

THE CRY FOR THE OTHER: THE BIOCULTURAL WOMB OF HUMAN DEVELOPMENT

by James B. Ashbrook

Abstract. The human experience of meaning-making lies at the roots of consciousness, creativity, and religious faith. It arises from the basic experience of separation from a loved object, suffered by all mammals, and, in general terms, from the experienced gap between ourselves and our environment. We fill the gap with transitional objects and symbols that reassure us of basic continuity in ourselves and in the world. These objects and symbols also serve the neurognostic function of demonstrating what the world is like. Thus, humanity lives by faith, as manifested in its pattern-making capacity, and not by literal sight.^f

Keywords: cognitive imperative; consciousness; religious imagination; separation cry; symbolization; transitional space.

The link between the separation cry of mammals, researched by neurophysiologist Paul D. MacLean, and the neurognostic cognitive imperative, as developed by anthropological psychiatrist Eugene G. d'Aquili, lies in the experience of transitional space, described by child psychiatrist D.W. Winnicott. I submit that, for good and ill, the roots of human consciousness are found in the experience of the gap between ourselves and our environment. Within the intermediate realm between outer stimuli and inner meaning, we must mediate between what we need and that which responds to our need. We fill that psychic space with tools for the task—transitional objects and symbols that enable us to think about what the world is like. They hold us in the imagined presence of the physically absent Other. Thus, we make meaning within the psychic space between

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subject and object. Clearly, then, we live by faith as expressed in our pattern-making and pattern-recognizing capacity and not by physical sight.

A NOTE ON METHOD

Human meaning, I submit, is formulated in the psychic space between one's needs and the world's capacity or proclivity to meet them. To pursue this thesis requires, I believe, a multilevel integrative approach encompassing the neurosciences, psychoanalytic object-relations, and theology. I employ a mutually critical correlational approach (cf. Tracy 1981, 21-28) that connects these disciplines even as it qualifies each by virtue of its relation with the others.

Religion rightly resists reducing the most perplexing human phenomena to their simplest elements. Similarly, science rightly rejects ignoring the insights which reductive specialization gives to understanding these phenomena. Psychologist William Bevan (1991) insists the nature of human life is "orderly in its complexity rather than lawful in its simplicity" (cited by Cacioppo and Berntson 1992, 1027). I take that to mean we can discern patterns and patterning; we cannot definitely determine permanent patterns and exclude what emerges from the interaction of levels and perspectives.

Finally, this is a synergistic approach that holds the various disciplines in tension. Because it appreciates their distinctive characters, it recognizes the speculative leaps necessarily involved in associating them. At the same time, it assumes they have more to contribute to human knowledge in their continuities and analogies than in their segregation (cf. Tracy 1981, 88 n. 44). Each perspective is necessary to a full comprehension of human phenomena; no perspective is privileged or sufficient in itself.

In what follows, I first explore "the cry for connection" or our object-seeking proclivity for relatedness. From a theological perspective, this may be the correlate of divine love. Then I examine "the cry for comprehension," or our meaning-making capacity for constructing a model of reality. From a theological perspective, this may be the correlate of divine logos.

THE CRY FOR CONNECTION

We only live as we are connected with others. This connection is the basis of what we know. The umbilical cord connects the fetus with the mother. The astronauts' lifeline supplies them with oxygen and allows for communication while they are outside of the spacecraft. And as the communion hymn has it, the spiritual tie "binds our

hearts in . . . love." We only live to the degree our supply lines are working. There is no life without attachment.

What connects the physical cord and the spiritual tie? The question is at once literal and metaphoric as is the answer which is the vocal cry in the face of separation. It is the cry that connects the physical, the cultural, and the spiritual dimensions simultaneously: the cry from the heart on behalf of life together.

The cry from the heart is born of the pain of being cut off from that which supplies and supports life. That support system may be oxygen, a significant other, or a community of care. When we are cut off from life support, physically or psychologically in physical or psychic pain, life is threatened. Then, the heart cries out on behalf of life itself.

