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The Linguistic Network of Signifiers and Imaginal Polysemy: An Essay in the Co-dependent Origination of Symbolic Forms

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The relations between language and imagery are addressed by cross referencing Lacan and James Hillman, along with Mead, Geschwind, and Gibson. Not only is neither symbolic frame reducible to the other, but neither can be rooted in perceptual capacities that would be distinct from or more "primitive" than the other. Outside of specific theoretical agendas that would analyze one by simplifying the other, word and image are co-emergent and co-dependent expressions of the inherent openness of the human mind.

Jacques Lacan, with his revision of Freud's dynamically repressed unconscious as language, and James Hillman, with his recasting of Jung's collective unconscious as imaginal polysemy, articulate two distinct faces of the same post-modern dilemma. What is the source of the inherent unknowability and perpetual openness of the subject — its continually renewed deletion in Lacan's terms, its imaginal circumambulation in Jung? Does it originate in a capacity for metaphoric self presentation in polysemic images, as in the Jungian enterprise? Or does it rather emerge, with Lacan, out of language — the network of signifiers that, specifying only other signifiers, thereby leaves our invisible "I" at its center as the true cognitive basis of Freud's uncon-

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scious? In what follows, I will try to indicate how the latter alternative only "works" if we falsely limit the self referential imagery of Jung and Hillman to a static narcissism, while any corresponding Jungian hegemony will in turn reduce language to an endlessly and emptily recursive syntax. There will emerge instead a necessary circularity in any attempt to relate imagery to language so as to make one more fundamental and the other derivative, or one more primitive and the other more developed, one subjective and narcissistic and the other objective and real, or one based on identity and the other on difference. It will also be important to note that this round of debate is as prominent within current cognitive psychology as it is within the inheritors of Freud and Jung.

Reflective Conversations Within Imagination and Language

Lacan

For Lacan (1968) language as a network of signifiers is based on the "difference" between signs and their referents. Referents perpetually glide beneath their significations, leaving our sense of the "real" as an otherness endlessly approached and never attained. Freud's unconscious is the speech of that "other." We are born into a network of signifiers, as one of those signifiers, and our development as persons is the gradual reading of our position within that network.

> If he is apprehended at his birth in the field of the Other, the characteristic of the subject of the unconscious is that of being, beneath the signifier that develops its networks, its chains and its history, at an indeterminate place . . . . Hence the division of the subject — when the subject appears somewhere as meaning, he is manifested elsewhere as "fading," as disappearance. (Lacan, 1978, pp. 208; 218)

It is the "name of the father" that becomes the symbol of that otherness and begins the process of filling/deleting the subject (Lacan's $) by giving us a signifier for name and place.

Lacan depicts a course of development remarkably like that undergone by the prisoner in Kafka's "The Penal Colony." The execution machine carries out its "sentence" by engraving the subject's crime, of which he has hitherto been uninformed, into his back. We could say that in Lacanian psychoanalysis it will take time and resolve to avoid losing consciousness from the pain of learning who we are or making up a message we like better than the one life is inscribing upon us. A more beneficent and North American "reading" of these vicissitudes of identity would be George Herbert Mead's (1934) depiction of the recursive, developing relation between the unknowable "I" and its multiple "me's" — the successive versions of who we are unfolding via

our symbolic capacity to "take the role of the other" toward ourselves. Here the inevitable disparities between the "me" I construct and the potentially more complete "you" seen by the other become the social locus of Freud's unconscious, just as the observing others see the prisoner's sentence in the act of its engraving long before the prisoner is able to read his/her text. It is the I–me axis, on the other hand, that would seem to be the locus of Jung's circumambulation of Self. Indeed, Mead states that Jesus and Buddha are historical exemplars of self articulations that are more complete approximations to the full potentialities of the "I" than most of us will reach in our own symbolic encirclings.

To return, however, to Lacan's location of the real in the traumatic gap instituted by the father as other, the major barrier to this gradual self reading by the symbolic is a second more variable form of alienation — Lacan's "mirror stage." While it is unclear whether Lacan speaks here of reality or metaphor, trope or science, it is the discovery of the child's image in the mirror that leads to a further deletion of subject. The openness of "I" is replaced by re-ified, fixed versions of "me" that are now just like the similarly fixed images of the others we see around us. The inchoate, kinesthetically multiple, and unformed openness of the bodily self is thereby lost and replaced with a fixed visual image that falsifies our openness by replacing it with a series of specific, narrowed identifications. Multiple me's and you's now appear as fantastic, recursive reflections of each other, encapsulating the self in a narcissistically sealed "imaginary" order that has its basis in the early mother–infant symbiosis. It is later therapeutic psychoanalysis that must break these mirrors and open a "tear" or "gap" within the "maternal" realm of sameness and identity, so that the symbolic may renew its previously truncated confrontation with difference and deletion.

