

INTEGRATIVE EXPLORATIONS

Journal of Culture and Consciousness

July 1994/Volume 2 Number 1
The Journal of the Jean Gebser Society



The Integral

Gebser's Project

**A Krishnamurti Perspective
on Integral Consciousness**

**On the Sense of the "Partial" Fulfillment
of Phenomenological Intuition**

**From Consciousness To Technology: Cymatics,
Wave Periodicity, And Communication**

Algis Mickunas

Michael Purdy

William Miller

Eric Mark Kramer

Thomas W. Cooper

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February 1994/Volume 2 Number 1

Integrative Explorations is the official journal of the Jean Gebser Society. The journal is edited in cooperation with Division of Communication, Governors State University. The journal publishes integrative explorations in the form of articles, bibliographies, or reviews of research about culture/civilization, consciousness, or Jean Gebser's life and thought; as well as, poetry, short essays, etc. Submissions should loosely conform to discussions of culture/civilization and consciousness, be scholarly and footnoted. The journal seeks interdisciplinary work and is open to creative and "alternative" styles of investigation.

The Cover was inspired by a cosmic "sun" and "starfield" used on the cover of one of Jean Gebser's publications.

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Manuscript Information: Three copies of articles should be send to:

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The *Integrative Explorations Journal* (ISSN 1074-3618) will be published biannually in January and June, will be continuously paginated, and consist of articles up to 20 pages (longer manuscripts will be considered), double-spaced, and include a forum for discussion of issues, poetry, commentary, and book reviews. Articles will be blind, peer reviewed by at least two members of the editorial board (papers should have the authors name and affiliation only on the first page so it may be removed for the blind/anonymous review process). No paper can be under consideration for publication in any other journal at the time of submission. The MLA style manual will be the basic guideline for submissions. This includes the use of gender-inclusive language. Three copies of a work must be submitted for review with a 150-200 word abstract prior to the opening paragraphs of the paper, brief (100 words or so) biographical summary of author(s), and a list of key words for use in indexing.

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Subscriptions: Subscription is included with membership in the Jean Gebser Society (\$25.00/year) which includes participation at the annual conference of the society. Individual issues of the *Integrative Explorations Journal* can be had for \$6.00 for a printed copy and \$3.50 for a digital copy on either 3.5" or 5.25" high density disks, (please specify word processor or text viewer). Eventually, we expect to have the journal available on Bitnet and Internet. Make checks payable to Michael Purdy, Managing Editor, *Integrative Explorations Journal* and send to above address.

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About *Integrative Explorations Journal*

Integrative Explorations Journal is the result of thirteen years of publication as the Gebser Network Newsletter. The newsletter and the journal are the result of the efforts of Algis Mickunas to spread the word about the works of Jean Gebser. The

Gebser Network Newsletter was begun in 1980 by Elaine McCoy then a graduate student in the School of Interpersonal Communication at Ohio University. In 1983 Michael Purdy took over the editorship of the newsletter and published the newsletter from Governors State University.

The newsletter was originally developed to be an information sharing instrument for the Jean Gebser Society. The Gebser Society is patterned after European societies, or circles, pursuing the work of a particular philosopher. The philosopher here, Jean Gebser, was born in Posen, Germany in 1905. He studied and worked in Germany until the rise of the Nazi party in 1931. From Germany he fled to Spain where he wrote poetry (*Poesias de al Tarde*, 1936) and served in the Republican Ministry of Culture. When war over took the country in 1936 he fled to Paris where he associated with the circle of artists surrounding Picasso and Malraux. He finally fled Paris as the city fell in 1939 and went to Switzerland. He became a Swiss citizen in 1951 and he assumed the chair for the Study of Comparative Civilizations at the University of Salzburg.

It was in Switzerland that Gebser finished his monumental work on the comparative study of civilizations, *Ursprung und Gegenwart* (1949/53). The English translation was undertaken by Noel Barstad with Algis Mickunas and published as *Origin and Presence* in 1985 by Ohio University Press. This massive effort of over 500 pages is a phenomenology of civilization. From a vast collection of work covering many fields, historical and current, Gebser described the modalities of consciousness of historical cultures, as well as the extent and openness of human consciousness in general. His work is penetrating and offers an understanding useful to scholars from many fields of study.

Those wishing to pursue the study of Jean Gebser's work must read *Origin and Presence*, still offered by Ohio University Press. This work is very accessible and eminently readable. Some of the authors represented in *Integrative Explorations* have published works on Gebser and provide an excellent basis for study of Gebser (e.g., see G. Feuerstein, *Structures of Consciousness*, Lower Lake, CA: Integral Publishing, 1987). Back issues of the Gebser Network Newsletter also contain information about the Jean Gebser Society, short articles, poetry, translations of short works by Gebser, excerpts from longer works, poems of Gebser's with commentary, and reviews of books about Gebser's work. (All of the back issues of the Gebser Network Newsletter may be obtained from the editor on a PC compatible disk for a fee of \$5.00.)

EDITOR'S WORD

We can all celebrate! *Integrative Explorations Journal* is now official with its own ISSN number, 1074-3618. Pass the word. Some scholars were concerned about publishing in a journal the did not have the Library of Congress approval. Now all can rest easy and send manuscripts for publication.

Please take note of the Gebser Conference on "Creating: The Arts, Culture and Consciousness" scheduled for November. We will return to Windsor, Ontario with the gracious support of the University of Windsor and Rosanna Vitale. Mark your calendars now.

The next issue of *Integrative Explorations*, following the lead of the annual conference, will focus on creativity, the arts, culture and consciousness. Other papers will also be considered. Send your manuscripts to the managing editor by December 31, 1994 to assured of being included in the next issue of the journal. We hope to have an historic introduction to Jean Gebser's structures of consciousness by Dr. Algis Mickunas to open that issue. Dr. Mickunas gave a lecture on structures of consciousness at the University of Rhode Island in 1977 and that presentation is being edited for publication by the author.

This issue presents an interconnected array of interesting essays on integral consciousness, the work that Jean Gebser made of his life and writing, Krisnamurti's thought as examining the idea of an integral life, a Gebserian approach to Husserlian intuition, and modern physical perspective on the vibrational ground of communication and other phenomena. Mickunas' piece on the integral clarifies Gebser's notion of the integral and explains the manner in which various structure so consciousness may integrate other structures of consciousness. I illustrates the interactions and supporting roles of each structure of consciousness in the Ever-Present Origin. Purdy's article probes Gebser's intentions in writing his major work *The Ever-Present Origin* and explores what those origin intentions might mean in a contemporary post-modrn world. Miller's review and speculations about the work of the mystical writings of Krisnamurti suggests that he was indeed writing and speaking about an integral life as described by Gebser. Kramer's paper explores, from a Gebserian perspective, the spatializing sense of "partial" fulfillment in Husserlian phenomenological intuition. Cooper explores the world as a continuous wave field where as he says in an analogy of life with a TV program: "The fact that each television character appears separate is meaningless in the larger scheme of things where all broadcast television images are seen as the visible outcome of invisible waves."

Spread the word about *Integrative Explorations*. As a scholarly organization we are making every effort to keep the cost of sharing knowledge to a minimum. Tell your colleagues about the integrative approach of this publication, tell your library to obtain a subscription, and share your own integral thoughts for presentation in *Integrative Explorations*.

The Integral

Algis Mickunas
Ohio University

Because of its compass, complexity, and depth, Gebser's work has been highly regarded, both by serious scholars of comparative cultures, and by a variety of seekers for a new age and salvific spirituality. While such regard may be warranted, the task Gebser assumes is much more profound and indeed relevant for deciphering diverse human cultures, their interconnections, and above all the ways that the so-called "past" human modes of awareness continue to play a dominant—although unrecognized—role in our times. Moreover, his work has shown correlations among the most diverse domains of cultural creations, from poetry through sciences. The correlations led Gebser to the conception that despite various proclamations of the end of the Western world, there is evidence of an emergence of a different mode of perceiving—the integral. This emergence offers a clue to broader scholarly ventures and correlations of cultural phenomena during different periods and at different places of cultural creations. This is to say, Gebser points out that our age is not the only one that experienced a vast transformation in awareness. He undertakes the task of tracing the correlations of such diverse phenomena in order to show their connections and through the latter to decipher the types of structures of awareness that connect such phenomena. To Gebser's own surprise, the phenomena suggest vast periodic transformations—mutations—of awareness that restructure human modes of perceiving, conceiving, and interacting. Such mutations not only yield novel structures of awareness, but also integrate and position other modes of awareness within the requirements of a predominant structure.

GEBSER'S MODE OF RESEARCH

Gebser's achievement hinges on his mode of research. He does not proceed from a presumed method or system, but follows the clues discovered among a variety of cultural phenomena. He avoids the stock of methods available to, and used by, the sciences and humanities. The reason for Gebser's reservations concerning such methods rests squarely on their limitations, and specifically on the recognition that they belong to a particular structure of awareness, and thus cannot be deemed to be universal. Moreover, Gebser is quite cognizant of the various conceptions belonging to our own century that suggest the impossibility of an impartial observer, or an application of something without distorting the subject matter under consideration. This is important, above all, with respect to cultural studies of linguistic, aesthetic or even ritualistic phenomena, since these phenomena are the very fabric that suggest the awareness required to access such phenomena.

Gebser suggests in his *Cultural Philosophy As Method And Venture* that cultural philosophy deciphers sense connections among various cultural phenomena. This should not result in an abstract set of conceptions but in a concrete understanding of the origin, position, and tendency of our own cultural ventures. In this sense, Gebser does not posit a dualism wherein one would have an external view toward one's own culture; he includes our own tendencies and participation in cultural ventures. Thus, his research is done partially to avoid fragmentation and isolation,

predominant not only in various scientific areas and constitutive of a pervasive attitude, but to show that what is fragmented in one mode of awareness, is integrated within another mode. However, the fragmentation cannot be overcome without showing the connections among diversities.

Gebser accepts a major modern division of thought into the sciences and the humanities. While the sciences are oriented toward control and possession, manipulation and prediction through the method of induction, and humanities confront understanding and deduction, the practice of cultural philosophy is reduction. In order to be clear about this practice Gebser points out that the reduction is a final outcome. The practices that lead to this outcome are, first, phenomenological, second, comparative, and third, coordinating. This suggests that the results of sciences and humanities must be understood and regarded as given cultural phenomena. At this stage we practice cultural phenomenology. The given phenomena require comparisons in order, then, to decipher their common elements. Reduction follows from the explication of basic structures that integrate such elements. It is to be noted that the practice of comparison is not equivalent to inductive generalization, but is a discovery within a given phenomenon of its basic invariants; the latter, in turn, comprise the basis of comparisons leading to reductive recognition of basic structures across most diverse phenomena. In other words, the variation of any cultural phenomenon yields an invariant which becomes an element among the invariants discovered among other phenomena; such invariants manifest all-pervasive structures of awareness that connect them. It is to be noted that any complex culture exhibits a variety of such structures; hence, whereas in one culture and in one sense rationality may be the predominant awareness, in another rationality may function within the domain of a very different structure. Thus, in one sense, modern rationality is purely logical—all the way to quantification—in another sense it is magical. Care must be taken to discern differences among such structures, lest we become subject to unrecognizable forces.

What Gebser proposes to avoid is a one-sided scientism, (i.e., positivistic methodological absolutism), and in turn, also an historical relativism that leads directly to irrationalisms. Implicitly such a rejection is equally an effort to avoid system construction. Thus, if science, even a Weberian non-positivistic system, pretends to build an all-encompassing explanation, then for Gebser it belongs to modern Western culture with its pervasive and rigid spatializations. System carries with it the notion of dualism, basically of space and time. These can be expressed at other levels as object-subject, inner-outer, chaos-order, and even divine-worldly. In brief, a system can only be built on the basis of a static metaphor of space and time and reification. By noting multiple, intertwined consciousness domains, Gebser uses, what he calls, *systasis* to articulate the ways in which such domains integrate. The integration does not posit some static whole, but an incessant integrating that constantly traces the *origin* and latently prefigures consciousness in its entirety. The latency is what provides clues for the active co-presence of all domains of consciousness. One must not regard *systasis* as a method that deciphers consciousness historically. The latter is neither wrong nor right, but belongs to a mental structure and, in this sense, cannot be regarded as an all-encompassing thesis, rather other theses depend on the specifics of a given consciousness structure.

THE STRUCTURES OF CONSCIOUSNESS AS INTEGRATIVE

Gebser's investigations indicate that there are distinct structures of consciousness, each having a predominant mode of experiencing. He articulates at least five structures, ranging from the archaic through magic–vital, mythical, mental–rational, to integral. The predominant mode of experiencing in the archaic structure is one of unity. The human is completely submerged in, and is coextensive with the world. It is an awareness akin to dreamless sleep, and has been intimated in numerous metaphoric expressions, such as an initial human oneness with a divinity in paradise, or the mystical visions of merging with the one, or the spontaneous rituals that dissolve the participants into a state of trance. It is a zero–dimensional consciousness in the sense of not having any objectifying, vitalizing or psychologizing valence or distance.

Magic–Vital Consciousness

The magic–vital awareness is one of identity. Every event is vitally connected to, and can be transformed into every other event. One can become the other. In vital awareness, the human has no specific egological identity or psychological self image; rather, it is identical with the powers that it enacts. Thus, a hunter who performs the hunted animal's movements in dance, or wears the animal's skin, consists of the very powers of the animal. The hunter does not symbolize the animal as if he/she had a permanent identity and then enacted the animal. In magic there is no symbolic distance.