THE STARTLE RESPONSE AND THE EXPERIENCE OF A GAP

Early in the life of the fetus, no time elapses between stimulus and response; there is only continuity. Toward the end of pregnancy, there is a separation of stimulus and response. After birth, the infant startles at an arousing stimulus; soon, both anxiety and curiosity appear. Here we discern the dawn of cognitive processing (May 1950, 48).

The Separation Call and the Need for Security. The consequences of the gap between organism and environment are noticeable in the moment a young infant or its mother—or significant care-giver—realizes they are too far apart for safety. One of them calls or reaches out to reconnect. MacLean (1985) claims that the separation call is the basis for empathy in its deepest form. Empathy, according to him, is the "capacity for feeling concern for the suffering of all living things" (1990, 12).

The cry for the other, then, arises out of the experience of distance between ourselves and those with whom we are connected, those upon whom we depend for safety and satisfaction. This is the womb out of which *human* experience is born. That consciousness releases the imaginative powers of the infant and later the creative powers of the adult. In the process, we construct a world of meaning. That is, we imagine a way of holding in the present what we have relied upon in the past. Such a memory makes a future possible.

Transitional Space and Meaning-Making. Winnicott has described the dynamics of the gap between self and other in his work on transitional phenomena. The nature of human nature has three aspects:

(1) our relationships with others; (2) an inner reality that distinguishes us from others; and (3) “an intermediate area of *experiencing*, to which inner reality and external life both contribute. [This third part of our life as human beings exists] as a resting-place . . . in the perpetual human task of keeping inner and outer reality separate yet interrelated” (Winnicott 1971, 2).

This intermediate realm of experience begins with the infant’s effort to cope with disillusionment. The mother’s breast is unavailable when the infant wants it. The cry of pain reflects the intermediate space between what is inside the infant, namely, anxious fear in the experience of separation, and what is correspondingly outside—in this case, the absence of the supporting other. There follows the developmental task of accepting a reality that does not supply all of our needs all of the time. Our relation with significant others leads inevitably to the experience of disappointment, disillusionment, and yes, possible abandonment.

Such disillusionment continues through life, and to cope with it, we must operate creatively within the space in which we hold together inner and outer realities, producing transitional objects and schemes of understanding (Winnicott 1971, 13). In short, the cry for connection becomes the cry of creation, the creation of a world of meaningful activity and symbolic significance. This creativity, founded on the infant’s disillusionment, “is retained in the intense experiencing that belongs to the arts and to religion and to imaginative living, and to creative scientific work” (Winnicott 1971, 14). “There is a direct development from transitional phenomena to playing, and from playing to shared playing, and from this to cultural experiences” (Winnicott 1971, 51).

In a penultimate sense, creativity in all of its forms—from architecture to sculpting to painting to cooking to weaving to parenting—are forms of such activity. In an ultimate sense, religion in all of its forms—from Western trajectories of belief to Eastern trajectories of wisdom to African trajectories of the communal—reveals this meaning-making core of human experience.

OBJECT-SEEKING CREATURES

Because we are born, we come from a reality which we neither create nor control. At the same time we develop in a world for which we are responsible—a world of people as well as a world of nature and things. In the language of the Bible, we are dust into which God has breathed the breath of life (Genesis 2:7)—the physical is psyche; matter is the bearer of meaning.

Thus, because we are *Homo sapiens*, we are also *Homo religiosus*. We are religious by genetic predisposition. We depend upon a context of influences we do not create. We are part of a physical order we must respect if we are to survive (Burhoe 1981). Equally, we are part of communities that call us to become part of humanity. The bridge between the genetic and the cultural is the quality of environmental provisions of the care-giving relationship (Winnicott 1965). The bridge between the cultural and the spiritual is the quality of religious imagination.