Lacan has certainly succeeded here in re-articulating Freud's distinction between Oedipal reality and infantile narcissism. It is the "name of the father" that must break through, sooner in childhood or later in analysis, the imaginary union of mother and child. It would appear that for Lacan any technique that cultivates imagination in the guise of self realization will necessarily remain lost in narcissism.

It is interesting that contemporary mainstream "cognitive science," seeking to understand the symbolic entirely in terms of a neurally encoded propositional–logical capacity, views "imagery" in a way analogous to Lacan. Imagery can be nothing other than the by-product and epi-phenomenon of propositional–linguistic structures, just as "illustrations" in novels must not be confused with the true text of which they exemplify selected portions and which they must never contradict. For Pylyshyn (1984), we can only "image" what we already know propositionally — so, with Lacan, leaving imagery and imagination as narcissistic reflections of language. Imagination can only give

back, recursively, what language has placed within it. Some perceived support for this sort of approach to imagery has come from Farah's (1984) discovery of a center in the left hemisphere adjacent to the major language areas of the brain, whose damage or destruction seems to result in a loss of the capacity for voluntary imaging and dream recall.

Yet these accounts seem in turn dangerously limited. Patients with commissurotomies separating their left and right hemispheres, leaving them with conscious access only to the verbal left hemisphere, indeed still report dreams, as Farah and Pylyshyn might predict, but such dreams are striking in their brevity and lack of vividness. Is there not another kind of imagery — possibly right hemisphere but definitely more preemptive, involuntary, and dislocatingly "bizarre"? Such imagery does its own kind of tearing and shocking. Enter here those cognitive psychologists who have called attention to the way that novel geometric and physiognomic patterns, reminiscent of Jung's mandala patterns, seem to mediate discovery in the sciences (Shepard, 1978) and arts (Arnheim, 1969).

Hillman and Kugler

A very different reading of the symbolic order and its potentiality for a necessarily unfinished self reflection emerges from Hillman (1980, 1981) and Kugler's (1982) extension of Jung's (1944/1953) descriptive phenomenology of the imagination in his later fascination with alchemy. The polysemic imageries of alchemy and other techniques of active imagination are reflections of a self referential imaginal capacity that circumambulates Lacan's deleted subject, reflecting aspects of "I" back by means of expressive patterns of nature, recombined and superimposed and used as metaphor. We cannot make visible the inner aspects of our experience without such veiled outward references to the "stream" of consciousness, the "fires" of passion, the meditative lights and colors of consciousness, not to mention the more specific metaphors based on natural properties and events found in native mythologies. Jung posited metaphoric imagination as the "transcendent function" that breaks through the socially pragmatic symbolism of ordinary discourse — precisely as Lacan depicts the name of the father breaking in on his imaginary narcissism. Here it is mirrored semblance that lays bare an otherness within; the nonhuman properties of a physical nature suddenly show us an inner self of which we would otherwise be unconscious.

Jung understood alchemical imagery as depicting the unknown self by means of the unknowns of nature, a view of knowing the unknown by the equally unknown that has since been formalized in more cognitive accounts of metaphor by Lakoff (1987) in psychology and Ricoeur (1977) in philosophy. It is most curious. We pretend to ourselves that metaphor uses the more

known to draw out hidden semblances within the less known. But when in response to some particularly hideous news story of crime and cunning we say "man is a wolf" we use a fantasy of wolfishness drawn out of us by the story, but without a second thought to our lack of ethological expertise in the actual behavior of wolves. In most metaphors we truly represent the unknown by the unknown. Although native peoples also possess a sophisticated technology of natural events and their utilization, their just-so stories draw out humanly expressive physiognomies from their natural surround in the same way — not in their own right as they might in more practical contexts, but in terms of their potential to reflect back the personal and social order as problematic and mysterious.