Magic–vital awareness can assume a variety of forms. Thus, instead of a ritual, one may engage in incantations, appropriate sayings, assumption of names, and even prayers. As long as the performance is regarded to be identical with another event whose powers the former incorporates or becomes, magical awareness is at play. Nonetheless, attending such awareness is the vital want as a source of will to master and control, to make things happen, and to obtain power. The very term *magic* unfolds into European terms such as "to make," Germanic "Macht" (power), and "moegen" (to want), and "machine." In this sense, magic awareness tacitly integrates vital interests, technical production, rhetoric, and theatre. For example the latter is premised on the understanding that the actor "becomes" the role, that Burton disappears and Hamlet appears. Rhetoric, on the other hand, is not only a transparent attempt to convince, but more fundamentally an incantation that identifies the addressee with the slogans, sayings, promises, and images of stars in advertisements, as well as identifying with the power of an office holder, a nation, or a flag. Moreover, making of implements, technologies, that transform nature in accord with human vital wants, human will, scientific designs and rationality, is modern magic. This consciousness is one dimensional in the sense of identity of one power, one event, with another. Thus, in its own context magic integrates other modes of consciousness.

The integrating reveals how a given structure bears within its own predominant mode, other structures. Magic–vital mode of awareness, while functioning in a vital identification of any part with any other part, also includes wants and desires that are magical modes of willing. Willing, as an aspect of directed and rational activity, is equally contained in magic insofar as the latter exhibits an implicit ends–means correlation. While magical activities preclude symbolic distance, they contain *tacit* polarities that are an aspect of mythological psyche. Thus, the predominance of the

magical structure does not mean that the other structures are completely excluded. The integrating mode of analysis offers a way of accessing the ways in which a particular structure situates the factors from other structures.

Mythological Consciousness

The third structure of consciousness is mythological. First, it must be emphasized that this structure has very little to do with story telling or fables, although stories and fables usually comprise the ways, the images, the sayings, and human relations, in which the mythological structure appears. While the magical structure contains point-for-point identification of every vital event with every other vital event, the mythical structure relates the events polarly. The latter is to be distinguished from duality insofar as polarity means the dynamic movement of one event, image, feeling, that provokes, attracts, and requires another event. The appearance of sky is also the appearance of its polar aspect, the earth, the appearance of love is also the appearance of hate, the appearance of high demands the polar presence of the low—one is never given without the other, and one may replace the other. Thus gods and demons may exchange their positions through various deeds. Demons may become good and thus may rise to the heights, while gods may become corrupt and sink to the low region. While this movement comprises a rhythmic, and indeed dancing and oral mode of awareness, such an awareness is temporic in a cyclical sense. The cosmos moves in cycles that repeat themselves: from spring to summer, from summer to fall, from fall to winter, from winter to spring. The periodicity of mythical rhythm leads to cyclical repetition, still resonating in Nietzsche's eternal return of the same.

Being temporic and not spatial, the mythical consciousness is expressed in images requiring, for their movement, no spatial traversal. Thus, Gebser notes that myths are usually expressed by psyche and its polar arrangement of dynamically interchanging images, among which oral imagery predominates. The genuine researches in psyche belong to the mythical world. This should not be regarded as an identification of mythologies with method. Rather, the way mythical consciousness integrates all human awareness within its own requirements, including the function of the psyche, makes up the very access to the mythological world. It should be emphasized that this world is fundamentally oral and musical, and both are direct expressions of psyche.

As with other modes of awareness, the mythical mode has its own way of integrating the other structures of consciousness within its own parameters. Vital wants turn to psychological desires and passions, peopled by imageries that are attractive, repulsive, and indifferent. Such imageries, nonetheless, are bearers of magic power that can affect human lives and their destinies. In this sense, psychological imagery contains desires that have their own "will" and rationality. The imagery bears an explanatory power focusing on the "reasons why" events happen the way they do. It is to be noted that these modes of awareness are read both polarly and cyclically, and numerous magical sacrifices comprise the powers that insure the recurrence of the cosmic and human rhythms and cycles, and in turn guarantee that the explanations maintain their coherence.

Mental Consciousness

The mythical consciousness does not retain its polarizing and psychic character indefinitely; it undergoes a mutation that leads to the preeminence of a mental structure of consciousness. Its characteristics consist of various radically fixed aspects. First, it is dualistic with preeminence given to the function called mind over matter. Second, mind is not regarded as an entity, but a function of directedness, orientation, and finally of linearity. Third, the orientation originates with a center called the ego—at least in the modern configuration—with a propensity to lend it a spatial position from which perspectives become constituted toward the "object." Here we acquire ego–subject in opposition to material object. Fourth, the ego–subject as an orientational function, may be treated, at a deeper level, as constitutive of linear time, while the other, the material side, can be regarded as a representation of space. This would mean, according to Gebser, a division of space and time. Is then the mental dualistic consciousness coextensive with the separation of the awareness of time from the awareness of space? This, for Gebser, is taken for granted by modern thinking, and leads to the reification of time as an indifferent measure of linear motion of spatially located objects. It seems that modern mental consciousness is constituted fundamentally on a spatial metaphor. Indeed, all events and phenomena, in order to be real, are to be reduced to spatio–temporal positionality, and thus to perspectival fragmentation.

Despite the fragmentation, integration plays an essential role in the mental consciousness structure and provides for its maintenance in the face of fragmentation and disintegration. Integration is an unavoidable aspect at the directly lived level of consciousness. Thus, a person living in mythical consciousness does not question her integration. Indeed, such questioning would make no sense. In turn, the explication of a given consciousness structure requires recognition from the backdrop of another consciousness structure, or from the same consciousness structure in its deficient mode.

This double possibility of reflecting one mode of awareness offers one profound solution to the incessantly discussed theoretical and methodological issue concerning the access to one's own culture and to other cultures. This is to say, how is it possible to step outside of one's own culture in order to regard it and other cultures objectively. Gebser's analyses of consciousness structures as coextensive with cultural life, shows that each culture bears within itself consciousness structures that are accessible to all and provide reflexive moments from which the dominant consciousness structure can be recognized.

Deficient Mental Consciousness

In this sense, if the deficient mode of a given consciousness structure reaches a point of excessive fragmentation, other modes not only reflect it but also may provide the moment of integration. Thus deficient mental awareness may revert to the magical consciousness in order to maintain its power; such reversion may lead to the deliberate multiplication of a consciousness that has begun to fragment itself. Both, during the mutation from mythical to mental and from mental to integral modes of consciousness, the deficient modes were proliferated by the invention of new myths or by the production of new logics and ever new calls for the subjection to quantitative research of all areas of cosmic and human processes. Nonetheless, in both cases a modicum of integration is achieved. Quite frequently

such efforts are most virulent; each new invention or efforts to maintain the deficient myths or rationality make a claim to being the sole myth or reason and demand the suppression and indeed destruction of their own efficient forms. Such phenomena are prevalent among contemporary fundamentalist trends. Each claims to be the sole truth, and calls for the destruction of all evil enemies. This is also present among the political technocrats with their best "humanistic" efforts to improve humanity.

One characteristic of a deficient mode of consciousness is its inability to maintain itself as qualitatively lived; thus it becomes an indifferent division and subdivision, fragmentation and refragmentation of all events. Mental consciousness presumes that its rationality has the sole claim to truth and objectivity, while other modes of experiencing are dismissed as subjective. As suggested above, its proliferation rests on a willful effort to maintain the deficient mental mode not by a rational debate, but by the technological power of sciences. Indeed, qualitative rationality that would maintain a domain for public and open discursive practice, is usually rejected as utopian and replaced by experts with their fragmented advice. The legitimacy of advice is also premised on quantitative and fragmented knowledge. Thus, rationality manifests its own exhaustion to the extent that its persistent self-proliferation is a repetition and incrementation of the same mode of deficient mental consciousness.

This does not mean, for Gebser, that the deficient mental consciousness accepts other modes of awareness in their efficient modes; rather other modes of consciousness may breakdown under the deficient mental. Thus mythology assumes the form of progress. Progress is not a sign of purposeful activity, but has become a self-referring and self-enhancing repetitive structure: progress is for the sake of progress. It turns back upon itself and assumes a mythological structure of cyclical repetition. Magical awareness is equally included in the deficient world of mental awareness. The form that magic assumes is technology. After all, the latter bears the marks of want and willing, making and fulfilling of individual or social-national vital interests. If one couples quantification as the mode of deficient rationality with the ability to make and control, one notes that this coupling is coextensive with the incrementation of power. Power pervades all magical practices to the extent that initially it deals with the making of equivalent identifications, while with instrumental rationality it serves volitional designs. If one were to push this magical base to the limit, one could say that modern magic is will's empowerment of itself, empowerment of its own self-proliferation as will.

The conditions for the possibility of mental consciousness, as noted above, is a specific constitution of time and space. The issue, for Gebser, is the extreme dualism of subject and object, and more fundamentally, of space and time. Kant expressed this dualism in its basic configuration by showing that space is the external mode of perception, while time is the internal mode. Yet it is precisely this type of duality that cannot be integrated by mental consciousness, specifically in its deficient mode. Hence it must presume magic as an integral structure in the form of a modern insistence on making—technology—and a continuous emphasis on the fulfillment of material wants. It is a culture obsessed with the magic of production as the common denominator and the final purpose of all activities. Dualism is avoided at the level of magical consciousness in the form of rampant materialism

with an attendant glorification of power. For Gebser this state of affairs explains contemporary power confrontations.

The current debate concerning the viability of qualitative methodologies is not a novelty, but an effort to enhance the continuity of the mental consciousness structure. Certainly, the significance of this debate cannot be overlooked; it reveals the inadequacy of both, the qualitative and the quantitative methodologies, and opens a methodology of integration. This is to say, the objectivation of the two mental methodologies manifests a consciousness structure that defies the magical integration, and opens the ever-present *integrum* that is prior to parts and wholes, to the one and the many, to unity and diversity, and even to time and eternity. *Integrum* is not a whole that unifies the parts, that is more than the sum of the parts; rather it frees the diversity from the constrictions upon openness and releases it from succession and structural rules. This, for Gebser, is the case of the twentieth century.

Integral Consciousness

The integral consciousness, manifesting its predominance in every domain of this age, from physics to poetry, and comprises an explicit presence of what has been latent or implicit in all the modes of awareness. This immediately precludes the notion that integration is an arrayment, recognition, and acceptance of the different structures of consciousness. The diversity traces in each the commonalties that are *transparent* precisely because of the diversities. Gebser's understanding of the integral, manifest basically by transparency, requires meticulous articulation. It should be clear that transparency does not mean seeing through things by some mystical vision.

At the first level Gebser accepts meaning as a phenomenon of consciousness that does not signify (so called) reality, but comprises an event of mutual relationships and dependent differences. If we take a material object, every aspect of it means other aspects and thus integrates, and is in turn integrated by them. One side of the object means other sides and thus is both different from them and yet transparent with them as they are transparent through it. In this sense, meanings point to other meanings, that are different from, and yet related to one another. They integrate in their mutual call for each other and in their mutual differentiation.

The second basic feature of the integral awareness is *atemporality*. Once again, some basic misunderstandings should be avoided. This term signifies concrete awareness of time as integral, prior to its abstract and linear division into past-present-future. Even such a division at the level of meaning suggests transparency of one through the others and differential integration. Indeed, as numerous researches into time awareness have shown, a purely sequential experience would not yield any sense. Such an experience would be totally fragmented into disconnected temporal quanta. Any connection already takes for granted a presence of concrete awareness that is integrating. The atemporality of such integration means that prior to various functions introduced to account for time, such as memory, images, projections, and expectations, the consciousness of the presence of the whole is required. Thus, the integrating process of the previous, the present, and the subsequent is prior to their sequence, and allows their perception

of one through the other. For Gebser this perception is atemporal concretum and is at the basis of aperspectival awareness depicted by the artists of this century.

Without atemporality there would be no aperspectivity as a way of seeing something from all perspectives or as omnipresent. Atemporality integrates spatial perception of perspectives, allowing an awareness of something from all sides without the succession of mental functions. This state of affairs can be explicated even in the familiar language of mental consciousness. To have the presence of a perspective requires the co-presence of a previous or the subsequent perspective. But such a requirement is possible on the condition of the presence of atemporality such that the latter makes co-present the previous and the subsequent perspectives as integral aspects of an awareness of the whole. Thus, atemporality is an integration of spatial perspectivity *by* atemporality.

It would be a mistake to speak here of wholes as if they were a pre-given structure in contrast to the parts. In other words, this conception presumes the controversy within the mental consciousness concerning the priority of parts over wholes and conversely wholes over parts. Indeed, this controversy reflects the difference between the qualitative and the quantitative mental structure, or between the efficient and the deficient phases of any structure. Thus, the notion of the whole within the integral consciousness must be regarded non-dualistically, such that even the notion of one aspect becoming the other, of energy changing into matter and matter transforming itself into energy, or psyche being the other side of the body and the body being an appearance of the psyche, must be avoided. Gebser demands that we think the integral in a way that avoids dualism without the assumption of holism wherein everything is a night in which all cows are black.