A Context of Attachment. As I have stated, we are neither our own origin nor our own destiny (Ashbrook 1989a). Instead, we are part of the great chain of being to which we refer in various ways as God, Life, Nature, Humanity, Universe, Being Itself (Tracy 1987, 90). Augustine voiced that sense of how our literal dependence upon the care-giver carries the reality of our ultimate dependence upon God: "Thou didst sometime fashion me [O God]. Thus even though [my mother and my nurses] sustained me by the consolation of woman's milk, neither my mother nor my nurses filled their own breasts but thou, through them, didst give me the food of infancy . . ." (Augustine 1955, 1.6.7). For good and ill, in our initial object-seeking venture, our experiences as infants influence our understanding as adults. We begin life in a two-person relationship, a relationship that embraces "mother-and-me" in a face-to-face reality (Wright 1991).

In relation to significant others, attachment behaviors such as seeking, glancing, calling, touching, crying, and clinging are intended to maintain the relationship. Whatever endangers that bond elicits behavior to preserve the bond; and the greater the threatened breach, the more intense the activity to prevent it. Such behavior appears whether the threat to the bond is physical, psychological, or spiritual. Personal anxiety is the subjective experience of threat; physiological stress is the objective evidence of threat.

The experience of loss of the mother's support—the emergence of transitional space—is present for every creature that experiences maternal care (but not, for example, for reptiles that lack maternal behaviors). It derives from the basic relatedness of life. The separation call between a mother and her offspring, according to MacLean (1985), "may be the most basic mammalian vocalization."

Here is the source of the transitional space between "what is" and "what might be." That space is the basis of learning and memory as creatures seek to comfort themselves and make their way despite disillusionment (Squire 1987, 86-88).

The Search for Connection. I think of the separation call as “the search for connection.” In its fullest meaning, I submit, the separation call becomes “the cry to God,” “simultaneously a cry of pain . . . and a cry for help” (Boyce 1988, 22, 71), a cry of anguish and a cry for support, the cry of pain which underlies every cry for justice and liberation and healing.

The cry of separation and the cry for connection arise from the same source and, in the sound, embody both functions. The separation call is a search for understanding, an attempt to find a transitional object—a person or a thing—to maintain stability in the face of uncertainty. In its ultimate form, this call is to God as the truly Other. As Martin Luther observed regarding ultimate support, whatever our heart clings to and relies upon, that properly is our god.

Isaac Waits (1674–1748) paraphrased the Twenty-third Psalm, which was then put to the music of an American folk melody “Resignation”. The second stanza goes like this: “When I walk through the shades of death, / thy presence is my stay; / one word of thy supporting breath / drives all my fears away.”

Whether we are cut off from oxygen or from a significant other, the rift triggers the cry for connection. When we are cut off from life support—disconnected because of physical dysfunction and/or psychic dysfunction—our world is shaken to its foundation. We experience the threat of annihilation, the loss of continuity of being (Winnicott 1965, 47).

Life, then, may be characterized as a search for that reality upon which we can depend (Augustine 1955) and to which we must adapt (Burhoe 1973, 415; 1981).

The Reality of Relatedness and the Relatedness of Reality. The world of significant objects depends upon the maturation of the brain, most particularly the nondominant (usually right) hemisphere and its capacity for orientation and relatedness (Horton et al. 1988, 19–23). It also depends upon our relations with others (Stern 1985). There is a matching between the needs we bring to life and the resources the world brings to us (see Laughlin et al. 1990, 50–51; Trevarthen 1986; 1990). At best, the match between basic need and basic resource makes for adaptation and empowerment, but if there exists dysfunction within the systems of which we are a part, there is a lessening of all that is genuinely human in ourselves and others. At worst, a mismatch leads to efforts to avoid reality, even through psychosis.

