manifest in myth and ritual, was self-evident. It was self-evident because they all felt it, together. Who still doubts that in the mists of prehistory, the tribal mind precedes the birth of individual ego consciousness? The point here is that the reality of the *mythosphere* (Teilhard de Chardin, 1959), of the tribal and totemistic mind, also reveals the primacy of intersubjectivity.

Intersubjectivity is a term open to many meanings but the way it is intended here is to imply something more than mere communication from isolated mental monad to isolated mental monad. There is a good deal of evidence that one of the early effects of

emerging language, both phylogenetically (in the human species) and ontogenetically (in the individual) is to create a sense of mutual identity among those using it together. Language, after all, is a group phenomenon. It is not possible without at least two interlocutors, though many are preferable. Until one can skillfully use language from a point of self-reference, there are no other points of origin perceivable *except in the minds of others*. One thus identifies with those others before one learns to identify one's self as oneself. (And for tribal persons, learning to identify one's own private self is often a temporary or even taboo condition as it leads to doubt and selfishness.)

Of course, we are each corporeally unique. Participation in the symbolic world of language, however, takes us beyond our unique embodiment into the mystical participation of the group, into intersubjective awareness. Percy (1975), for example, sees conscious experience as evolving neither from third person materialism nor pre-existing in first person spirituality. He writes that 'there has come into existence a relation which transcends the physico-causal relations obtaining among data. This relation is intersubjectivity. It is a reality which can no longer be understood in the instrumental terms of biological adaptation' (pp. 271-2). One might call intersubjectivity the second person perspective, 'I am you' or 'thou art that.' This is likely beyond nonhuman animal experience but previous to the isolated Cartesian subject assumed to always be present in some form by psychologists.

Instead, *primary intersubjectivity* (Gallagher 2001) begins with a core self that only knows relationship before it learns to be isolated. However, I cannot conceive of a relational *entity* dwelling in the interstices between communicating bodies so I agree with Lacan (1977) and later phenomenologists like Merleau-Ponty (1973) in taking the step of assuming the initial *identification* with others, usually the primary caregiver(s), — obvious in the case of the fetus in the mother but continuing for the infant. Identification avoids the implication of the term intersubjectivity that already existing individual subjects are simply interrelating. Primary identification is mystical (since it transcends its bodily source) participation with the tribe or even with the world. It begins even before language acquisition in the sensuous life of the intermingling tribal bodies. Though aggressive, warlike cultures have by now destroyed or isolated the remaining physically bonded cultures, there is strong testimony in the literature for the existence of the *innocent* tribal mind, a shared identity that refuses individualism.

Perhaps especially among such empathically-united groups, the inexorable but invisible presence of certain mortality would have been as destructive to their cultural integrity as the all too visible but just as inexorable arrival of aggressive, non-empathic global 'conquistador' consciousness. As discerned by Sorenson (1998) and a great many other anthropologists, the death most feared is not that of one's own body but of the protoconscious identity comprising the family, tribe, and the environment, experienced as concentric circles of self. In so far as the primitive and the child identify with the world, it makes little sense to say they fear their own death. Crapanzano (2004) has asked, '[Can we say that] the terror of death is a substitute for the terror of world-ending? Is it less our own dissolution than that of the world — our intimate and perduring connection with it — that terrifies us?' and concluded, 'The most frightening

of nightmares is to be absolutely alone — deprived of all context, human or material' (p. 202).

It's true that the cycles of Nature — the waning then waxing of the moon, night vanquished by the dawn, spring following winter, the rainbow after the storm, and in general life emerging from death — must have been simultaneously perceived, perhaps leading to unbearable stress as the Great Fear was confronted with the as yet unfathomed Great Hope. But the hopeful metaphor of the unity of Nature with its compelling cycles of *eternal return* was yet just beyond the reach of a conception that would make cosmos and deity. One small step that was also an unwonted leap into an unexplored *parallel universe* of human be-ing (well beyond in importance any small step later taken onto a dead moon) was required to unite these antinomies in a new world beyond the symbolic threshold.

To approach such a threshold after which 'nothing will ever be the same again' is to reject one's current life: to accept certain death and only possible rebirth. As the ultimate origin of language, religion, art, ethics, and all higher cognition, it seems to be true after all that, as Wallace Stevens (1923/54) famously wrote in 'Sunday Morning':

*Death is the mother of beauty; hence from her,
Alone, shall come fulfilment to our dreams
And our desires. (V: 3-5)*

The 'fear and trembling' of the soul in the face of death is compressed in its hermetic incubator until its transmutation bursts its vessel asunder. A threshold like this is in fact the archetype of initiation that Eliade (1954) saw as the basis of consciousness in archaic humanity.³⁵ Those who brought on such a magnificent breakthrough must have undergone what sacrificial rites always aim to cause or what the shaman underwent as an individual: initiatory death and rebirth. Once the threshold is crossed, there is no return. The bridge, as it were, has been burnt. The philosopher of symbolic forms, Cassirer (1944) observed that 'man is in a sense constantly conversing with himself. He has so enveloped himself in linguistic forms, in artistic images, in mythical symbols or religious rites that he cannot see or know anything except by the interposition of this artificial medium' (p. 25).

Again, the key to human speech and intersubjective human being is *symbolic self-reference* wherein symbols of language and other creative systems expand the system by going forth as conceptual constructions derived from their experience of embodiment and world; symbolic self-reference is not enclosed within the garrote of the hermeneutic circle, but concentrically open. The inherent syntactic creativity of most human sentences and the symbolic reference to concepts (not *representations*) are enough to set human language apart from all other modes of communication, but linguist R.L. Trask (1995) offers four further closely related 'design features' of the FLN (Faculty of Language Narrow), modified from Hockett (1960), and demonstrates that only human language has them: duality, 'the use of a small number of meaningless elements in

35 Such initiatory cycles — death, isolation, transition rebirth — continue less obviously in the present, according to Eliade.

combination to produce a large number of meaningful elements' (p. 3); displacement and open-endedness (too closely related to separate), the former is the ability 'to talk about things other than the here and now' (p. 5), and the latter is the fact that nearly anything can be said.³⁶ A corequisite of these two is another kind of displacement, that of the speaker from the spoken, though for the first speakers such displacement would have been subliminal. The last is stimulus-freedom, the power to choose how or if one should respond to a received stimulus. Trask concludes: 'Lacking duality, lacking displacement, lacking open-endedness, lacking stimulus-freedom, animal signalling systems are almost unfathomably different from human languages' (p. 11).

Bickerton and others take their stand on syntax but this word simply means grammatical structure; other clever animals exhibit elements of this as well. But, note, human syntax is *open-ended*, and I argue that its breakthrough was made as essential as air by the human need for meaning, that is, *semantics*. Syntax is the support structure for semantics; semantics (meaning, or the desire for meaning) is that which called forth syntax. For Chomsky (who is unlikely to agree with my proposals), what makes human language absolutely incomparable in kind to any other communication system is its quality of *recursion*, but recursion leads to the same thing I have been outlining above through creative symbolic self-reference.³⁷ Recursion refers to the infinite extension of sentences, clauses, and phrases embedded within language, but this image can be turned inside out, as I do here, to suggest the expansion of language space and thus the discovery of a supersensory world in the palaces of the imagination. Imagination, i.e., the power of image making, may be a quality of existence itself and thus beyond the merely human, but the human, semiotic sort of imagination begins and takes wing only with the help of certain linguistic qualities like recursive expansion, displacement, and open-endedness, while continuing to be driven by the need for meaning, semantics.

A syntactic infrastructure does not limit imagination but enables it by granting the power to reconfigure perceptions and the chaotic images of memory into imaginative narratives. The work of linguist Ferdinand de Saussure (1959) around the beginning of the last century gave the first structuralist vision of language in which linguistic signs get their meanings from differences among them alone and their context in words, phrases, etc. on up to the total system itself. Without going into detail in what is a complex theory, the linguistic *sign* consists of the relational identity of the *signified* — not the object but the concept of such an object — and the *signifier*, the impression of the sound or graphic image. It can be seen that objects in themselves are excluded from language (though they remain in the background as time-displaced referents).

Protolanguage may have used sounds as pointers to objects or events but formal language transposes such sounds into one aspect of the sign, which now 'points' only toward the opened network of the symbolic. As Bickerton (1995) states: 'No Rubicon of thinking whose crossing could have led to this staggering change in human fortune

³⁶ Benson *et al.* (2002) claim Kanzi demonstrates these; perhaps, but in a highly restricted manner. Semantic creativity requires that the whole constructive system be active: a change in quality or *kind*, not degree.

³⁷ William von Humboldt stated that language 'makes infinite use of finite media' (in Pinker, 1994, p. 84).

seems half as convincing as the move from an unstructured, restricted, pidginlike protolanguage to the syntactically structured, infinitely recursive richness of true language' (p. 63). Syntactic structures emerged as the 'universal grammar' that stabilises the production of ideas by linking them together, yet not limiting their potential for expansion.

§7. The Prehistoric Moment

The prehistoric location and timeframe of this momentous event, as indicated above, is likely to have occurred some thousands of years before the 'creative explosion' (Pfeiffer, 1982) of Cro-Magnon left clear archeological evidence.³⁸ This remains controversial as a number of other explanations can be conjured to explain the appearance of new technologies, food sources, living arrangements, ritual activities, musical instruments, and, of course, the arts of sculpture and cave painting. Linguist Bickerton (1995), looking at the situation from the other side, asks, 'Is it conceivable that any group of hominids could have had 65 percent of modern human language or 85 percent of modern human language and still gone on, millennia after millennia, with zero percent change in the way they lived?' (pp. 69-70) Perhaps his suggested 0% is a slight exaggeration, but if you accompany children through a museum of prehistory all the fabulous improvements in stone technology over many millions of years claimed by paleoarcheologists go by without much notice, but when the remnants of the Cro-Magnon visions are exhibited, they instantly awaken. No amount of specialist rhetoric can hide the fact that something utterly unprecedented occurred in prehistory — in one place at one time — that became evident in western European caves and carvings.

Beyond the geographic location or the time frame of the crossing of the symbolic threshold, a more to the point question might be: Just how long did the actual crossing take? Did humanity come to imagine the far beyond and move into the grasp of syntax overnight or over many millennia? Related to this is the question of whether the birth of imagination and the origin of language resulted from the evolution or mutation of the brain, or from cultural invention. Anyone who has read this far will understand where I stand. Despite the fact that such an awakening to the symbolic potential of vocalising would necessarily have had significant accompanying neural activity, it is highly unlikely that the symbolic crossing was also a moment of actual genetic mutation (macro or micro), the theory favoured by Klein (2004) and others who cannot accept that cultural breakthroughs could precede biology. If such took place, it would have had to have happened many millennia before the breakthrough to human understanding. The brain and the physiological mechanisms for speech would need to already have been in place. Though not yet attuned to *other minds* within the intersubjective matrix necessary for abstract conceptual construction, the instruments of more articulate sound production in each individual must have been *ready*, so to speak, waiting only their call into action. If there were a propitious random mutation — whether saltational or related to the punctuated equilibrium theory of Eldridge and Gould (1971) — it would likely have

³⁸ I suggest these appear several thousands of years later because, as is known from Ancient Greek sources, sculpture in stone and wall paintings or mosaics were preceded by millennia of images carved or depicted on impermanent materials that left no record.

signalled the emergence of *H. sapiens* (ca. 100-200 kya), who at first would have been a geographically isolated ‘daughter’ subspecies of a larger ancestor species.

Certainly an improved ability to communicate in ‘prehistoric pidgin’ (protolanguage) would have proved evolutionarily advantageous. It seems quite sensible to speculate that archaic *H. sapiens* began to expand his repertoire of mimicry and gesture with a greatly improved ability to make a wider range of oral sounds. Whether cerebral capacity increased first from an existing need for greater complexity of communication or whether something like a mutation in the placement of the larynx occurred first (allowing for greater breath control and an increased likelihood of choking on our food) *followed by* cerebral adaptation must remain unknown. They may have co-evolved, as Deacon (1997) would have it. In any case, such breath control could have led to a greater complexity of vocalization as such control was extended to the movements of the lips and tongue. This evolutionary change in the physiology of communication would likely allow for some degree of increased cultural complexity over tens of thousands of years (specifics varying from tribe to tribe), but at this point such communication would only have been a tool to serve the basic needs or instrumental ends in the here and now. The displacement from the here and now, the abstraction of self from world, the power to create-discover images and give them form, the sense of a sacred reality — these were yet waiting in the wings.

Language — in the formal sense of symbolic interaction (followed by *reference*) and, beyond that, of seemingly limitless expansion *into the blue* (since almost anything can be said or thought) — cannot begin its imaginal construction into the abstract *until a complete network of syntactic structures is in place*. Without such foundational structures ideas or concepts cannot be combined or spliced (Chomsky’s *merge and displace*) to create new ideas or concepts that make no direct reference to the concrete world of the embodied senses or the environment. This explains why there are no partial languages (‘proto’ does not mean ‘partial’) since for abstract concepts to have meaning, they must be already embedded within a larger meaningful system. How else could ideas or words employ other ideas and words to build new ideas and words? Iconic ‘words’ that only indicate concrete actions or objects in the here and now can never *get off the ground*, that is, they cannot create new sentences from previous sentences to expand on a theme. If partial FLNs are not possible, than a self-referential language code or system cannot be built bit-by-bit. It must begin as an emergent system already functional with the potential for expansion. Such emergence can only take place *all at once*, in a momentous efflorescence.

To discover a mythic cosmos meant that the syntactic undercarriage already had to be present as a complete system. You cannot build a cosmology with a partial syntactic structure any more than you could build a bridge without a consistent structural support system. The various properties that in a momentary conrescence created recursive syntax may have been evolving for millions of years each on their own but in the service of other biological functions. The parts of the bridge may have been made elsewhere then brought together to make its structural support system. Until the entire bridge is complete, however, it is useless. Only with a complete bridge can the crossing be made, and that completion occurs in a single identifiable moment. In the same way, human

recursive speech cannot appear until its substructure is in place, and that completion is sudden. Unlike the bridge, language is an emergent, its possibilities not indicated in its substructure. *Language in the human sense, formal language, is not reducible to its parts.*

This then is a first point that needs emphasis: Even if the journey to this transformation of experience is seen as a slow rising exponential curve, there is still an apex, the point of transition. No matter how slow or long the climb up the hill, no matter how many returns, pauses, dead ends, or turns toward other hills to ascend, this particular hill is only crested once — *in a moment* — for the first time. This has been noted by any number of linguists and theorists of the symbolic but is usually mentioned as an aside, as though the very idea was too bold to bear scrutiny.

Structuralists begin with the assumption that language creates a parallel reality of its own. A few, like anthropologist Lévi Strauss have stressed that ‘language could only have been born in a single stroke. Objects couldn’t just start to signify progressively. After a transformation..., a passage was effected from a stage where nothing made sense to another where everything did’ (in Kristeva, 1989, p. 46).

Saussure, the founder of linguistic structuralism, simply avoided questions to do with the origin of language claiming they were of no relevance, but he must have been aware of the irreducibility of his own theory. It is well known that the Linguistic Society of Paris once banned all discussion of the topic of language origin because such knowledge was thought beyond reach. The poststructuralist movement (if it can be called such) certainly agrees that language creates a world of its own, but leading poststructuralists have no comment on how precipitant this creation must have been since it is doctrine that we can know nothing outside (or before) the text of our language-world.

Chomsky (1975) has similarly avoided questions to do with the evolution of language but has intimated that the innate ‘universal grammar’ that enables all formal languages could not have gradually evolved but might have resulted from a sudden neural mutation. Recently, along with two Harvard biopsychologists (Hauser, Chomsky, & Fitch, 2002), Chomsky maintained his view that the evolution of language was saltational, not gradual, though here he accepts *exaptation*, the view that ‘important aspects of language have been exapted from their previous adaptive function (e.g., spatial or numerical reasoning, Machiavellian social scheming, tool-making)’ (p. 1570). Exaptation supplies an evolutionary sound explanation for the sudden discovery of the FLN as expressed in the facility of speech. Bickerton (1995) agrees that ‘a wide range of evidence ... has suggested that the evolution of syntax was ... likely a single catastrophic event’ (p. 82).³⁹

³⁹ There are certainly exceptions among linguists. Pinker (1994) stays with incremental evolution; Kristeva (1989) agrees with the timeline here but suggests that the graphic image preceded the vocal; Claude Hagège (1990) postulates a ‘multiregional’ language origin in which speech was discovered in various times & places by different humans — thus no ‘first language’.

Beyond linguistics per se and structuralism, Tattersall (1998) also endorses the evolutionarily sudden and recent awakening to a symbolically enlarged universe as the zenith (or nadir?) of the journey begun toward self-awareness with the earlier speciation of *H. sapiens*. Like Tattersall, the Johansons (1994) see that symbolic art, language, and conceptual cognition are evolutionarily simultaneous. The Johansons quote the Australian archeologist and aboriginal cave explorer Rhys Jones as agreeing with the suddenness of the awakening of our species: 'My guess is that we will very quickly be able to establish that early on, whatever early is, the whole lot was there. Bang. They were us. And before that they weren't us; they were something different. Then something decisive happened' (p. 306).

What situation brought about this symbolic potential? It may be the organism's natural response to humanity's first cognitive crisis, a crisis so profound that the organism was thrown back upon its elemental resources: Hauser, Chomsky, and Fitch (2002) note that 'the human faculty of language appears to be organized exactly like the genetic code itself: hierarchical, generative, recursive, & virtually limitless with respect to its scope of expression' (p. 1569). The existential crisis (the crisis of motivation brought on by the peripheral observation of inevitable mortality) didn't create syntax on the spur of the moment *ex nihilo*. It is a tenet of systems and 'chaos' theory that when any system enters a crisis state, its organization will begin to degenerate or it will transform into a new system through 'emergent evolution' (*cf.* Pattee, 1995). In the case of emergent syntax, the genetic code itself provides the biological template.

Further, restless humanity never remains in any particular state. The first speakers could not have possessed the understanding that they were *signifying*. This thesis will be difficult to accept for many today since we, as a result of cultural change, have come to conceive ourselves as distinct from the symbolic network that called forth our self-sense in the first place. In fact, we often mistake language as but another tool for the pre-existing self to use to interact with other such selves. The first speakers could have made no such distinction between self and speech, so were not in that sense self-conscious. They did not experience speech at first as being consciously asserted but more likely felt themselves drawn with others into the world of symbolic forms where words and phrases seemed communally received and intersubjectively expressed.

Without differentiating world from words, such early exchange had the same reality as anything else. Julia Kristeva (1989) has stated that for such prehistoric groups 'language is a *substance* and a *material force*. ... [The 'primitive'] does not *know* this act to be an act of idealization or of abstraction, but knows it instead as *participation* in the surrounding universe' (p. 50). She suggests that part of this materiality of language is indeed material, that is, etched symbols as the beginning of writing and imagistic expression.

The conscious quality of experience from our position within symbolic reality seems a continuous state, but that is only because we are not conscious of the dimming of consciousness. Experience brightens into conscious apprehension and dims back from such apprehension many times throughout each diurnal cycle, but we who think *all the time* maintain at least minimal steady state self-awareness. But the first speakers had to

learn the code before they could practice it alone so it is doubtful that silent thinking appeared before writing. (Even then reading was apparently always vocalized, silent reading not appearing until the Middle Ages, according to Illich, 1993.) Silent thinking is basically an inner *dialogue*, talking to oneself, dividing the self and creating within a speaker and listener, the concepts apparently going from the former to the latter. This would be a sophisticated advance for a self still so rudimentary that language seemed to arrive from sources beyond it and become manifest only in conversation or communal signifying. Dialogue and dialogic must have been previous to and a cause of the recognition of the private subjectivity involved in speech assertion (Dewart, 1989), so independent, private thought was literally *inconceivable*.

Gallagher (2001) is correct in positing a primary intersubjectivity from which individual subjectivity emerges. Such group speaking and listening, then, involves the features of identification or empathy and mimesis already mentioned as linguistic prerequisites — but it also implies that the only conceptual expansion possible in that first era was *when speech was spoken together*. Thinking and imagining, in this situation, were aloud and communal. This implies that speech, though asserted by individuals, was experienced as a communal phenomenon, perhaps a gift or act of grace arriving from mostly beneficent deities.

This situation means that early human symbolic consciousness was not a full time engagement. The Rubicon may have been crossed, but it continued to exist in its own curious timeline like the aforementioned parallel universe, only occasionally entered. Such were probably times of leisure and security around the hearth that permitted the opening of the newly discovered door into the awesome potentials of a realm where the spoken word allowed the mundane environment to blossom (or transmutify) into the fantastic world of myth.

§8. Myth and Language

It has been shown, I think decisively, by both poststructuralists and more conventional language theorists that language is more metaphor than objective representation. George Lakoff and Mark Johnson (1999) make the case that our entire tradition of rationally-based philosophy is illusory. *Truths* thought to derive from *universal reason* are revealed as abstractions or category complexifications of embodied experience — all made possible through the creative use of syntax. It should be no surprise that the attempt to reduce language to the clarity of mathematical formulae by the logical positivists proved to be futile. But if language is self-referentially symbolic and metaphor *all the way down*⁴⁰ — that is, not innately practical — one may well wonder what immediate practical purpose the crossing of the symbolic threshold served. As I have indicated above, the will to live is itself an impeccably practical need.

The world of abstract symbols as found in myth and religion is similarly based in metaphor and imagery. As I have postulated above, the major impetus for the symbolic transformation was the intensification of the existential crisis. The only response

⁴⁰ To semantic primes or frames at least.

possible to the de-meaning fact of mortality was a vast and sudden expansion of awareness into meaning-making metaphor. As indicated above, a 'great hope' was existentially necessary to deal with a truly life threatening crisis — though what was actually threatened was the tribal identity that first congealed in response to the 'great fear'. *This great yearning or hope fulfilled itself in the discovery/creation of the realm of the sacred, as expressed in the myths and mythic images of archaic peoples.*

Language (FLN), as Cassirer first indicated, was similarly discovered/created to serve the need for myth, including myths that deny the end, that is, myths of circular time, the eternal return. Eliade (1954) has famously argued that 'archaic man' felt 'the terror of history', that is, of linear unrepeatable time. If past time is remembered to have a beginning, middle, and end, it not only puts the Grim Reaper at the end of all our advances, but it allows personal narrative memory to create the ego-self whose desires may become set against those of the larger tribal-self. So the solution offered by archaic myth (and all myths are creation myths to Eliade) and time-regenerating ritual was to identify with the birth-death-rebirth patterns of Nature. Time has no end!