While dualisms are premised on the separation of time from space consciousness, the integral consciousness is a concretization of time in such a way that the space is dynamized. Indeed, the very separation that led to mental, linear time resulted as well in a reified time and an appeal to spatial metaphors for its explication. The difficulty in grasping the integral consciousness as atemporal and aperspectival may be attributed to the hindrance of the prevalent discursive language with its mental emphasis. On the other hand, the possibilities of other modes of expression lend themselves to the task beginning with the conceptions of openness, probability, chance, and even chaos. Such terms preclude conceptions of spatial closure and strict localizability. They suggest the irruption of atemporality within the spatial rigidity and thus disruption of such rigidity. This irruption, for Gebser, is not an intellectual invention, but is traceable across the diverse cultural phenomena of our century, from poetry to physics. The irruption of atemporality avoids dualism and abolishes the language of inner-outer, expression-expressed, and even meaning and the meant, or the now famous signifier-signified.

It should be noted that the integral does not abolish the other modes of awareness; neither does it simply aggregate them and tolerate their differences by allowing each to have its say. Rather, the other modes of awareness become subject to, or even subordinate to the integral. In this sense, rationality ceases to be fragmented and merely instrumental but assumes a sense-making function that is never closed. The sense-making is not purely logistic and argumentative but connecting within the context of the integral. It plays a role of tracing out sense implications and their never finalizable intersections. Thus, rationality sets the transgressible

limits that allow for openness and integration. Once again, the notion of integration is to be dynamized in the sense of "continuous" and atemporal *integrating*. Integrating does not lose differentiations. To the contrary, the differentiations comprise the very factors of transparency of the various modes of consciousness. As already noted, rationality becomes one aspect of the integral consciousness, but it also makes transparent the mythical, not by reflecting on it, but by incorporating the very differences that make them transparent. Rationality, in integral consciousness, has its myth of perfectibility, but in such a way that the presence of the future is what explodes the rigidified, spatial present. In brief, future is not something that is coming but it is co-present as the difference between the given and its variants of perfectibility. The latter, in turn, integrates and is vitalized by the magical transformation of the given to perfectibility. It is a magic transformation which is atemporally present such that what is to be transformed and its variations are co-present. Apparently, such a copresence includes the very structure of aperspectivity. Aperspectivity and atemporality are key for the integrating differentials that allow for openness and yet transparent comprehension.

The task, for Gebser, is to articulate the integral without a loss of significant differentiations. The latter become most important in face of various contemporary socio-political and theocratic movements. These movements seem to be reasonable, and yet what is to be noted is their immersion in various deficient modes of consciousness structures. The cognizance of such modes is a way of avoiding the pitfalls of becoming subjected to the deficient, and at the same time extremely virulent enchantment, commitment, and action on the basis of such modes. We know well the magic of Hitler and Regan, the mythical sayings and magic rituals of all types of fundamentalisms—whether theological or political—that ply their trade under the protecting guise of rationality, the right to speak and "convince," and even the violent right to impose their "truth" on all for their own, although unsuspected, good.

THE INTERTWINING OF CONSCIOUSNESS STRUCTURES

The intertwining of the different consciousness structures, their constant integral presence, poses equally unsuspected dangers. Since, as noted above, each consciousness structure may integrate other modes, then during an age of mutation, one may be tempted to select any one of them as preeminent and exclusive. This temptation is the more prevalent when humans are faced with a disintegrating and fragmenting mode of awareness. One seeks for any integrating mode and falls prey to an exclusive emphasis on one consciousness structure.

For Gebser this state of affairs cannot be rejected; what is required is a cognizance of the limits of one mode of awareness vis-a-vis the other modes. Magic and myth integrate rationality, yet if one were to shift to rational mode of awareness and its ways of integrating, one would be able to appreciate the limits of the other modes, and thus would not fall prey completely to the direct, lived solicitations of the other modes of awareness. The same can be said of the mental consciousness; in the context of the integral the limits of the mental become transparent not only in relation to other modes of awareness, but also through their all-pervasive integral dimension.

The cognizance of the integrating differentiation also shows the common *integrating* ground. The latter is *ever-present* and in one mode or another precludes a complete fragmenting collapse of any mode of awareness. At the same time, the integral awareness escapes, at a more fundamental level, the above mentioned issue of theoretical and methodical access to one's own and other cultures without having to transcend them. Due to the integral consciousness, one can regard the events within the contexts of the preeminence of one or another structure of consciousness of any given culture by noting the recurring, even if diversely expressed integration. This is to say, one can access them both atemporally and aperspectively. Thus, one need not appeal to some unconscious reality, some material base, some instinct in order to extricate oneself from inner-cultural positionality. These tandems, regarded as an explanatory base, attempt to avoid cultural closure and inevitably introduce elements which are both outside of culture and consciousness. For Gebser, even such explanatory offerings presuppose a specific mode of awareness that integrates them with other modes of awareness and does not allow one mode to be completely supreme. Indeed, the explanatory components are not dead substances or mechanisms, but are borrowed from another structure of consciousness. For example, the vital-magical consciousness that intertwines with all vital events may become hydraulic biology that explains human behavior in terms of blind drives. There are two aspects of this that show the relevance of Gebser's thought concerning such explanations. First, the blind drives, apparently, are quite cognizant of what they want, otherwise one could not speak of them in various purposive terms; and second, such drives become transparent as consciousness on the reflexive grounds of another consciousness structure that is already integral to the very drives, e.g. their directionality and, in case of magic, their vital nexus that is both effective and protective. The latter two are quite apparent in events from current religious practice to sport mascots. The point is that all explanations are one aspect of integral inter-reflexivity of different modes of awareness and play a role in allocating to certain modes of consciousness their specific meanings.

FRUITFUL HORIZONS

The understanding offered by Gebser's investigations into specific consciousness structures—as coextensive with cultural structures—rejects both, the evolutionary thesis as well as the teleological thesis of western philosophies, still preeminent under the silent sway of Hegel, Marx, and even the mythology of progress. For Gebser, such teleologies are neither right nor wrong; they must be located within their proper consciousness structure and evaluated with respect to their limits and their manifestation within the preeminence of specific modes of awareness. Indeed, in the context of integral consciousness, the teleological aspect is not abolished; rather, a multi-purposive horizon—an aperspectival understanding—is opened. This need not be regarded as a fragmentation of a teleology, since in the efficient mode of integral awareness the multi-purposive telos is mutually interconnected with and reveals the efficiency of other modes of awareness. It is otherwise when a preeminent mode begins to be exhausted, repetitive, bored to tears, that one can speak of fragmentation and a transition to a manifestation of another mode.

The fragmentation of a given consciousness structure opens two options: first, the intimation of an emergent integration that is both a mutation and restructuration

of other structures of consciousness; second, the reversion to a culturally available mode of consciousness that promises "salvation" from the ravages of the dissolving consciousness structure. Salvation no longer offers an integration. In one sense, this is not a problem of the fragmenting rationality, but a lack of awareness of a mutation of consciousness toward another structure. While the latter may not have become prevalent, in the sense of being "lived," it appears on the ground of the fragmentation of a prevalent structure and what is sensed as missing in it. The missing aspect dominates the fragmenting consciousness and—as noted above—can be filled either by reverting to magic and its power to regenerate myths, or by tracing out the constitution of an emerging awareness. The latter, according to Gebser, prevails only through a commitment. Yet the most important methodological consideration focuses precisely on the missing aspect that lends access to the fragmenting and upsurging consciousness structure. This upsurgence has been always atemporal and aperspectival, although not explicitly manifest within the diverse "time" structures belonging to the various modes of awareness.

No doubt, Gebser's work is not complete; yet its depth offers multi-dimensional access to human awareness and culture. The vast correlation of cultural phenomena, the analyses of all the consciousness structures intersecting such phenomena, provide a contribution that is novel, profound and replete with fruitful suggestions for future research. Much of this volume is, in fact, devoted to such research. After all, to be true to Gebser's work and insights, one need not repeat what has been done by Gebser. Rather, the task is to extend human awareness concerning various current phenomena.

Gebser's Project: What Must We Do Now?

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It was Sunday morning. Most people are in church on Sunday morning. I was shopping, and thinking about what Georg Feuerstein wrote about Jean Gebser. Gebser, he said, considered the big questions of life: "Who am I? Whence do I come? Whither do I go? How shall I live?" I was thinking about the big questions of life while I was buying curtain rods in Venture department store. As I stood in the checkout line I looked around and wondered if anyone else was thinking about the big questions of life. Actually, although I was thinking about the big questions of life I was also thinking about Gebser's project. What was Gebser attempting to do in writing the *Ever-Present Origin* (EPO). What did he hope to accomplish with this monumental two volume work.

In looking for a way to comment meaningfully on Gebser's project I searched many avenues of thought but I also interviewed four of the people (Al Mickunas, Noel Barstad, Elizabeth Behnke, Georg Feuerstein) whom I felt knew Jean Gebser's work best. These interviews gave support to my ideas and fleshed out unfamiliar parts of Gebser's life and thought.

From what I have gathered, Gebser wrote EPO for several reasons:

1. He wanted to make sense of his own times and express that understanding to others. He was in exile from his own country, Germany, beginning in 1931 because of the Nazi regime and wanted to understand the culture of Europe that led to this tragedy. Barstad has suggested that the explosion of the atomic bomb in 1945 may have given even more impetus to publishing his work. Certainly, the Preface to EPO made clear that the world faced a crisis which could "only be described as a 'global catastrophe.'" His research on EPO was in part an attempt to answer the question: How could this happen?
2. Gebser wanted to portray an optimistic future. The popular works of Spengler and others that gave meaning in the popular mind to the events of the early 20th century were pessimistic. Gebser was very optimistic and wanted to express what he felt was a more optimistic possibility for Europe and the world's future.
3. Barstad suggested that Gebser wanted to have an impact on shaping and building the future of Europe (and the planet). This is one reason he published EPO with an East German publisher who had published other important works of the time. He wanted to indicate what he perceived as the optimistic trend of civilization and mark the way for others to follow. He no doubt felt that the development of the integral consciousness would progress more rapidly if people could identify it and act in harmony with it.

Let me expand on each strand of Gebser's reasons for writing EPO. In the process I also intend to reflect upon what Gebser's project might mean to us in the context of today's lived world.

GEBSER'S RESPONSE TO THE CRISIS OF HIS ERA

In light of Gebser's inquiry about how the Nazi horror and the atomic bomb could happen, we must ask if we can still be optimistic—we are, after all, moving toward the predominance of the integral structure of consciousness. Could the threat of Germany (or another totalitarian country) happen again? Have we outlived the nuclear holocaust? From Gebser's perspective we must first ask why these threats happened in the first place.

I think in Gebser's terms the Nazis came to power because of the use, the appeal to the power, of deficient magic and deficient rationality—the emotional force of speech/language (magical structure) and strongly directed political control (mental/rational). Mickunas ("Gebser's Structures") observed that Nazi Germany happened because the dominance of the mental consciousness broke down, allowing power and emotion to take over, almost unhindered. What Gebser suggested was that the catastrophes of the twentieth Century were "products of a consciousness structure which is still present even if it is misinterpreted by our rationalistic mode of observation" (Mickunas, "Comparative Study" 6).

Gebser says that whenever we find "fanaticism, "a prevalence of the idea of unification," "a stress on the concept of obedience," "and in general, whenever we meet up with overweening emotionalism as in mass assemblies, propaganda, slogans, and the like, we may conclude that we are dealing mainly with essentially *deficient manifestations of magic.*" (EPO 154). He says that even if we cannot do anything against such forces we can "avoid becoming submissive to them," observe them with detachment, "secure in the knowledge that a deficient acquisition of unity does not lead to strength but rather of necessity, and naturally, to brutal power, and ultimately, to impotence" (EPO 154). This is most likely Gebser's observation of the Nazi order that indeed became brutal and eventually fell before its own growing powerlessness.

He also observed the deficient interplay of the rational with the psychic.

Here we can discern the tragic aspect of the deficient mental structure . . . : Reason, reversing itself metabolistically to an exaggerated rationalism, becomes a kind of inferior playing of the psyche, neither noticing nor even suspecting the connection. . . . This negative link to the psyche, usurping the place of the genuine mental relation, destroys the very thing achieved by authentic relation: the ability to gain insight into the psyche.

In every extreme rationalization there is not just a violation of the psyche by the *ratio*, that is, a negatively magic element, but also a graver danger, graver because of its avenging and incalculable nature: the violation of the *ratio* by the psyche, where both become deficient (EPO 97).

I think that is what happened in Germany, both the psychic and the mental, along with the power of magic, were operating in the deficient modality. Through fear and drama the worst was forced upon the Germany people. This was an especially vital experience for Gebser as he was exiled for his homeland from 1931 making his way to Spain and then later to France. He kept barely a step before the Nazis as he escaped France only hours before the border with Switzerland was closed. I think the threat of another world takeover by a maniacal power had probably receded somewhat by the time Gebser was finishing EPO due to the buoyancy of the postwar years, but I'm sure it was still a major factor in his thinking.