If all goes well, the love match begins at birth, when the shared

space of pregnancy turns into transitional space, the space between needed support and available supplies, between the physical and the emotional. The infant “starts to learn by communicating” its needs, beginning with innate emotional expression (Trevarthen 1990, 342; Stern 1985, 124–61). Mother and infant regulate their emotional exchanges “by means of expressions of eyes, face, voice, and hands.” The infant stares in voiceless curiosity at the face of the mother, searching out her eyes, responding to her lips, touching her breast, tasting her milk, playing with her hands. This is what developmental psychiatrist Daniel N. Stern terms “the naturally occurring non-verbal language of infancy” (1985, ix).

The mother’s face constitutes the infant’s first emotional mirror. The infant comes to know its own emotion through the mother’s responsiveness (Wright 1991, 5–6). When the baby looks at the mother’s face, “the baby sees . . . himself or herself. In other words, the mother is looking at the baby, and *what she looks like is related to what she sees there*” (Winnicott 1971, 112). The mother’s face mirrors the infant’s aliveness, or lack thereof. In turn, that mirrors the aliveness, or lack thereof, of the world as the infant experiences it.

There, in the face-to-face reality of mother and child, each person’s notion of the quality and character of reality comes into being and begins to develop (see Wright 1991, 20–21). Mother Earth. Mother Nature. The face of the Deep. The face of God. Here, I suggest, is the origin of experiences of trust, of satisfaction, of joy. Here, I would contend, is the origin of the blessing which the Lord instructed Moses to give to Aaron and his sons in blessing Israel:

The Lord bless you and keep you:
the Lord make his face to shine upon you,
and be gracious to you:
the Lord lift up his countenance upon you,
and give you peace. (Num. 6:22–26 NRSV)

Some, though, meet only a scowling countenance or a masklike visage. A withering look of disapproval can cut us off from support. Lack of response can leave us anxious and afraid, alienated from the source of our being. Such alienation is depicted in the story of the Garden of Eden, when Adam and Eve hid from the presence of the Lord God (Genesis 3:8–10). It is experienced by each of us when we suddenly feel ourselves being looked at, a spectacle, an object of shame and criticism (Wright 1991, 23–37). Biblical theology describes it as the wrath of God, which replaces the mercy of God because of humanity’s sin. It comes with experiences of mistrust, of shame, of guilt.

The child's brain develops as it experiences the world. Intrinsic regulation of brain growth and the social transmission of knowledge are reciprocal processes (Trevvarthen 1990, 340–41). Each requires and engages the other. The child's brain is genetically "adapted to be coupled, by emotional communication, to the regulators of adult brains of people who know more." Learning, in essence, "takes place not in single brains, but in communities of [brains]" (Trevvarthen 1990, 357).

The interaction begins with a "mirroring" of the other, an "empathic responsiveness" to the other's actions, an imitation of the other's expressions. Then comes an increasing modification of strict imitation, which Stern describes as "a theme-and-variation format with slight changes." By the latter half of the first year of life, the mother shifts her reflecting of the infant's behavior to what he calls "affect attunement." Affect attunement is a matching of the feeling state of the other's behavior in a cross-modal sensory form, such as the child's voice by the mother's body. In attunement, the mother recasts the child's experience "by way of nonverbal metaphor and analogue." Such enlarged experience on the child's part becomes the stepping stone "essential . . . toward the use of symbols" (Stern 1985, 138–61).

Symbols are used to represent the realities of others and of the physical world. These symbols *personify* these objects. Religious studies professor and clinical psychologist James Jones contends that "we personify what we are most intimately connected with. Personifying is our most fundamental mode—it is what makes us human" (Jones 1991, 129). Martin Buber characterized such personifying as an "I-Thou" relationship with reality (Buber 1937). We experience and express our relatedness to the world—physical as well as social worlds—in terms which convey a personal meaningfulness. When we lose the ability to personify, "we have lost part of our humanity," namely, the origin of transformative experience (Jones 1991, 127–35). I think of such object-seeking as our experiencing God's loving relatedness.