Rejecting the too easy linguistic axiom of an arbitrary relation between sound and referent in language (Lacan's "difference"), Paul Kugler in his *Alchemy of Discourse* has called attention to an imaginal aspect of language based on "metaphors in sound." Language, from its etymologies to concrete acts of enunciation, is riddled with an imaginal sensibility that continually re-asserts a felt or sensed *similarity* between word and referent. Kugler (1982), for instance, has called attention to imaginal complexes linking ostensibly different realms of discourse by means of the same verbal root — as in the "carn" root common across carnation, carnal, carnage, carnival or the "lib" root in libido, liberty, liberi (children), library. In such groupings we find much of the Freudian mythos pre-given within language. Sexuality, violence, freedom, and beauty are linked as aspects of the same imaginal complex. Even within syntactical order itself Jakobsen and Halle (1956) find a *semblance* to a prototypical order moving from agent to object — an order also emergent in Creole languages (Bickerton, 1984) and not contradicted by cultural variations in what are still semblances of different orders.

Meanwhile, on the level of enunciation, Werner and Kaplan (1963) offered statistical demonstration of commonalities in the way we animate or physiognomize words by emphasizing the very phonetic and morphemic symbolisms that are suppressed within more routinized speech. In poetry these are released as the drawn out vowels and harsh consonants that accentuate or contradict the semantics of word meaning. Here we have a principle of imaginal semblance, whose system principle moves from within speech toward music. Finally, within a more recent cognitive psychology, McNeill (1985) has videotaped the way in which "iconic" gestures "present" the essential emphases and sequences within syntactic plans just prior to their actual articulation. To transfer such gesture forms from air to drawing creates just the sort of physiognomic–geometric line drawings studied by Werner and Kaplan (1963), Arnheim (1969) and Lakoff (1987) as the immediate root of verbal thought itself. So we have come full circle, and now it is spoken discourse that must "narcissistically" illustrate and fill out the spatial–

kinesthetic shapes that are here seen as the source of thinking. It is imaginal semblance that now breaks in to keep language open to the world and the other. Without the imaginal and metaphoric, language is merely a recursive syntax that can only re-present itself.

Lacan, and the more mainstream cognitivist psychologists of imagery with whom curiously enough he is aligned, have missed the actual phenomenology of the first source of "mirroring" in human development — Winnicott's (1971) depiction of the mirroring dialogue between visual form and kinesthetic expression shared by the infant and the mothering one. Its rudiments are present from birth (Meltzoff and Moore, 1989). These increasingly playful exchanges over the first few months are not narcissistic in the sense that the term does apply to Lacan's mirror stage. Rather, they involve novel plays across both sameness and difference, in which the infant alternately discovers its own face in the mothering one's returned expression, and takes the role of the mother to send back her own facial expressions. Co-emergent with physiognomically expressive vocalizations and antecedent to conventionalized words, we have a complexly nested mirroring dialogue in which the issue of who is who becomes increasingly open. Within this nonverbal dialogue the infant can become alternately intrigued with sameness or difference. If we follow out the logic of the neurologist Norman Geschwind (1965), that the potentiality for the symbolic rests in a capacity for neocortical cross modal translations between the structures of vision, kinesthesis, and audition at least somewhat independent of lower limbic pain-pleasure connections (see below), then Winnicott's mirroring is the first instantiation of this symbolic capacity. The infant does not know what its face looks like, only how its own facial kinesthesis feels, while it cannot experience the mothering one's kinesthesis, only the visual transformations of her face. Clearly this first mirroring is as emergently and novelly cross modal as is language itself. It is, indeed, the first manifestation of language in one sense of the term, yet appearing initially in the visual-kinesthetic mirrorings that will later be subordinated to speech as gesture and expressive physiognomy.

If Winnicott's "mirroring" is potentially outside and alongside linguistically imposed "textuality," and if active imagination techniques mirror the unknown subject by means of expressive patterns in nature (alchemy) as a more primary "language" of psyche, then, as Paul Kugler (1991) has also indicated, there is a potential point of contact with Lacan's "real" that emerges from within the postmodern deconstruction of the subject. From this perspective, Hillman's contribution to the deconstructionisms of Derrida and Lacan becomes his demonstration that the actual openness of texts is not merely a function of endlessly clever verbal acrobatics, but rather emerges more spontaneously with the release of metaphoric polysemies actually "contained" within the natural array and already "held" within the etymologies,

imaginal complexes, and physiognomies of language. At its best then, deconstructionism is not arbitrary or idiosyncratic but guided from beneath by the multiplicity of signification within image.