The second major threat which motivated Gebser's project, probably the more ominous and immediately threatening for Gebser, was the "increase in technological feasibility, inversely proportional to man's¹ sense of responsibility." In discussing the mutational shift from the rational structure of consciousness Gebser again "emphasized that we must remain suspicious of progress and its resultant misuse of technology. . . (EPO 41). When he talks of the deficient atomization of the rational he asks what could have led to this: "[I]t can be found in the notion of technology that brought about the age of the machine with the aid of perspectival, technical drafting; in the notion of progress that spawned the 'age of progress'; and in the radical rationalism that, as we are surely justified in saying, summoned the 'age of the world wars'" (EPO 95)². Since Gebser was finishing the second half of this work in 1950–53, the threat of the atomic bomb was looming ever larger for most of the world and had to be an influence on his project. It certainly was a major element of soberness for the W.W.II generation as well as those of my generation, the post W.W.II baby boomers.

We have also considered the possibility of major catastrophes such as world war or a nuclear threat happening again now, and or in the future, and this begs two questions: (1) what does it mean to be entering the era of the integral structure of consciousness, and upon mutating to the integral do we leave behind the horrible possibilities of the deficient mental rational and/or the deficient psychic?, and, (2) does the movement toward a predominance of the integral consciousness with all of its promise for the future mean there will be no deficient side to civilizational consciousness? (Barstad wonders if there isn't a deficient Integral.) After all, we continue to see atrocities and dictatorial rule in Cambodia, Haiti, Bosnia, etc. Will there still be large pockets of mental–rational consciousness and the power of deficient magic long after the integral has become predominant? And then the key question: Is the integral predominant? If not now, when?

Gebser suggests the options include our successfully outliving the threat of catastrophe "by our own insight" or "by a transformation (mutation)" in the long run (EPO xxvii). On the opening page of EPO he suggests that those who believe we will be saved by "a new attitude and a new transformation of man's consciousness," will be believed less than those who

herald the decline of the West. Contemporaries of totalitarianism, World War II, and the atom bomb seem more likely to abandon even their very last stand than to realize the possibility of a transition, a new constellation or transformation. . . . the reaction of a mentality headed for a fall, is only too typical of man in transition. . . ." (EPO 1).

¹ I maintain Jean Gebser's use of the masculine pronoun throughout this paper with the awareness that such language is considered sexist today. Readers who are offended may take up the issue with Gebser himself. Actually, Gebser does use the feminine pronoun in some situations.

² When we read the word "rationalism" with its negative connotations we must also note the constructive role Gebser had for any structure of consciousness: "By way of conclusion, I wish to add that despite all the distress and catastrophe caused by the prevalent mentality stuck fast in the cul–de–sac of mere rationalism, we must be grateful to this rationalism for burying itself. For without its past actuality we could never have become consciousness of the bottomless pit in which it finds itself today" (Gebser, "In Search of" 5).

It would seem Gebser was more pessimistic at this point. This doesn't seem to be the language of an extreme optimist, sure of the imminent coming of the integral. Perhaps he hoped to dislocate his readers from complacency by these strong statements.

GEBSER'S OPTIMISM

The response to Gebser's intent to set out an optimistic direction for the future of Europe and the world is an extension of our discussion of point one (immediately above). What does the future hold 50 years after the Nazis were in power? We are still only a few years after the worst of the atomic/nuclear threat and still dogged by the possibility of new nuclear powers such as North Korea. In my interview with Feuerstein he emphasized how optimistic Gebser was. I'm not sure if that optimism extended back to the 1930's and early 1940's or was manifested only after the war ended. Certainly the end of W.W.II was a tremendously optimistic period. I think Gebser's explication of the integral structure of consciousness gave him cause to be optimistic for the future. Today, depending on how we see the integral unfolding, or how we read the present and future, we could be optimistic *or* pessimistic. Or maybe our degree of optimism depends on how open we are to the emerging integral. If we are within the emergent integral structure of consciousness perhaps we are in harmony with the Ever-Present Origin, the Tao, or the Way of the Masters, and we are eternally optimistic, 'unattached'. If, however, we are still living a predominantly rational life (that is, if we are still predominantly in the rational-mental structure of consciousness) we will worry over time, for rational persons the age's anxiety is a temporal anxiety. If we aren't ensconced in the integral we will think, as Feuerstein suggests, in the dualities of "problems" and "solutions" ("Afterward" for *In Search of the New Consciousness*, p. 6). Being on the cusp of the integral, in the mutational transition, we could be leaning either way depending upon our "attitude."

GEBSER'S IMPACT

Did Gebser have an impact on the future of his era? He obviously thought so. He expended tremendous energy researching and writing EPO. This was the action dimension of his project. He no doubt wondered if he could have an impact on history. Feuerstein and Barstad both say he was somewhat disappointed in the outcome of his project. He was hoping for a better reception, more recognition. Sales of his work were respectable in Europe, but he did not get a professorship until late in life, and it wasn't the solid support he desired. Europe was more compartmentalized than the US—universities were very stuffy Barstad said. Gebser was always an outsider in the university. Feuerstein believes Gebser is better understood today than he was in his own time.

Generally, in thinking about the third part of Gebser's project we might ask if it is possible to make people aware of the inception and potential of the integral? Will we hasten the predominance of the integral if we do make people aware of the integral and encourage people to "work on themselves" as Gebser suggested we must to usher in the integral age? Gebser quotes the adage "how we shout into the woods is how the echo will sound," and adds that "*Everything that happens to us, then, is only the answer and echo of what and how we ourselves are.* And the answer will be an integral answer only if we have approached the integral in ourselves" (EPO 141).

So Gebser's project was in response to the political and social repression of his age as well as the threat of an ego-dominated technology. His project was to set out an optimistic future for the world, and finally, to have an impact on the future development of Europe (and the world). Despite Gebser's optimism³, I'm not sure we have reason to be optimistic as a civilization now. Today we find fragmentation *and* creation, incredible human and planetary degradation *and* awesome human potential, all present simultaneously. If we look at the potential of those working on themselves and serving others we can be very optimistic. If we focus on the problems of the cities, the poor, third-world nations, we can become depressed.

In thinking about Gebser's desire to alter the outcome of our age, I don't think he has had much direct impact. If we understand that Marshall McLuhan derived some of his most enlightened ideas from Gebser⁴ maybe we can be more sanguine. McLuhan has had a more popular appeal than Gebser, though McLuhan is little known to the new generations of the 1980's and beyond.

One way to play out Gebser's project is to ask how Gebser's project is different today and what that means for us: "What must we do now?" My game plan will be to (1) sketch out how the contexture of our contemporary world differs from that of Gebser's and suggest what this may mean for Gebser's project today, (2) to interrogate Gebser's "methods" (the tools he used to carry out his project) and evaluate their responsiveness to our world, and at the same time trace out some signs of the integral in our contemporary lived-experience in order to understand what we must do now.

HOW GEBSER'S WORLD DIFFERED FROM TODAY'S

To thematize the difference between the 30's and the 90's means to understand our own times, a difficult task at best. We do not have the ominous "physical otherness" of the Nazis today (at least not on the world stage). Our problems today are less immediate for many people. The green-house effect is not the life-threatening danger of the Nazi stormtroopers. Pollution is not physically and menacingly in my backyard. It is, but many people don't experience the immediacy of our eco-problems.

I want to say facetiously that we are not in exile, we don't retreat before the enemy now. However, considering our present contexture I think we are in exile. We are in exile from our self, from our inner spirituality. Gebser recognized, and Feuerstein developed the notion, that in the East humanity has developed inner technologies, in the West we have conquered nature and developed outer

³ Feuerstein in the afterward to Gebser's (1974), *In Search of the New Consciousness*, questions if Gebser was too positive and idealistic when he quoted the youth of the late 60's and early 70's? Feuerstein is optimistic despite the world's problems, because of the many people working on the transpersonal level. Gebser is pertinent even to these selfless workers. Gebser would say one didn't need a bag of tricks to approach life's problems. "In effect, what he is saying is that there is no problem that needs fixing—a statement that is bound to be misunderstood by those who think and live predominantly from within the mental-rational structure of consciousness. . . . This new orientation is particularly wary of all quick fixes, including shortcuts in recovering the sacred dimension. The challenge before us is to *find* the Tao ("Way") rather than merely *seek* it" (p. 6).

⁴ Eric Kramer (author of article in this volume) has researched this issue.

technologies. In the sense that we invest all that we are in the external world we are in exile today as much as Gebser was in fleeing before the Nazis. It is after all the quantification of the deficient mental-rational mode, the *immoderation or excess* of the material world that further emphasizes or articulates our isolation. People do in fact retreat to collectivized groups to escape the exile typical of the mental-rational consciousness. In the West we have found it difficult in the past to support meditation and other "passive" and inward, centered activity.

To continue with the exploration of Gebser's project, we have already suggested that we may be optimistic *or* pessimistic today depending on how we view the unfolding of the world. No doubt we are still in the transitional phase of mutation from the dominance of the rational to the integral. The mutational shift, as Mickunas has suggested, is neither fish nor fowl, it is neither mental nor integral, in itself, but something else. I think there are elements of the efficient mental ("with its extraordinary qualities and illuminative capabilities" EPO 95)—as opposed to the deficient consciousness structure of the mental-rational—at work today in concert with the magical structure of consciousness. Gebser suggests the "relation of both the magic and the mental structures toward something outside of themselves—that of the magic to nature and of the mental to the world—results in a stronger affinity between them than between either [of them] and the mythical" (EPO 153). There is movement today toward a reproachment with nature and there is a softening relationship of the ego toward the world in general. Certainly the women's movement has changed many male egos (though by no means all). Maybe if we were doing a more "precise" description of the prevailing consciousness we might find forces at work that go beyond the constructive magic and mental structures of consciousness.

Can we carry forward Gebser's desire to help the integral emerge? Certainly, but only by changing ourselves can we hope to change the world, only in recognizing the integrity of each and every individual, as well as the collective, can we alter the world, for the world shines through the experience of each persona.

GEBSER'S METHOD OF CULTURAL PHENOMENOLOGY

In reflecting upon Gebser's methods I think we can say that Gebser gave us a fantastic set of "tools" for understanding our age and its relationship to the ages of other structures of consciousness, (those consciousness structures are of course still active today). Elizabeth Behnke has called Gebser's cultural phenomenology a "heuristic hermeneutics." It is a powerful self-generating metaphor for making sense of our own times and a metaphor that opens the possibility for optimism. In its original form, phenomenology was a rational attempt to catch the world in its variations. And yet in its development (like in photography) the mental beginning grew (and indeed is still growing) to encompass something more complete. So too, it is a mental project for Gebser to write a treatise on the future, whether about the integral or whatever. Indeed Gebser's work does begin in the mental framework. As he says of the "Synoptic Table," it is "intended to be, not a straightjacket or rationalistic patchwork, but in its demonstrable overlappings, an attempt in mental fashion to show man viewed in terms of his principal components as an entirety" (EPO 152).

Gebser's rational patchwork in the "Synoptic Table, perhaps even his total project "is a rational, that is perspectivistic, goal-oriented question, and this is precisely

why we are raising it. For even when viewed from the one-sided utilitarian viewpoint such a survey . . . can have a clarifying effect" (EPO 152). From the rational beginning in EPO Gebser's method seems to grow into a temporal pattern of taking up the themes of the consciousness structures as they crisscross each other and indeed dovetail, overlapping earlier thoughts to make them all copresent simultaneously. This move is similar to Gebser's sense of time (derived from Teilhard de Chardin) as not linear but curving back upon itself and

constituting a continuous process of integration of spatial elements. . . . ('man is the place where evolution and the temporal process becomes aware of itself'). . . . In such a curvature upon itself it integrates the very origins and all of the stages of the evolutionary process. Origin becomes Presence, past becomes manifest through the present process of integration of elements. (Mickunas "Jean Gebser and the Comparative Study of Civilization," p. 27).

In Gebser's two guiding principles of latency and transparency we again find the mental at work in another duality:

Latency—what is concealed—is *the demonstrable presence of the future*. It includes everything that is not yet manifest, as well as everything which has again returned to latency (EPO, p. 6).

Transparency (diaphaneity) is *the form of manifestation (epiphany) of the spiritual*. Our concern is to render transparent everything latent "behind" and "before" the world—to render transparent our origin, our entire human past, as well as the present, which already contains the future. We are shaped and determined not only by today, but by tomorrow as well (EPO, p. 6–7).

Like so many of Gebser's approaches to the phenomena of consciousness we find him beginning with a mental "framework." Consider the efficient and the deficient—a mental dichotomy again. I think we must catch Gebser in his creative moments and notice what is happening and what is coalescing as he works. For as he works he transitions from a mental framework to an integral creativity.

In my interview with Feuerstein he mentioned that he wasn't sure Gebser used his tools as well as he could have. Both Behnke and Mickunas suggested on the other hand that we needed to return to the tools of Gebser and of others, (e.g., Husserl, Merleau-Ponty) and approach the phenomena (acumena) once more to get a fresh grasp of what's happening with the structures of consciousness.

Mickunas suggested we needed to return to the world of experience and trace/read/dance the phenomena again/anew. In Mickunas, talk "Threads of the Integral," at the at the 1993 International Gebser Conference (Windsor, Ontario) he says 'the integral is not even integral anymore. [We need] a transcendental shift that is not transcendental, that is true to the spirit of Gebser—not a sense that we have the answer. For example, advertising is described as magic, but that's not all there is. The magic in advertising goes beyond the vital. Science is magical, logic is magical, they are incantations. Why get burdened by written texts when we can take the cultural phenomena and "see" for ourselves what is happening.'⁵

Mickunas and Benke are suggesting that the structures that Gebser described are not the whole description of the world, though they are powerful aids in understanding the world. There is more to the world than what is given in Gebser's structures of consciousness. The work to accomplish the description of this

⁵ See also Mickunas' article "The Integral," in this volume.

emerging (continuing) world is being done in many places or sites [Cultural Studies (which seems hung up on, fixated upon, spatial metaphors). The joke is all out in the open today. Mr. Subliminal counterposes the surface meaning with the ironic phrase which is slightly less stressed, though certainly not unarticulated]. Fiumara in *The Other Side of Language: A Philosophy of Listening*, suggests the “psychic” structures of consciousness that have imprisoned us may also with the alertness of the integral provide an openness to restructuring.