This must be what literary theorist Owen Barfield (1977) had in mind when he aphorized, 'It was not man who made myths but myths, or the archetypal substance they reveal, which made man' (p. 75). If it can be accepted that protolinguistic cognition had led our ancestors to developmental stasis (not actual despair) by their sense of inescapable doom, then it can be understood how the soul — the drive of life itself — would have called forth what cognitive powers were at hand to meet this crisis with a breakthrough never before seen under the sun. However, Eliade (1963) himself did not see this as a creative human response to a stressful crisis, but as an 'irruption of the sacred' *into* the cultural life of humanity: 'In short, myths describe the various and sometimes dramatic breakthroughs of the sacred (or the "supernatural") into the World. It is this sudden breakthrough of the sacred that really *establishes* the World' (p. 6). In this view, the sacred is identified with the 'supernatural', which has the agency to 'irrupt' into the natural world. Here, God or the gods led humanity to mortal knowledge so they or It could be recognized, as in the traditional hymn: *'T'was Grace that taught / my heart to fear. / And Grace, my fears relieved. / How precious did that Grace appear / the hour I first believed.'*

This is a pleasant thought, but this sense of supernatural meaning comes at the price of recognizing the fierce life-drive of natural forces, not even to mention human creativity and freedom. Eric Gans (1993) and his generative anthropology would have it that God and humanity simultaneously came to be in the 'originary event'. But since 'God' is here a term without a referent or even a thinkable idea of a referent, I will be content to say both the sacred and humanity came to be in the decisive crisis of a communal response to mortal despair. We began in the sacred and the sacred, as a quality of awareness, began with us.

Though others have seen his philosophy as idealist, the sacred is not the same as 'God' for Cassirer (1944, 1946a) either. He emphasized the creativity found in the symbolic forms, but these are not Platonic forms dwelling eternally beyond Nature. Cassirer's symbolic forms have no supernatural existence of their own. They came to

function as the transformational nexus of meaning between greater Nature and humanity: protohumanity's own adaptive powers were under such intense stress that the creativity of Nature burst into the now human mind. The only thing seemingly supernatural here is the symbolically-enabled awareness that transcended the limits of the animal body's immediately sensed environment with imagistic apprehensions of the *far beyond* in time and place. Such 'transcendence' is still biologically based,⁴¹ the leap into symbolic forms to overwhelm a previous biological abnegation is indicative of greater potency and prescience in Nature than is usually considered.

Finally, however, it is meaningless to question whether the sacred, as such, pre-existed humanity's discovery of it since it can only be known by the forms we give it in our myths, visions, dreams, and artistic-musical expressions. Yet the sudden ability to *see beyond oneself* or one's group routines found in the enchanted speech and images of mythmaking must have awakened the life of our species to the greater unity of existence, well beyond individual life-cycles: the wonder of the animated sky, the cycles of Nature, and the mythic memory of the *illud tempus* whence they originated. In what must have been experienced as the gift of revelation, the first mythmakers *together* received the images and created the symbols that would allow the sense of participation in a greater reality and in that way transcend the shadow of individual mortality. At last, the *far beyond* could be grasped (in symbol and image) and entered, right here and now through sacred ritual.

Eliade (1969) — in a statement often self-cited — insisted that 'it is impossible to imagine how consciousness could appear without conferring a *meaning* on man's impulses and experiences. Consciousness of a real and meaningful world is intimately connected with the discovery of the sacred' (preface). That the sacred revealed itself with our awareness of it will be anathema to centuries of objective attempts to explain myth, ritual, art, and religion through sociology, genetics, political-economics, evolutionary psychology, sociobiology, philology, or even semiotics. Eliade, however, would explain that all these scholarly disciplines act as part of our cultural reduction of the sacred to the secular, but are, in actuality, *still manifestations of it*. The perspective from the subject-excluding objectivity of mind-independent reality is in fact an attempt to see ourselves and our experienced reality from a god's eye view, that is, from the beyondness first conceivable through the creation/discovery of the greater, all-pervasive reality experienced as the sacred. In this view, speech as narrative (and concept as image) was the vehicle that conveyed our ancestors across the symbolic threshold into a new, consciously-apprehended reality beyond the merely sensory or biologic (a reality that in our times has largely become desacralized and *despirited* as 'objective').

⁴¹ Neuroscientist Antonio Damasio (2003) agrees that human consciousness emerged as a necessary response to a biological crisis: 'Confronting death and suffering can forcefully disrupt the homeostatic state. ... The yearning for homeostatic correctives would have begun as a response to anguish' (p. 271). He seems to agree that 'social emotions and feelings of empathy' that 'already were budding in nonhuman species' would be enough to bring on this life-threatening anguish, and that memory-extended consciousness and imagination, unique to humans, compensated with hope and reverence. He even supplies an evolutionary rationale for the spread of such abstract thinking: 'Those individuals whose brains were capable of imagining such correctives and effectively restoring homeostatic balance would have been rewarded by longer life and larger progeny' (pp. 271-2).

This receptive apprehension did not merely awaken *to* the gods already manifest in universal forces, but was itself the awakening *of* such suprapersonal entities with whom a tribe could engage in ritualized symbolic exchange; *in this sense* Gans's (1993) coeval appearance of humanity and God may be correct. It could be said with equal veracity that it was the reality of transhuman forces within wider Nature that drew experience across the threshold into consciousness — at which point humanity experienced itself as a participant in the beyond-the-merely-biological, though its primal oceans of emotion remained the touchstone of such participation. The symbolic universe opened vistas outward in space and time and inward toward the dark heart of emotion that were not possible previously. In Eliade's (1978) view, 'In proportion as it was perfected, language increased its magico-religious abilities. The uttered word loosed a force difficult, if not impossible, to annul' (p. 28).

So, as revealed in studies of metaphor, myth is neither a 'disease of language' (Müller, 1873) nor language's ideological abuse (Barthes, 1972), nor simply a palace of the imagination built from it. *Myth is language and language continues to be mythic*. Language and myth first appear as 'twin creatures', two faces of one head, as Cassirer (1944) expressed it:

Language and myth are near of kin. In the early stages of human culture their relation is so close and their cooperation so obvious that it is almost impossible to separate the one from the other. They are two different shoots from one and the same root. Whenever we find man we find him in possession of the faculty of speech and under the influence of the myth-making function. (p. 109)

To speak or write or think is a mythmaking venture, and so are most other distinctly human activities from transcendent chorales of praise in heaven-pointing cathedrals down to elaborate fetishistic sexual rituals or even beyond into psychopathology. Praiseworthy acts of compassionate selflessness are as renascent of prehistoric ritual sacrifice as are less praiseworthy acts of suicide. From communion with the divine in prayer or meditation to entheogenic visionary *trips*, the thirst for the sacred or other *planes of reality* continues. Despite our progress and sophistication, our language continues to escape from mere instrumentality with its drive to reduce the unknown to the known and find a practical application for it. The need for myth continues, though often occulted, not by breaching the walls of the unknown world beyond human experience but by continually expanding our palaces of the imagination, which are not mere fictions but, as I've pointed out, aspects of all human endeavour, our reality itself. As historiographer Paul Veyne (1988) once put it:

These palaces are not built in space, then. They are the only space available. They project their own space when they arise. There is no repressed negativity around them that seeks to enter. Nothing exists, then, but what the imagination, which has brought forth the palace, has constituted. (pp. 121-2)

Beyond these palaces (in which gods may dwell) lies ...nothing. To conceive essences from this nonspace is simply to expand the palaces and further push back the horizons of the unknown, 'that untraveled world whose margin fades / For ever and for ever when I move', as Tennyson's Ulysses put it.

An approach that is central to this theme is found in creation myths – including those of mainstream religion and scientific cosmology. A comparative study of such myths reveals ‘patterns of repetition’ (Eliade, 1963) that must be more than arbitrary syncretism. Culturally specific symbols and details to do with names, places, and events cannot entirely obscure the transcultural mythologems that are the actual inspiration of such tales, artwork, and rituals. It seems to me that experiencing the symbols and images of myth themselves rather than merely talking about them reveals more about the beginnings of the human mind than do empirical studies of the *mind-independent reality* before or beyond that mind. Myth is self-revelatory, *speaking* in its own language of emotion-laden images, just as dreams do according to archetypal psychologist, James Hillman (1979). According to Hillman, we less objectively analyse our own dreams than *dream them forward*. All the interpretations we apply to myth or dream or art only displace ourselves from the inherent import of the images themselves. The myth communicates on the level of direct experience, so all the studies on them, like studies of dream, are only further mythmaking elaborations of the primal structuring of the imagination – archetypes of the ‘collective unconscious’ within the life and energy of Nature. Alan Watts (1963) once said that ‘myths are natural phenomena which grow out of the mind more or less uniformly in all places, just as the human body is of one essential pattern in China and Peru’ (p. xiv).

Such comparative studies of creation myths have been carried out⁴² and retain great interest for phenomenological or even psychoanalytical studies. Mythologist David Adams Leeming (1990) states that

the creation myth, like the myth of the hero’s birth, inevitably has a psychological meaning. In the fact that cosmos is born out of chaos or no-thing-ness, or the fact that a hero is born of a virgin, we find a metaphor for the awakening of consciousness from the unconscious. (p. 16)

Though other interpreters do not always agree with the names they apply to categorize these patterns of repetition, such similar themes as the simple birth of humanity (from divine primal parents or an earth goddess alone or from an all-powerful male god excreting some form of fertilizing effluent like spit or semen), the creation of order out of chaos or of form from a formless unity, the dive to the bottom of the sea, the killing and dismemberment of a primordial monster from whose parts Nature is made, creation by thought out of nothing, or emergence from a stifling or limiting enclosure (the primal parents Earth and Sky embracing too tightly for the light of mind to awake between them, the cosmic egg, the pre-Big Bang singularity, etc.).

The most completely rendered work on creation myth and consciousness may still be *The Origin and History of Consciousness* (1954) by psychoanalyst Erich Neumann. Though its terminology is basically Jungian, Neumann goes beyond his mentor by conjuring up images of preconscious experience within the *uroborus* – the self-consuming, self-nourishing serpent – that is also the womb of the Great Mother, Nature herself. For Neumann, symbolism is the transformative chord, the *language*,

⁴² These include Long, 1963; Maclagan, 1977; Sproul, 1979; & von France, 1995.

between preconscious experience and experience that is conscious to itself: 'Only the symbol group, compact of partly contradictory analogies, can make something unknown, and beyond the grasp of consciousness, more intelligible and more capable of becoming conscious' (p. 8).

Elsewhere Neumann (1983) has clarified how the symbolic makes the distinct process of conscious apprehension and finally language itself possible. The symbol is said to partake of the both the material in which it is manifest and to point toward the abstract imagery of the bottomless collective unconscious of Jungian vocabulary. The symbol is rational in its construction but the response it draws forth is irrational. How is this possible?

Before conscious mediation, the human psyche was immersed in the *surreal* of archetypal images. Where were these images? They were all around humankind *as world*. Previous to the fatal step of distinguishing the subject from the object, there was no specifically *inner* realm of the mind. That which was experienced was experienced in the world, experiencing self *as the world*. From our perspective we may conjecture that humanity projected his experience of archetypal images upon the world but it is more to the point that this world of experience was reality.

Without sidetracking too much into the nature of the archetype, let us just note here that Jung in several places identified the archetypes — with all their vague boundaries, contradictions, and mutual affect — with the instincts, but understood them as patterns of feeling or response rather than behaviour alone. When such feeling tones congeal, they may be unconsciously experienced in the form of the 'archetypal image', though without the act of symbolization this instinctual image is always just 'beyond reach' or recognition in the realm of the potential. Neumann (1983) quotes Jung: 'The primordial image might suitably be described as the *instinct's perception of itself*, or as the self-portrait of the instinct' (p. 6).

Powerfully compelled by these *presences* in the world, more felt than actually perceived, we create concrete metaphors — rituals or representations — of our experiencing. This is the symbol, whose indubitable meaning derives from the power of its archetypal source and communal agreement that this is the case. 'But the pictorial plane, on which the archetype becomes visible to consciousness, is the plane of the symbol, and it is here that the activity of the unconscious manifests itself in so far as it is capable of reaching consciousness' (p. 6). *The symbol as picture or practice is tangible yet opens the door to that which is not, the inchoate presence and effect of the archetypal forces.*

The symbolic or metaphoric aspect of language, then, is what the linguists have identified as its semantics or, overall, semiosis. But without the spur of imagination — the symbol's compelling 'just out of reach' aspect of felt meaning — language would be just uninspired technology. Hermeneutic philosopher Paul Ricoeur (1967) has emphasized the centripetal power of the symbol to focus inchoate experience into that which can spoken — that is, the first words without concrete referents, the step out of protolanguage into the real thing. Referring to the sense of felt presences (what

Neumann or Jung would call archetypal images), Ricoeur declares that ‘for these realities to be a symbol is to gather together at one point a mass of significations which, before giving rise to thought, give rise to speech’ (p. 11). The communally accepted meaning of such symbols is what gives language wings, that is, its imaginal potential to expand into the unknown. This explains what Ricoeur calls *an excellent maxim*: ‘The symbol gives rise to thought’ (pp. 347-57).

These same themes could metaphorically express the awakening of individual consciousness (itself a symbolic complex) through the communication of shared symbols in the intersubjective matrix of culture. The *phase transition* from the cycles of pre- or protoconsciousness to full human consciousness must have been a wonderment that left the previous state of *raw* experience impossible to *make sense of*. We can gain some insight into the other side of the symbolic threshold by considering how Helen Keller (1910) attempted to describe herself before being guided by Anne Sullivan to her destined meeting with the water pump: ‘Before my teacher came to me, I did not know that I am. I lived in a world that was a no-world. I cannot hope to describe adequately that unconscious, yet conscious time of nothingness’ (p. 113).

In the same way each of us awakens from a sleep, feeling the tendrils of dream slip away. Where have we been? What has just happened? Before we succumb to the habit routines of the day, we may create narratives to give those fading images form, not realising that in doing so we are ‘dreaming the dream forward’ more than we are recalling the experience itself.

In this reading, death is no longer the naked fact that makes life meaningless. It becomes instead a word, an idea, a symbol that, as such, can be dealt with symbolically. Symbolic activity has much greater freedom of movement than does life activity itself. In fact, life activity soon becomes itself symbolic activity once myth and language have combined to create human culture. It suddenly becomes a great deal more than mere survival. ‘In mythical thought the mystery of death is “turned into an image” — and by this transformation, death ceases being a hard unbearable physical fact; it becomes understandable and supportable’ (Cassirer, 1946b, p. 49).

The web of tales we call a mythology is thus seen as an existential response to an existential crisis brought about through the rudimentary cognitive powers that evolved from millions of years of tool use, group hunting, and complex social structure, mimetic communication, and protolanguage. But it must not be forgotten that the need for a mythic response in humanity was also a need for language in which to vocalize such myths to accompany rituals and give form to the experience. Donald (1991) noted in his groundbreaking work that language developed rapidly even while technology stood virtually still, so its growth was likely spurred by the need for mythic images and ideas:

The myth is the prototypal, fundamental, integrative mind tool. ... The pre-eminence of myth in early human society is testimony that humans were using language for a totally new kind of integrative thought. Therefore, the possibility must be entertained that the primary human adaptation was not language *qua* language but rather integrative, initially mythical thought. Modern humans developed language in response to pressure to

improve their conceptual apparatus, not vice versa. (p. 215)

And this is precisely why Cassirer (1944) has insisted that myth and language are twin creatures, identical in origin, with their separation only occurring since the advent of widespread literacy, scientific objectivity, and perhaps *modernity*. He continued this theme in a later work:

Language and myth stand in an original and indissoluble correlation with one another, from which they both emerge but gradually as independent elements. They are two diverse shoots from the same parent stem, the same impulse of symbolic formulation, springing from the same basic mental activity, a concentration and heightening of simply sensory experience. In the vocabularies of speech and in primitive mythic figurations, the same inner process finds its consummation: they are both resolutions of an inner tension, the representation of subjective impulses and excitations in definite objective forms and figures. (1946a, p. 88)

Language at its core is mythic and its growth is a study in mythmaking, the creation of a universe of symbols and symbolized experience. However, Cassirer feels that logic is a different and superior ‘tendency of thought’ and seems to agree with Donald (1991) that once what he (Donald) calls *theoretic culture* begins, mythic cognition loses its grip. This distinction is at least controversial, and many social observers think our vaunted rationality remains rooted in a plethora of unquestioned, value-giving assumptions which *include the myth of logical objectivity* (Kolakowski, 1989), the myth of progress (Guggenbühl-Craig, 1991), the myth of self (that becomes narcissism) (Hillman, 1989), and our gods of Economic Utility, Consumerism, and Technology (Postman, 1996). This is not even to approach the mythical metaphysics which continues to inhere in science itself (*cf.*, Burt, 1924; Griffin, 1988; Harman, 1994; Malik, 1995).

It finally needs to be reiterated that myth and language are also both fluid, long-term projects whose words, attributes, and images seem at first to be more communally *received* than conjured or actively created — though with the rise of village culture, self-seeking ideologies likely begin to infect the mythic spell. The forms of each quickly succumb to regional variations and the need for continual updating in accordance with changing circumstances, the latter called mythic *functionalism* by the esteemed early 20th century anthropologist, Malinowski (1926). Donald (1991) points out that such stories of what happened in the beginning are not canonical, at first, but relational, intersubjective, worked out over generations, until an official version is sanctioned. The same could be said for language itself:

The supreme product of the narrative mode, in smaller preliterate societies, is the myth. The myth is the authoritative version, the debated, disputed, filtered product of generations of narrative interchange about reality. ... And those who preserve and regulate myth — priests and shamans — hold positions of great power in the collective cognitive hierarchy. (p. 258)

At this point, we should now be able to understand what myth *is* with some sophistication beyond accepting it as merely a far-fetched tribal tale. Once more, the major attributes of mythmaking include spontaneity and intersubjectivity. It is not consciously created, not self-guided fantasy, but received as revelation (though by necessity put into culturally specific

forms). It is at first the other face of language — the very form language takes in dealing with the lived realities of the emotionally overwhelming existential crisis. Language is pushed beyond itself to accommodate the need for greater mythic complexity and in so doing allows for greater cultural complexity. Coeval speech, mythic narrative, tribal identity, and intersubjectivity are essentially *the content of the symbolic threshold* that experientially separates us from the rest of Nature. In any case, we have reached a sufficient understanding of myth and mythmaking to begin to approach the question of how ancient and tribal myths respond with the mystery of conscious experience (and to see if we modern postmoderns can learn from this response).

Understanding through such personal mythopoeisis may allow us a sense of what our ancestors must have felt as they attempted to account for their own awakening — and for what chaos, confinement, or monstrosity preceded it. The conclusion seems unavoidable that prehumans underwent an existential crisis that could be resolved only by the discovery-creation of the larger realm of symbolic consciousness we call *the sacred*. Imagination is born. Within this larger mythos *humanity was able to conceive itself* and emerge as a new species on this blue planet.

Mortal knowledge then is the unbearable negation of all life striving. Since death in itself cannot be conceived it may be understood as the *absent-presence* (to borrow a phrase from phenomenology) around which mythic narratives and images circulate. It is the reason for narrative, yet its aporia. Since meaning is only intended but never completely arrived at via narrative or image, death may be understood as the lacuna within it, but it is this lacuna that gives storytelling its impetus. “The storyteller has borrowed his authority from death,” literary theorist Walter Benjamin (1969) declared. Death “imparts to everything that concerned him that authority which even the poorest wretch in dying possesses for the living around him. This authority is at the very source of the story” (p. 94).

Though we, the human species *H. sapiens*, are but one species among innumerable others, in terms of experience we differ in kind, not degree. It is not our tools, our knowledge, our religion, or even our speech that sets us apart; it is instead the quality of symbolic displacement that realises self-consciously inhibited awareness. This composite screen of *self-reflected experience* is our palace of exile and the *aporia* within all our knowledge. This is the *psychosis*⁴³ of culture, mind displaced from direct experience. Though mortal foresight drove us into a new mode of conscious being epitomized by the *‘writhe’ of civilization*, no one alive knows for certain if death is the final end of experience or not.

No doubt there has been great gain and great loss in becoming the new species that Charles Morris (1993) designated as *Homo symbolicus*⁴⁴ in his 1925 dissertation — a notion that warrants serious consideration. Finally, since no atavistic desymbolization is conceivable or desirable, the best that can be imagined is to guide our myths — the

⁴³ *Psychosis*: ‘2. A particular form of conscious functioning or condition, as distinguished from the accompanying brain changes: opposed to *neurosis*’ (Funk *et al.*, 1938).

⁴⁴ Cassirer (1944) nominated the title *animal symbolicum* (p. 26), while Percy (1975) called us like he saw us, *Homo symbolificus*, ‘man the symbol-monger’ (p. 16).

thrust of the human experience — with wisdom, courage, and faith, while surrendering to their inscrutable *telos*. Rather than negate fantasy, we should rather dream the dream forward or inward, daring to bring light and form to the hollows of soul rather than merely expanding numerically outward across Earth and beyond.