We need such personified objects to cope with the loss and grief that are everywhere in our experience. Since life is made up of both attachment and loss, "there is no life without grief" (Mitchell and Anderson 1983, 21). We grieve—cry—over the absence of the supporting presence of the other.

We create an object, an other, to hear our cry and to hold our life. The experience of the cry for connection, then, is the origin of our creative efforts to make our life meaningful. If in the mothering one meets the needs of the infant in a good-enough way, the child

develops the capacity for confidence and competence, for satisfaction and mutuality. But if the mothering received does not meet the needs of the infant, then "ego-development is necessarily distorted in certain vitally important respects" (Winnicott 1965, 57). The child's capacity for integration, for personalization, and for initiating object-relating are impaired. These capacities are basic for genuinely human life. Without them, the newly emerging person experiences uncertainty about "the pattern of a continuity of going-on-being" (Winnicott 1965, 60). One fears the "unthinkable anxiety" of not-being.

THE COGNITIVE IMPERATIVE AND THE CRY FOR UNDERSTANDING

Meaning is grounded in the personal, face-to-face interaction where we concretely experience the relation of self and other. This is the experience of the in-between, the intermediate space between inner and outer realities. This is the maternal origin of consciousness. As I have described, this interaction is itself rooted in the mother-child relation, the primordial ground of separation and connection. How we are held and how we are handled affect how we hold and handle ourselves and reality (Winnicott 1965, Bollas 1987). Without a primary experience of care, there is little reality and certainly no dependable reality (Trevarthen 1990).

In the transitional space between absence and presence, the infant finds an object, perhaps a blanket or a soft piece of cloth. This object supports the child's experience of its own precarious presence. It is both a substitute for the absent other and a symbol representing the presence of the other. From the beginning, then, we are object-seeking creatures, ever searching for that which will keep our universe steady. That, I believe, is the ground of Augustine's voicing the restlessness of our heart for God (1955).

With maturity, separation may evoke a sustaining belief or a cognitive scheme. The making of meaning begins with this search for the absent other. "Consciousness," as psychiatrist Kenneth Wright points out, "is originally a form of searching for the lost object" (Wright 1991, 137, chap. 5). In seeking that object, we are trying to comprehend that which is other than ourselves. We struggle to grasp what is not-me. This grasping of the not-me, to use the precise language of Wright (1991, 89), marks a shift "from relating to things to relating to meanings."

The mind orders events (Basch 1988; Kegan 1982). It transforms sensory stimuli and inner stimuli into symbols and images. From

symbols come ideas, metaphors, and concepts. With language comes culture. Culture creates a world. Here is the cognitive drive that organizes what we bring to reality with what we find in reality.

THE PRIMACY OF MEANING

The ability to create and recognize patterns “must be among the most basic capacities of the human infant,” according to Wright. Pattern-making appears to be innate. It “certainly is operative soon after birth” (Wright 1991, 237). Winnicott states the issue more strongly: “There is no id before ego” (1965, 56). The *organization* of id-functions is present from the beginning.

The most powerful tool of organization is language. It is the most explicit expression of meaning and the symbol-making capacity. It sets us apart from all other creatures (Cassirer 1946).

Language depends upon the development of the cerebral cortex, the new brain or, what MacLean calls the “rational mind” (1977; 1990). When we are born, the new brain is the least developed of our cortical equipment, and we are born with more undeveloped cerebral cortex than other mammals, according to neurosurgeon Wilder Penfield (1975).

We have fewer brain cells with built-in instinctual tasks. This makes for greater flexibility in how cells respond. The learning of adaptive behavior assumes more importance than instinctual survival. The cerebral cortex is responsible for planning, initiating, speaking, evaluating, and integrating experience in relation to what matters to us.

Because cortex is initially “uncommitted,” it has “organic plasticity.” If something happens to the left hemisphere, cells in the nondominant hemisphere pick up the task of language development and the analytic processing underlying language (Geschwind 1972, Geschwind and Galaburda 1984; Heilman 1977; Wada 1977, 372).