If however we are disposed to look back at the stratified and archaic ‘components’ of our inner world we may no longer perceive them as fossilized vestiges, but as functioning structures that somehow contribute to determining the present moment of hominization. And the very propensity that allows us to recognize the involvement with phylogenetic history can, in the same way, be conducive to a constructive openness toward our future. 184

Merleau-Ponty would say we need to further interrogate Gebser's structures of consciousness if we are get on with the process of reinscribing the world. We need to rethink the efficient/deficient dichotomy, though from my own experience it is difficult to do the thinking that needs to be done to move beyond this dichotomy. The project of deconstruction, as in doing some solid phenomenological description works wonders in expanding dichotomies into more integral phenomena.

We might also interrogate Gebser's notion that in the periods of transition from one consciousness structure to another there is fragmentation? My immediate take on this is that one person's fragmented experience is another person's creative material. For example, especially with electronic art we can collect pieces of the world, each of which gathers a world(s)-in-a-nutshell, and use them to gather a new world that never existed before. Of course, this didn't have to wait for electronic imaging to happen, the imaginative psyche has been doing this in art for a long time, observe surrealism, dada, and other montage/collage work. Andy Warhol was digitizing images before scanners were invented.

In my interviews with both Behnke and Mickunas the limitation of the integrum unfolded. Gebser wrote of the wholeness of the integral consciousness, of the spiritual coming to fruition. The wholeness, the teleology of the spiritual fulfillment however, presents challenges. Behnke has begun to think instead in terms of an "open wholeness," a wholeness that is not a unity.

In this postmodern world are we seeking an integrality that is radically singularizing? Does it lead to a unification? Mickunas says, Gebser leads us to think in terms of integrating but not in a unifying way⁶. I would add that the phenomena of the world are much too rich to be encompassed by a single unity. In other words there may be a cosmic unity, but it is rather a unifying wholeness, an open wholeness that is never fulfilled, as Behnke describes it. Drawing on Merleau-Ponty's notion of the “simultaneity of impossibles” we may arrive at the understanding that it isn't possible to fit everything under the sun (or the cosmos) into one order. There is no single overarching unity/entity.

⁶ Mickunas also recognizes that there is no fixed unity, everything is in the process of formation and at the same time deformation (formations and deformations are consciousness structures). and the integral is integrating all of the previous consciousness structures “Man is the wholeness of his mutations.” instead of a system, Gebser talks of a ‘systase’—“a process of integration of parts into the whole” (ftnotes 35, 36 in Mickunas, nd).

Behnke wrote me on November 4, 1993 to continue this discussion. She found the reference to the "simultaneity of impossibles" in Waldenfels (1987), who in turn refers to Merleau-Ponty's *The Visible and the Invisible* (1968, p. 265?). Waldenfels describes Merleau-Ponty's phrase as

This explosion of Being whose splinters sparkle and hurt, finds its expression in various attempts in modern art, where the classical central perspective is renounced in favor of multiple and multivalent modes of presentation that no longer converge on one center. Here we shall only recall, among others the flickering fragments of images and sentences in Delaunay [The Red Eiffel Tower, 1911] and Apollinaire; the thresholds of heterogeneity in Magritte's pictorial riddles [The Sleepwalker, 1927], the metamorphosis making the impossible possible in M.C. Escher's pictorial patterns; or the grotesque as a simultaneously ambivalent heterogeneous and contradictory element (F.8, F. = "the ordinary and the extraordinary," F.8. = The breaking-in and the outbreak of the extraordinary.)

Behnke says Waldenfels uses "the simultaneity of impossibles when he refers to Delaunay's painting as 'exploding, bursting, the existing order' by showing an 'excess' of possibilities, an 'overflow' of them" (correspondence, November 4, 1993). Hence, there is an "order," a wholeness, but it is provisional and open, it is one among many possible constellations of being.

Dealing with problems of society today we can no longer think generic solutions. Gebser's thinking leads us away from one unitary response to our problems. For example, in formulating solutions for our schools, we cannot legislate what each school should do. Each is a different contexture, each needs a unique solution. We cannot dictate, impose, straightjacket every institution into the same mold. Cisnaros, Secretary of HUD in the Clinton administration, talked similarly of partnerships between government and local communities to work on local problems. He said each partnership would be different, the government would be listening to hear what residents thought and would build solutions upon local ideas with local leadership.

The open wholeness idea, the lack of unifying relationships plays off of Merleau-Ponty's notion that there is always wild being—that being exceeds any attempt to contain it within some single unity [*The Visible and the Invisible*]. As in finding solutions to local problems, there still may be some overarching set of principles or goals to guide local solutions, but the field of applications must be open to the needs of the unique context.

Contemporary genetics in particular gives us striking examples of the openness of any unity. Developments in genetics have shown that even if rats have exactly the same genetic heredity there is still a random factor at work that gives some diversity to the offspring of rats. From a brief study of twins I can also say that even with identical twins there can be significant differences in their personality, behavior and abilities. This indicates that there is always a random element, a "mutational" element as in Gebser's understanding of structures of consciousness. I'm sure Gebser would have supported such an idea as consistent with his project.

What works best to describe the open wholeness Behnke proposes is a network of relations that tie into larger wholes, each open and simultaneously impossible. Technology, in the presence of the Internet, has provided such a set of relations. The internet allows for communication around the world, but the net itself is not organized as a universal system. There is a wholeness to the network of more than

25 million members, that grows at the rate of 150,000 new participants each month (as of early 1994), but there is no unifying principle of organization which can describe the whole. The internet is made of many "sub"-nets—which are not "under" anything, as in a hierarchy, but rather are self-organizing "systems" within the overarching open wholeness of the total internet. I would like to think that Gebser would have approved of this technology because it was "integral technology" in the best sense of that phrase. It is technology that is democratic (so far) and anonymous in its operation.

I think this is similar to what we would seek in interpersonal communication as well. Interpersonal communication at its best is a self organizing interaction between equals, each of whom is awake and takes responsibility for their relationship with others. The relationships of interpersonal communication are like the internet, self-organizing. There is no utilitarian force involved making people communicate, no organizational principle telling people how to relate, no teleology other than the tendencies of biological and human attraction, human interest and need. In ethical terms the freedom of the individual is the open goal of action, never a fixed principle, always changing with the needs of the open whole and the other humans involved.

The "individual" I'm referring to here is not the atomized individual of mental-rational consciousness, but the individual as the focus of a web of relationships in the anonymous experience of society⁷. The individual is the crux of the web of relationships but not free from response-ability to the world. Feuerstein says Gebser shows how we as a nascent world community can help the world recover from crisis, "And it is a matter of participation and of personal and institutional responsibility." (Feuerstein, 1987, p. 10). As Mickunas has suggested, paraphrasing Camus, if one person is demanding justice that is more than enough. To the extent that we are awake we must take responsibility for our fellow humans.⁸ We must communicate and reach out to take part in each other's lives. Peter Drucker in *Post Capitalist Society*, in noting that the "new man[sic]" of Marxism was never realized, does suggest that:

Still, redemption, self-renewal, spiritual growth, goodness and virtue—the "new man," to use the traditional term—are likely to be seen again as existential rather than

⁷ Gebser gave us an indicator as to whether a person had "reached" integral awareness:

someone who has learned to avoid placing blame or fault on others, on the world itself, on circumstances or "chance" in times of adversity, dissension, conflict, and misfortune seeks first *in himself* the reason or guilt in its fullest extent—this person should also be able to see through the world in its entirety and all its structures. Otherwise, he will be coerced or violated by either his emotions or his will, and in turn will himself attempt to coerce or violate the world as an act of compensation or revenge (EPO 141)

⁸ Feuerstein writes that there was controversy over Gebser's work and it was "as much about Gebser's unorthodox approach as it is about his conclusions. They imply an uncomfortable moral demand that only those will meet who are committed to living as *homo humanus*, the whole human being, transcending the parochial visions of egotism, sexism, nationalistic ideology, religious imperialism, and racism." p. 8

social goals or political prescriptions. The end of the belief in salvation by society surely marks an inward turning. It makes possible renewed emphasis on the individual, the person. It may even lead—at least we can hope—to a return to individual responsibility (13).

This is the same call for a return to individual responsibility that Gebser and others are banking on to transform the world in the long run.

It seems that the crux of individual responsibility is the intensification of self-growth. But can self-growth take place without social growth? Government has become the pastoral state according to Foucault, attending to individual and societal needs and promising salvation in this life. Government legislates morality. One estimate is that victimless crimes take one-half of the effort of our judicial system. In addition, we have become dependent upon government for making change. But, as Coretta S. King, Martin Luther King's widow admonished, we need to become less reliant on the "man" in Washington and more self-reliant. *The Way of Lao-Tzu (Tao-te Ching)*, offers much advice on governing and trust in the self-reliance of the people: 'The sage takes no action and does not interfere with the people, and they will transform spontaneously and the world will be at peace of its own accord' (37). "I take no action and the people of themselves are transformed. I love tranquillity and the people of themselves become correct." (57) "The sage will rule like cooking a small fish," firm in his convictions that much handling will spoil it. (60) He "has no fixed (personal) ideas" but "regards the people's ideas as his own" (49). He leads the people but does not master them (10).

The concept of the individual also establishes, in mental-rational consciousness, the dichotomy of the "inner" and the "outer," for example, as I introduced inner and outer technology above. These too are inefficient terms in an open wholeness. I mentioned above also that the self was, in a sense, in exile today. I think with mutation to the integral that the concept of dichotomy too must begin to change. I cannot say that we will come to a unity of inner and outer, that teleology would be too weak anyway. But I think we must begin to take note of, and be awake to, the harmony of inner experience with that of outer experience. To invoke Merleau-Ponty one more time, experience is anonymous. Our world is slowly *becoming* aware of the anonymity of experience, but the mutation is still slowly and often painfully shifting. This awakening will hopefully continue because it is at the root (it is a seed?) of the development of integral wholeness. Technology doesn't become efficient until we see ourselves reflected in its abilities (Heidegger). We don't take responsibility for our fellow being until we are aware that our beings are of one extended fabric—not a unitary fabric, but a patchwork of interactive open wholes, a simultaneity of impossibles, each independent and dependent at the same time. Maybe we can even go beyond the notion of co-constitution to the multi-constitution of social experience (i.e., anonymous).

So, I think the first step, if we are to be true to Gebser, is to start afresh with what he has offered us and from that starting point to discover what new realms may be waiting. To carrying on Gebser's project we must bring together our own gathered experience and test Gebser's structures, to add to them where they are thin, to replace them where they are found wanting. As scholars of Gebser we are in a

unique position to make sense of this postmodern world. And finally, to paraphrase Alvin Toffler, our goal should be to work toward a practopia rather than a utopia⁹.

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⁹ A good place, or literally, not a place

A KRISHNAMURTI PERSPECTIVE ON INTEGRAL CONSCIOUSNESS*

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We must work on ourselves, Gebser reminds us, if we are to realize integral consciousness. But how to do this he has left "tantalizingly incomplete."¹ How do we divine a methodology, or to use Feuerstein's term, a "psychotechnology,"² especially one suitable to western sensibilities? Could a possible candidate be the "methodless method" of spiritual teacher J. Krishnamurti? The two teachings share some intriguing similarities. And Krishnamurti's non-sectarian (really anti-sectarian) position can support a contemporary non-metaphysical western orientation. Let's explore the question.

In his major work *The Ever-Present Origin*, Swiss cultural philosopher Jean Gebser (1905–1973) presents the theory that contemporary human consciousness has evolved through four major mutations, each of which inaugurated a fundamental change in consciousness structure. Gebser identifies these structures as the archaic, magical, mythical and mental-rational. He claims we are now on the verge of a fifth, the integral. Understanding these modes of consciousness helps us realize who we are and why we act as we do since each previous structure continues within us; we can identify their various traces in our actions and thoughts. So they are both phases in human consciousness evolution and constituents of our present consciousness.³

In a very brief and restricted overview, we can say that the archaic reflects our long animalistic development when we could comprehend little other than our existence. Today it is manifest in deep sleep stages, in our fight or flight response, and perhaps in deep hypnosis and drug states.

The magical began some 750,000 years ago in a world experienced as spaceless and timeless. Humans relied on instinct, emotion and a sense of oneness with nature. Identification with clan or family group developed, idols and rituals appeared, along with an awareness of death. But there was still no sense of individual ego. We see the magical active today in sleep, in soporific experiences and in various superstitions that suggest that we can somehow directly influence natural processes.

¹ *This paper was originally presented at the International Jean Gebser Conference in Windsor, Ontario, November, 1993.

¹ Feuerstein, p. 200.

² Feuerstein, *Gebser Network Newsletter*, Spring 1991.