It is important to note that the imaginal mirroring that emerges through and past the linguistic network of signifiers ultimately rests on visual perception, however reorganized and recombinant. Gibson (1979) provides the original perceptual template for this imaginal self presentation in the way that the perceived ecological array for any motile creature gives back the unique position of the organism as the only possible pattern of locomotion to yield just that specific patterning of lamination, occlusion, looming, and kinetic depth. Raised to the level of symbolic self reference, the glittering mosaic of natural physiognomies reflect back the successive symbolic circumambulations of Jung's self. This imaginal mirroring back of our deleted inwardness breaks in on conventional language as clearly and distinctly as language may in turn break in on it. It seems unlikely that if, with Lacan, we were to render one of these networks metaphorically "maternal" and the other "paternal" we could tell which is which, let alone decide which one of them is "real."

Jung's replacement of his earlier speculative theory of archetypes, rendered cross culturally common by virtue of "racially" inherited forms, with his more direct phenomenology of alchemical imagery makes it possible to account for these relative and shifting cross cultural commonalities by means of the common physiognomies of the natural order — along lines earlier suggested by Boer and Kugler (1977). The cognitive psychology of metaphor missing from Jung, but implied by his final methodology of "unknown by unknown," would come from Werner and Kaplan, Lakoff, and Marks (1978) and finally move us from a poor theory of "racial memories" and "common brain structure" to a descriptive theory of metaphor geared to the actual moves of active imagination. We are left with the probability that physiognomies, geometric expressive designs, white light and out of body patterns, and above all cross modal synesthesias (Hillman, 1979; Hunt, 1985, 1989b) provide an imaginal psychology of metaphor with the equivalent, for nonverbal symbolic intelligence, of the universal grammar or deep structure so widely posited for language. If so, we are also left with a corresponding question concerning whether alchemy, the systems of synesthetic chakras in meditation, and the binary grids of Levi–Strauss' mythologies also constitute a symbolic network as enclosed and self limited as Lacan's network of signifiers. Given the lack of agreement on operating procedures among the alchemists and the numerous variations and "lawful inexactitudes" in chakra systems from within the same cultural tradition — let alone cross culturally — it would appear likely that those systems need not be narcissistically enclosed on themselves. Instead imagery systems are every bit as open as propositional logic has proven for

represention in the natural sciences — where, in contrast to the humanities, it is the other who is ultimately "deleted" and not the subject. It may remain indeterminate, however, whether in Peter Kugler's (1992) terms all such symbolic networks are open and unformalizable or recursively contained within an ultimately formal system — the set of syntactic permutations, the set of physiognomic superimpositions or polysemies. (If such questions were easy we would already better know how it stands with us — as a species and as spiritual beings.)

An Inseparability of Linguistic and Imaginal Networks

It will not work to posit either representational language or presentational imagery as the core of each other or of our symbolic capacity generally. Nor is it finally supportable to consider one as resting on a principle of difference, the other on identity, or one as paramountly objective and real, the other as subjective and narcissistic. All these distinctions soon run into each other in the same way that the later William James (1912/1971) complained of the impossibility of locating any criteria that would cleanly separate a realm of consciousness from the world it is "of." We have seen how syntax, lexicon, and phonetics are full of semblance, despite and alongside the hallowed arbitrary link between language and referent. Similarly, Foucault (1983) has used Magritte's "this [picture of a pipe] is not a pipe" to show that images, surely involving some degree of semblance, nonetheless only "refer" by virtue a liminal difference or distinctness from their referents. Dennis Tedlock (personal communication) has noted that the chief barrier to translating the pictographic writing of the Maya has been the difficulty in accepting the way in which context will determine when pictograms should be "seen" imaginally and when they should be "read" phonetically. So depending on the context, this [picture of a pipe] may not even refer to pipe as object but to a word beginning with "p." We find ourselves unexpectedly back to Freud's metonymic decoding of certain dreams as rebus, just when resemblence might have seemed most obvious.