In short, brain research makes the prologue of the Fourth Gospel and the first chapter of Genesis sensible: In the beginning is God, the Word, the Logos, that which generates and creates meaning.

As a way to cope with limits and loss, we give voice to our visceral and vascular processes—the guts and blood of life. Perceiving a purpose or meaning or order in events—this phenomenon is described differently by different theoretical orientations—enables us to regulate our emotional responses to ambiguity and to the specter of limitation. This coping mechanism applies especially to loss, the threat to the survival of the self. The gap between ourselves and significant support evokes the cry for comprehension. We try to make

sense of the sudden loss of support. We search for the word/pattern that reconnects our experience of distance with our memory of relatedness.

Psychiatrist Victor E. Frankl described “the unheard cry for meaning,” which is necessary for coherent life or even for survival (1978). Our “will to meaning” is innate; inevitably, we ask for what and for whom we are living. The imprint of our origin can be discerned in our insisting that there *is* meaning in life. Our task is to realize that meaning. The transitional space of infancy emerges into the transcendent space of the making of meaning.

The Cry for Comprehension. Genuine symbolic thought is emergent. It first occurs at about the time that the child experiences what Winnicott (1965, 29–30) and Wright identify as a three-person relationship. Such a relationship includes both mother and father—or equivalent adultlike twosome—in a way that excludes the child from the dyad (Wright 1991, chap. 7). The child is connected with the dyad yet excluded from its togetherness. So the child becomes conscious of that space between itself as subject and all else as objects. In a closely connected step, it begins to perceive even itself as an object of self-consciousness. And, as philosopher Paul Ricoeur has observed, “*symbols give rise to thought*” ([1967] 1969, 19).

At about the same time, maturation of the brain enables a shift of the transitional object. It need no longer be a *thing*; it may be something we can conceive of (Ricoeur 1976, 45). We grasp what is not present by means of an idea, a mental representation. In short, our cortical processing shifts from sensory activity to nonsensory activity. Symbols and words replace the direct experience of sensory immediacy (Sunbeck 1991, 11).

We are always translating sensory stimuli into the symbolic. In the striking words of Ricoeur, “Language is the light of the emotions” (1967, 7). With language, the interpreting dominant hemisphere (usually left) objectifies what matters to us. We then can look at what’s around and what’s inside, examine it, distance ourselves from it, see it more clearly, even as we have been related to it and continue to be related to it.

In the growing zone of transitional phenomena, we create the components necessary for life. Here matter and meaning, stimulus and symbol, are transformed into each other. Interpretations trigger biochemical processes even as biochemical processes generate interpretive perceptions. Images are generated by the relational impressions of the nondominant hemisphere (usually the right). Schema are derived from the rational interpretation of the dominant hemisphere

(usually the left). Together, image-symbol-schema-concept create a cosmos, an orderly and ordering world of meaning.

The old mammalian brain, or emotional mind, helps to monitor and manage our interaction with the environment by providing deep-level motivation (see MacLean 1990). Arousal relates to survival, both physical and psychic; relaxation involves cooperating with the environment. In the process, we assimilate what is new and/or disturbing into a sense of reality.

Thus, the mind does not truly mirror an objective reality (see Arbib and Hess 1986; Lakoff 1987; Rosch and Lloyd 1978). Rather, mind combines visceral processing with symbolic processing (see Johnson 1987; Laughlin et al. 1990). In combining outer and inner realities we create a human world and construct a physical environment. We do this with others and with ourselves.

The great neurophysiologist Sir Charles Sherrington described the brain as an "enchanted loom." The brain is ever weaving "a dissolving pattern, always a meaningful pattern, though never an abiding one; a shifting harmony of subpatterns" (Sherrington 1940; Hooper and Teresi [1986] 1987, 30). The tapestry is never the same. We are constantly "weaving . . . a pattern." We construct the reality in which we live (Kelly 1955; Mahoney 1991, 95-117; Wright 1991, 232), and these constructions invariably present us with alternative realities.