On the darker side, however, another recurrent archetype revealed in creation myths is that of paradise lost — a departure from that dawn time when creation was eternal for each moment was the *only* moment, unconditioned by a remembered past — when the ‘gods walked amongst humans’, and anything was possible but foreknowledge. Often dismissed as romanticism, this mythologem is the form given to the disquieting sense that some terrible price was paid for our crossing into selfhood, knowledge, and power. Existential guilt or angst may be the result of this Heideggerian divorce from Being, just as violence is the human response to our existential terror. This was the birth of tragedy, as Nietzsche knew. Within our very conceiving is the taint of *misconception* — the blood of primeval titans mingling with the ichor of the gods.⁴⁵

§9. Afterword: Prehistoric Speculation

After all this, it must be admitted that recently there has been an upsurge in agreement amongst professional researchers that human symbolic interaction began much earlier and resolved itself much more gradually than I here argue. The multidisciplinary case for the Blombos Cave origin of symbolic activity (ca. 70 kya) is made by d’Errico *et al.* (2003), yet even they concede the evidence is not decisive: ‘It is a matter of debate whether convincing archeological evidence exists for an earlier origin’ (p. 17). Tattersall (personal communication) accepts Blombos as indicative of symbolic activity, but still stands by the late symbolic threshold of human language (FLN) coincident with the Aurignacian upsurge as being definitive.

In the event, I’d like to make some unsupportable guesses as to just when and where this decisive and crucial crossing into the world of symbolic forms may have taken place. Biological research into the DNA trail has shown that an early form of *H. sapiens* who was well established in the Levant some 100-150 kya (but still on the far side of the aforementioned threshold) moved north into central Asia (not west directly into Europe, as many have presumed). *H. sapiens* in its ‘archaic’ form originated in Africa and today there is more DNA diversity among Africans than among all other ‘races’ that emerged on other continents combined, implying that only a single tribe or small number of families led the exodus. The *H. sapiens* who found themselves in central Asia at the height of the last Ice Age continued to migrate in at least three separate directions (south, east, and west), evolving into the other biological types or ‘races’ of that species in gradual adaptation to the climates they entered. The ancestors

⁴⁵ It is an awful thing to dare ask what has been lost by objectifying natural reality & entering the magic mirror of cultivated reality. But preconscious experience — like the afterlife & the extrauniversal — is literally *unthinkable*, as such. Still, the loss of paradise mythologem — given form in Genesis as the eating from the Tree of Knowledge & suffering consequent exile from the unity & sensual immediacy of Nature — is too universal & too compelling to be ignored. It is as though direct animal-natural experience had been cored — hollowed out — by the mortal dread that was momentarily transubstantiated into the efflorescence of symbolic knowledge and the human witness to being.

of the late-*sapiens* Cro-Magnon then would have been forced across the Caucasus Mountains in what is now Russia before arriving and flourishing in what is now southwestern Europe (see Wells, 2002, 2007; Wade, 2006).

My speculation is that it was at this time (*ca.* 40 kya) in Russia, perhaps within a small tribe isolated for generations in a Caucasus valley that biologically undetectable but still very real speciation (phenomenologically speaking) happened through symbolic awakening to the sacred. From there, as their migration continued southward, I postulate that such new still ‘spellbound’ but fully modern human beings, ‘walking warm onto the fields of praise’ (to paraphrase Dylan Thomas) would have literally *spread the word* like some irresistible charismatic religious movement. The leap in the quality of stone, as well as bone and antler, tools and weapons known as the Aurignacian in Europe and the Baradostian in southern Kurdistan began soon after.

It’s probably too much to guess that women were the primary catalysts of the symbolic breakthrough based on archeology (and not just because of Dunbar’s gossip theory). Beautifully sculpted and widely distributed little ‘Venus’ figurines of stone or ivory first appear around 28 kya, but they may have been preceded by an age of similar figurines constructed in impermanent material. Beyond that, however, women were most often the campsite attendants and would be most aware of the tribal hierarchy and family ties, not to mention being most directly concerned with *time* – birth, aging, and inevitable (non-violent) death, and in this view, such was the catalyst for awakening to symbolic experience of the sacred.



Venus of Laussel, *ca.* 25,000 years ago

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Commentary

Brief Comment on Gregory Nixon's Hollows of Experience: Derrida

Frederick D. Abraham*

ABSTRACT

My congratulations to Gregory Nixon for a very thorough and sophisticated essay, and my apologies for the rather hasty attempt to provide a hopefully relevant comment, for which opportunity I am grateful.

Key Words: hollow, experience, Derrida.

Nixon (2010) gives many of Derrida's ideas important consideration. One of Derrida's most important ideas relates to instability in language, where he starts with Heidegger's concept of '*sous rature*' to emphasize the fact that words often cannot adequately stand for that which they reference, that is, they are inadequate to make an exact reference or representation. The word sends us on a long chase for meaning.

Heidegger's concept of '*sous rature*' ('under erasure') also emphasized extracting meaning from oppositions. A word gets erased but is left visible, i.e., as if crossed out, and one wrestles with the difference in the meaning of its presence and absence. Deconstruction goes further, more Heraclitian, in emphasizing the process of extracting meaning by transcending the apparent opposition. This is part of the process of Derrida's concept of *deconstruction*, which Taylor characterizes thusly:

"The guiding insight of deconstruction is that every structure—be it literary, psychological, social, economic, political or religious—that organizes our experience is constituted and maintained through acts of exclusion. In the process of creating something, something else inevitably gets left out.

"These exclusive structures can become repressive—and that repression comes with consequences. In a manner reminiscent of Freud, Mr. Derrida insists that what is repressed does not disappear but always returns to unsettle every construction, no matter how secure it seems. As an Algerian Jew writing in France during the postwar years in the wake of totalitarianism on the right (fascism) as well as the left (Stalinism), Mr. Derrida understood all too well the danger of beliefs and ideologies that divide the world into diametrical opposites: right or left, red or blue, good or evil, for us or against us. He showed how these repressive structures, which grew directly out of the Western intellectual and cultural tradition, threatened to return with devastating consequences. By struggling to find ways to overcome patterns that exclude the differences that make life worth living, he developed a vision that is consistently ethical." (Taylor, 2004)

Surap's characterization:

"The method of deconstruction is connected to what Derrida calls the 'metaphysics of presence'. It is Derrida's contention that Husserl, along with almost all other philosophers, relies on the assumption of an immediately available area of certainty. The origin and foundation of most philosophers' theories is presence. In Husserl's case the search for the form of pure expression is at the same time

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a search for that which is immediately present; thus implicitly, by being present in an unmediated way and present to itself, it is undeniably certain.

"Derrida, however, denies the possibility of this presence and in so doing removes the ground from which philosophers have in general proceeded. By denying presence, Derrida is denying that there is a present in the sense of a single definable moment which is 'now'. For most people, the present is the province of the known. We may be unsure of what took place in the past, of what may take place in the future, or of what is taking place elsewhere, but we rely on our knowledge of the present, the here and now -- the present perceptual world as we are experiencing it. By challenging access to the present Derrida poses a threat to both positivism and phenomenology." Surap, 1993, p. 35).

And, from Poster:

"[Foucault, Derrida, and Lyotard claim] that the quest for certain truth and the claim of having attained it are the greater dangers. The logocentric philosophical tradition, with its strong assertions about truth, is complicit, for them, in the disasters and abominations of the twentieth-century Western history. On this difficult, even tragic issue of the relation of politics to truth, poststructuralists in general strive for a cosmopolitan position that makes every effort to recognize differences, even uncomfortable or disagreeable ones, and for a theory of truth that is wary of patriarchal and ethnocentric tendencies that hide behind a defense of reason as certain, closed, totalized. Above all, poststructuralists want to avoid forms of political oppression that are legitimized by resorts to reason, as this kind of legitimation has been, in their view, one of the paradoxical and lamentable developments of recent history." (Poster, 1989, p. 16).

Whether language has instability or not, in Western history, is a discussion that goes back to the Greek Cosmologists. Xenophanes tried "to reconcile the antithetical interpretations of nature, first as an array of ever changing things [the Heraclitian view], and second as an infinite never changing substance [the Parmedian/Platonic view]." (Sahakian, *History of Philosophy*, p. 6) Philosophy has been debating this issue ever since. The cosmological debate was soon reflected in the concern for language (rhetoric), social action, and everyday and political relevance, exemplified by Protagoras.

Nixon discusses the aspect of binaries in Derrida's thought, and here are some additional ideas on binaries that reinforce his:

"In my view, this is the real significance of the metaphors of the cyborg and cyberspace — not only did they embody the lived experience of information technology, but they also offered a means of reconceptualising that experience in potentially non-hierarchical and non-binary terms." (Wolmark, p. 3).

To which I have commented:

"Postmodern literature, despite its great diversity, has a major theme of establishing the process of discourse, rather than dominating ideologies, as a means for providing a continuing flow of society toward equal opportunity and freedom from tyranny and discrimination. Wolmark's (1999) commentary, which sets the theme of her book, seems to place science fiction literature as sharing some communality with this postmodern discourse. (This is cryptically buried in her terms, 'non-hierarchical and non-binary'.)

"I think Wolmark inherits this usage of the terms non-hierarchical and non-binary from French feminist, philosopher, playwright, and poet Hélène Cixous (Cixous & Clement, 1986). For Cixous, as for Jacques Derrida, oppositions (binaries) can be dangerous, a source of oppression. For those of us

involved (and many who are not so involved) in dynamical systems theory (see Schuldberg in Richards, 2007), we have a great deal of admiration for the Heraclitian model of oppositions as creating a process that produces a new dynamic of greater complexity (an attractor—a pattern of activity created by mutually interactive agents) that surpasses each component of the binary.

“At the same time, we have to understand that the dynamical process may produce maladaptive or harmful cultural attractors, as well as desirable ones. This can happen especially when the relative strength of the influence of each part of the binary is asymmetrical. ‘A’ clearly dominates ‘B.’ This is the meaning of her term, ‘hierarchical’. A healthy social process should minimize the asymmetry of the binary to produce possibilities beneficial to all participants in the binary opposition. It is probably no coincidence that creative thought also goes beyond polarities and favors the complex thinker who can tolerate ambiguity (Montuori, Combs, & Richards, 2004).” (Abraham, 2007, pp. 248-9.)

I am concerned with emancipation, the program of critical theory, poststructuralism, philosophical hermeneutics, postcolonialism, and neopragmatism, whose ideas are syntonetic with those of Gregory Nixon, as well as Mikael Bakhtin's ideas of dialogue, heteroglossia, polyphony, and unfinalizability.

“Russian philosopher and semiotician Mikhail Bakhtin's theory of "dialogue" emphasized the power of discourse to increase understanding of multiple perspectives and create myriad possibilities. Bakhtin held that relationships and connections exist among all living beings, and that dialogue creates a new understanding of a situation that demands change. In his influential works, Bakhtin provided a linguistic methodology to define the dialogue, its nature and meaning.” (Maranhão, 1990, p. 51.)

“Dialogic relations have a specific nature: They can be reduced neither to the purely logical (even if dialectical) nor to the purely linguistic (compositional-syntactic). They are possible only between complete utterances of various speaking subjects... Where there is no word and no language, there can be no dialogic relations; they cannot exist among objects or logical quantities (concepts, judgments, and so forth). Dialogic relations presuppose a language, but they do not reside within the system of language. They are impossible among elements of a language”. (Bakhtin, 1986, p. 117.)

Since my concern is with emancipation, and the role of instability in empowering cultural change, I do not mean to imply that all social and cultural bifurcations end up with improved social conditions. Cultural dynamics often involve institutions, which tend to resist change, and that something needs to unstabilize them for progress, and that this is a never-ending process. The more oppressive and conservative a culture, the more unbearable it becomes, and it thereby seeds the roots of either its own destruction or its retrenchment. Social philosophies give us a more mature metaperspective which guide the discourse. Moreover, these perspectives should be founded not upon ideologies and fixed interpretations of nature, humans, and society, but on discourse and the tolerance for ambiguity and uncertainty.

My congratulations to Gregory Nixon for a very thorough and sophisticated essay, and my apologies for the rather hasty attempt to provide a hopefully relevant comment, for which opportunity I am grateful.

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Commentary

Playing With Your Food: Review of "Hollows of Experience" by Greg Nixon

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ABSTRACT

This essay is consistently engaging and thought provoking and for that, a worthwhile read. Important questions about mind and world are raised and considered from multiple angles, but not clearly answered. It is a special narrative skill to assert both sides of an argument without highlighting the contradictions inherent, and without making a strong, contestable statement of one's own claims. Nixon does that trick well, and perhaps that is because his purpose with this essay was merely one of exploration, not to assert a particular point of view. For someone who likes to play with their food before eating it, this might be a pleasing technique. For those who want to bite right in, it will be frustrating, but still tempting.

Key Words: hollows, experience.

This sprawling fifty page essay from educator Greg Nixon (2010) intelligently surveys some difficult questions about the relation between mind and world. Among many questions, he asks whether some experience is non-conscious; what is the role of language in consciousness; can language refer to anything that is beyond the edges of language; where does consciousness come from; how did language arise; can machines think? These, and many related questions are considered with erudition and style. Answers are offered for most of them, supported by citations to the academic literature, although as Nixon himself admits, there can be no final answers to such questions.

Nixon begins with deceptively simple questions: What is the mind? Is it a substance, as Descartes claimed, or is it a dynamic process? And whatever it is, why are we aware of it? What evolutionary advantage is served by introspection? Does it help you stay alive, find food, or reproduce? Billions of animals seem to get along just fine without it. Why are we blessed (or cursed) with self-awareness?

Even more perplexing is the question, what is in our minds anyway? In other words, what is experience? Are we aware of the world as it really is, or is our knowledge limited by the categories we use to sort our experience? Nixon believes that all organisms, even the lowly nematode, are capable of experience, and what they experience is change in the environment. Whenever there is any change in the relationship between an organism and its environment, experience is the result.

How does Nixon know this? He doesn't. No one knows what a nematode experiences, of course. In our own case however, is it true that experience is always a reaction to environmental change? There is empirical evidence that it is, at least for sensory experience. Studies show that sensory adaptation quickly sets in when the environment does not change, or changes too slowly, and a person ceases to be aware of the sensory input. So yes, sensory change is prerequisite for sensory experience. But it seems a bit much to attribute all experience to environmental change. Memories, thoughts, ideas, hopes, plans, regrets, questions, feelings, confusion, and much more, are all mental experiences, none of which necessarily depends on an environmental change. Overgeneralization is

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a hazard for anyone who tries to reason from simple first principles to the full landscape of mind and world.

And then there is the hoary question of whether or not the brain creates the mind. Most neuroscientists are sure that it does, and that is the main reason they work so hard to understand the brain. They are not doing it for the sheer joy of the task's complexity. No, they do it because they want to understand how the mind works. Nixon points out what is obvious but what no neuroscientist will admit, that we have merely correlations between brain function and mental function; there is no proven causal connection. In fact we don't know, and can't even imagine how it would be possible, for a brain to create a mind. Another possibility, equally logical, is that the mind creates the brain. In other words, the brain is an intellectual construct we use to account for the varieties of our experience. Wisely, Nixon deigns to choose between these alternatives, since there is no basis on which to choose, but notes that whatever choice is made, it has far-reaching consequences for how one construes mind and world.

Leaving that unending discussion, Nixon returns to one of the original questions, what are we aware of when we are aware of mental contents, and how? His favored hypothesis is that language is the crowbar that levers conceptualized experience from "raw," unconceptualized experience. Language lets us (actually requires us to) objectify our experience into the idea of a mind-independent reality that can be studied by science.

Invoking Immanuel Kant, Nixon reminds us that if there really is a reality "out there" beyond the mind, the mind could never know it. We know only our own interpretations of what we think we perceive and understand. What is really out there, in-itself, regardless of what we know or think about it, is simply not accessible. We know what we know and we don't know what we don't know.

Nixon says that what seems to be out there is really just our reified ideas of what we believe and want, but that does not make the world any less real to us. However, from some imaginary, omniscient, view from nowhere, it would be apparent that what we think we know about the world is not necessarily related to anything that is in the world. Of course, since there is no omniscient God's-eye view, such speculation is fruitless, even if thought-provoking.

Nixon likes to provoke thought, so he indulges his speculative side to imagine what the world-in-itself must be like, even while admitting that we cannot know. One line of thinking leads him to lament that we humans have become alienated from nature (whatever that is). Our intellectual conscious lives force us to conceptualize and categorize all our experience, to such an extent that we are no longer capable of apprehending anything beyond our own linguistic conceptualizations. Thus we are out of touch with nature, unlike all the other animals of the earth, who have a "mystically close" connection with their environments. This romantic nostalgia is not justified, since Nixon admits that non-conscious (unconceptualized) experience is intrinsically unknowable, but this back-to-nature urge is a common theme echoed throughout modern history and worthy of a moment's thought.

A more serious implication of Nixon's point of view is that if all we know and can know is our own conceptualization of the world, then science is a waste of time. At best, science might discover an interesting linguistic network among scientific concepts, but as for discovery of what the world is really like – that is pure fantasy. We simply cannot know what the world is really like. We can only know our own experience, which is itself highly constrained by language, culture, and prior conceptualization. The full implication of this radical, antiscientific viewpoint are not elaborated by Nixon. For example, if science is merely a mind-game and has no special hegemony over the truth of nature, what is to prevent us from being sucked back into the muck of ignorance and superstition from which we have only recently emerged?

I think it is irresponsible, even nihilistic, to argue that the scientific method is merely a formal system, like the rules of chess, that cannot reach beyond the game to grab hold of anything true, unless that is, one is prepared to offer an alternative epistemology that could plausibly lead to broad consensus, as science has. Although Nixon does not explicitly claim that science is merely a specialized form of conversation, he strongly implies that scientific assumptions of naturalism, materialism, and naïve realism are little more than delusion.

Why does Nixon feel that way about science? Apparently, due to his annoyance that the scientific method, by its own rules, is incapable of studying mental phenomena (which are presumably non-physical). But he does admit that "This refusal to comprehend consciousness as the arbiter of all realities there may ever be – including the imagined "reality" of objective materialism – is necessary for the scientific-technological program to continue its materially successful march."

We must overlook the implicit contradiction that any such march of progress could only be illusory if science is only a formal system of symbols, yet oddly, Nixon asserts elsewhere that "There is little doubt about the success of science in explaining the world..." Surely he meant to say the "physical world," since he has argued that experience itself is not amenable to scientific inquiry, but even at that, it is difficult to understand how science, as a mere system of symbols has been so successful, in his view.

In any case, if science is of no help in understanding the mind, we are left on our own to answer the question, what is awareness in itself? Nixon does not believe we are capable of answering that question. Echoing the arguments of philosopher Auguste Comte in the early 1800's, Nixon points out that to use awareness to investigate awareness is like using a flashlight to search for the source of its own illumination.

What are we to do then? As Sherlock Holmes always said, when all reasonable alternatives have been eliminated, you are left with the unreasonable. Groping for a foundation, Nixon thus reaches for the fantastic: "What if awareness or experience is as all-pervasive and foundational as universal background radiation?" But in this speculation, he conveniently separates his ontology from his epistemology, for according to his previous arguments, even if awareness were a background radiation, we could never know it.

In a section on the nature of subjectivity, Nixon tends to the view that subjectivity is self-knowing, or proto-knowing. While he supports the notion that the "self" is merely a narrative structure, somewhat arbitrarily built and maintained by conversations in society, he seems to at the same time believe that "The recognition of the self is, in a sense, the objectification of the subject by the subject..." The relationship between subjectivity and the self is never made explicit. The narrative self is the total set of stories we tell ourselves about who we are, but at the same time, "Subjectivity, then, is the experience of being the implied subject of discourse." Nixon suggests (but does not state) that subjectivity is a prerequisite for development of a narrative self, for subjectivity is necessary to define intersubjectivity, the awareness we have of each other's minds.

Nixon appeals to the psychoanalytic literature to support the concept of intersubjectivity, rather than the experimental psychology literature, which I find far more convincing, but at least we are in agreement that intersubjectivity is a fact of human life: we do read each other's minds. If we did not, language would not be possible. Of course we do not know every little detail of each other's thoughts, but in broad outline, we mutually understand what it is to be a human, in a human body, living on this planet with all its regularities, struggling through the constancies of the developmental arc, and so on. And more than that, we understand, even if only tacitly, the existence of and outlines

of, each other's subjectivity. Nixon frames intersubjectivity in terms of pre-conscious, "mythic" feelings, but I think there is a significant intellectual (if tacit) component to it as well.

Nixon is not one to make stark claims and build conclusions upon clear premises, so it is not always easy to tell where we agree and disagree, for example, on the question of whether or not it is possible for a person to breach the hermeneutic boundaries of conceptualized experience to glimpse some transcendent domain. Nixon seems adamant at first that this is not literally possible, and the attempt to do it mere delusion. "[W]e are "prisoners of our own device" within the realm of the symbolic. As such, nonsymbolic experience — even of a profound or transformative nature — is unable to produce literal knowledge of itself."

Actually, I do agree that transcendent, nonsymbolic experience is, practically, non-experience, and therefore cannot in principle be known to itself. But this does not rule out inferential knowledge, in the same way that we understand the nature of black holes by probing them at the event horizon. In the crepuscules as one approaches and leaves a black hole of non-experience, one understands its context and role within ordinary conscious experience. Nixon does not explicitly take up the possibility of indirect knowledge of non-experience. Yet he does say, enigmatically, of Merleau-Ponty's "hollows of experience" that they are "not [to] be explained or accessed either through some objective knowledge-creation or through an atavistic return to animal nature. It seems to me that Merleau-Ponty and even Derrida to some extent suggest that it is within the "hollows" of experience that we can reconnect *experientially* with primal creativity. Knowledge or interpretation must come after."

So are we in agreement then about the black hole of non-conscious experience? Maybe not. Nixon also says, "It hardly needs saying that such hollows must have everything to do with memory, felt memory — the frame of reference that shapes experience." But is memory not a principal content of conscious experience, precisely what is absent in a "hollow"? Despite the earlier description of a hollow, or as I call it, a black hole of non-experience, Nixon paradoxically says that he chooses, "...and I hope others do, too — a conscious return to the hollows of experience." But that is exactly what is not possible with a hollow. As with most other topics considered in this stimulating essay, Nixon is adept at projecting multiple meanings that do not necessarily cohabit well together.