Within the sphere of active imagination and alchemy, moreover, metaphoric natural forms and their polysemic superimpositions shock us with their "difference" and alienness as much, or rather in the same way as Lacan's "tear of the real." Indeed, Miller (1989) has suggested that the alienation of Lacan's modern silvered mirror would be absent in the more traditional uses of metal or water for perceived self reference. The self reflected back from a metal mirror is fluctuating, bizarrely transformed, and "other." Just so, metaphoric imagery offers possibilities of self awareness and self realization more profound and startling than ordinary language precisely because of its radical otherness. It is the difference between ourselves and the alchemist's

leaden bear and soaring dove that elicits an echo of our interior otherness and initiates the move from exemplifying "me's" to circumambulating their deleted, receding "I." This is the very point of Jung's knowing the unknown (I) by means of the unknown (otherness).

As also for Paul Kugler (1988), if we consider the symbolic in terms of Wittgenstein's "seeing as" — seeing or taking one thing or situation by means of another one — then the deep commonality of imagery and language is clear. Whether we see a portrait as the person portrayed or take the sound "chair" as that piece of furniture, or vice versa in both cases, "seeing as" means knowing *something* through and by means of something *else* and potentially distinct from it. Networks of signifying media and their signifieds are only mutually coordinated or "reciprocally rotated" (Werner and Kaplan, 1963) by virtue of both felt semblance *and* difference. How could we "refer" by means of something totally the same? We would end with a version of Borges' map identical in size to the country it depicts (Borges, 1964). And how could we refer at all to anything through a medium of absolute difference? When we enunciate "chair" we must *feel* it to be the same as its object, or else we have suffered a semantic satiation and are "meaning blind" (Wittgenstein, 1980). Is deconstructionism perhaps the re-opening of traditional texts thus "understood" to the point of satiation and so dissolved?

Speech may show difference as its outer "face," but it must be animated by the semblances of gesture, tone, and emphasis. Even the bizarre image seems to present a nidus of sameness, but the felt meaning of active imagination rests on an unsettling contact with felt difference. How else could one learn anything new from it? And of course there is a constant interchange. The previously shocking polysemic and endlessly rich image later becomes a routinized sign for partly forgotten insights and eras of one's life, while automatized codes representing mathematical or syntactic relationships may suddenly open out with the richness of an unexpected and unsought animation.

In short, the lessons of several decades of debate within and about imaginal and linguistic studies leave us with the conclusion that neither image nor language can be made the sole root of the symbolic, nor one the essence of the other, unless we denude and reduce imaginal polysemy to the narcissism of simple identity and language to a truly mindless, recursive syntax that manipulates signifiers based on an absolute and so impossible arbitrariness. Rather, language and imagery constitute indefinite and fluctuating networks of "seeing as" which, as far as we can tell, interact and cross reference each other at all stages of their ostensibly separate showings and sayings. Nor is it possible to decree one network as "real" and/or "outer" and the other as "narcissistic" and/or "subjective" on the basis of some metaphysics of truth as ultimate otherness or ultimate sameness. Mathematics, as the language of scientific representation, can also be seen as the projection of an internal

system or network that cannot, with Gödel, be shown to be completable or consistent. Correspondingly, the metaphoric "languages of the soul" are based on treating a supposedly outer physical nature as potential mirror for our "inwardness." Directed outwards, our self referential symbolic capacity gives us the deleted object, directed inwards it gives the deleted subject. The external and objective becomes the very stuff of self referential metaphor, while mathematics itself is an all too human projection that cannot finally be located as inside or out. There is no room here for a clean demarcation of "objective" from "subjective."

The Symbolic as an Emergent Field Re-synthesizing More Fundamental Organismic Capacities

Just as it did not prove possible to reduce imaginal self reference to language or the network of signifiers to the imaginal, it seems equally implausible to try to reduce "downwards" and ground either image or language in capacities in less complex organisms that would be distinct from and/or more "primitive" than the other.

It will not work to see image as directly emergent out of a more simultaneously given perception, and language as rooted in a more sequentially organized capacity for movement. Certainly language is kinesthetically articulated and symbolic visual imagination re-uses and combines perceptual processes. For Gibson (1979), however, and his neo-realist phenomenologically based rejection of separate "internal processes" as "causes" of experience, our too easy separation of stimulus and response, perception and movement, is an illusion. Movement and perception are, rather, two faces of the same ecological array — which only specifies itself and confers corresponding position when a creature is mobile. It is locomotion that releases the flow of surfaces in which objects loom and alternately occlude and reveal other gradients. Gibson updates Von Uexkull's (1934/1957) earlier discussion of the *umwelt* of lower creatures as an inclusive "bubble" based on the unique intersection for each species of patternings of the surround and the animal's capacities for motility — what Gibson would later refer to as the affordances offered by the array for a species' unique possibilities of movement. Here neurological accounts of localization of function are misleading. They reflect the way in which increasingly automatized and routinized subsystems are stored in the neuronal system and so miss the seamless interface of the total function geared into its world.