Perhaps these shifting patterns are the source of diversity, pluralism, relativism. There is no abiding pattern. There is only a pattern-making process. The loom weaves values and purposes, assertions and aspirations. This, I suggest, is the fullness of religious imagination.

The conceptual process pursues ever-higher levels of complexity in reflection of the universe (see Sperry 1991; Ashbrook 1989b). From the perspective of downward causation, the cognitive processes of mind construct myths and models and meanings which always go beyond the data generated by lower levels of organization. From the perspective of upward causation, the biochemical processes of the brain constrain responses and reactions to the effects of lower levels of organization. Most experience and expression combine both downward and upward processes. We are made to make sense of and to shape what happens to us and in us.

THE MECHANISM OF THE ENCHANTED LOOM

Felt-meaning is experienced by the nondominant hemisphere, and the dominant hemisphere interprets and evaluates that meaning for

consistency. Such activity requires a fully functioning and myelinated nervous system, including a mature corpus callosum (Trevarthen 1990, 351–53).

Likewise, it requires that the “uncommitted cortex” of infancy has been shaped and molded by an environment that facilitated appropriate development in the early months and years of life. Such “integrative processes . . . lead to the establishment in the individual of a self that goes on being, that achieves a psychosomatic existence, and that develops a capacity for relating to objects” (Winnicott 1965, 257). If the environment fails to provide “something good-enough” “before the individual has become able to establish an internal environment—that is, to become independent” (Winnicott 1965, 134, 257), the capacity for growth, adaptation, satisfaction, or joy is compromised. The richness of the loom’s potential pattern is diminished or even distorted.

The interpretive process itself relates particularly to somewhat later experience with the father or fatherlike figure (Wright 1991, 111–12). This person exercises the role of awakening the infant to boundary situations. These situations exclude “the grandiose me” of the infant. These limit-setting experiences are critical in shaping our experience into a view of “the way things are” (Bridgman 1959).

Our explanations of *why* things are the way they are arise in the dominant hemisphere for language. It is “the interpreter” of experience and physical reality (Gazzaniga 1985; 1988). The left brain is constantly making sense of what it knows and what it observes. It talks, and what it says is based on what it understands. What it understands appears to be determined as much by what it observes in the external world as by what it knows directly from the inner world.

Left-brain explanation seems objective. I say “seems objective” because data suggest that knowledge derived from observation may be at odds with knowledge coming from the right hemisphere. The left half is the vigilant half of the brain. It notices what goes on; it tags what it sees with words; it lets us know what is in the public domain. And because it is conscious of its own consciousness, it constructs a rationale that stabilizes the world as it perceives the world to be. It is the logical brain.

However, rationality is vividly colored by the emotion or affect in the old brain. When we have a base of good-enough mothering, then reality is experienced as gracious. Otherwise, it is unthinkably threatening (Winnicott 1965).

THE RELATEDNESS OF REALITY

Anthropologist Richard Leakey tells of finding a circle of seven hundred-pound stones seven miles from the place they had been formed. What would have led a mammal, the human mammal, he speculated, to have dragged such weight such a distance for no utilitarian purpose? From whence came that symbolic gesture? Simply, a need other than immediate necessity must have been at work.

I submit that in such activity—including awareness of death as manifested in early burial customs inaugurated by Neanderthal hominids about eighty thousand years ago (Eccles 1989, 203)—we come upon imaginative consciousness. We create the experience that we are held by a facilitating environment. Having known a holding environment in infancy, we seek a holding environment in the future (Bollas 1987, 40). We do this despite knowing that the world impinges on us in ways that generate danger and even despair. Here is the process of transforming impersonal fate into human meaning.