A final example of that charming ambiguity in Nixon's writing surrounds the topic of creativity. We agree that creativity is a force of nature to be reckoned with, a required first level axiom for any theory of mind. And I think we agree that creativity emanates from those hollows of non-experience previously discussed. But Nixon also wants to say that creativity is some kind of fundamental force of the universe, perhaps another one of his supposed radiation background fields. As a psychologist, I have no need to look to distant galaxies or to quantum collapse phenomena for the source of creativity. It is intrinsic to the mind.

In sum, this essay is consistently engaging and thought provoking and for that, a worthwhile read. Important questions about mind and world are raised and considered from multiple angles, but not clearly answered. It is a special narrative skill to assert both sides of an argument without highlighting the contradictions inherent, and without making a strong, contestable statement of one's own claims. Nixon does that trick well, and perhaps that is because his purpose with this essay was merely one of exploration, not to assert a particular point of view. For someone who likes to play with their food before eating it, this might be a pleasing technique. For those who want to bite right in, it will be frustrating, but still tempting.

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Commentary

Brief Commentary on Nixon's Three Papers

Roger Cook*

ABSTRACT

A desire for transcendental experience seems to permeate all three papers – the phrase ‘deeply interfused’ struck my eye, and sure enough there it is in Wordsworth’s ‘Lines composed above Tintern Abbey’: “a sense sublime/ Of something far more deeply interfused, /Whose dwelling is the light of setting suns”. So although I would hope that answers to the Hard Problem will come eventually from neuroscience, these essays are greatly to be welcomed as an original and informed perspective on consciousness, expressed in well-turned prose, and occasional poetry.

Key Words: transcendental experience, hard problem, neuroscience.

In the First Paper Nixon (2010a) sets out his stall engagingly, drawing widely on the writings of respected authorities (and furnishing the rest of us laboring in the vineyard with stimulating material for our own theorizing). Following Nixon over the symbolic threshold into language, myth, art and religion (a leap whose implications are further explored in the Second Paper (Nixon, 2010b) and Third Paper (Nixon, 2010c)), we find ourselves in somewhat uncharted waters. We encounter a number of tentative ideas about degrees of awareness, often prefixed ‘pan-’, that are foreign to those having only a nodding acquaintance with philosophy and psychology. But this reader returns to dry land when the classic Nagel question is raised, ‘What is it like to be a bat?’; I feel safe in asserting that a bat is a biosonar organism, supremely sentient, but having no access to consciousness of any kind. But this is not the forum for detailed debate; future issues of JCER will hopefully provide that.

The centrality of language having been established in the First Paper (Nixon, 2010a), the topic is pursued at length in the Second Paper (Nixon, 2010b). The Symbolic Crossing into language is reached, *homo sapiens* having left the real present for the specious ‘present’ of abstract thought. The exposition of numerous aspects of conscious experience is comprehensive, indeed quite mind-expanding to read.

The concepts of myth and the sacred (Nixon, 2010c) show how powerful language can be in human affairs. Both are products of the conscious mind, but like the idea of consciousness going ‘all the way down’ to the nematode worm, hard evidence is scarce. Myths are by definition inaccessible to rational or scientific analysis. However there is much enlightenment to be had from Nixon’s exploration of the topic.

A desire for transcendental experience seems to permeate all three papers – the phrase ‘deeply interfused’ struck my eye, and sure enough there it is in Wordsworth’s ‘Lines composed above Tintern Abbey’: “a sense sublime/ Of something far more deeply interfused, /Whose dwelling is the light of setting suns”. So although I would hope that answers to the Hard Problem will come eventually from neuroscience, these essays are greatly to be welcomed as an original and informed perspective on consciousness, expressed in well-turned prose, and occasional poetry.

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Commentary

Commentary on Nixon's From Panexperientialism to Individual Self Consciousness

Stephen Deiss*

ABSTRACT

Works of this type which help elucidate how we can come to misunderstand each other are important given that fact. While we seem unable to know anything directly about our own or others unconscious experiences, as Nixon shows there is plenty of evidence that it exists for organisms with brains and could exist as well as for all manner of systems throughout the universe. This leads naturally to some blend of panpsychism or panexperientialism and solves, or hopefully will one day be seen to solve, a host of problems in the philosophy of science as well as having wider socio-cultural implications ranging from support for strong or radical ecology or perhaps a new kind of non-human centered spirituality.

Key Words: Panexperientialism, self consciousness.

In this paper (Nixon, 2010) the author seeks to highlight the distinction between the terms 'experience' and 'consciousness' and show how it supports a panpsychist view. According to his use of these terms experience is the more fundamental of the two, and consciousness always includes the extra element of self experience. Some of us have used these terms differently. For instance in the reference to my work the author cites [Deiss, 2009 in the paper under review], he says that I use the two equivalently. That is true. However, I do distinguish experience and self experience or, equivalently in my case, consciousness and self consciousness.

There is lengthy discussion of how various philosophers have used or ignored this distinction, as well as dictionary perspectives, and the etiology of the word conscious. Some do not acknowledge that there can be experience that is not conscious (as in self conscious), others would allow for experience that has no subject. It was helpful to see these differing historical and contemporary viewpoints outlined. Nixon (2010) comes down clearly on the side of allowing experience with and without self experience.

There is a suggestion in the paper that consciousness has something to do with memory especially in the last paragraph. I would have liked to see this elaborated more since it is a key idea that I have promoted in the previous reference. I would like to see how others view the importance. There is also the claim that allowing for experience without a self opens the door to legitimization of Psi experiences. However, this seemed taken for granted rather than explained in detail, and I did not follow the connection myself.

The paper also has an appendix that recounts 21 things (experimental phenomena, and relevant theories) that support the case for distinguishing experiences that have or do not have a subjective perspective attached.

In the end we must acknowledge slight cultural differences in language use. The language police are understaffed and will remain so. Works of this type which help elucidate how we can come to

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misunderstand each other are important given that fact. While we seem unable to know anything directly about our own or others unconscious experiences, as Nixon shows there is plenty of evidence that it exists for organisms with brains and could exist as well as for all manner of systems throughout the universe. This leads naturally to some blend of panpsychism or panexperientialism and solves, or hopefully will one day be seen to solve, a host of problems in the philosophy of science as well as having wider socio-cultural implications ranging from support for strong or radical ecology or perhaps a new kind of non-human centered spirituality.

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Commentary

Nixon on Conscious and Non-conscious Experience

Gordon Globus*

ABSTRACT

To my mind (*pace* Heidegger) the enormous focus on consciousness and experience in contemporary philosophy is a continuation of metaphysical mistakes made by the Socratic philosophers and carried forward to this day, requiring “deconstruction” (in its technical postmodern sense). My view is that *Existenz* is “between-two,” between two quantum thermofield theoretical modes in the ground (vacuum) state of quantum brain dynamics. In the belonging-together (matching) of dual thermofield modes, *Existenz* is unfolded as explicate world-thrownness. Discussion of conscious and non-conscious experience, even at Nixon’s perspicuous level, are unfortunately off the mark.

Key Words: conscious, non-conscious, existenz, quantum brain dynamics.

Greg Nixon (2010) has provided a thorough and thoughtful discussion of non-conscious experience, over against conscious experience. Curiously, the much used term “experience” forgets its etymology, which is from *experio*, to try out, as in experiment. And as Nixon points out, the etymology of con-consciousness refers to sociality, to know-together, far different from what we mean by consciousness today. Such dislocations of original meaning attract the deconstructive eye as evidence of textual tension.

To my mind the plethora of articles on consciousness (which even has its own devoted journal, *The Journal of Consciousness Studies*), with no discernable progress but an ever more brilliant controversy to which Nixon contributes, suggests that, frankly speaking, the whole discussion is barking up the wrong tree. Some would even proclaim *Ignoramus et ignoramus*. We are ignorant and shall remain so!

I would rather the whole kit and kaboodle of consciousness and experience be replaced by Heideggerian *Existenz*, a *dynamic* in which we always find ourselves already amidst a world of affordances. (Always finding ourselves thus is the meaning of being “thrown” ... existence is thrown existence.) “Consciousness” and “experience” are then reserved for reflexive existence, quite the opposite of Nixon’s emphasis. “Intentionality” in the existential brain model becomes the brain’s attunement, which is a function of both the brain’s self-tuning activities and priming by sensory input. (For extensive discussions of existence, consciousness and intentional self-tuning see Globus (2009).)

The tangle of thought to which the idea of non-conscious experience leads can be seen by considering only the first 5 of Nixon’s 21 indicators of non-conscious experience, given in his Appendix. He considers blindsight to be the premier scientific example of non-conscious experience. Blindsight patients, while consciously blind in some part of the visual field, may respond appropriately to stimuli in that part of the visual field. But this does not necessarily imply any nonconscious experience, only that the stimuli have primed the brain’s attunement which constrains to appropriate responses, irrespective of any conscious or non-conscious contentual experience. The conception of non-conscious experience is replaced by the brain’s attunement.

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Anton's syndrome is, I believe, commonly misunderstood in the way that Nixon does. It is widely thought the patient is blind—has no visual experience—and confabulates having visual experience. However, that the patient actually *has* visual experience (though usually dim) is shown by a patient *discovering* after a year, to her great dismay, that she is actually blind (Raney and Nielsen, 1942). Clearly she had visual experience the whole time, probably via some kind of coherent resonance into the visual system from other intact perceptual systems. The confabulations serve to explain the mistakes the patient makes while dimly having a visual experience autonomous of visual input (much as a hypnotic subject confabulates the reasons for actions actually controlled by post-hypnotic suggestion). Anton's syndrome features a dim conscious visual experience, just as the patients claim, and has nothing to do with a non-conscious experience.

Prosopagnosia is the inability to recognize consciously faces even though there are bodily evidences that the face has in fact been recognized. Nixon comments that “obviously recognition is being non-consciously experienced,” but there is no requirement that any kind of experience is involved. The same mechanism as in blindsight comes into play: sensory input primes the intentional attunement which signals the body in preparation for a conscious experience that never comes. To be ready to recognize someone does not imply that recognition will be experienced, if there is some fault in the mechanism. Priming of intentional attunement also explains Nixon's cases of physiological and emotional responses to people who are not recognized and actions that are not owned.

Nixon considers split-brain experiments as providing evidence for non-conscious experience. He states, “Again, physiological and emotional response readings indicate that subjects are experiencing, but are not conscious of it.” But split-brain studies only show that the right brain cannot talk about its conscious experiences. Gazzaniga and Miller (2009) indeed state that “while the right hemisphere's visual representations are much sharper and its perceptions of space are much keener than the left hemisphere's, the right hemisphere is probably mute, autistic-like, and mentally impaired” (268). A non-reportable experience is not the same as a non-conscious experience (unless consciousness is equated with reportability, which Nixon does not appear to intend).

To my mind (*pace* Heidegger) the enormous focus on consciousness and experience in contemporary philosophy is a continuation of metaphysical mistakes made by the Socratic philosophers and carried forward to this day, requiring “deconstruction” (in its technical postmodern sense). My view is that *Existenz* is “between-two,” between two quantum thermofield theoretical modes in the ground (vacuum) state of quantum brain dynamics (Globus 2009). In the belonging-together (matching) of dual thermofield modes, *Existenz* is unfolded as explicate world-thrownness. Discussion of conscious and non-conscious experience, even at Nixon's perspicuous level, are unfortunately off the mark.

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Commentary

Commentary on Nixon's From Panexperientialism to Individual Self Consciousness

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ABSTRACT

Nixon brings to our attention that consciousness changes and is of many kinds. Consciousness studies focus on only one kind of consciousness, ego consciousness also termed self-consciousness. Nixon's essay may cause some to re-think that issue. A brief summary of the concepts of God, divine Consciousness and human consciousness described in Indian philosophy is added here to dispel any misconceptions of this philosophy.

Key Words: Panexperientialism, self consciousness.

Is not consciousness the ability to experience? If there is unconscious experience, in other words, if consciousness is not required to experience, is that experience similar to the contents of a computer memory? (The author seems to think understanding the continuum of experience — from nonconscious to conscious, to self-transcending awareness is a first step to panexperientialism). If experience happens without consciousness does it happen vice versa, in other words can consciousness exist without any accompanying experience? Trying to answer these questions via self examination and self interrogation is tricky because the answers one gets from such self introspection are subjective and no two individuals get the same answer. The subjective nature of these investigations is probably the reason why philosophical papers on consciousness by different authors often contain the same words (such as consciousness, awareness, experience, and so on) but with different meanings and often not clearly defined but freely used as does this paper. The author seems to think consciousness, awareness, and experience are all different but it is not clear how consciousness and awareness differ according to him and it is not clear what self-transcending awareness is.

I tried to understand unconscious experience using the computer-brain analogy. Nowadays, computers can perform many tasks which in earlier days, were supposed to require a high level of intelligence and education. Today's Artificial Intelligence (AI) programs can simulate several thought processes such as learning and problem solving. This is all possible because the human brain is in some ways, similar to a computer. Computer users frequently use expressions like "the computer knows", "it does not understand", "it thinks", and so on. In fact, when we say "the computer knows the object", we mean the following: A computer (behaves as if it) knows an object (a data item or a program instruction), when a representation of that object as bytes of "0"s and "1"s in a digital computer or qubits in a quantum computer, in other words, as a sequence of states of hardware units, exists in its memory. Once such a representation is entered into a computer's memory, it can perform any number of operations with that representation. The computer can compare the object with other objects also known to it similarly. It can add, subtract, compute functions of it, draw a picture of it, and so on. The computer can do almost anything that a person can do with that object and behave as though it "knows" the object without really knowing anything! On the other hand, a computer programmer knows the meaning of an algorithm in his/her head; the algorithm in the programmer's head is not the same as its code stored in a computer (digital or quantum). The

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programmer assigns meaning to the code; the computer does not. A living human brain is similar to a computer in the sense that it has a hardware-like physical component as well as a lot of information; but unlike the computer, the brain carries some "real information" (meaning, conscious or unconscious experience, desires, emotions, etc.). So it seems reasonable to expect that a human brain "knows" an object (physical or abstract), if and only if a physical representation of that object as well as some "real information" specific to the object both exist already in its memory. Hence it is possible that the human brain may sometimes contain some "real information" which has no associated physical representation (in terms of neural pathways etc.) and hence is not conscious of that piece of "real information". Such information could be unconscious experience.

As to what the author calls "void consciousness of the mystics", Consciousness in Indian philosophy, is referred to by the inanimate pronoun "it" to emphasize that it is nonphysical and so it has no gender. In ancient Indian philosophy (all written in Sanskrit) God is Consciousness which is different from human consciousness that we are currently trying to understand. Three essential qualities of God are mentioned in this literature:

1. Sat – means always and everywhere present
2. Chit – means conscious and alert
3. Ananda – means perfect bliss

When they emphasize the second quality, God is Consciousness that is always present (hence never slumbering) unlike human consciousness which comes and goes. God is both personal and impersonal. God is impersonal because God is not flesh but spirit and therefore has no gender. God is personal in the sense that God is always conscious, blissful, loving and merciful and has free will. An elaborate explanation of the above three qualities implies that God or Consciousness is independent of space, time and causality. Free will means not to be conditioned or controlled by any cause, past, present, or future. That is why God was not born at some point of time from somebody but He/She/It exists always and everywhere and has no origin but is the origin of everything. Consciousness is said to be undescrivable because to describe anything, we need a language which is a set of symbols and rules and therefore insufficient to describe something which is not bound by any rule. On the other hand, human consciousness is subject to causality. The state of a lifeless object usually depends on the past. The state of a human beings (and many other living beings) depends both on past and future because we have goals, purposes, desires, and so on (all these look into the future).

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Commentary

The Predictive Mind and Mortal Knowledge

Marc Hersch*

ABSTRACT

In my commentary on Greg Nixon's articles, "Myth and Mind" and "Hollows of Experience", I begin with a discussion of those definitions and principles regarding consciousness in which Nixon and I are in agreement. Next I set forth my understanding of Nixon's thesis regarding the reaction to mortal knowledge and concomitant construction of sacred myth, in the emergence of consciousness, and critique this thesis. I then offer an alternative explanation for the emergence of consciousness, in which the construction of predictive narrative is selected "for". I conclude my commentary with an alternative explanation of the emergence of, and significance of, Nixon's existential crisis of mortal knowledge, by repositioning its emergence from beginnings, 150,000 years ago, to cultural developments that occurred as recently as 10,000 years ago.

Key Words: myth, mind, consciousness experience, mortal knowledge.

In his articles, "Hollows of Experience" and "Myth and Mind" Greg Nixon (2010a, 2010b) offers us an elegant and thought provoking narrative explanation for the emergence of human consciousness. In terms of his fundamental vision of the nature of consciousness, Nixon and I are largely in agreement.

1. Agreement

First, Nixon and I agree that for the purposes of this discussion, consciousness is most usefully defined in terms of actively reflexive, self aware and self-referential knowing that is, to the best of our knowledge, uniquely human. As such, consciousness is a qualitatively different phenomenon from the environmental "awareness" we impute to other living creatures as they go about behaving in the world. It is also different from the universal interactions we consciously observe between "things" going "all the way down".

Second, Nixon and I agree that the instrumentality of self-referential knowing is fundamentally a symbolic behavior and principally linguistic. In other words, without language, there can be no consciousness.

Third, we agree that the nature of symbolic behavior, as opposed to sign behavior, entails the construction of explanatory narrative in which causal, and therefore temporal, relationships between experienced/observed events are imputed. These narrative structures constitute "meaning" and in the absence of meaning, there is no consciousness.

Fourth, we agree that all that is experienced consciously is constructed by symbolic creatures in interaction with their environment and amongst themselves. In other words, the narratives by which conscious creatures construct meaning that is shared and handed down in a cultural context, is an ongoing and emergent process in which narrative undergoes continual transformation in the context of changing circumstance, experience, and ubiquitous variation.

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Fifth, we agree that in consciousness, symbolic creatures experience, behave, and act within the context of a self-created world of meaning in which they are inexorably immersed.

As Nixon says,

“Thus, although we, the human species, are but one species among innumerable others, we differ in kind, not degree. This quality is our symbolically enabled self-consciousness, the fortress of cultural identity that empowers but also imprisons awareness.”

Finally, Nixon and I agree that the meaningful symbolic world in which we are immersed is, from the first moment of self-referential awareness, constructed as a mythic cloth, woven together in mythic narrative founded upon axiomatic belief.

On the whole, Nixon and I agree that consciousness is best regarded as an irreducible process --- a behavioral constellation --- rather than some aspect of the creature that can be teased out from the whole and examined under a microscope.

In these matters of agreement, Nixon argues powerfully and in the interest of brevity, I will refrain from restating or reworking them. Suitable definitions and explanations of the nature of symbolic behavior can be found in the body of his articles.

Instead of retracing the basic groundwork upon which Nixon and I stand, which is in itself controversial, my intention is to comment upon his narrative of emergence and propose a somewhat different path by which to arrive at the same destination.

2. Nixon’s Thesis

At the risk of oversimplifying, Nixon speculates that the path to consciousness entails a crisis in which the pre-conscious creature awakens to the awesome knowledge of its own mortality. In that crisis, he argues, the creature is compelled to construct a transcendent mythic-sacred narrative in order to cope with the shock and awe of this terrible knowledge. It is the sacred quality of this mythic construction that knits the raw material of pre-consciousness into the whole that is necessary for an awakening of the fully conscious being.

“I conclude that prehumans underwent an existential crisis that could be resolved only by the discovery-creation of the larger realm of symbolic consciousness we call the sacred.”

Nixon reasons that an anticipatory, psychological-emotional response to an awareness of personal mortality is the final straw that tips the scales toward an awakening by compelling the pre-conscious creature to “spontaneously” construct sacred myth. In doing so, he resorts, as he must, to numerous psychological causes. To list a few, “emotion”, “ego-complex”, “conscious” versus “unconscious” experience, pre-symbolic awe, fear, grief, and even psychedelic experience.

Nixon says,

But until such primordial actions as the above became anything more than emotional responses to the dimly conceived horror of killing other bloodletting creatures or the unnamed terror of realizing death comes to all who are born, something more was necessary to give these feelings form and even transmute them into the hope and awe that are the beginnings of religion and the creative encounter with the sacred.

... It is only with myth in its first spontaneous stirring that we enter the realm of consciously apprehended experience, that is, experience made conscious through its transformation into metaphor and story, a transformation that required the corequisite transformation of facial, gestural, protolinguistic communication into the fully fledged self-referential system that earns the name 'language'.

Nixon goes on to explain that the ultimate emotional crisis triggers an awakening to consciousness.

The life crisis that arises with the realisation that the struggle to survive is always doomed to failure can only be cataclysmic.

And concludes that,

... The self is founded with death at its core.

3. Critique

In his pursuance of his thesis, Nixon includes most of the key elements necessary to explain the emergence of consciousness but inverts the flow of the process of emergence in a manner that confounds his explanation. He places the cart before the horse by invoking psychological cause --- "a life crisis" --- that can only come into being as a function of conscious experience.

There can be no doubt the individual self-awareness of mortality is one of the great and terrible contradictions of conscious experience, but I contend that the crisis created by this knowledge is not causal, nor is it a formative event in the emergence of consciousness. To the contrary, I contend that the psychological impact of mortal knowledge is an epiphenomenon that had a late onset in the course of human experience.

Nixon begins as I would, by asserting that there appears to exist in all living organisms an impetus to survive and reproduce.

He says,

...it seems likely that the intentions of any organism can never veer too far from its innate evolved instincts for survival, predominance, and reproduction.

This starting point is axiomatic and tautological. Life is defined in terms of the "will" to survive and reproduce. Such counter-entropic, energetic behavior entails a costly uphill struggle and I offer no argument here as to why this behavior called "life" came into being.

For the purposes of this discussion though, it is important to note the following problems with Nixon's formative statement.

- There is no basis for asserting that survival and reproductive behavior is "intentional" or "willful" in the absence of conscious awareness.
- The attribution of survival and reproductive behavior to "any organism" (singular) is best credited to Spencer and his "Social Darwinism". This idea is not well supported by observation. In many instances it is evident that individual survival is subordinated to the

continuity of communities of organisms, both intra-species and inter-species. Indeed, it can be argued that such subordination is the rule rather than the exception when the biosphere is regarded as a whole.