³ Gebser describes his model using structures rather than stages. Some claim that to speak of them as discrete events is misleading. Their view is that the integral structure is something that is present (from the origin) and working itself out in various aspects of our experience and culture rather than as a mode to be realized. There is something to this position. Still, Gebser does speak of radical changes of consciousness, a theme that has been developed by others such as Wilber and Jaynes. I will stay with this latter view since it is more in line with Krishnamurti's thinking. Nor does the less radical position eliminate the possibility of such a drastic consciousness change for the realization of the integral.

The mythical appeared between 12,000 to 20,000 BC and corresponds to the growth of agriculture, cities and, most especially, the acquisition of language. Imagination and introspection appeared. Gebser characterizes the mythical consciousness as involved with polarity and complementarity. We experience it in daydreaming, artistic creation, and involvement with fantasy.

The mental consciousness structure appeared somewhere around 1000 to 500 BC and continues through today. Now there was a sense of the individual ego. Thinking began using abstraction and causality. The world was experienced as three-dimensional. Time became measured. Later, as materialism and scientism developed, this mental structure took on a deficient form that Gebser names the rational. It is this consciousness that most conditions our contemporary way of being in the world. And it is leading to our spiritual bankruptcy. We need a major change.

Gebser postulates that we are on the verge of another major mutational leap to the integral consciousness structure. With it will come a new perception of time as intensity or quality as opposed to measurable quantity. And the integral will be marked by a transparency, a diaphaneity, that will let us be aware of the presence and activity of all the other structures. Gebser says we will attain it by transcending the ego. But how?

Early in this century, as a young boy in India, J. Krishnamurti (1896–1986) was identified by Theosophists as the prophesied great World Teacher. They educated him in England, preparing him to take leadership of the Order of the Star of the East organization. Then in 1929, standing before 3000 devotees, he renounced his leadership and dissolved the movement, stating that truth is a pathless land that cannot be approached by any organization, religion, sect, meditation or teacher–authority, including him; we must look only within ourselves for freedom and enlightenment. Krishnamurti continued to travel and teach—particularly in India, England, the US, and Switzerland—until his death in 1986.

Krishnamurti explains that somewhere evolution took a wrong turn so that human beings are messed up. We have psychological problems because we identify with our illusory ego—our false sense of self, our constructed and conditioned "I" and "me." This ego is formed and sustained by thought, by thought that is continually going on in our heads whether or not we are aware of it (what some eastern practices term the chattering monkeys). Thought is memory, which is the past. We miss reality—the what *is*—the living present—because we are always dwelling in the past and in the future—in our memories, desires, hopes and fears. We inhabit a self-mediated pseudo-reality.

It is so difficult for us to be free of this mind, this thinking, this ego, since we have been conditioned to accept a dualistic mode of thinking that separates the thinker and thought, the observer and the observed, the experiencer and the experience. We imagine ourselves as something which *has* a thought or experience. What we don't realize is that there is no one acting or receiving the thought or experience. We *are* the experience, the thought. "The observer is the observed."

Krishnamurti offers the illustration of suddenly seeing a beautiful sunset. At that instant there is direct experiencing, in the present. But almost as instantaneously, our mind/ego responds by naming the experience as "beautiful." (Language is a prime conditioning agent keeping us from the present.) We become aware that

something we consider an "I" is having something we label a beautiful experience. Thought and memory have intervened. The illusory ego is once again reinforced as real.

When we judge, evaluate, criticize, or condemn ourselves or our actions, we are making the split into one who judges and one who is judged. Whenever we try to achieve some personal psychological goal for ourselves—some improvement or change—we are trapped in this dualistic thinking, separating what is from what should be. And producing internal conflict thereby. Any goal or endeavor to change this only keeps us trapped in the dualistic thinking that reinforces the ego. This is why Krishnamurti decries any method or attempt to make his teaching into a method. Doing so only traps us in our existing condition. You can't ask "how," Krishnamurti iterates.

(Krishnamurti makes an important distinction between survival/technical thinking, knowledge and memory and psychological thinking, knowledge and memory. Obviously the former is needed to live day to day. It is not the problem. Our difficulty lies in the psychological arena.)

To counter our need and suffering, Krishnamurti brings a message of individual freedom. (He doesn't ignore the social, but believes that social change—true revolution—can only be achieved if first there is individual change: "You are the world.") He claims that this freedom can come only from within ourselves; trying to attain it by some system, practice, meditation, discipline, teacher or guru only enslaves us to the authority or the desire for achievement. Once realized, this freedom brings peace, joy, tremendous creative energy, and, he maintains, the only real love.

While Krishnamurti's vision of an enlightened being and of transcending the ego is not unlike that of some eastern practices (cf. Taoism, Zen), he resists any attempt to label what he advocates as a practice or method since he sees these as producing enslavement and conformity. He constantly warns about digesting others' ideas, including his own. He denies reading any philosophy or spiritual teachings since he feels these would only drive him further away from the freedom that each of us can only achieve for ourselves.

Krishnamurti bases his teaching on his own personal experience—he found out this truth for himself, he experienced the profound change he urged on others. I don't doubt that he went through such an experience or that he was sincere in sharing this possibility with others.

Then, what is this liberating methodless method, this non-technique? It is looking to yourself and simply being aware of the activity of your mind. Watch its movement. Do not name what is happening, nor judge or evaluate it. Don't try to change it. Only attend. Do so without hope of change or achievement, without goals or ambitions, for with these there is again the ego and its dualisms. Be choicelessly aware. And then, by itself, the change will suddenly come. And you will find yourself living in the now, free from the conditioned construction of the ego.

By passively observing the mind/ego, you become aware of its falsity. You come at the true from the false since a positive approach only offers another a goal to attain, another trap.

It takes commitment and intensity. Approach it directly, immediately, urgently, without reflection, Krishnamurti counsels, as if you suddenly came across a dangerous cobra.

It takes a silent mind to do this. But not a mind made silent by forced practices, by concentration or repetitions; such is not freedom. Rather, discover the silence for yourself. Catch it in those brief moments between thoughts.

In an analogy to a pendulum, Krishnamurti says that as our normal state of consciousness swings between the past and future there are infinitesimal intervals of complete stillness at the extreme of each swing. Catch these, and they will impel the change to freedom.

And when the change happens, it happens instantly, completely, totally. Krishnamurti would undoubtedly endorse the description (but not the reference) of being like a new creation, old things passed away, all things become new.

Then there is no more ego center. There is no (psychological) past or future, so (psychological) time ceases. Experiencing goes on without any—one to have an experience, any—thing to be so labeled as an experience, or any—one doing the labeling. Now you inhabit reality, you live with what is.

Krishnamurti refers to this experience as a mutation—a major change in consciousnesses. He even suggests that it brings about a physical change in the brain. It is an evolutionary leap of Gebserian proportions.

Krishnamurti's theory has appeal. While it has much in common with eastern traditions, it is free of sectarian or doctrinaire baggage. It is compatible with a materialist philosophy (although Krishnamurti wouldn't approve). By addressing issues around social and personal ego construction, it is relevant to contemporary poststructural and Foucauldian analyses of the construction of the subject, meaning, and our sense of reality. Also, it can fit with the emerging view of the brain/mind as a federation of "minds."

Nor is his "method" so suspect. The idea of being passively aware as a way to achieve change is as common in contemporary mind/body work as it was centuries ago with the Taoist notion of *wu wei*, "not doing." One aspect of Gestalt therapy is making the client aware of an activity—a pattern of behavior, a body posture, a tone of voice—and having the client stay with that awareness, not trying to change it, but just being aware of it and letting the natural therapeutic result occur. Myrolfers (who do structural integration deep body massage) have the same message. Simply be aware of a body condition (such as a tendency for a leg to rotate outward, or a shoulder to be carried high). Don't try to change it. Don't force. From simple awareness, change will result.

Krishnamurti has the same message. Change—freedom—enlightenment—is not something that can be forced. It cannot even be invited. Simply be aware. And of itself, without urging, the change will happen.

He strongly believed his message. He felt he had discovered the key to free the captives. It impelled his teaching. He knew it worked from his own experience.

Then, could Krishnamurti's methodless method possibly be a candidate for a psychotechnique to invoke Gebser's integral structure of consciousness?

Let's consider some similarities—the superficial as well as the significant.

Both Gebser and Krishnamurti recognize the need to transcend the ego/self and the importance of letting this experience happen rather than trying to make it a goal. (Gebser declares that only an apersonal, ego-free individual can perceive the apersonal.⁴) Both speak of the importance of silence (of the mind) that accompanies this transformation. Both speak of memory as always time-bound. Gebser says that turning away from memory is turning toward freedom—it could be a quote from Krishnamurti.⁵ Both claim that love, energy and creativity come when the ego is transcended. And both share a sense that there is "something" underlying and operating through creation. For Gebser this is the ever-present origin. For Krishnamurti it is the ground or universal Mind. (But he doesn't speak of it often; it is less important to his pragmatic agenda than the origin is to Gebser's broader theory. Krishnamurti speaks of it more as something he has glimpsed than a deduction he has worked out.)

More to the point is their shared concern with time.

Gebser speaks of the integral structure of consciousness as freedom in time. It is the concretion of time as the spiritual blends with consciousness. It produces a new relationship to time as intensity—qualitative rather than quantitative. Krishnamurti says much about (psychological) time. For him, mind, memory and the ego are products of time, just as time is a product of the mind and memory. The experiencer is the result of time. For most of us, the past is our present. Freedom means being released from time. (Psychological) time ceases for the ego-free person. Only then can we know the timeless. Reality is of no time, it is timeless. There is only the immediate present. Eternity is the new, the moment. Transformation can only be in the now, from moment to moment. For Krishnamurti, to be cut off from the past (memory) does not mean that we don't recognize it, but that our mind has no direct communion with it. We are free from its conditioning influence.

It is not improbable that Krishnamurti's experience corresponds to what Gebser describes. However, this presupposes that both are in touch with some sort of universal truth, and this needs skeptical examination.

Gebser presents problems. The very totalizing scope of his work makes it suspect. It is all too neat, too pat. It fits too easily. His epochs correspond too tidily with our space/time dimensions, with figural signs, with all the characteristics Gebser defines for his schema. Such structuralist universalizing has been strongly critiqued by Lyotard, Foucault and the postmodernists for whom all such grand pronouncements are suspect. Any classification scheme is arbitrary and conditioned by one's present perspective. (For example, while Ken Wilber's model may build on Gebser's, Wilber posits additional future consciousness structures. Are his speculations any more, or less, credible? Interestingly, Wilber criticizes both Gebser and Krishnamurti for what he sees as their confusing the pre-subject/object and the trans-subject/object. Wilber prefers the notion of attainable higher spiritual states. Not that Wilber has any more convincing a schema, but isn't it rather arrogant to declare the integral as the last, culminating stage beyond

⁴ .Gebser as quoted in Feuerstein, p. 163.

⁵ .Gebser, p. 324.

which there is nothing more?) For all its exhaustiveness, Gebser's theory could well be a magnificent chimera. I recall something I read long ago about a psychiatrist treating a patient who had delusions of being in contact with a distant planetary civilization. The patient had worked out an elaborate history and culture for this planet. It was so detailed that it proved highly engrossing—for both patient and psychiatrist. The crucial therapy moment came in a session in which the psychiatrist was getting so carried away by his involvement in the fictional planetary world that the patient had to call him on it (and thus begin the road to giving up the delusion). It is easy to get caught up in Gebser. But could it be merely a grand delusion?

I wonder whether Gebser would have written differently if he had read *Neuromancer*, McLuhan, and of the coming of digital electronics, virtual identities and virtual realities, smart drugs and brain implants.

Krishnamurti also presents difficulties. He undoubtedly had a powerful experience which gave him personal freedom of consciousness. This impelled him to dedicate himself to carrying his good news of release. But it appears that from some seventy-years of his teaching, few if any others have realized this experience. What value is a message of freedom that is only idiosyncratic to the proclaimer? Doesn't this suggest the possibility of a private delusion?

Krishnamurti never completed college (perhaps in part because Oxford wasn't anxious to have a proclaimed Messiah). He prided himself on not having read philosophies or religions or "knowledge." He claimed this kept his mind free from the conditioning of others' words. However, with broader knowledge he might have been able to better contextualize and assay his thought. He is dogmatic and severe with ideas different from his own. If he were more knowledgeable and open, he might have integrated similar teachings (such as Zen satori). It may well be that in spite of the dangers he points out, dependence on a system or guru might be useful at certain moments in one's spiritual growth. But Krishnamurti does not permit this. Also, he has the tendency to speak authoritatively in areas that seem far from his experience. Many of his "facts" are at best problematic, at worst they are simply wrong. (For example, he claimed that an ego-free person would not have to dream. Later he modified this position when it was pointed out to him that research seemed to belie this.)

Krishnamurti is too much the evangelist; he does not confront his own assumptions and hidden agenda. But for all these criticisms, the bottom line is: does it work? Based on his success rate, we can doubt it. But . . . what if he is just a contemporary prototype? What if his insight has yet to be realized? And what if Krishnamurti's experience is that which Gebser theorized, glimpsed, described? In spite of all the difficulties—and they are many—I submit this may be an open question.

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On the Sense of the "Partial" Fulfillment of Phenomenological Intuition

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A major problem for all metaphysical systems and their corresponding epistemologies, including methods, mediations, and pretensions at being certain, inextricably presume the issues of reliability and validity. For the perspectival modern mentality reliability and validity, or intersubjective agreement among experts, constitutes objective knowledge. Scientific discourse, which is the most powerful manifestation of the perspectival mentality, is a unique form of democratic communication. It is highly dualistic incorporating a dialectical structure including the use of "referees" in the competition between ideas.