The circle of stones and the burial customs each reflect the meaning-making activity which is distinctive of *Homo sapiens*. These symbolic acts suggest the separation/connection call, a reaching out to make contact with the invisible power that holds us. Here we see intentional behavior, dependent upon the maturation of the frontal lobes of the new brain in evolutionary development (Laughlin et al. 1990, 92–101). These acts are aligned with the basic urge to know—what d'Aquili calls “*the cognitive imperative*” (Laughlin et al. 1990, xi). We are made to seek and create the reality in which we are related. In sum, we are meaning-making creatures.

Our brain reflects the experiences voiced in the eleventh and twelfth centuries. Saint Anselm spoke of faith as ever seeking understanding (Fairweather 1970, 73). This, I propose, reflects right-brain and limbic activity. Peter Abelard spoke of understanding ever-seeking faith (Leff 1958, 111). This suggests left-brain interpretive processing. Both faith and understanding are basic to knowing reality. Each is necessary; neither is sufficient.

In our object-seeking/meaning-making processes we create our own unique transitional representations. We cull these representations from the images and symbols and ideas of a wider cultural world and a vaster physical environment. This is an ongoing process of adaptation. As one interpreter describes it, the process is shaped by the tension between assimilating new experience to the old “grammar” of life’s givens and accommodating the old grammar to new experiences of emergent possibilities (Kegan 1982, 43–45).

We balance a consolidation of ourselves as we have lived with an adaptation to reality as it opens before us. A purpose or meaning or order in events enables us to regulate our emotional response to the experience of ambiguity and especially to a threat to our sense of self—or to life itself. Our nervous system functions to give structure to what happens. Biogenetic structuralists Charles D. Laughlin, Jr., John McManus, and Eugene G. d'Aquili (1990) refer to that meaning-making process as a neurocognitive system. The nervous system is organized for knowing what is necessary for adaptation.

Religious attitudes symbolize the pattern-making activity of our brain. Religious studies theologian Garrett Green (1989) interprets our relatedness to God as an act of constructive imagination, a vision of meaning-making. This vision creates and sustains an environment that holds us in the face of disruption and surprise. It is the “something” that is there when nothing else is there (see Merkur 1990; Horton et al. 1988; Meissner 1984; McDargh 1983; Pruyser 1983; Rizzuto 1979). In the last analysis, the imaginative activity of transitional experience tells us “what the world is like” (Green 1989, 79).

This pattern-making reflects the conviction that we live in a gracious context. Our losses are embraced by life rather than life being demolished by our losses. Transitional space gives rise to transitional phenomena. These phenomena—from teddy bears and blankets to worry beads and rosaries to theological ideas and sacraments—reverberate “with the affects of past object relations and [are] pregnant with the possibility of future forms of transformation” (Jones 1991, 134). As such, they are the ingredients of meaning.

In truth, how we view limits and losses, and finally how we view death itself, presents us with our most basic challenge. In dealing with finitude we find clues to dealing with freedom. In knowing how to die we discover how to live.

CONCLUSION

The separation cry is present in all mammals, including *Homo sapiens*. Here is our genetic inheritance. It makes nature the context of life. The cognitive imperative is the neurognostic base for human phenomenology. Here is our cultural inheritance. It makes conscious experiencing the motivation of what it means to be human. The perspectives of separation and comprehending each give a glimpse of the grandeur and misery of humanity. Grandeur comes with

experiences of satisfaction, joy, and happiness; misery comes with experiences of sin, shame, and guilt.

MacLean's emotional ties make us aware of each other in the face of danger, d'Aquili's cognitive drive organizes what we bring to reality with what we find in reality. In identifying the experiencing of transitional space, Winnicott provides a conceptual womb in which the need to connect—the separation cry—and the need to comprehend—the cognitive imperative—combine. Together they give birth to what it means to be human. They are the basis of our being *Homo religiosus*. They constitute religious imagination. And religious imagination is the transformative source of selfhood and humanity.

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