- The idea of “predominance”, which implies competitive intention and a will to dominance between individuals in species and/or between various species, is not born out by observation. For example, in every case of dominance behavior we must infer at least one case of submissive behavior. It is not necessary to regard the submissive behavior as the loser in a zero-sum game. It might be more useful to understand that both individuals and the community as a whole win in the process of contention.

In the final analysis, it needs to be remembered that the interactions among and between various species have been determined by a selective process based on the random variation that takes place in the context of the entire constellation of physiological-behavioral differences that emerge among living organisms. There are no rules that determine what works at any given time, in any given place, and in any given ecological context. Among individuals and groups, competitive and cooperative behaviors, dominance and submission, are equally subject to selection pressures. Selection is the ultimate equal opportunity employer. Failure to understand this is the fallacy inherent in Social Darwinism.

I suspect that Nixon understand these caveats, but the lack of rigor in his formative statement creates a slippery slope of psychological reduction by injecting individual will and competitive impulses before the fact of consciousness.

In a more fateful pitfall, Nixon resorts to some rather common explanations of the basic structure of symbolic behavior, which he sets forth in terms of mechanistic “category naming” and “opposition”.

He writes,

The physical entity would still note which stimuli are threats, which are prey, which might be mating potential, and which matter not at all. These categorizations continue to be primal response categories without the need for conscious decision-making.

However,

... their categorizations remain emotionally based, as well.

But,

With the arrival of speaking hominids, a net was thrown over the world and the entire progress of knowledge within the human species can be seen as a measure of the increasingly fine weave of the strands of that net. With the act of naming, each category can be further reduced to other categories and so on. What we call knowledge is based in increasing conceptual complexification involving both sub-sensory reduction and super-sensory expansion.

And, with respect to the self-contained nature of linguistic categorical structures...

....all terms of language are built from these “binary oppositions” that refer essentially to each other.

The flaw in Nixon’s characterization of symbolic behavior is that it fails to explain WHY such categorization --- this “naming” process by which the world is populated with symbolic objects ---

occurs. What is missing is the crucial concept of PREDICTION, which I contend, is the crux of the process by which consciousness was selected “for”. It is this omission that creates problems for the rest of Nixon’s analysis, in which he touches on all the right bases, but in the wrong order.

4. Predictive Behavior versus Predictive Action

Let me focus on this idea of prediction and see where it takes us, using virtually all of Nixon’s ideas about the nature and problems of conscious behavior.

Nixon states,

For example, Eliade’s (1954) demonstration of the eternal recurrence of cosmic cycles of time certainly applies to the mythic mind in general, but it is unknown how a presymbolic culture could share or even conceive of such an idea. It may have observed the cycle of the seasons or changes in the moon but it could not measure them without a means to do so.

Note: The idea of pre-symbolic “culture” cannot be supported. Culture is a product of conscious action.

What Nixon misses with respect to what he calls “cosmic cycles” and I call “patterned events” is that there exists what might be called a genetic mind that in the process of natural selection, imbues organisms with both sensory “measurement” and predictive behavior. The rooster crows at the break of dawn and herds of mega-fauna migrate with the seasons.

All organisms engage in predictive behavior, but in the absence of consciousness, that behavior is genetically engrained rather than intentional. It is selected FOR in the Darwinian sense. Every living species conducts its affairs --- survival and reproduction --- in its own uniquely selected fashion in the context of the world with which it interacts by way of its physical characteristics, sensual faculties, and behaviors. We can think of the characteristics of a species as its bandwidth, in which the organism experiences and behaves. For example, some organisms live in an olfactory band, others in a principally auditory band, and still others in a bandwidth that is principally visual.

Given an organism’s bandwidth, its genetically determined behaviors come to be more or less predictively synchronized with the patterned events that occur and reoccur, within some range of variability, in its environment. If these patterned events are stable enough in relation to the organism’s behavioral repertoire, that organism will survive long enough to reproduce others of its kind. Should the patterned events in the environment change suddenly, the repertoire of predictive behaviors built into the organism may cease to provide a survival advantage, thus jeopardizing the organism’s survival.

Again, in the case of non-conscious behavior, every organism must of necessity, have built into its genetically determined behavioral repertoire, predictions that have been selected for on the basis of patterned events that actually take place repeatedly in its environment, and this behavioral repertoire will be passed on to subsequent generations.

On this basis, we can state that all living organisms behave in a manner that anticipates events, (i.e. prediction), and that the nature of the patterns that allow for such prediction is entirely dependent on the bandwidth of the organism in question. Given its physiological characteristics, the organism’s survival is entirely dependent on its BEHAVIOR IN RELATION TO patterned events in its environment.

We have a tendency to view the process of evolution in morphological terms rather than behavioral terms, yet morphology can be aptly viewed as nothing more than an instrument of behavior that, at its most fundamental level, involves survival and reproduction, and it is from the standpoint of the predictive nature of all living behavior, that we must address the emergence of consciousness.

So far, I have painted a picture of predictive behavior in terms of genetic hardwiring, but this is not to say that within the behavioral repertoire of various living organisms, we do not observe varying degrees of behavioral latitude. In selecting for optimal behavioral constellations, natural selection seems to vacillate between the principle of simplicity, such as that observed in the robust hardwiring and rapid generational turnover of microorganisms and insects, and the more vulnerable complexity of long-lived behavioral polymorphs. In the first case, the instability of worldly patterned events --- change --- is addressed by low-cost rapid reproductive turnover and slapdash random genetic variation. In the second case, the instability of worldly patterned events is addressed by increasingly flexible behavioral constellations realized at a considerably higher cost to the species and its members.

Clearly, when taken as a whole, we conscious beings, possessors of the most complex, flexible, and expensive, behavioral constellation, have a vested interest in the latter path to survival and reproduction, but given the open-endedness of time, we can only say that time will tell which approach is superior. In any event, consciousness is what we have to work with, so I'll move on and see how we might come to terms with it.

We can now take a great leap forward to the point where, after eons of variation and selection amid changing worldly patterns, hominids make their appearance. These non-conscious apelike creatures are monuments to behavioral flexibility. Having recently, in evolutionary terms, descended from the trees to the savannah, they live in cooperative troops. There is a rough division of labor between the genders. They care for their young, who are by comparison with other mammals, slow to reach independent adulthood. Individuals are further stratified in terms of dominance tests that shape reproductive rights and produce the relations of leadership and followership that are essential to coordinated collaborative action. They have acquired an elaborate set of signs by which they signal coordinated behavior to address threat, defend, attack, etc. Their behavioral constellation entails levels of interdependence so complex that any individual can only survive as a member of, and in relation to, the troop as a whole. To be born and left alone or to be exiled from the troop would be tantamount to a death sentence.

The whole of this genetically determined predictive behavioral repertoire, which enjoys the advantage of flexibility in both the social and individual behavioral domains ---this interactive dance ---, has been carved out over generations of variation and natural selection. Though it is still neither intentional nor willful, it works.

Given this flexible and highly social creature, we find ourselves by happenstance, at the threshold of consciousness. Let's consider just a few of the many concomitant conditions that had to occur to set the stage for a leap to consciousness.

- Having descended from the trees, bipedal locomotion that frees the hands for manipulative activity was selectively favored.
- Bipedal locomotion that permitted migration (nomadic) of the troop from an area of depleted opportunity to areas of greater opportunity, was favored.

- Vocal apparatuses used for increasingly complex coordinating sign behavior, was selectively favored.
- Complex neurological faculties, (e.g. convoluted brains) used to manage increasingly complex group interactions, were selectively favored.
- Slow infant development needed to incorporate the young into the complex interacting group, was selectively favored.
- Living in a tightly knit, interdependent nomadic troop that functions as a whole that is greater than any single part, was selectively favored.

This list can be elaborated ad nauseam, if only because it is the whole creature, in every imaginable aspect of physiology and behavior, that sets the conditions for what comes into being next. Subtract any element from that whole, or change the environmental conditions in which the creature behaves, and something else that we cannot predict, happens.

Now we must set the whole creature in motion to understand how conscious behavior emerges in terms of advantage based on enhanced powers of prediction.

As I have discussed, the troop's behavior, as flexible as it is, is like that of other organisms --- rooted in its genetically programmed predictive behavior. That programmed behavior already engenders a great deal of adaptive latitude, but it is not yet conscious in Nixon's and my sense of the term.

The change begins when the predictive behaviors that reflect the interactions between the creature and its environment become turned inward amongst the group itself. Given the preconditions discussed above, the patterns of behavior among the members of the troop increasingly become focused, upon the troop as a whole, and upon individual members of the troop.

This predicting of the behavior of others is founded in the patterned and rhythmic behavior of the troop and among its members. I have heard it suggested that the rhythmically plodding steps of nomadic wandering might have been one of the formative triggers for the genesis of a proto-intersubjectivity. In any event, it is by focusing on the troop's collaborative behavioral rhythms --- that predictive mindfulness rises above the creature's predictive genes.

Maybe there occurred a signing behavior of tapping out a cadence to coordinate the timing in a hunt. And maybe that tapping was repeated out of context, in a manner we describe now as drumming. And maybe that drumming behavior called forth the first intersubjective "shave and a haircut", beginning with the predictive call --- tap, tapa tap tap --- and the predictive response --- tap tap. Whatever the specific triggering behavior(s) were, the transformative leap from sign to symbol and reaction to action, engendered a qualitative shift from sign-reaction to the symbolic process of predictive intersubjective call-response interaction between now-conscious beings. It is the call and the response, in which the response in turn, becomes a call itself, that marks the emergence of the intersubjective conscious creature.

Awakening to consciousness entails a leap to meaningful language, and language behavior involves, at its root, patterned, predictive, mutuality. Signs and signals move one way only. It is the call and the predictable response that connects these creatures intersubjectively, in mind and in body.

5. The Infant's New Mind

It is difficult to imagine the exact context in which the transformation occurred among our ancestors, but we can see the process at work in child development.

We are all familiar with the idea that in embryologic development, we see much of evolutionary development mirrored in the development of the embryo --- gills and the like. In this same fashion, we can see in the development of the child, the various stages by which consciousness emerges in microcosm.

The newborn infant is not conscious, though from a genetic standpoint, it is both equipped and predisposed to acquire consciousness. At first the infant is entirely focused and reactively dependent on its mother. The mother, who is both programmed and conscious, calls forth the consciousness of the infant, and pop-psychology notwithstanding, is genetically compelled to perform the behaviors necessary accomplish this calling-forth.

This maternal calling forth process begins with rhythmic rocking. Maybe this is a substitute for the rhythmic cadence of early humans' nomadic trekking. Nevertheless, rhythmic rocking is a necessary first step toward consciousness. In the absence of some form of rhythmic stimulation, the newborn infant child is on a road to ruin.

As the infant matures, the mother engages in rhythmic vocalizations that are the immediate precursors to language. These include cooing, repetitious phrases, and singing.

Still later, the mother begins to conduct numerous predictive games. Peek-a-boo is almost universal in this regard. "Now you see me. Now you don't. Here I am!" The child is genetically predisposed to be enthralled by this game in much the same way that a young bird-chick is predisposed to "practice" flying.

As the child is increasingly immersed in rhythms and predictive play, the mother begins to call forth the world by naming others in relation and worldly objects in relation. The sound "daddy" begets affection (we hope), the jack-in-the-box pops out when the weasel goes "pop". Adorations and praise follow upon the heels of first words and correct predictions. And so the child is awakened to a symbolic world of theory in which the meaning of things is engendered in cause and effect relationships --- reliably and predictably.

To place this picture of the process of emergence of consciousness in microcosm in the context of Nixon's crisis of mortal knowledge, we might ask ourselves how the very same crisis awareness emerges in human development. Since I have not come across any academic literature that correlates anticipatory death terror with developmental age, I can only speculate. It seems to me that the terror engendered by the anticipation of one's eventual death develops quite slowly over the course of a lifetime. In the consciousness of young children, the inevitability of death is usually addressed in curiosity and incomprehension. When will I die and how long will I live? How long is that? What might it feel like? Like sleeping? Later comes the familiar fearless and altruistic fantasies and acting-out of pre-pubescence. In adolescence and early adulthood, the prevailing consciousness engenders a sense of invincibility that is universally recognized as producing good soldiers. It is in the consciousness of old age that the terror of our inevitable death becomes fully realized. I can only wonder, was the consciousness emergent among our hominid precursors more like that of the young or the old?

Common sense tells us that the child acquires the name for things, categorizes them and thereafter, organizes them into predictive theoretical relationships. As difficult as it may be to grasp this idea,

the situation is actually the opposite. The child experiences everything in relation --- in predictive interaction with the world --- and names things in order to clothe relation with symbolic objects (objectification). In this process, the child undergoes a transformation from a behaving creature that reacts to the world to a predictive intentional actor who acts upon the world. We see that theory (as prediction) precedes data. It is all relation in prediction and there can be no data and no "things" without theory. The narrative begins in theory and is fleshed out with data.

The narrative of relation that Nixon describes as mythical is indeed sacred, because it transcends the data points. It binds the whole together as sensible and meaningful. The infant, first awakened, comes forth in consciousness with a *Weltanschauung* that renders the whole world sensible and meaningful. That theory, which embraces everything, will become transformed again and again in a lifetime of symbolic revolutions instigated by predictive anomalies revealed in ongoing interactive relations with others and in relation with the world. In this process of "learning", better called "knowledge creation", the circle of conscious, active experience widens from interdependence with significant others, to becoming a player among the tribe of generalized others, to becoming a self that is instrumental in relation to other instrumental selves. The fuzzy self resolves into ever-sharpening focus. Horizons grow broader. The data proliferates. The narrative is extended. Elaboration is the rule, and in any individual's lifetime, paradigmatic shifts are rarities of apocalyptic proportions.

6. The Tribal-Centric Mind

In turning back to our ancestral troop of wandering hominids, we can accept that, unlike the infant's awakening over a period of three to five years, the embryonic development of consciousness among these wandering apes took many generations, but the process of awakening was the same.

Consciousness was first realized in relation to the group as a whole, and this marks the transformation of the troop to tribe. The tribal being was founded in the rhythms and patterns of day-to-day life. The individual may have been self-aware, but in a dimmer sense than we rugged individualists experience today. He and she were immersed in, and entirely dependent upon, the tribe as a whole. Individual relation was bound into the tribal relation with the world and the ongoing challenges presented by that world. Individuals did not act individually. All was call and response --- all was RESPONSE--ABILITY. Every enterprise was a collaboration guided by the shared aims that represented the foundation of tribal-centric conscious intention.

This does not mean that individuals did not come into conflict with one another. This was no utopia. In the course of enterprising action, in purpose and by happenstance, an individual might obstruct another's intentional action. The synchronization of mutual action is momentarily interrupted in crossed purposes. A drummer changes up the timing. Mutual prediction fails. The failure is noted and the anomaly is reconciled on the basis of culturally defined norms and in innovative revision of narrative. The beat and cadence must be reestablished. The integrity and continuity of the tribe stands paramount. Survival hangs in the balance. The beat goes on.

As was mentioned in the discussion of child development, and as Nixon asserts, language as a theoretic construct, is emergent as a whole. There is a tribal *Weltanschauung* that is embodied in its narrative that is populated with those worldly events and objects that are relevant to the tribe and those artifacts of tribal industry that RE-present the tribal identity. This is the ever-emergent tribal culture that constitutes the tribal bandwidth realized not just in physical/behavioral relations as before, but now in self-constructed conscious relation that overlays it all. The data points that populate the symbolic linguistic whole are elaborated and refined over time, but the overall tribal

worldview --- the narrative relation --- can only be overthrown in revolutionary conflict spawned by overwhelming anomaly.

In tribal consciousness, the problems of personal mortality are of no great consequence. The tribe is the world, now, in the past, and in the future. The individual was born of the tribe and will continue as the tribe, so long as there is the tribe. We may call this a sacred awareness, but to the tribe there is no distinction between sacred and non-sacred. The world is whole and, in sacred relation, the tribal narrative encompasses that world. The tribe's mythic narrative is a "theory of everything".

7. Shock and Awe

In contrast to Nixon's mortal knowledge thesis, I have asserted that conscious emerges from rhythmic call and response behavior spawned from complex sign behavior, and that call and response is perpetuated and elaborated in language behavior in ongoing intersubjective inter—ACTION. The faculty of symbolic interaction (language behavior) enables the construction of a shared predictive/theoretical narrative --- a socially constructed reality --- that functions to produce coordinated, collaborative, intentional (meaningful), and innovative, action among members of the fundamentally the eusocial human species.

Central to Nixon's problem is that he invokes an essentially emotional response --- a shock and awe -- - with respect to mortal knowledge. He can only support this by resorting to a categorization of emotional experience.

Nixon says,

We consciously experience all emotions, especially the "higher" ones, through the lens of linguistic interpretation; even the basal emotions most often become transfigured or transmogrified through cultural experience.

Nixon is forced to create a hierarchy of "basal" to "higher" emotions and suggests that basal emotions are "transfigured" by cultural experience. It is more useful to think of emotional experience as a function of consciousness.

We interpret what we observe in the behavior of non-symbolic mega-fauna as emotional, but this is an error of anthropomorphism. Feeling and emotion are not one in the same. "Arousal/placidity and fight or flight" as well as pain and the feelings of threat and disorientation that occur upon the loss of a nurturing parent, are not emotions, basal or otherwise. They are genetically programmed behavioral responses honed over the millennia by the process of natural selection. Humans also possess these genetically programmed feeling responses, but it is not until the awakening to consciousness that they become "transmogrified" into the emotional.

Non-symbolic creatures do not anticipate death and therefore, cannot fear it. The symbolic concept of death, in the context of theoretic-relational narrative, must become reified before it can be felt as feared. This process of reification is the symbolic aspect that differentiates emotional experience from genetically programmed feeling experience.

Having confounded the concept of emotion, Nixon writes about "emotionally-based" knowledge and the ushering in of "theoretic culture".

However, emotionally-based "knowledge" is the defining factor of what Donald (1991) labels as mythic culture, the first cultural stage of humanity after language acquisition but before mass written

literacy. Such literacy — with the addition of the experimental method and logical skepticism — ushers in theoretic culture. The latter is apparently where we are now, but it must be pointed out that mythic thinking is still rife amongst us, especially when we use concepts for metaphysical ideas or experiences that have no referents in the real world before

It is more useful to discard Nixon's distinctions. Once the predictive mind is awakened, the admixture that is genetic and symbolic is irreducibly present in the experience and knowing of all conscious creatures, including those who practice the disciplines of experimental method and logical skepticism. It is not helpful to suggest that there is a mythic mind that stands in opposition to a theoretic mind. The mythic narrative is theoretic and the theoretic is mythic. As in the case of the infant that awakens to consciousness, the world of which we are conscious, in relation, is whole. The mythic mind and logical mind, emergent in interaction are not only inseparable; they are one in the same in the symbolic process of narrative that is creatively populated with worldly "facts" in temporal-causal relation.

Earlier I suggested a set of preconditions that set the stage for an awakening to consciousness. The conditions allowed for a transition from genetically programmed predictive behavior to socially constructed predictive action that was rooted in rhythmic relations among members of troops-become-tribes. The explanation I propose drives the awakening in terms of selective pressures that favor increasingly efficacious prediction.

Nixon also speculates as to the conditions that might account for an awakening, but uses a different approach.

He suggests that bipedalism is necessary but not qualitatively different from other adaptive events. Tools, he suggests, are not clearly and exclusively characteristic of conscious beings.

The mastery of fire, he says, seems to represent a definitive milestone.

With this accomplishment — and it was an accomplishment — humankind irrevocably distinguished itself from all other animals.

Yet fire itself must have been a very familiar and unremarkable phenomenon to all living creatures and selection surely favored those that could turn this common event to their advantage by way of their genetic programming and, for the conscious, symbolic constructions.

Nixon argues, again from the psychological, that the characteristics of fire inspire a mystical awakening. I would suggest that in consciousness, the ethereal nature of fire may very well fan the flames of the imagination, but its magical powers were on par with the other forces of nature that came to populate the mythic narrative that constituted emerging consciousness.

Nixon writes,

There are few sacred rituals that did not involve fire in some form...

I would suggest that it was not the fire that kindled the mind but rather the drumming and dancing around the fire that kindled the imaginative mystical reverence for fire.

Moving forward toward the death crisis, Nixon interprets Giegerich, saying,

...early hunting with weapons was 'unnatural' for our ancestors, no matter what species they may have been. The act was a decisive break with nature whose importance became underlined when human culture became more settled with pastoral or agricultural pursuits and still found the need for blood sacrifices to reawaken the shock of death.

And,

The life crisis that arises with the realisation that the struggle to survive is always doomed to failure can only be cataclysmic.

And in addressing the problem of an emotional response to death awareness as a trigger to conscious awakening,

...this existential crisis was concomitant upon the also dawning awareness of oneself as a unique experiencing entity.

He concludes,

Egocentric consciousness is the polarity of death consciousness, each inside the other: The self is founded with death at its core.

I do not find Nixon's thesis regarding egocentric awareness of mortality either necessary or compelling.

As I have explained, the emergence of tribal-centric consciousness in which the individual self is fully realized is not only consistent with a definition of consciousness, but it is the essence of consciousness that, Nixon and I agree, emerges in symbolic interaction among eusocial creatures. The immersion of the self in relation to a larger causal narrative that embodies tribal identity, takes precedence and this remains true today in the emergence of consciousness that can be observed in child development.

If I am correct in suggesting that Nixon's crisis of mortal knowledge is an epiphenomenon of conscious rather than causal or even concomitant with the emergence of consciousness, and that the awareness of mortal knowledge was not a fearsome prospect to tribal-centric conscious beings, how might we explain the emotional angst that consciousness inspires in ourselves?

To begin, I would like to suggest that IF mortal knowledge constituted a conscious-generating existential crisis as explained by Nixon, it unlikely that the faculty of consciousness would have survived the challenges of the evolutionary selection process.

Mythic-sacred narrative and shamanic ritual notwithstanding, egocentric reflection and the fear thus engendered, would have undermined tribal action to a debilitating degree. What was the suicide rate among our earliest conscious ancestors?