An essential aspect of scientific as well as mundane truth claims is the necessity for duplication of findings and the shared presumption of what constitutes adequate evidence. Replication based on precisely shared theoretical formulations and procedures assures the reliability, and therefore the rhetorical—pragmatic power, of science as a method of discovery and an institution of change.

Due to an almost complete lack of replication, most so-called social "science" cannot properly be said to be reliable. For this reason, social scientific claims are perceived as being either not very convincing or, if believed to be true, to be little more than common sensical (trivially obvious). This may be why social "science" has failed as an institution of manipulation (social engineering) in the interest of alleviating suffering. While material engineers can build bridges that hold up, thus solving a commonly recognized problem, poverty, injustice, violence, and other commonly recognized "problems" for social engineers remain unsolved. Some might even wish to argue that social "science" often exacerbates these problems.

As Wilhelm Dilthey (1913) recognized, the power of the natural sciences is in their ability to:

subordinate [phenomena] to their constructions by bringing about uniformity among the phenomena that are to be ordered; this they do through abstraction, by means of these constructions. In contrast, the cultural sciences incorporate, primarily by taking the immeasurably expanding historical-social reality, as it is given only in its external manifestations or in effects or as mere product, the objectivated sediment of life...(in Habermas, 1971:338)

Since Dilthey drew this fundamental distinction "operationalization" as an attempt to reduce phenomena to uniform and measurable units has been embraced by many positivistic social scientists. However, operationalization (which means to operate upon an external reality) is only part of the discursive manipulation the discursive structure called "science" must do in order to exist and succeed. More important is the process of duplication which presumes this reductive uniformity of units.

Replication is essentially a communicative process whereby theoretical statements, concluding remarks, and procedural descriptions are shared and then reproduced. Agreement is managed via preconceived discursive formations that assure rhetorical effect. As is commonly observed for instance, statistics and numbers are

quite persuasive to many audiences. Reproduction however, has nothing to do with being "independent" as in the notion of independent (objective and value free) thinking, research, or inquiry. Quite the contrary, close referencing to previous research and networking with cliques of agreeable colleagues, act as very strict guides and prerequisites to the cumulative process of knowledge generation. But within this perspectival apparatus of knowledge production, a fundamental suspicion is highly valued and marks the modern distrust of "provisional" claims. For instance, if I claim to have accomplished "cold fusion" this claim does not constitute "knowledge" unless and until I have communicated with others who then duplicate the procedure and, in turn, communicate their success at copying my original experiment. The highest value is reserved for "independently verified knowledge." Corroboration under the burden of suspicion leads to a convinced audience of skeptics. This is widely believed to be the essential structure of scientific discourse.

Never the less, because not even one student of any field can have empirical, meaning *direct personal experience* of each major scientific experimental outcome, skepticism is actually grounded upon a strong faith in the authority of the discursive structure itself including of course its privileged metaphysic (what is *a priori* allowed to count as "real") and the halo of celebrated personalities. The issue of trust, which was honestly explored by the Hungarian chemist Michael Polyani (1958), is essential to scientific as well as mundane reliability. Modern mental rational science must rely upon prerational faith while it draws its power not from empirical observation, which alchemists and others proved to be very rigorous at, but from the abstracting and communicative process of replication and accumulation of findings (knowledge) which leads to generalizability across space and time (prediction). What constitutes a "fact" or "finding" is the discursive structure of this particular type of communication—what Dilthey called "construction." "Facts" are bits of information that have the privileged status of metaphysically authorized legitimacy. Facts are the result of intersubjective agreement about the mode of construction of definitions (operationalization). Under the auspices of this metaphysical dogma it is dictated that prior to encountering any phenomenon its definition must include how to spatialize (measure) it. Thus a belligerent ontological prejudice that exclusively favors the eye, is built into any acceptable mode of identification, discussion, and "knowledge." This prefabricated presumption about the metaphysical status of truth strongly prejudices what claims can and cannot count as "legitimate" knowledge. The metaphysical rules that are laid down prior to any investigation manifest the form and valued (acceptable) construction of "scientific," "objective," and so-called "value free" discourse. One of the essential and identifying qualities of "scientific" claims as such is their uniform reliance on spatial metaphysics. For any phenomenon to be a legitimate subject/object of study it must be measurable. ***If the ontological status of the phenomenon is such that it has no spatial extension, like an opinion or an attitude, then it must be redefined (metaphysically forced) in such a way that it can become measurable by definition (a priori).*** This is the metaphysical prejudice of positivistic constructivism which is rejected by Husserl. In the interest of validity, Husserl prefers to accept the phenomenon on its own grounds.

"Positivism" is a blatant valuation which implicates via contrast an epistemic negativism or nihilism. If meaningfulness means to be measurable, then existence by definition, shall be reduced to physicalism (spatial extension). However, and quite absurdly, while positivism was invented in the eighteenth century as an attempt to combat social and moral anarchy (evil nihilism) by making things manageable (reducing everything to a uniform metaphysical substrate available for division into consistent units of measurement), in the twentieth century it has embraced "value freedom" and an attitude of "disinterestedness." Mathematization has its own ideological agenda for the most basic form of politics is the process of defining what will count for reality. Who can argue with reality? What "is the case" has so much imperative force that it is often presumed to be "beyond question." This is the dictatorship of Reality. Scientific knowledge, which amounts to nothing other than a specific style of constructing and compiling claims about past observations (its application is more appropriately called "technology") relies upon trust. This is unavoidably the case for not every scientist can duplicate and personally vouch for the veracity of science as such. As Edmund Husserl (1913) demonstrated, the ultimate origin of all knowledge is subjective direct awareness. Thus, science depends on the communicative formation known as "testimony" which roots it in the life-world along with all other actions and disciplines such as history and philosophy (Campbell, 1776).

However, the logic of extrapolation can be followed in reminiscences (journal articles that report rationale, procedures, and findings) that are accepted as *being* valid. This form of acceptance, without direct personal experience, is faith. The privileged ontological status accorded to intersubjective agreement is essential to truth defined as consensus which presumes a type of competence and conformity of communication style which is often and erroneously called "pragmatic." To equate competence with conformity is hardly pragmatic especially if we accept the fact that change requires deviance and that humans are curious by nature (Kuhn, 1962). The "motors of change (history)" have always been actions that are not redundant (Krippendorf, 1975). "Leaders" whether in the arts or sciences are by definition not followers. What marks a "genius" is a distinct lack of conformity to old styles of thinking. Geniuses (a particular type of modern ego) are revolutionaries (Gadamer, 1960). But for leaders to exist there must be followers who presume a shared reality, a common semantic structure that allows them to comprehend and imitate. Competing realities compete by sharing a common rhetorical field. An essential aspect of this process of knowledge production is the standard which claims legitimacy as based on "adequate evidence."

Husserl (1913) more than any other thinker dared to confront the problem of the origin of knowledge as being direct personal experience. As Francis Bacon (1937) recognized in his outline of "idols" which lead to error, Husserl faced the dichotomy of absolute true knowledge versus permanently provisional supposition based on limitations inherent in the human condition. If it is true that the origin of all knowledge is direct personal (subjective) experience, and if all individuals are unavoidably limited by talent, intelligence, level of education, physical constraints, et cetera, then one cannot escape the conclusion that evidence for claims can only be "partial." However, partial awareness may be "adequate." This is so unless one ascribes to a notion of transcendental truth which exists in some sort of communal "mind" manifested as transpersonal knowledge like objective science.

Despite an appeal to transpersonal knowledge which may be characterized as a shared hermeneutic horizon, absolute knowledge remains beyond or inclusive of all possible horizons. Regardless of the number of samples compiled, logic dictates that simply collecting and averaging fundamentally limited perspectives cannot lead to truth. Adding error upon error can only lead to error. Therefore, the consensus theory of truth has been, by force of logic, rejected by Husserl as an adequate source of knowledge, adequate that is if one is seeking an apodictic ground for claims. This does not deny however the power of popular opinion. Indeed, much that passes for science is actually fad and fashion which drives publications and the granting of research money and position within the academic community.

However, for the intrepid inquirer, the problem remains, if all claims must be provisional or "partial," then what standards or criteria can distinguish between adequate and inadequate evidence? This epistemological problem remains cogent for it lurks behind all mediated/methodical claims to fact whether they be made in casual conversations, newspapers, law courts, or academic journals.

INTERSUBJECTIVE AGREEMENT AND ADEQUATE EVIDENCE

Husserl (1913) presumed a sense of "partiality" in his theorizing about direct experience (the only kind) which exposes a perspectival bias that segments reality into parts. According to standard (perspectival) semantic theory these parts are meaningfully grasped as oppositional. In this sense, part is ontically distinguished from whole, paradigm from syntagm, diachronic from synchronic, subjective partiality from objective totality, relativism from absolutism, secondary from primary qualities, et cetera. Likewise, "fulfillment" of intuition, meaning direct awareness, diacritically signifies emptiness. This logic belies the classical dichotomy of presence and absence which is transcended by the seemingly paradoxical ontic condition of a presentiated sense of absence.

Before continuing, it is important to clarify the difference between *gegenwärtigung* and *vergegenwärtigung*. Agreeing with Ludwig Landgrebe's (1981) distinction, the usual rendering of the two terms as "presentify" and "re-presentify" is rejected in favor of "presentiate" and "presentify" respectively. That is, *gegenwärtigung* must be contrasted to *vergegenwärtigung*. *Gegenwärtigung*, or presentiating, designates the impressional phase (primal now) as different from the retentional and protentional phases (primal past and future) of the act of making something present (*gegenwärtig*). Furthermore, presentiating is fundamentally different from representifying (*vergegenwärtigung*). Presentiating is distinct from a second act of making something which is absent, present to consciousness, as with recollection and anticipation.

According to Landgrebe, the *ego cogito* manifests both acts simultaneously as when he writes, "in every present (*gegen-wrt*) I know my life in both past and future" (quoted by Welton, 1981: 92). What is revealed here is an achronicity (an extrapolation from Jean Gebser's theory of the *achronon*) of the conditions of temporal constitution as being transcendental in the most radical sense of this term (Gebser, 1953). ***The synthetic ability to constitute flux into linear sense is itself neither "in" nor "out" of time, neither eternal nor finite in any spatial sense, but the very condition for the standing streaming of the ego cogito.***

To experience an absence is to always already presume a phenomenon that is not present. Absence expresses the sense of a loss and it simultaneously signifies a past present as a presentification and a present absence as a presentation. Thus absence proves to be temporally more complex than simple hypothetical linearity, hypothetical primal past. This state of affairs (absence) is different from the invisible which makes no such presumption—a "prior" knowledge. Invisibility here is not limited to the optical sensation of the spectral array that sighted people perceive, but rather it is being used in this paper as a metaphor for conscious awareness without metaphysical specification.

The invisible partakes only of presentation, that is the primal now. Partiality involves the invisible rather than the absent. That which is only partially fulfilled offers itself as a clue to the rest which is present *as invisible* like the bottom two thirds of an iceberg.

Before proceeding any further an unfortunate ambiguity in phenomenological literature must be confronted and clarified. Far too often authors have used intention and intuition interchangeably. There is even some of this in Husserl. For the purposes of this paper, intention designates the active aspect of consciousness. To discuss the relationship between intentionality and constitutionality requires another paper. Suffice it to say that intentionality is the drawing of the correlation between the noetic and noematic polarity. This is in line with Franz Brentano's (1907) original conception of intentionality and this description also accepts the Husserlian model of the correlational structure of experience.

Additionally, intuition in this paper may be sensuous or categorial. The relationship between intention and intuition (including sensuous) is not always clear in phenomenological literature. Often one (intuition) is conceived as being or not being "filled" by intention. However the literature often speaks of "partial" or "full" or "empty" intentionality as well. In this paper, intention is generally conceived of as being either fulfilling or not fulfilling only in relation to an intuitional correlate. The determination is made by degrees of expectation fulfilled. What is given is compared to projected expectation. Such comparison may be just as passive as passive constitutionality. When this occurs we say that we have been completely surprised by the given.

We now continue our investigation of the sense of partiality. Partially fulfilled intuition implies referentiality, and a whole that is fully given via the mutual implication of its partial appearance. It has the sense of a potential about it, a potential wholeness that may be suspected or sensed with certainty, i.e., I am certain that there is more to this phenomenon (that is wholly presumed) than "meets the eye." The idea of partial fulfillment expresses the ontic requirement for experience as dualistically perspectival, what Hans-Georg Gadamer (1960) calls "prejudice." Without a perspective (prejudice), experience can have no meaning—there can be no experience—no integration of new information. The meant of experience is the consequence of a particular "point-of-view."

Partial fulfillment implies the potential that through moving bodily or through free-variant imagination, the whole can be sensed in coincidence with some intuited identity that transcends contingency. Once sensed, the whole can be named as an identity across the diversity of noemata. All naming is a

transcendental process that unifies all possible adumbrations, including those only hinted at through implication, into an identity.