Instead, we might wish to think in terms of Neisser's (1991) location of two distinct systems in lower organisms: first, we would posit Gibson's "direct perception" — attuned to the ambient array by the intersection of lamination, occlusion, looming and the inherent proprioception of the perceiver's

position within that unfolding array. Direct perception needs motion. It is noninferential, immediately given, and inseparable from action. Second, we could locate a recognitive system — the organismic core of image and memory. It abstracts patterns of special significance to the animal out of the flowing array. This capability is static. Neisser says that to identify something is to hold it still. These static extractions of fixed form (the hawk silhouette for creatures of prey, for instance) are based on a pre-given readiness to use these fixed shapes as "releasors" for basic needs. We thus have a "where" system and a "what" system with quite different neural sites — the posterior–anterior net for the former and the limbic region for the latter.

Is it then plausible to see the imaginal primarily as a development of the recognitive capacity and language as a symbolic–auditory development of the array? Again, it will appear that the features of both precursors are equally mixed and transformed in each symbolic "frame." Certainly it is true that language emerges out of the sequencing and motoric movements of articulation. Indeed, Vowles (1970) has suggested that the ultimate source of syntax as fixed order lies in the fixed order of limb movements of a running creature at its characteristic gaits. We have seen that the unfolding of Gibson's ecological array is inseparable from limb movements and the structure of that array is full of the "if–then" relationships of occlusion and deletion, the "but" of looming surfaces, and the "and so on" of continued surface lamination. In these senses language is, indeed, an auditory symbolic version and "sublimation" of the array and its flow. Yet with equal clarity, language is obviously a development of the recognitive system — since whatever else language does it labels, fixes, and classifies.

Correspondingly, imaginal self-referential systems like alchemy, the chakras, and native mythologies are the very opposite of anything static in their polysemy, spontaneous transformations, and felt impact. We have already seen how infant mirroring games, as the template of self-transformative imagery, entail a continual motion across felt identity and difference. In addition, these transformative imageries are "autosymbolic" or self specifying and self locating as a higher symbolic version of Gibson's proprioceptive co-specification of "here" via the "theres" of the ecological array. One could even suggest that the fully felt realization of a co-emergent presence–openness in Buddhist meditation (Guenther, 1989) and in the later thought of Heidegger (1972) is nothing other than a full symbolic expression of the way that any creature is open toward its array and in turn "given" by it as specific presence. We might say that in the higher stages of meditative practice this inherent structure of openness as compassion or letting-be is finally recognized (see Hunt, 1995).

At any rate, language is as much recognitive as it is ambient, and polysemic imagery is as much ambient and self referential as it is recognitive.

While each inclines toward its own ratio of simultaneity to sequentiality, language does not consist of automated fixed sequences of syntax, nor are the visual-kinesthetic physiognomities of felt meaning static. Both systems are co-emergent and characteristic syntheses of recognition and the ambient array on the level of the symbolic. It is interesting to note then that the emergence of the proto-symbolic capacities of the great apes entails a simultaneous appearance of self referential behaviour with mirrors, spontaneous imagistic recombinations of the given array in Köhler's problem-solving chimpanzees, proto-signing and gesturing, and the beginnings of aesthetic resonance in Goodall's observations of spontaneous chimpanzee "rain dances." We do not find the phylogenetic root of one symbolic frame appearing before the others.

Some Final Thoughts: A Self Organizing Unified Field of Symbolic Forms Based on Emergent Cross Modal Transformations

What is it about the symbolic that renders circular and contradictory any attempt to designate one of its multiple "frames" (Gardner, 1983) more primordial or fundamental than any other, or ground it in a more fundamental organismic capacity? I have suggested elsewhere (Hunt, 1985, 1989a, 1989b, 1995) a further development of Geschwind's (1965) model of the symbolic capacity as emergent out of cross modal fusions and transformations between the different simultaneity–sequentiality ratios of the separate cortical "analysers" for vision, hearing, and touch–movement. A hierarchic or tertiary integration of these modalities in terms of their own structural possibilities for transformative re-combination, independent of direct control from the limbic pleasure–pain circuits, would result in a unified field which synthesizes all its precursors. This emergent, self organizing field would account for key features of the symbolic, both in its unity and diversity.