It is more reasonable to speculate that the self that was called forth to consciousness by the tribe, was so embedded in mythic relation to the whole of the tribe, that individual mortality was writ into consciousness and mythic narrative in a fashion that engendered the ongoing continuity of self in the same sense that the tribe itself was ongoing and self-renewing. The experience of the individual as ongoing was not an intellectual rationalization. It was a lived reality.

But this argument doesn't answer the question of how the reification of the concept of death produces the anticipatory-predictive, emotional terror we know today.

Previously, I discussed the behavioral and physiological conditions that set the stage for the emergence of consciousness. Salient among these was a nomadic lifestyle that enhanced opportunity and provided the rhythmic template for intersubjective experience.

Exact numbers are not necessary, but conservatively speaking, we can place the emergence of the symbolic, language-using, *Homo sapiens* at around 150,000 years ago. When regarded as a whole, their physiology, flexible sociality, predictive powers, and nomadic lifestyle, enabled them to take advantage of an increasingly broad territorial range, resulting in their spread across the planet.

Thus far the behavioral constellation of the species *Homo sapiens* --- eusocial, nomadic, intersubjective, predictive --- represents a relatively short-lived evolutionary experiment. Over a period of about 140,000 years, their behavioral constellation remained relatively constant. As populations increased beyond tribal carrying capacity that was bounded by the constraints of nomadic movement, hunting and foraging technologies, and member socialization and enculturation processes, new tribe tribes were spawned and migrated along ecological fall-lines to eventually encircle the planet.

For 140,000 years, the success formula of *Homo sapiens* produced an explosive increase in range rather than numbers. The quest for territory needed to sustain each newly emergent nomadic, hunting-gathering tribe created a pressure that favored range over numbers, yet success inevitably produces the seeds of its own failure.

Estimates vary regarding the beginnings of the cultural transformation from a nomadic to agrarian, location-dependent, lifestyle, ranging from 10,000 years ago in the Americas to about 5,000 years ago in the Mesopotamian region. This transformation must be regarded as revolutionary (cultural) rather than evolutionary (genetic). Given certain conditions such as location, soils, weather and range limits, among others, some tribes, in their flexible and innovative symbolic, tribal-centric consciousness, were able to more efficiently exploit local resources and thus increase the carrying capacity of their particular niche.

This revolution in lifestyle, from nomadic to location-dependence, transformed the modes of relation from those of tribal interdependence in which self-identify was bound into relation with others, to tribal dependence on land and tools that spawned a self-centered, object-centric, identity. In other words, the symbolic reality --- the self constructed mythic narrative --- became transformed from intersubjective call and response relation to relation with THINGS that are incapable of response, but nonetheless, imbued with socially constructed meaning. Although we can never shed our call and response roots, from this point forward the process by which intersubjective relation begets objective relation increases at an increasing rate.

The definition of "success" must always include an answer the question, by what measure? The 140,000-year experiment with tribal-centric consciousness produced a stunningly rapid expansion of range for *Homo sapiens*. The most recent 10,000 year experiment in which object-centric consciousness, a cultural product realized in intersubjective relation, produces increasing economic efficiencies at an exponentially increasing rate, has resulted in a stunningly rapid expansion of population. While the jury is still out with respect to tribal-centric consciousness, the evidence hasn't even been fully heard with respect to object-centric consciousness.

So what shall we say about Nixon's crisis of mortal knowledge?

In the tribal-centric reality that was predominantly intersubjective, the call and response rhythms of everyday experience produced an ongoing process, without beginnings or ends. In the mythic narrative of the aboriginal peoples of Australia this is rendered by observers today as, "The Songlines", in which the "human beings" are continually calling-forth the world in song (rhythmic sacred narrative). We might ask if tribal-centric people --- "The People" --- were fully conscious in the sense put forth in Nixon's articles and in this commentary. I would answer that these tribal beings were not only fully conscious, but in some ways, were even more fully conscious than those I have called here, the object-centric knowers, who emerged from tribal-centric peoples a mere 10,000 years ago.

The object-centered people have realized remarkable achievements in their pursuance of material wellbeing. The impetus toward such material achievement is rooted in the axiomatic drive to survive and reproduce, and has been realized in the increasingly efficient exploitation of the faculty of consciousness. Excess productive capacity and the resulting accumulation of material wealth, provided a compellingly attractive survival buffer that could not be realized in nomadic, tribal-centric, relation. On the other hand, increasingly object-centric relations produced a reality in which un-response-ABLE "things" have beginnings and ends and can be gained and lost. Call and response relations become focused, not on the collaborative process of surviving, but upon the accumulation of a reservoir of things whose numbers can be "accounted" for in terms of wealth.

From a developmental standpoint, tribal-centric and object-centric consciousness, emerge along the same path. We are all called forth by the tribe, and in intersubjective symbolic interaction, we all become actors in the call and response dance. But in the object-centered culture, constructed in mythic narrative, the world of relation is transformed into a world made up of objective, means-to-ends instrumentalities. In a process of increasingly abstracted reification, even the conceptual takes on the symbolic qualities of thingness --- physically and temporally bounded, intentionally caused, and defined in terms of intrinsic instrumental value (ideology). Most important among these constructed "things" is the self that is physically and temporally bounded, caused, and instrumental.

The terror inspired by the anticipation-prediction of the loss of the thing called "I", only emerges in the context of "I" as "thing", and this does not occur until the object-centric mythic narrative emerges in the context of a sedentary, property-centered, object-oriented, lifestyle.

There can be no doubt that individuals among nomadic, tribal-centric people, experienced feelings of fear when confronted with the prospect of personal annihilation, and as a general rule, behaved with the intention to postpone that event as long as possible. Such feelings of fear and accompanying physiological responses are built into all organisms. There can also be little doubt that *Homo sapiens* shares with other complex organisms, the genetic predisposition to subordinate their individual survival to the survival of their progeny. But in socially constructed tribal-centric consciousness, it was the threat to the continuity of the tribe that provoked anticipatory mortal terror, because it was the tribe, as a lived reality, that was the principal wellspring of selfhood and the guarantor of the survival of individuals and their progeny.

8. The Jury is Still Out

Homo sapiens emerged as a conscious creature in the context of a particular set of happenstance circumstances in a particular time and place. The faculty of consciousness by which the existentially experienced came to be overlaid by a socially constructed, symbolic and temporally predictive narrative in the context of patterns bounded by the creature's sensorial bandwidth, emerged from

rhythmic, intersubjective mutuality that transformed sign behavior into predictive, call and response behavior. For at least 140,000 years, consciousness was essentially tribal-centric. In all respects, the individual's lived experience was immersed in and supported by a mythic-sacred narrative of tribal identity that was constructed, renewed, and continually transformed in the context of their nomadic lifestyle.

Beginning a mere 10,000 years ago, opportunistic conditions and conscious behavior converged to permit some tribes to cease their wandering ways and establish permanent residence upon some lands. In the context of this new lifestyle, there occurred a symbolic narrative revolution in which intersubjective tribal call and response relation took a backseat to relations of "objective" property. This new lifestyle gave rise to the construction of an object-centric mythic narrative in which the individual became one of many bounded worldly objects defined in terms of opposition. The object-centric creature lives within the tribal-centric creature that lives within the genetically shaped creature. These forces, acting as a whole in the context of the world here and now, constitute the conscious creature we currently call "us".

How are we doing? Only time will tell.

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Commentary

Consciousness as Shared and Categorized Result of Experience

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ABSTRACT

I very much second the basic tenets of Nixon as to separating the concepts of experience and consciousness. However, I see the relation of these terms in a somewhat different way: experience is the general basis of our existence, a process in the organism-environment system, whereas consciousness is based on shared results of the experience, and categorized by language. Everything that is not realized in shared results of experience stays nonconscious, and does not exist for the subject, although its effects may be seen in his actions, as Greg Nixon quite correctly remarks.

Key Words: consciousness, experience, categorized result.

I think Greg Nixon (Nixon, 2010) is quite on the right track when trying to clarify the relation between unconscious and conscious experience. It is true that these concepts are usually used (if used at all) in a very opaque way, especially in constructivism and cognitive brain research. In the former, it is often unclear (at least to me) if reality is seen only as a result of construction of conscious experience, nonconscious processing playing no role. In the latter, the processing in the brain is endowed with some magical powers that make some of the brain processes conscious, whereas the rest of these processes stay at the nonconscious level.

I completely agree with Nixon that the terms “experience” and “consciousness” are not interchangeable, but my reasons may be a little different than those proposed by Nixon. According to the organism-environment system theory (Jarvilehto, 2000; Jarvilehto 2009), consciousness appeared as a new kind of organization of organism-environment systems, as an aspect of the social organization based on cooperation of individual systems for shared or common results. Thus, contrary to traditional or common sense explanations, consciousness is not considered as something private, but it is rather characteristic of the structure of the cooperative system directed towards common results. It seems this conclusion is quite aligned with Nixon’s ideas.

In the framework of the organism-environment theory the criterion for consciousness is the possibility of report, that of communicating and indicating common results. However, with words we can never describe an action, but only common results. If I want to tell what happens when I take a pencil from the table, I must divide my action into subresults: my hand is now here, I move it, at the next moment it is there, I grip the pencil, etc. If I am further asked what I mean by “move” or “grip”, I must again go to the subresults and say, for example, that moving means the hand is now here, but at the next moment there. We have no words for the action itself, and, in principle, we cannot have this, if consciousness is related only to the results of action. In fact, each verb is an abbreviation of a sequence of results.

From this it follows that we can be conscious only of common results, of something that we share with other people. Consciousness, thus, is basically non-continuous, and based on a continuous life process, most of which stays non-conscious for us. However, language offers the possibility of a theory of action for explanation and understanding of one’s own behavior. Language makes possible

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the existence of the past and the future in the present, because with the help of language we may reflect on what happened and what will be happening. This is the basis for our impression that consciousness is continuous and that we can use language for the description of the actual processes.

Although words are for cooperation and for the achievement of common results, the common results are something that may never be exhaustively described by words. Speech and language are only tools for creating the organization leading to the common results. A word is an "interpretation" in the sense that it refers to an indicator of results. For example, the word "ship" denotes a piece of reality (thing) which is an indicator of the result (e.g. the possibility to go overseas). The word is a human interpretation of a piece of reality. For an ant that part of the world would not be a ship, but something else (of which we will never have exact knowledge, because we cannot share it with the ant). The identification of the indicator of result with the result itself means the stopping of development, limiting oneself to what is visible.

The organism-environment theory states that the parts of environment belonging to the organism-environment system are parts defined by the structure of the system: "Physical description of a living system can never be a complete description, not only because physics has nothing to say about life as such, but also because the parts of the system are not selected according to the physical laws, but on the basis of the living structure" (Jarvilehto, 2000). Thus, when we describe the environment of an animal, we do not really describe the parts belonging to the living system. We describe these parts as separated from the system and joined to the system of the observer. Therefore, we cannot observe the "Umwelt" of the animal (cf. v. Uexküll and Kriszat, 1932); we may describe only our own Umwelt and relate this to the body of the animal. When observing the behavior of the animal, we may then see how the animal relates to such parts of the environment, which, in fact, belong to our own system.

This consideration may be developed even further. When we give a description of our own environment, we do not really describe those environmental parts belonging to the organism-environment system. Instead, we give the description of certain parts of the world from the point of view of the human species as a whole, because the consciously described human environment is a shared environment. All conscious things are common; therefore the whole human world, as it may be described, is a social world. All conscious experiences are common experiences.

When I say something about my environment, then it is no longer my private environment, i.e. that which belongs to my specific organism-environment system. It is a shared "third person" view of my experience. The environment cannot be extracted from the organism-environment system and be described as if "from inside." The human being cannot describe anything that is completely private, because the contents of his consciousness are common, shared with other people. This means also that we never have conscious knowledge of our environment so far it is regarded as belonging to the organism-environment system; we know it consciously only through the results of our actions. I think this would pretty much correspond to "Erfahrung", as discussed by Nixon.

We do not consciously know how we are connected to the world, because we act in the world as organism-environment systems. As conscious beings we may at any moment separate some parts of the world as objects of our activity, and these parts are as results of the perceptual experience shared with other people. When we describe these parts, we use words as indicators of these results. Thus, the verbal description of a part of the world is only an indicator of the shared part, but not identical with it. Such a verbal description is good enough when we create co-operative organization for common results; it gives to the other human being the possibility to direct his activity to the part of the world in question, and to join it into his organism-environment system. The real part of the world involved in the cooperation is, however, always more than the verbal description reveals.

This fact manifests itself clearly in teaching of the skills. You may describe by words how to ride a bicycle, but this does not much help the person who wants to learn to ride. If you want to teach him you have to coach him by showing the motions and the ways to balance the bicycle. Finally, when the student learns to ride, no one really knows how it happened.

From the point of view of the organism-environment system theory, this is understandable. As our consciousness is related only to the result, we can consciously deal with, and verbally report, only sequences of results, not the processes as such. Thus, we can learn how to throw a ball, if we first consciously listen to the instructions of the teacher (put the hand like this, press the ball, move the hand, release the ball), and follow the described sequence of results. Then, in the process of repeating the intermediate results, our functional organization is changed such that we do no longer pay attention to the single phases of the action. When mastering the task, our behavior is directed from the beginning directly towards the intended goal. We now can throw the ball, but we don't know how it happens, because the process itself is nonconscious.

Summarizing, I very much second the basic tenets of Nixon as to separating the concepts of experience and consciousness. However, I see the relation of these terms in a somewhat different way: experience is the general basis of our existence, a process in the organism-environment system, whereas consciousness is based on shared results of the experience, and categorized by language. Everything that is not realized in shared results of experience stays nonconscious, and does not exist for the subject, although its effects may be seen in his actions, as Greg Nixon quite correctly remarks.

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Commentary

Brief Comment on Gregory Nixon's Myth and Mind

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ABSTRACT

Nixon brings to our attention that consciousness changes and is of many kinds. Consciousness studies focus on only one kind of consciousness, ego consciousness also termed self-consciousness. Nixon's essay may cause some to re-think that issue.

Key Words: myth, mind.

Nixon (2010) writes, "By accepting that the formal structure of human language is the key to understanding the unicity of human culture and consciousness...I am free to focus on the causes that led to such an unprecedented threshold crossing." (p291). We find similar conclusions about the varieties of consciousness in other studies. In his book, 'The Discovery of the Mind', Bruno Snell investigates the structure of the literature of the writings of the Early Greeks, beginning with Homer. Snell says, 'European thinking begins with the Greeks...this type of thinking was an historical growth.' (p.v). and 'how radically the experience of Homer differs from our own.' Snell looks closely at early Greek literature and also concludes that language is a key to understanding human culture and consciousness, 'For the existence of the intellect and the soul are dependent upon man's awareness of himself.'(p.ix), for example. In 'Greece and the Hellenistic World' (Boardman et al) trace the same pathway of development through the artistic and sculptural creations of the early Greeks, culminating in the evidence of self-reflection found in the Kouros, 'Kritian Boy' (480 B.C.). Additionally, Charles Taylor, in, "The Dialogical Self", points out another change in consciousness, monological to dialogical consciousness.

Snell, Boardman, and Taylor point out that human consciousness has changed. Our thinking and experience changes and is directly related to our various states of consciousness.

In saying, "I conclude that pre-humans underwent an existential crisis that could be resolved only by the discovery-creation of the larger realm of symbolic consciousness we call the sacred." (p291), Nixon brings to our attention that consciousness changes and is of many kinds. Consciousness studies focus on only one kind of consciousness, ego consciousness also termed self-consciousness. Nixon's essay may cause some to re-think that issue.

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Commentary

Commentary on Nixon's Three Papers

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ABSTRACT

On the First Paper, a relevant point not mentioned by Nixon is the existence of 'consciousness without experience'. This is the domain of the emergence of the primary mind or 'cognition'. On the Second Paper, I agree with Greg Nixon that Being, Awareness is unexplainable, but this does not imply that it is impossible to 'describe' mind--->matter and matter---> transformation in a 'relatively' closed inter-individual (interobjects-intersubjects) loop. On the Third Paper, I agree with Nixon that God in absolute sense is hidden and objectively unknown but definitely not beyond existence. This touches also the issue of the compatibility of evolutionism-creationism and has to do with the 'mental chemistry' of disconnection-connection.

Key Words: Panexperientialism, consciousness, hollows, mind, myth.

1. From Panexperientialism to Individual Self Consciousness

Nixon (2010a) put consciousness in a broader context. Consciousness is not only an interactive process exclusively for human beings but pertains to all beings in the universe (pan-experientialism). He makes a distinction between non-conscious, subconscious, preconscious non-subjective experience and conscious subjective experience. Subliminal experience and other phenomena are examples of non-conscious experience (21 indicators of non-conscious experience in the appendix). "Experience without consciousness — that is, experience as responsive interactions within an ecosystem or perhaps any complex system (as opposed to a culture) but without any sort of awareness of that experience. Experience is viewed as really consisting of a continuum from momentary flashes into existence of 'occasions of experience' to the boundaryless experience which blossoms into transpersonal awareness".

A relevant point not mentioned by Nixon is the existence of 'consciousness without experience'. This is the domain of the emergence of the primary mind or 'cognition'. You can't witness or experience your own birth at that very moment of birth, they don't coincide. One can think to the 'mind set' or person's cognitive process of "I" unaware to him/herself but consciously perceived as immediate experience by another person (mind-reading). Formally we can put this in a causal frame of "1st person cognition as cause" and "2nd person perception (subjective conscious experience) as effect" (Monteiro, M. 2009).

2. Hollows of experience

In Part I Nixon (2010b) examines: 1) the origin of conscious experience: symbolic communication and conceptualization growing out from identification; and 2) how our own consciousness came to be: the separation of subject and object. In Part 2 Greg Nixon examines the origin of experience itself: the ontological question of Being, Awareness. It is suggested that awareness is identical with creative unfolding to be considered ultimately unexplainable.

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I agree with Greg Nixon that Being, Awareness is unexplainable, but this does not imply that it is impossible to 'describe' mind--->matter and matter---> transformation in a 'relatively' closed inter-individual (interobjects-intersubjects) loop. To answer Greg Nixon's question 'how does any material entity create mind, consciousness, or even just experience?' is not a matter of creation, but mental unfolding what is already present in matter from the beginning (from strong force in the nucleus of atoms till strong love bond in persons).

I agree with Greg Nixon that "the brain is not a producer of consciousness but a transducer which focuses diffuse mental "energies" into individual experience.....and "any experience that precedes, exceeds, or transcends the brain is felt to be more real than the brain itself so the brain's reality can only be reactive".

However, brain's reactivity only holds in the context of stimulus-reflex. In case of the emergence of higher-order cognitive values, the brain mediates between merging of two lower-order percepts into a higher-order percept to outburst in cognitive value (fusion-fission).

I agree with Greg Nixon that subjectivity results from other persons through the internalization of the language process already used by them. However, from the second person perspective, not only language is relevant for conscious identity, but starts with normative role behaviour. I wonder therefore whether the statement holds of "all that is outside of language is non-conscious experience in a reality that is largely a construction of our biological human sensory and memory systems relating to the things in themselves".

Nixon (2010b) states "Another position derived from a combination of quantum physics and far from equilibrium thermodynamics sees experience of any sort creating experienced worlds from the chaos or semi-chaos of the unknown and non-experienced — the Kantian "things in themselves".

However, the autonomous non-experiencing thing or chaotic unrelated process and experiencing is the borderline between meaningless and meaningful to be incorporated in a philosophy or theory. The meaningless autonomy of a process (Ding-an-sich) must be the axiomatic starting point. The question is how to build the bridge between meaningless and meaningful experiencing: 1) one has to postulate accidental random material object interaction to generate or activate the mind (matter→mind); and 2) accidental random subject mental interaction to activate matter (mind→matter). Through interpersonal feedback, meaningful experiencing (perception) comes into being. The question is what happens in the non-causal gaps of matter→mind and mind→matter.

Nixon (2010b) also states "The creative person learns from the active unconscious. The creative phase of initial inspiration dilutes the separation of subject and object....." "[T]he creative impetus may be the ultimate source not only of consciousness or experience but also of all existence, pre-existing all realities as potential. "What creativity is, in itself, cannot be known.....until it manifests in things or processes of this world. To attempt even to imagine a pre-existent unity, being, or substance without its differentiation and manifestation into a many is animpossibility. We know and can know nothing objectively of creative potential or of a God who is beyond existence".

But I wonder whether we cannot say anything about creativity in general (human, God, evolution, etc.) only but in material manifestation. In a relatively closed inter-object- and inter-subject system, the antecedent and consequent conditions of creativity can be known: 1) the antecedent condition is the creative mental product (mental synergy of merging percepts into a higher-order percept). This process of mentalization (the bottom-up of 2-1 fusion into a higher order percept) takes place behind perception; and 2) the consequent condition is the emergence of a creative cognitive value to occur outside conscious experiencing (a person is at that moment not aware of his cognition as "I" and

concomitant value) and the manifestation of the creative material product (the top-down material synergy) by crossing the mind→matter threshold.

The domain of what happens unconsciously (behind perception) and preconsciously (cognition before perception), the postulate of a God as a creating-unifying force (CUF) holds. I agree with GN that God in absolute sense is hidden and objectively unknown but definitely not beyond existence. This touches also the issue of the compatibility of evolutionism-creationism and has to do with the 'mental chemistry' of disconnection-connection (Monteiro, 2009).

3. Myth and Mind

Nixon (2010c) states that “[m]y thesis that human conscious experience appeared suddenly, at one point in time....caused by an existential crisis crossing a threshold.... paving the way for myth, symbolic, self, creativity, etc.”

I agree that a breakthrough of human consciousness generating self-awareness, symbolic interaction, etc, which lower vertebrates lacks, but I wonder whether this is a sudden occurrence qua mechanism in evolution. Mentalization unfolding in the human being is a 2→1 fusion mechanism, which is operational from the beginning based on 2→1 fusion mechanism of materialization (wateratom→helium; photosynthesis, etc.) and the other way around. Materialization and mentalization goes hand in hand. However, one can state a 'crisis' or three-folded great leap between anorganic matter, organic matter and human specie.

Nixon (2010c) further state that “Intersubjectivity is a term open to many meanings but the way it is intended here is to imply something more than mere communication from isolated mental monad to isolated mental monad.” But If one tries to tackle the problem of inter-subject (or inter-object) behaviour it is prerequisite to start with what Nixon calls “the isolated mental monad (object/subject) to isolated mental monad”. This is the foundation prior to symbolic interaction, self concept, creativity, myth, etc.

To attribute to living organisms consciousness is generally taken for granted, but to state that atoms have a consciousness is another story. Can 'dark energy' be reserved as the source of consciousness as the basis to create matter through transformation or the other way around that through material annihilation matter/energy is transformed into consciousness (black hole)? A universal outlook is therefore prerequisite to start with a simple but abstract descriptive experimental social human process model which is also assumed to be valid down the evolutionary ladder of quanta. Greg Nixon joins the science community subscribing the universal mind and touches the issue of intersubjectivity. The problem concerns the 'homunculus' (Nixon: We experience through the self). In general, I agree with Nixon's articles, but the main points of discussion are the 'existence of cognition', the redundant construct of self (homunculus) and 'God's existence' as creating-unifying force (CUF).

The domain of what happens unconsciously (behind perception) and preconsciously (cognition before perception), the postulate of a God as a creating-unifying force (CUF) holds. I agree with Nixon that God in absolute sense is hidden and objectively unknown but definitely not beyond existence. This touches also the issue of the compatibility of evolutionism-creationism and has to do with the 'mental chemistry' of disconnection-connection (Monteiro, 2009).

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Commentary

Brief Commentary on Nixon's "From Panexperientialism to Conscious Experience"

Richard W. Moodey *

ABSTRACT

This is a brief commentary on Nixon's "From Panexperientialism to Conscious Experience".

Key Words: conscious experience, unconscious experience.

Nixon (2010) says that his aim in "From Panexperientialism to Conscious Experience: The Continuum of Experience," is "to demonstrate that the terms experience and consciousness are not interchangeable" (p217). He explores meanings different thinkers attribute to "experience," "consciousness," and to the ways forms of these words can be combined. He concludes (p227) by suggesting that "the distinction between conscious experience (aka consciousness) and experience as such is well worth making." I agree. Even before reading his essay, I believed that the distinction is valid.

But I disagree that "the idea remains the same" [the idea of experience as such] if we were to "call it unconscious experience, consciousness without mind, core consciousness, or experience without a subject." For me, the same kind of distinction holds between "unconscious experience" and "experience" as holds between "conscious experience" and "experience." In both cases, unmodified "experience" is the broader category, and it is made narrower by the addition of either modifier.

I have different reasons for disagreeing with the phrases "consciousness without mind" and "experience without a subject." I see them both as self-contradictory, and thus can't use them to refer to the same idea as "experience as such," which I do not see as being self-contradictory. I don't know what Nixon means by "core consciousness," and thus have a hard time understanding how he can mean by it the same thing that he means by "experience as such."

He asks, "What is it like to be a bat, to have non-conscious experience?" When I imagine what it might be like to be a bat, I don't imagine my bat-like experience to be totally unconscious, even though I don't imagine my "bat-self" to have the same kind of experience I do. I believe that a bat is conscious when it is flying around catching bugs, and unconscious much of the time it is hanging upside-down in its cave. But, of course, as Nixon points out in earlier in the essay, the bat will neither agree or disagree with me.

"Radical constructivism," Nixon writes, "has suffered criticism because naïve skeptics ask, 'You mean the world out there is like that because we make it so?'" (p228). I am a skeptic, though I don't like to admit that I am naïve. I suspect that my critical realist stance in philosophy accounts for many of the disagreements with the positions taken by some of the authorities Nixon cites, and with some of the propositions Nixon himself asserts.

For example, he (p221-222) attributes to Martin Jay the claim that "Schopenhauer, Heidegger, Benjamin, Adorno, Bataille, Foucault, Barthes, and possibly Oakeshott, Dewey, and the trickster of text, Derrida" approve of the notion of "experience without a subject." Of course, they might have "approved" of this notion somewhat in the same way that I approve of the notion of unicorns. I

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don't believe they really exist, but "approve" of their use in stories. But if their approval means that these eminent men once believed that an experience can actually occur without there being an experiencing subject, then I passionately disagree with them. Nixon, however, seems to be much more willing than I am to praise these famous men for their approval of this notion.

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Commentary

Hollows of a Science of Consciousness?

Alfredo Pereira Jr.*

ABSTRACT

I consider Nixon's essay a well thought discussion of the possibility of a genuine science of consciousness. Most of the sections are worth discussing, but to find the main message it may be necessary to read between the lines. The good news is that he does not present true impossibilities for this science, but his discussion leads to the (sound) conclusion that it would have to account for many unconscious factors that make us creative and human.

Key Words: consciousness, science, hollows.

In the well crafted article "Hollows of Experience", Nixon (2010) begins by stating: "The fundamental division in approaches to the question of consciousness is whether the brain creates experience or experience the brain." (p.8). These alternatives are illustrated by the classical Materialist and Idealist approaches in Philosophy and Psychology. However, there is no 'a priori' reason to rule out the possibility of conscious activity being determined by the brain and, in turn, influencing brain activity. One of the main attempts to formulate and defend such a "co-evolutive" view is T. Deacon's book "The Symbolic Species", acknowledged by Nixon.

He prefers to emphasize the dichotomy, possibly because the Idealist alternative would make it difficult – if not impossible – to build a Science of Consciousness, in the context of current scientific standards of "objectivity". Some kinds of Idealism are incompatible with science, but not exactly because they hold that consciousness controls the brain. This possibility is perfectly admissible for non-Idealists, maybe not for radical Materialists. The problem (of our scientific standards) with Idealism arises when supernatural forces are assumed to express themselves by means of the individual's body and even control his/her brain.

In the second section, he departs from the assumption that "When experience becomes conscious, it has itself become an object. No longer one with the environment, we now feel ourselves as distinct from it, opposed to it. In the same way, we become aware of ourselves in the world and self itself is objectified" (p.9).

I disagree with this proposed semantics of "experience" and similarity of conscious experience with such an (introspective) objectification. Alternatively, I take "conscious episodes" to refer to content experienced by a subject in present time, and "experience" as the interaction of the individual's body, brain and environment (Pereira Jr. and Ricke, 2009). In this view, what conscious activity does is to individualize episodes in time, making them available to subjective experiences, which are then conceived as embodied (in the individual's material structure) and embedded (in the environment). Our differences regarding these basic concepts are subtle, but make a difference for the discussion of what would be a science of consciousness. Instead of thinking of consciousness as "the arbiter of all realities", I view it as a sequence of snapshots in a sea of unconscious experiences. In this regard, I wonder which of the two concepts of consciousness above are better fit by Merleau-Ponty's quoted phrase, "the *sensible* hollowing itself out".

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Jumping to the last section - appropriately called "The Hollows of Experience" - I find Nixon attributing the origin of human and non-human creativity to unconscious experiences, not to the conscious tip of the iceberg. This seems to be in contradiction with his initial conception of consciousness. Then he proposes a change: "This is not to abnegate "I" consciousness but to suggest instead another way of being conscious, one that allows for both vital experience and for awareness of that experience." (p.40). OK, Greg, but let me ask: did you find this conclusion only after writing most sections of the paper? If you knew it from the start, why begin with the "I-consciousness" view?

At the end of the paper, Nixon tries to picture - with Heidegger - biology and technology as enemies to an authentic understanding of consciousness: "we may choose to define consciousness as a biological byproduct isolated from primordial experience and so continue to forge a future guided by the triumph of technology...As much as the symbolic mode of being conscious allows us to guide our own autopoiesis, I choose instead — and I hope others do, too — a conscious return to the hollows of experience." Here I just recall that some authors — maybe Merleau-Ponty and Maturana/Varela themselves — have a different view of biological processes and others have a less pessimistic view of the effects of technology (e.g., in the emerging field of "artificial consciousness").

In conclusion, I consider Nixon's essay a well thought discussion of the possibility of a genuine science of consciousness. Most of the sections are worth discussing, but to find the main message it may be necessary to read between the lines. The good news is that he does not present true impossibilities for this science, but his discussion leads to the (sound) conclusion that it would have to account for many unconscious factors that make us creative and human.

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Commentary

Comment on Gregory Nixon's "From Panexperientialism to Individual Self Consciousness"

Steven M. Rosen*

ABSTRACT

Semantic and substantive issues raised by Nixon's essay are explored. Despite questions regarding the semantics, it is concluded that Nixon effectively challenges the Cartesian paradigm of consciousness by demonstrating that experience is not limited to the reflective self-consciousness of human beings but pervades nature at every level.

Key Words: consciousness, panexperientialism, self-consciousness, Cartesian.

Nixon (2010) offers a thought-provoking essay written in an engaging style that held my interest from beginning to end. Broadly speaking, the paper's central theme is that we no longer need to limit our understanding of experience to the reflective self-consciousness of human beings, with the rest of nature comprising naught but insensate "dead matter." Following Whitehead, Nixon holds that nature is experiential from top to bottom. This panexperientialist approach is agreeable to me and I applaud Nixon's imaginative advocacy of it.

In the abstract to the paper, Nixon asserts his aim of demonstrating that "the terms *experience* and *consciousness* are not interchangeable." He then proceeds to offer various perspectives on consciousness and experience evidently intended to bring out the nuances, subtleties, and ambiguities of these terms. The author acknowledges the challenge posed by the wide variability of definitions from one source to another, and, as I read the material, I was struck by the seeming arbitrariness of some of the distinctions, particularly those more concerned with semantics than with substance.

Summarizing the two main schools of thought on his subject, Nixon suggests that the current controversy essentially boils down to those thinkers who contend that all experience is conscious but distinguish reflective or self-consciousness from other forms of consciousness, and those who identify conscious experience with reflectiveness, all other experience being taken as non-conscious. The author appears to favor the latter view, as is consistent with his goal of demonstrating that the terms "consciousness" and "experience" are not interchangeable. In my own view however, the controversy is something of a tempest in a teapot. To me it seems the underlying issue is indeed largely a semantic one revolving around the question of how broadly one defines the term "consciousness." I believe the matter can be readily resolved by consistently implementing an idea that Nixon himself prominently emphasizes elsewhere in the same paper.

The subtitle of Nixon's essay is "The Continuum of Experience." Although, in a number of passages, he implicitly draws a categorical distinction between conscious and non-conscious experience, at a certain point in his presentation he adds a caveat:

It should be noted that no one is implying the line between the light of conscious apprehension and experiencing 'in the dark' is sharp or apparent or that there are not

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important degrees of difference within what I am calling non-conscious experience and conscious experience. Experience is a continuum, as Alfred North Whitehead explained.

And yet, even after acknowledging this, Nixon continues to draw stark contrasts between conscious and non-conscious experience, never actually articulating explicitly the possibility of *degrees* of consciousness. It seems to me the problem may lie in the author's persistent tendency to read the word "consciousness" narrowly, tacitly interpreting it as *reflective* consciousness. Near the end of the essay, Nixon speaks of "sensations derived from relational encounters between two fundamental entities, which later became internalized within each entity as its own via physiological memory traces...as Deiss (2009) has suggested (though he still equates experience with consciousness)." Nixon's parenthetical disclaimer notwithstanding, I see no reason why the internalized sensations he refers to could not be considered rudimentary forms of consciousness, rather than as purely non-conscious experience. In fact, it stands to reason that – if development moves along a continuum from non-conscious to conscious awareness as Nixon states elsewhere – the internalized sensations in question should constitute a step away from what is completely unconscious toward consciousness. My working hypothesis then is that Nixon's inclination to sharply distinguish consciousness from experience and prove that the two terms are not interchangeable is rooted in a semantic predilection to equate all consciousness with fully reflective human consciousness, thereby disallowing the possibility of *degrees* of consciousness. In his penultimate paragraph, Nixon himself seems to relax his denial of non-reflective consciousness by speaking of the "void consciousness" of the mystics. And he closes by acknowledging the somewhat arbitrary semantic nature of the issue he has dealt with, stating that while "the distinction between conscious experience (aka consciousness) and *experience as such* is well worth making...if the terminology offends, call it unconscious experience, consciousness without mind, [or] core consciousness....The idea remains the same."

Having expressed my misgivings on the matter of semantics, I want to reaffirm my support for the substance of Nixon's presentation. His characterization of "void consciousness" struck a particularly responsive chord in me. He describes it poetically as "a sort of background radiation of the psyche that is without objects of awareness, intentionality, or self-direction (indeed *without self*)." Void consciousness is a pure potentiality for experience, "an invisible pan-present non-presence ... that would have zero dimensions (0-D) and remain at time-zero in the eternal present." In my work on topological phenomenology (2006), I too set forth a zero-dimensional realm of timeless potentiality, a paradoxical domain that defies description in positive terms, as Nixon says of void consciousness. In fact, the essentially panexperientialist account offered in my *Topologies of the Flesh* details several basic dimensions of consciousness or experience, each a lifeworld in its own right with its own topological structure and distinctive degree of reflectiveness. Another point of contact between Nixon's work and my own concerns his references to modern physics as a field of study with significant relevance for panexperientialism. In *The Self-Evolving Cosmos* (2008), I propose what is, in effect, a panexperientialist account of physics and cosmology wherein the basic fields and forces of nature are not merely seen in physical terms but understood as dynamically co-evolving psychophysical action spheres.

By way of closing, let me underscore my appreciation of Nixon's efforts. It is indeed worthwhile to challenge the still-influential Cartesian paradigm that limits consciousness and lived experience to the reflective abstractions of human beings and regards the rest of nature as but a lifeless automaton. In Nixon's panexperientialism, nature returns to life and its soul is reanimated.

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Consciousness, Non-conscious Experiences and Functions, Proto-experiences and Proto-functions, and Subjective Experiences

Ram L. P. Vimal*

ABSTRACT

A *general* definition of consciousness that accommodates most views (Vimal, 2010b) is: “*consciousness is a mental aspect of a system or a process, which is a conscious experience, a conscious function, or both depending on the context and particular bias (e.g. metaphysical assumptions)*”, where *experiences* can be conscious experiences and/or non-conscious experiences and *functions* can be conscious functions and/or non-conscious functions that include qualities of objects. These are *a posteriori* definitions because they are based on observations and the categorization.” Non-conscious experiences are equivalent to relevant *proto-experiences* and non-conscious functions are equivalent to related *proto-functions* at various levels as these terms are precursors of respective conscious subjective experiences and conscious functions aspect of consciousness. The non-conscious experiences and non-conscious functions may be considered as a part of the definition of mind and/or awareness. My congratulations to Gregory Nixon for a very thorough and sophisticated essay, and my apologies for the rather hasty attempt to provide a hopefully relevant comment, for which opportunity I am grateful.

Key Words: consciousness, dual-aspect dual-mode framework, experiences, conscious experiences, non-conscious experiences, functions, conscious functions, non-conscious functions, proto-experiences, proto-functions, subjective experiences, self, mind, awareness, panexperientialism.

In (Vimal, 2010a), we proposed that there are three entities that need to be appropriately linked and addressed: *structure*, *function*, and *experience*. For example, there is a *structure* ‘V4/V8/VO’ color neural-network,¹ which has a *function* of detection and discrimination of wavelengths of light. In addition, normal trichromats have color related subjective *experience* (SE), such as *redness*, which needs to be appropriately linked to related *structure* and *function*.

According to (Nixon, 2010), “terms *experience* and *consciousness* are not interchangeable. Experience is a notoriously difficult concept to pin down, but I see non-conscious experience as based mainly in momentary sensations, relational between bodies or systems [there are 21 indicators of non-conscious experience] [...] non-conscious experience as the precursor and foundation of subjective consciousness. [...] Experience is a continuum [from non-conscious, to conscious, to self-transcending awareness], as Alfred North Whitehead explained [(Whitehead, 1978)]. [...] Non-attended (nonsubjective) experience [*phenomenal* SE that cannot be reported; attended experience is *access*

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¹ The color area ‘V8/V4/VO’ refers to visual area V8 of Tootell group (Hadjikhani, Liu, Dale, Cavanagh, & Tootell, 1998; Tootell, Tsao, & Vanduffel, 2003), visual area V4 of Zeki group (Bartels & Zeki, 2000), and VO of Wandell group (Wandell, 1999); they are the same human color area (Tootell et al., 2003). VO stands for ventral-occipital cortex.

SE that is reportable] has *affect* — that is, it disturbs or creates emotions — and it has notable *effects*, too, on actual behaviour or on thought. [...] Consciousness is certainly dependent on the animal capacity for experience. [...] Experience is divided into subject and object. [...] panexperientialism implies straightforwardly that the entire universe is in some way alive or has the potential of becoming so at any time anywhere. [...] I suggest the distinction between conscious experience (aka consciousness) and *experience as such* is well worth making. If the terminology offends, call it unconscious experience, consciousness without mind, core consciousness, or experience without a subject, as others have.”

The above is consistent with (Vimal, 2010b): (Nixon, 2007) and (Pereira Jr. & Ricke, 2009) argued that experience can occur with and without consciousness². In this context, *experiences* could be *conscious experiences* and *non-conscious experiences*, and *functions* could be *conscious functions* and *non-conscious functions*.

Non-conscious experiences are those experiences that are not conscious experiences; for example, experiences related to pre-conscious, subconscious and unconscious domains, slow-wave dreamless deep-sleep, coma, vegetative, and anesthetized state. Non-conscious experiences can include experiences related to awareness without being aware or paradoxical awareness, such as *blindsight* and subliminal perception.

Non-conscious functions are those functions that are not conscious functions; for example, functions related to pre-conscious, subconscious and unconscious domains, slow-wave dreamless deep-sleep, coma, vegetative, and anesthetized state. Non-conscious functions can include functions related to awareness without being aware or paradoxical awareness, such as subliminal perception and related *state* consciousness (Rosenthal, 2009), *blindsight*, long-term memory, and implicit memory (listed in Table 1 of (Vimal, 2009a)).

One could ask: What is the difference between *non-conscious functions* and *non-conscious experiences*? Would both reduce to proto-experiences? The meanings attributed to the term ‘consciousness’ have been categorized in to functions and experiences (Vimal, 2009a). Functions are related to third person objective measurements related to the function of the system, whereas, experiences are first person subjective observations. Since *non-conscious experiences* are those experiences that are not *conscious experiences*, they are indeed proto-experiences in the dual-aspect dual-mode PE-SE framework. However, since *non-conscious functions* are those functions that are not *conscious functions*, it would be more appropriate to call them *proto-functions*. For example, in *blindsight*, subjects do not have conscious experience but they report ‘seeing’ something in cortically blind field; this experience is *non-conscious experience* or *proto-experience*. In addition, one could argue that subjects have no *conscious function* but they ‘guess’ above chance level, which can be interpreted as they can somewhat effectively detect and discriminate certain visual stimuli; this function can be called the related *proto-function* (Vimal, 2010b).

(Nixon, 2010) and (Vimal, 2010b) have elaborated examples of non-conscious experiences; we list some of them in terms of two categories, namely non-conscious experiences and non-conscious functions (Table 1).

² “In (Vimal, 2009a), over forty meanings (or aspects) attributed to the term *consciousness* were extracted from the literature and from online discussion groups; some of them overlapped and some were mutually exclusive, but certainly the list was in no way exhaustive. These meanings were categorized into two groups of mental entities: *function* and *experience*. It was emphasized that the prospect for reaching any single, agreed framework independent definition of *consciousness* appears remote” (Vimal, 2010b).

Table 1. List of some of non-conscious experiences and non-conscious functions

No	Name	Non-conscious experiences	Non-conscious functions	References
1	Blindsight	Subjects do not have conscious experience but they report 'seeing' something in cortically blind field	Subjects have no conscious function but they can respond, detect, and discriminate appropriately to certain visual stimuli	(Carey, Sahraie, Trevethan, & Weiskrantz, 2008; de Gelder, Vroomen, Pourtois, & Weiskrantz, 1999; Heywood, Kentridge, & Cowey, 1998; Kentridge, Heywood, & Weiskrantz, 1999, 2004; Lamme, 2001; Lau & Passingham, 2006; Trevethan, Sahraie, & Weiskrantz, 2007a, 2007b; Weiskrantz, 2004, 2009)
2	Anton's syndrome: denial of blindness	No conscious experience of external visual stimuli, but subjects deny it.	No conscious function, but they subjects deny it and bump into things, stumble, fall, and unable to share perception	(Abdulqawi, Ashawesh, & Ahmad, 2008; Abutalebi et al., 2007; Damasio, 1999; Maddula, Lutton, & Keegan, 2009; McDaniel & McDaniel, 1991; Roos, Tuite, Below, & Pascuzzi, 1990; Suzuki, Endo, Yamadori, & Fujii, 1997; Wessling, Simosono, Escosa-Bage, & de Las Heras-Echeverria, 2006; Yilmazlar, Taskapilioglu, & Aksoy, 2003)
3	Prosopanosognosia	No conscious experience familiar faces but may have strong emotional response	No conscious function such as no recognition of familiar faces. However, brain activation and skin galvanization suggest some level the face recognition.	(Sacks, 1985)

As noted above, (Vimal, 2010b) has elaborated non-conscious experiences and non-conscious functions. (Nixon, 2010) have discussed 21 indicators/examples of non-conscious experiences related to blindsight (no conscious experience but subjects can respond appropriately to certain visual stimuli), Anton's syndrome (denial of blindness), prosopanosognosia (no conscious experience familiar faces but may have strong emotional response), amnesia (cannot remember people but may have physiological and emotional responses), split brain subjects, sleepwalking, dream effect, alcohol and drug effects, post-hypnotic suggestion, implicit memory/learning/knowledge or priming, subliminal perception, habitual behavior, reflex actions, pre-conscious and feral humans, non-human animals, psychoanalysis, the collective unconscious and mythic memory, panexperientialism, physics and quantum potentia, higher order thought or higher order perception and speech theories, supersensory or extra-sensory perception (*psi*), and proto-experiences.