For instance, the novelty and open permutations of all symbolic forms can be understood in Peter Kugler's (1987) terminology as self organizing fractal properties created by the interference patterns of the different currents and rhythms of the perceptual–sensory modalities flowing into each other. The recognitive system of modality-specific static abstractions would therein become recombinatory. We have already seen how taking the role of the other and self awareness first emerge in the cross modality play of facial "mirrorings" in infancy. Cross modality would also offer a more organismic version of Pribram's (1991) holographic organization of the neocortex — since interference patterns created by these cross currents could be considered as successive "images" taken by each modality and enfolded within a single matrix. Meanwhile the different frames of symbolism suggested by Gardner

(1983) — language, mathematics, music, visual arts, dance, etc. — can be understood as based on different modalities serving as guiding templates, with other modalities as the mode of outer expression.

There follow some interesting implications for our previous discussion of whether it is imagery or language that opens Lacan's "tear of the real." Geschwind (1965) suggested that the great apes begin the shift toward the symbolic by cross-translating vision and kinesthesis, with vocalization left largely outside and tied to less mediated motivational cues. It would be the mutual transformations and re-transformations across all three modalities in our species that would launch the symbolic into its full range of structural possibilities. In this regard Lacan's version of the Oedipal triad, in which the father (as the third) "tears" the enclosed narcissism of infant and mother (the two) and adds perpetual difference and change, is remarkably prescient if reinterpreted through Geschwind. It would not be so much the name of the father that breaks in on dyadic mirrorings, but instead a matter of adding consensual vocalization into the mutual translation of vision and kinesthesis — with the former already based on a fusion of sound and articulatory movement. The mirroring of one modality into a second and the translation of that fusion into a third means that the return of this emergent patterning to the first for further translation will find it openly and unpredictably transformed compared to the beginning of its round.

It is the addition of the third transformation that breaks us open — within and without. This organismic, cross-modal version of mind, which sees synesthesias as co-emergent with language, has a further implication for the recent fascination in psychology and cognitive science with the implications of Gödel's theorem of the incompleteness and inconsistency inherent within any formal system. We are led to question whether the ostensibly informal systems of language and imagery would be formalizable at all in any traditional sense of enclosing algorithmic rules (Kugler, 1992). In this context it is interesting that our cross-modal transformative model of the symbolic constitutes a directly lived, phenomenal version of Gödel's theorem. Inconsistency, incompleteness, informality, and the perpetually deleted and beckoning subject and object emerge directly out of the three modality mirroring transformations above, prior to their relative specialization as the imaginal and linguistic networks of signifiers. Whereas in science and logic formality comes first and informality and intrinsic openness emerge reluctantly and later, in the arts and human sciences we depict a being for whom emergent self referential transformations and indeterminacy are primary, with formal systems appearing as specially created simplifications enclosing and specifying our open-ended experience in the service of the pragmatics of social life. In short, it is the formal system that is the special, derivative case. The three value logics of complementarity and indeterminism were already

inherent to mythological systems of imagistic self reference (Cooper, 1975; Hunt and Popham, 1987) before they became necessary in physics. Historically it was formality that was the special development of a linear causation whose limits may already have been reached.

To return then to our beginning, suppose we were to conclude, contradicting Lacan's open Other of the symbolic order and Jung's circumambulating Self, not to mention Wittgenstein and Gödel, that the linguistic and the imaginal are each enclosed networks of signifiers. Suppose we ignored these advocates of the intrinsic openness of human experience and viewed language and imagery as separate recursive sets within formal systems whose boundaries we cannot locate but whose existence we might attempt to infer from the cross cultural commonalities of "deep grammar" and "altered states of consciousness," respectively. Nonetheless, the continuous reciprocal influence, transformation, and tearing between these symbolic frames at all levels of their unfolding will immediately render each informal, inconsistent, and incompletable anyway. We may respond to this openness with alternative strategies of acknowledgement or attempted limitation, but we will do so without any certainty which is which, since we can never determine the full implications and consequences of any perspectival symbolic expression. So much of our experience alternates between the unexpected circumscribing of what we had thought to be open and the bursting forth of what had seemed fixed and finished that these reciprocal moves start to seem like the phases of any conversational dialogue — of any symbolic mirroring of sameness in difference and difference in sameness.

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