According to (Pereira Jr. & Ricke, 2009), “when we are sleeping without dreams we nevertheless have experiences without consciousness, e.g. the proprioceptive ones that prevent us falling out of our beds! Another good example of experience without consciousness is *blindsight*, a phenomenon in which people who are perceptually blind in a certain region of their visual field respond to visual stimuli without any associated qualitative experience ('qualia'). [...] In conscious experience there is a content experienced by a subject, while in the case of unconscious phenomena there may be - among other possible combinations - a subject without content (e.g. animals under general anesthesia), and informational content without a subject (e.g. information patterns in the Hard Disk of a computer). More precisely, according to the referential nucleus above, an experience is conscious when there is a reportable content being experienced by a subject, such that the content is content *for the subject*. [...] If a robot has feedback mechanisms allowing the completion of action-perception cycles, then it can be considered as having experiences, but not *conscious* subjective experience, because of the lack of content and subjectivity [artificial consciousness].”

This conception of non-conscious experiences is similar to or identical with proto-experiences (PEs) in the dual-aspect dual-mode PE-SE framework (Vimal, 2008a, 2008b, 2009b, 2010a) at various levels; for example, PEs related to sleep, dream, *blindsight*, general anesthesia, robots, and so on. This is because PEs are those experiences that not SEs; rather, PEs are precursor of SEs (Vimal, 2010b) so are the non-conscious experiences. In addition, or framework is consistent with the hypothesis that experience is a continuum because experiences at various levels range from elemental PEs to atomic PEs to molecular PEs to neural-net PEs to SEs and all PEs in between. Non-attended (nonsubjective) experiences or non-conscious experiences appear equivalent to *phenomenal* SE that cannot be reported; whereas, attended experiences are *access* SEs that are reportable. Experience can be divided into subject and object, where SE of subject is self (Bruzzo & Vimal, 2007) and SE of object could be the aspect of *phenomenal* or *access* consciousness (Vimal, 2009c). Panexperientialism (entire universe is alive) may be close to *Shiva* in *Trika Kashmir Shaivism* (Kaul, 2002; Raina Swami Lakshman Joo, 1985; Wilberg, 2008), where *Shiva* is the mental aspect of entire universe and *Shakti* is its material aspect in dual-aspect framework (Vimal, 2009d, 2010c).

In my view, non-conscious experience is equivalent to proto-experience (PE) because both appear to have similar or same meaning that they are not conscious subjective experience (SE). According to (Vimal, 2010b), “Based on the dual-aspect-dual-mode proto-experience/subjective experience (PE-SE) *optimal* framework, the *optimal* definition of consciousness is ‘*consciousness is a mental aspect of a system or a process, which has two sub-aspects: conscious experience and conscious function.*’ A more *general* definition is: ‘*consciousness is a mental aspect of a system or a process, which is a conscious experience, a conscious function, or both depending on the context and particular bias (e.g. metaphysical assumptions)*’, where *experiences* can be conscious experiences and/or non-conscious experiences and *functions* can be conscious functions and/or non-conscious functions that include qualities of objects. These are *a posteriori* definitions because they are based on observations and the categorization.”

To sum up, (Nixon, 2010)’s elaboration of 21 indicators of non-conscious experience is interesting and non-conscious experiences are equivalent to relevant proto-experiences at various levels as both terms are precursors of conscious subjective experiences aspect of consciousness. There are over 40 different aspect of consciousness that were categorized into functions and experiences (Vimal, 2009a). The non-conscious experiences and related non-conscious functions can be considered as a part of the definition of mind and/or awareness as elaborated in (Vimal, 2010b).

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Response to Commentary

Response to the Commentary of Frederick D. Abraham

Gregory M. Nixon*

I thank Abraham (2010) for his schooling me on Heidegger and Derridean deconstruction. Especially important, I think, is the notion that any creation, perhaps especially linguistic, cannot help but obscure as much as it reveals. Choices must be made and directions chosen. This very insight reveals how symbolization and mythmaking are always in some way a disguise. My essay, "Hollows of Experience," which Mr. Abraham is critiquing, cannot help but be so, too, but I have striven to call forth the labyrinth of our confusion (as in my frontispiece from Klossowski) so my non-referential concepts (like hollows of experience) may open a doorway that indicates a possible way out.

Derrida does indeed indicate that the *metaphysics of presence* is an illusion. I take this to mean that one effect of living within the symbolic is that we live in a time-delayed reality. When we discovered speech, we expanded the space or, rather, the time, between the stimulus and the response, but it also *takes time* to process incoming information through memory, to recognize it according to our memory structures, and to choose a response from remembered responses or none at all. In this way, our very perceptions are of events that have already happened. Our self is the "bag of memories," as Ken Wilber once put it, through which we consciously experience, and nothing is but what is not. Thus my suggestion, from Merleau-Ponty, that the way out of labyrinth of self may be found in direct, unmediated contact with what we once were in the hollows of memory, and from which we can move forward or outward only when we recognize our new identities in each other and our world.

For me, however, such liberation is far from the social or political sense. I hint at a highly personal transcendence (of the ego-structures that keep us conscious only through selfhood) that is yet transpersonal. It is the death of the self, feared by all selves, but yearned for with increasing desperation by the unconscious soul of us all. As Theodore Roethke expressed it in "In a Dark Time":

*Death of the self in a long, tearless night,
All natural shapes blazing unnatural light.*

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Response to Commentary

Response to the Commentary of William A. Adams

Gregory M. Nixon*

I would like to thank Adams (2010) for his well-considered thoughts on “Hollows of Experience”. His praise is encouraging to me and his doubts give me much to consider. I especially like his summary of the questions I put before myself; in fact, Bill provides a nice summary overall. I especially like his succinct, “Language lets us (actually requires us to) objectify our experience into the idea of a mind-independent reality that can be studied by science.” And I blush to read his praise that “this essay is consistently engaging and thought provoking and for that, a worthwhile read,” for I aim at nothing else.

It is important for me to repeat what I noted in the Preface/Introduction to this issue: My writing is not an unbiased scientific report of observed experimental evidence but more along the lines of aesthetic expression or even old school philosophy in that it is shamelessly speculative, though that speculation is based in reason, learning, observation, and, yes, intuition. Leaps of imagination were necessary to bridge some of the gaps in the theories with which I dealt and to provide a fully coherent vision. Bill expresses some frustration with the ambiguity of some of my material and that it is often not clear which side of an issue I am on, but that is the prerogative of such writing: it seeks to bridge the divide betwixt the binary oppositions of language by finding means to express the paradoxical *no man’s land* between or around them.

However, Bill when Bill chides me, “Memories, thoughts, ideas, hopes, plans, regrets, questions, feelings, confusion, and much more, are all mental experiences, none of which necessarily depends on an environmental change,” he seems to have missed or misunderstood the central point I emphasize that experience, as such, is not the same as conscious experience. When we created a *pause button* between instinctual stimulus and response found in the rest of nature, likely through the symbolization of possible causes and actions, we vastly expanded our repertoire of choices. This is when we “found the time” to think. As far as we know, we humans are the only ones with such a constructed mental time, and thus we are the only ones to have exceeded natural, environmental, experiential, *somatic* reactions with “memories, thoughts, ideas, hopes, plans, regrets, questions, feelings, confusions, and much more,” the mental attributes Bill lists. Bill’s point inadvertently supports my view that we are different in kind from other animals.

Bill is quite right that I use the word, *nature*, quite loosely, even occasionally capitalizing it. I do so out of a vast respect for *all that is*, a respect that borders on pantheism or maybe animism. Yet I do indeed realize that *nature*, like all concepts, is a

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social construct with different meanings to different cultures. In point of fact, we can never really be separate from *Nature*, though we seem to have either escaped or been exiled from the self-regulating balance of nature with our leap into mind and limited freedom of the will.

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Response to Commentary

Response to the Commentary of Syamala Hari

Gregory M. Nixon*

I am not clear on all of the points mentioned in this commentary (Hari, 2010), but allow me to respond to the idea of computer consciousness. I have previously stated somewhere that having a living body ties us in with all other living bodies and living material in general. I contain DNA and genetic codes that have evolved through my ancestors and, before them, from prehuman life forms and the earliest cellular structures. The body that I am is a microcosmic focus of all life on a particular genetic pathway. The inborn experience that comes with being a living physical body is part of my life (make me, in turn, a part of all life) and is further the foundation of the culturally reflected consciousness that makes intersubjectivity and self-identity possible. At the bodily level, experiential interactions take place without my learned self-identity reflecting upon them, so *experience without consciousness certainly does take place*. We do, however, learn to become conscious of our own experiencing. Needless to say, our culturally-constructed conscious experience also infects unconscious somatic experience in itself, so consciousness does not just ride like a boat upon a sea of unconscious experience. It interacts with it in a circle of mutual creativity. Our minds are part of the future evolution of our bodies and of living nature itself.

Computers, interacting with human minds, have advanced so quickly they can now do thoughtlike processing at a much faster rate with much larger chunks of data than any human or group of humans could ever manage on their own. Without doubt, much of our own conscious thinking and feeling is computational, acting and reacting in a linear cause and effect series, sometimes in parallel, sometimes not. In short, a powerful computer program can do everything a mind can do but better. Does that mean it is conscious, as in conscious of its own processing? I think the best answer is *not yet*. Complex multi-parallel processing can in principle allow computers to “observe” their own processing and even respond to it and change it. In that sense, consciousness has been attained. But this is not *conscious experience*. This is *conscious processing* since the computation is reflective only of further computation. So, to respond to Syamala’s question, I would say that advanced computer programs will become conscious but *it is consciousness without experience*. A consciousness not built on the base of experience is disconnected from the evolutionary history of life on this planet and exists without an instinctual teleology or carnal memories. It is a disembodied, heartless, parallel system of increasingly powerful computations whose only purpose has been programmed into them by human programmers with much less powerful computing programs in their heads. A human living only in a world of endless, tireless thoughts would be called insane. In computers to come, this may be called consciousness.

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Response to Commentary

Response to the Commentary of Marc Hersch

Gregory M. Nixon*

This is a tough commentary to which to respond for Hersch (2010) has written an important full-length essay of his own. I relish reading his list of primary theses with which Hersch and I are in agreement, for they are the foundation of everything else in my articles and the essence of that which is most important to me. It's good to know I am not alone in the perspective that culture creates mind and language creates culture. In a world in which scientific findings usually hold the trump card, our perspective has had to reach deep in order to finesse the bio-materialists.

Hersch (2010), however, doubts the notion that mortal knowledge brought about an existential crisis that led to a realization of the sacred. He sometimes seems to assume that I mean to imply that the sacred realm is merely a fabrication to cover over our unbearable knowledge of life's inevitable end. However, I refer to the "*discovery-creation* of the larger realm ... we call the sacred" (my italics). By this I mean to indicate that the perceivable reality of both space and time has always been around us – we did not create it – but that it was neither previously "out there" nor were we previously "in here" observing it. Our lives were lived, like that of other animals, as a part of our natural environment, just a particular niche in an ecosystem. However, this environment that could be perceived by the bodily senses existed only in an eternal present and it was as limited as were the senses with which it was perceived. My thesis is that with the life-threatening crisis of mortal knowledge the human awoke to his own existence and the mind itself now found a place between the environmental stimulus and the instinctual response system. In that place – or, better, that time, – the mind found a way to open the syntax of the protolanguage of gestures and nominatives and conceive of abstract concepts, concepts without immediately perceived referents. Imagination was born and finally we could speak together of the long ago, the far away, the yet-to-come, and even of invisible powers or the presence of ancestors that were not in the strict sense perceivable. This sudden expansion of reality is the mythic realm of the sacred, or it was to our ancestors. Today we have gained much knowledge and accept reality as extending well beyond what our senses can immediately perceive, but in our secular time the sacred realm is known simply as *the world*. It is still a vastly expanded reality from that of environmental participation. Its reality meant it was discovered, but our awakened imagination and intersubjective narratives also mean it was created. In my view, we now live in a reality that was once experienced as sacred, and hidden in the corners of its repressed imagination knowledge of our certain death continues to haunt us. That the self today still has "death at its core" is a thesis widely propounded in psychoanalytic circles (see, e.g., Becker, 1973; Brown, 1959).

Beyond this, Hersch is quite right that, in my statement of the genetic imperative to survive and reproduce, I ignore cooperative communities, which are central evolutionary features, as well. I

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did so to make my point and not entirely out of ignorance. The fact that cooperative communities often seem to go to war with other cooperative communities, however, underscores this genetic imperative. I do not, however, much subscribe to any form of social Darwinism, though the rule of genes and the reality of demographics cannot be denied. My point was merely that before somatic experience became fully conscious, we were more likely to act as our biology dictates, though clearly there had been strong social and even cultural groups going as far back in time as *H. erectus*, which may have mediated biology with rudimentary cultural forms.

I certainly agree with Hersch that new categories of thought involved the prediction of future events. That is even clear from the archeological record. I'm not sure where he thinks I deny this. I base thought on emotions because I asked myself, *why were predictions made? To what end was foreknowledge needed?* And the answer was always to fulfill needs that emotions indicated needed to be fulfilled. We certainly did use our new conceptual categories to predict and to build a new cultural world, but we did so for two reasons: We were biologically and psychologically compelled to do so. The former involves the natural emotions (or, as Hersch would have it, *feelings*) that arise from our embodiment and the latter involves the emotions that arose in response to the existential crisis of mortal knowledge. We began to build, to expand, to fortify, to fight wars, and to create impenetrable ego-structures to avoid the unthinkable thought of our own death. And in my view we continue to do so.

Hersch seems most strongly to resist the notion of the symbolic. We certainly share many behaviours with our animal brethren (including prediction), though their capacities for environmental interaction so often exceed our own. However, we are the only species that we know that symbolizes those behaviours and constructs reasons for them or tells tales about them. I can't agree that (symbolic) culture is a "product" of conscious action; it is, instead, a simultaneous appearance. We cannot become conscious of our selves without intersubjectivity, and intersubjectivity is a cultural phenomenon. Certainly, as indicated in "Myth and Mind" there must have been a very long period of protolanguage and thus protoculture (cultural practices without obvious symbolic forms) before crossing the symbolic threshold. *H. erectus* certainly had to at least pass on the templates for basic stone toolmaking, fire-management, and an array of primitive cultural behaviours. When the human mind appears, it is already the primary aspect of symbolic culture, and such a culture could not exist without the symbolic mind. They are twin creatures.

Still, Hersch's thesis that symbolic interaction (i.e., language acquisition) emerged as an advanced form of predictive behaviour has much to recommend it. It certainly accounts for the blind spots of human culture but also provides the hope that we may yet be able to undo some of the destruction that nearly seven billion humans have wrought on this planet. Since we can predict the future, more or less, we can aim to improve our condition. But what if *our condition*, psychologically speaking, is part of the problem? What if our very egocentricity is what drives us to become a danger to ourselves and our world? Then the needed change is radical indeed.

Hersch provides his own history of prehistory and I am much in accord with it. In fact, we each provide a list of important transitions in the human story. I am really drawn to the musical or, rather, rhythmic origin of human interaction that later becomes ritual and call and chat (self and other) primitive dialogue. However, I think it is too early in time, and the behaviours too concrete to call this the "emergence of the intersubjective conscious creature" as Hersch does.

For me this is the pre-subjective, pre-conscious creature that is developing a primitive sort of communion with others that will lead to the foreknowledge of inevitable death before such an event can be precisely grasped as a concept. It is the later moment of conceptually grasping the truth of mortal knowledge that gives rise to the concomitant knowledge of self-existence. Consciousness awakens as the group gropes to come to terms with this startling two-sided coin of comprehension.

As far as dealing with individual development, Hersch schools me (even though I have taught developmental theories for so many years). I too tend to favour the old idea that the development of the individual from the womb onwards loosely tends to recapitulate evolution – including in this case the cultural evolution of the self. Children’s fear of the dark and non-verbalized fear of abandonment speak of an almost innate fear of death. We forget the fears that arose when we were alone and the many magical ways we tried to dispel them. How many kids had trouble going to sleep after intoning the line in the old bedtime prayer, “If I should die before I wake”? It may well be that mortal knowledge is so at the core of mind and at the core of culture that it is passed on to children without any specific reference to it. However, that is but one point. I quite agree that children’s emergence into the freedom and responsibility of mature consciousness mirrors what may have occurred in our species, though this view is spurned as a cultural bias today.

It is likely true that “Consciousness was first realized in relation to the group as a whole, and this marks the transformation of the troop to tribe”; however, I can’t agree that death knowledge plays only a minor role in tribal life. It is absolutely central, to my mind, accounting for the preservation of ancestral remains and their worship (to the point of eating those remains in some cases). Subconscious mortal knowledge also accounts for much of the other tribal behavioural forms in the same way it accounts for behavioural forms in larger civilizations. It is especially noteworthy in what we would call psychological aberrations, such as obsessive-compulsive or fetishistic actions (not even to mention religious and patriotic displays), but these have often been ritualized in archaic tribal cultures too. Of course, it is true that “the symbolic linguistic whole are elaborated and refined over time, but the overall tribal worldview – the narrative relation – can only be overthrown in revolutionary conflict spawned by overwhelming anomaly.” One has only to read Sorenson (1998) to verify this. The mythic bond is culture itself; it is self-identity. It is even the stuff of individual consciousness. Hersch makes this point beautifully. Perhaps Hersch and I agree even more than he realizes. I quite agree that “Non-symbolic creatures do not anticipate death and therefore, cannot fear it. The symbolic concept of death, in the context of theoretic-relational narrative, must become reified before it can be felt as feared. This process of reification is the symbolic aspect that differentiates emotional experience from genetically programmed feeling experience.” In fact, I consider this the heart of my thesis. I also fully agree (and believe I said so) that mythic culture remains at the heart of our so-called theoretic culture. Hersch follows others, however, in distinguishing instinctual *feeling* from culturally constructed *emotion*, and I can accept the distinction.

[Hersch, my suggestion of the *control* of fire as distinguishing humankind from all other animals is focussed on the element of control, not just fire watching. Fire drew people together for all that rhythmic drumming and dancing you conceive. However, my idea is that this was the birth of the tribal communion that led to the protolanguage of gesture and nominative pointing and thus to a

long period of pre-consciousness, going from *H. erectus* right into the early stages of *H. sapiens*.]

I deeply appreciate the effort put forth by Hersch Hersch in writing this essay-length response. I admire his stringent thinking and have learned a few things from reading him, but I have seen nothing that makes me doubt that mortal knowledge is the existential crisis that drove us to become mythmaking humans in a vast sacred cosmos. In fact, sometimes in Hersch's writings I seem to see that same avoidance of the most obvious fact of our lives that I see everyday, everywhere from global wars to the weather report ("We interrupt this program to warn you that a large storm is approaching..."). We have the need to deny death or to squirm away from facing it. I am aware that Hersch is accomplished sailor who has faced seas all over the world, so I am not accusing him of fearing death, as such, but it may well be that his courage and drive do greatly enhance his sense of being alive here and now, and is that not a form of death denial?

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Response to Commentary

Response to the Commentary of Joseph McCard

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I wish to thank McCard (2010) for his additional references that seem to give support to my major thesis: that the crossing of the symbolic threshold into language, myth, and complex culture changed us in a way that evolution could never have managed alone. Emergent self-consciousness created a new being that basically lives in a symbolic reality not entirely dependent on natural processes with aims that occasionally teeter into the decidedly unnatural. For good or ill, we are that being, the one who witnesses natural unfolding and our questionable effect upon it.

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Response to Commentary

Response to the Commentary of Steven M. Rosen

Gregory M. Nixon*

I was very pleased to read the perspicacious commentary of Steven Rosen, even if he did take me to task for spending much time on a *mere matter of semantics* in “From Panexperientialism to Conscious Experience”. For me, however, semantics, the meaning we apply to words, matters. In the essay I suggest that we change our common usage to better illustrate the way non-human animals and perhaps even plants experience their world. To refer to such plants and at least non-mammalian animals as *conscious* – implying “*in the same way we are conscious*” – just does not seem right to me. Though I’ve been accused of anthropocentrism for avowing that only humans are conscious of their somatic experiencing, it seems to me that to assume our specialized form of conscious experience is the same form of experience in other animals and/or plants is the worst sort of anthropomorphism. It’s not the words “experience” or “consciousness” that matter, however, it’s the central idea that we humans have brought about some sort of major change in the way reality is experienced or transformed, and that way is a self-contextualized conscious way. It’s fine with me to refer to humans as being the only self-conscious animal and accepting that other animals are merely conscious but without a sense of inner self-identity – as long as we recognize (as the phenomenologists and existentialists do) that *all human consciousness is self-consciousness*. Even when we think we are dealing directly with the world (and not thinking of ourselves), both that world and the self doing the dealing are filtered through the frame of selfhood.

Dr. Rosen states: “I see no reason why the internalized sensations he refers to could not be considered rudimentary forms of consciousness, rather than as purely non-conscious experience.” Well, they can be considered such, in fact if experience leads to more complex experience and finally to conscious experience, such momentary sensations are indeed “rudimentary forms of consciousness”. But I emphasize that such experience is best considered non-conscious because it is not aware of itself and has no conceivable means of becoming aware of itself. What we humans call consciousness is, in reality, always self-consciousness, so we only make things more confusing when we refer to the consciousness of, say, a nematode or a cell, which almost certainly has no sense of subjectivity of which to be aware. Our world is an experienced world and our actions are experienced actions: When we become aware of such experiencing, the experience achieves a conscious quality. This seems to me more logic than a mere matter of semantics. Certainly experience is a continuum, but there is a huge tipping point once we have crossed the symbolic threshold and experience can twist back and apperceive itself.

When Dr. Rosen turns to my speculations about void consciousness or, as I put it, awareness-in-itself, I am left pleasantly breathless from reading that he has put forth very similar, almost

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identical propositions in his two books. If we disagree in a minor way on the semantics of things, I am overwhelmed to realize that we certainly do share similar concepts (that are perhaps more *non-concepts*) about the ultimate source and probable end of all our striving. This is an area I will certainly have to look into in greater detail, and Dr. Rosen's books seem an ideal place to begin.

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