The transcendental constitution of a whole with the sense of potential is a necessary pre-condition for movement and free-variant thinking. Intentional acts can be guided by intuitional sense which, at least in the *Logical Investigations*, are presented as always already categorial (*anschauung*). Furthermore, the sense of intentional fulfillment being only partially realized is itself fully available as a sense of being partially/potentially whole. Thus one can speak of a **fully intended partiality without contradiction**. In other words, that I sense that thus and so is only partially given is itself self-evident. Partial fulfillment is itself reducible to a category of experience. The most basic faith of inquiry is that there is something to be discovered that has not yet been experienced and this "something" is not limited to any metaphysical prejudice, it may be a new geometry or a new star. Thus we can say that not only is there an intuition of partiality and potentiality but that these phenomena are presumed by inquiry and curiosity.

THE SPATIAL PREDICATES OF EVIDENCE

This short phenomenology of partiality reveals the presumption of a metaphysic. The spatial metaphors of "full," "partial," and "empty," that are used to predicate intuition betray a metaphysical prejudice in Husserl. This choice of wording reveals Husserl's modernity. But more than this, it also reveals that he did not succeed in escaping the influence of Descartes' metaphysics of referentiality and coincidence. This is evident here as well as in the separation of the immanent from the transcendent and the noetic from the noematic. What is clear here is that Husserl is insisting that the field of transcendental experience (categorial intuition as compared with sensuous intuition) is correlated with the world and that neither is fully intended but always mutually implicated. Act-consciousness always implies the consciousness of horizons.

Despite Husserl's repeated insistence that categorial intuition and sensuous intuition are always given together, and that intentional acts are always directionally copresent with the noematic "object," he fails to satisfy the question concerning the metaphysical appropriateness of spatializing metaphors such as "directed toward" and "empty signification."

The consciousness of the world as the "total horizon" is always presentiated but never impressionally presentified because transcendental consciousness and its correlate world horizon are not limited to any metaphysical imperative. However, the issue of correlation brings us directly back to the problem of partiality and fullness. If consciousness and world are always given together, then how do we recognize them as different? In what way do these words "consciousness of" and "world" have any meaning if not as different from each other. Although the Husserlian construct of noema and noesis is presented as a polarity the demands of active consciousness and passive phenomenon seems to pose a duality in order for its most basic theoretical components to make sense. To be sure, the Husserlian duality (qua polarity) is said to be necessary for the appearance of either side of the Cartesian split. The noetic-noematic structure is a necessary condition for the possibility of experiencing either the subject or the object. But the polarity becomes more distinct when partiality of intuition is the issue. Partiality suggests that the noematic "content" is separate from and progressively revealed by the "scanning

ray" (noetic act) of intentional consciousness as an active perspectival observer (Husserl, 1913).

Husserl claims to articulate a level of constitutionality that transcends all possible metaphysical positions while belonging to none. Yet, consciousness is revealed as a consciousness *of* because intuition is not always fulfilled. But how can we know when this is the case, and therefore, how can consciousness be theorized as *somehow* separate from the world it is of? ***If all that is given is what is given, then how could one know that what is given is only partial unless the whole is also given, thus enabling comparison?***

Husserl's claim that the experience of any contingent thing manifests a clue to its identity given as categorial intuition once again suggests a separation, a lack of identity between the sensuous and the categorial which seems to be determined, ontologically. There is an essential difference between the sensuous and the categorial. Their respective modes of appearing seem self-evidently given as essentially different.

The Fully Given Invisible

Partial intentionality can be adequately thematized only as a fully given phenomenon. But it is a phenomenon that has the essential sense of potential and anticipation about it. But anticipation of what? That which is hypothesized to be necessary for absolute intentional correlation with full intuition? The rest? My emphatic answer is yes! "The rest" is a fully given sense which means something present as invisible and it is precisely this nonempirical field of the unknown that enables, or is the precondition for, all exploration. For instance, empiricism (and in fact all modes of inquiry regardless of metaphysical prejudice) must presume the nonempirical in order to make sense and to be "exploratory," "satisfying," and "*fulfilling*."

How is this field of the invisible present? The "rest" is presentiated via implication. The intuition of "the rest" is *not* partially fulfilled but *fully given*. Obviously, to claim to have only partially fulfilling intentionality of something presumes to know what absolutely fulfilling intentionality means. Husserl's claims about empty and partial intuition seem to presume the Cartesian/Kantian quagmire of hypothetical postulation without the relatively simplistic metaphysical distinction between the subject and the object. Husserl's duality is more logical than metaphysical. Nevertheless, partiality is a spatial metaphor that may be inappropriate as a predicate to intention or intuition because intentionality is always already fully given. It is only intuition that may be given with the sense of some degree of emptiness. Because of this, to speak of degrees of givenness also betrays a numeric/spatial mentality.

Hypothetical Thinking and Anticipation

It is at this juncture that the key to Husserl's partial success at breaking away from the earlier dualisms of Descartes and Kant can be grasped. For what we are exploring here is nothing less than the essential nature of hypothetical experience itself. It is the essence of the phenomenon of hypothetical experience itself to have the sense of anticipation and partiality. If we remain true to phenomenology's radical antimetaphysical charge, then we must admit the sense of the partial as a fully given experience. Phenomenology, in other words, does not deny the

experience of hypothetical thought. Indeed, because only phenomenology rigorously guards against unquestioned metaphysical presumptions, only it can explore the essential quality of hypothetical experience. The irony is that although phenomenology does not rely on hypothetical statements, the "empirical sciences" do. This is why phenomenology is logically consistent while empiricism is absurd.

Likewise, the experience of potential, anticipation, and suspicion are fully given. They completely betray the essential nature of hypothetical conjecture. Thus hypothetical predication is fully given. If intention were only partially given one could not know it because the existence of the unconscious is not acceptable to phenomenology's rejection of hypothetical speculation as having any truth value. However, we can explore the phenomenon of hypothetical speculation while the empiricist who depends on it cannot.

Hypothetical Experience

Partiality always implicates the invisible present—the whole predicated with the sense of potential and hypothesis. Furthermore, the name "hypothetical" given to a certain kind of experience presupposes a manifold of characteristics that are wholly and essentially presupposed and identified as such. The intention of partiality and hypothesis is thus totally exposed, and made available for analysis. The issue of exposure, that is the need for a methodical process called phenomenology itself, demonstrates that what is given is not already transparent or totally given. The requirement of assuming an unnatural attitude in order to expose metaphysical prejudice betrays the invisibility of "passive" constitution. Passive constitution, as well as active constitution, is similar to various degrees of intentionality. The very sense of the passivity that qualifies some experience cannot be appreciated until it is revealed by reflexive effort and then only by contrast to the sense or quality of active consciousness.

But we are not out of the woods yet. For the Husserl of the *Logical Investigations*, a type of Cartesian dichotomy between intuition and intention betrays a metaphysical mentality present in this work. Furthermore, the referentiality presupposed by intentional acts also betrays a latent dualism and spatial metaphysic. As Husserl clearly insists, meaning must be kept separate from perception.

If we may trust our arguments, we must not only draw a general distinction between the perceptual and the significant element in the statement of perception; we must also locate no part of the meaning in the percept itself. The percept, which presents the object, and the statement which, by way of the judgement (or by the thought–act inwoven into the unity of the judgement) thinks and expresses it, must be rigorously kept apart, even though, in the case of the perceptual judgement now being considered, they stand to each other in the most intimate relation of mutual coincidence, or in the unity of fulfillment (Husserl, 1900/1970: 685).

This separation is stressed repeatedly by Husserl as when he discusses intentional essence as the reference pointed to by mutually belonging percepts actively realized as the "this–meaning" of the object. Perception only realizes the possibility of an unfolding of the act of this–meaning with its "definite relation to the object" (684), while the meaning is not thus constituted, "nor even part of it" (684).

This "definite relation" begs the question and implicates the separation between the intuitional essence and intentional contingencies. The relationship is not merely "coincidental" as in the sense of being accidental or purely arbitrary however, for "perception is an act which determines, but does not embody meaning" (684). Perception only fulfills intuition but is not identical with it for this would mean committing a category error by confusing the two categories of absolute and contingent experience. Thus a photograph of a car can mean the same car as the one I am now sitting in while I hold the photo. This is obviously prior to, or transcendent to any ontifying act in the form of methodology or natural attitude.

This also begs the issue that lies at the heart of hermeneutics. Can one have an absolutely meaningless percept? We know that Gadamer's answer is an unequivocal no. Gadamer argues for the inevitability of perspectivity, that all perception always already manifests a unique perspective and that it is perspective that *enables* passive constitution to occur. So, for instance, the notion of an objective fact that harbors no prejudice is literally nonsensical. But perspective always already implies that more lies outside of the horizontal boundaries. It is this sense of the implicated as invisible far shore (that which is beyond the horizon and also defines the horizon as a horizon) that motivates exploration. But each exploration itself is marked with the style of the perspective that initiates it. Thus openness is enabled but in a particular way and indeed, without a starting point the journey cannot commence. The starting point is both necessary for the journey of exploration and prejudices the exploration. Thus blind and enabling prejudices depend on each other for sense: they are coconstituting. For Gebser, the causal priority of the constitution of perspective or perspectival constitution is a problem only for the spatializing and fragmenting modern mentality.

The problem of partially fulfilled intuition is an issue Landgrebe blames on Husserl's Platonism most emphatically expressed by his *Logical Investigations*. While Locke's tablet was pre-predicatively and pre-intentionally smooth, Husserl's is formatted with intuitional structures that prejudice intentional experience. To be sure, Husserl's metaphysics is not materialistic, but it is linear/spatial—structural. Husserl's position belies the presumed separation of the contingent and the essential which is carried fully into the paradigm that posits theory as that which explains contingent cases. This is in turn confounded by the problem of evidence which forces theory itself to be constituted as always contingent/provisional, at the mercy of future explorations. Thus, like a teacher whose student outgrows him, the theory that constitutes what evidence is "appropriate" can be changed by the force of the evidence. This is essentially the process of dialectical hermeneutics (dialogicality).

It is here in this relatively early effort that Husserl concerns himself with the dichotomy between the ideal logical conception and perception. At this stage in Husserl's thought the well known ambiguity of apodictic and adequate evidence circumscribes the problem of partially fulfilled intuition. For the Husserl of the *Logical Investigations*, only apodictic evidence was adequate. However, as the problem of partiality was revealed in a new way via his kinaesthetic investigations and more complexly his response to Wilhelm Dilthey's historicism and Heidegger's ontology, this issue of partiality took on a distinctly existential, that is to say, *essentially* existential sense. The essentially and necessarily perspectival nature of not only the kinaesthetic co-constitutionality of self and world horizon but also

linear time reveals the fundamental aspect of motive as being a search for additional evidence. Motive and the teleological nature of linear time as goal oriented (to be fulfilled) reveals Husserl's profoundly Western and modern (perspectival) prejudice.

THE ACHRONONIC (INVISIBLE) SOURCE OF TIME

However, Husserl's faithful modernity contains within itself a nascent post-modernity, for Husserl's revelation of the nature of transcendental ego, world horizon, and all fulfillments proves to be always "ahead," having the sense of always-already-but-only-potential. One is in short, motivated by the teleological sense of evidence that ideally can be apodictically and completely presentiated or fully intuited, but which always remains essentially ahead—essentially partial, essentially presentifiable rather than presentiatable. The profound consequence of this realization is the claim that everything that exists for the consciousness of... is always in the primordial future. Yet this presentification is presentiated as a *currently constituted*, essential sense-condition of the world. The sense of partiality is therefore a function of time spatially expressed via Husserl's Western linear conceptualization of living retention, living present, living protention. Meanwhile, the transcendental source defies diaphaneity by remaining also always "ahead," or to play on Fichte's analogy of the "red handedness" of the invisible center of the world horizon, the source proves to be an artful dodger. Thus Husserl and Heidegger prove to be well ahead of Derrida's deconstructive tracing of traces.

Furthermore, the invisible yet ever-present center of the world horizon including the streaming quality of it, is posited by Husserl as achrononic. The transcendental is itself neither in nor out of time. A gross analogy to the mediative aspect of consciousness is that computer memory banks retain information but are themselves not of the same order as that which is "saved" (presentified). Of course where this analogy breaks down is with regards to the self-constitutive aspect of consciousness.

The point to be made however, is that the transcendental conditions for the existence of a coherent stream of awareness, which expresses temporality, is not itself a temporal phenomenon (it is transcendently achrononic). It is the ever-present origin that defies presentiation and presentification. It cannot be caught red-handed, and it is this quality, which defies modern modes of thinking, that makes Husserl's transcendental far more radical than Heidegger or Derrida's linear temporics of trace and reductive lingualism.

But yet another problem immediately shows itself here. What does "being caught red-handed mean?" The invisible center of the world horizon, the transcendental ego is presentiated. Indeed, it is unavoidable. In order to appreciate Husserl's radicality we must understand that civilizational expressions (to use Gebser's terminology) are not merely traces of consciousness. Nor are they clues. Both "traces" and "clues," if interpreted from the attitude of the natural world, suggest a linear metaphysic, a linear temporics. But, the point here is that consciousness is *always already "caught red-handed" as implication*. "Grasping" consciousness is a futile effort only if one is assuming a spatial metaphysic that posits a fixed (synchronized) time that identifies existence (knowledge/truth) with physical extension—"thingness." But if this metaphysical prejudice is bracketed, as Husserl did, then consciousness as a process of implication and precondition for the identity

or sense of all phenomena (spatially extended and not) is not only "graspable" but unavoidable.

Consciousness is fully given and cannot be avoided because it is given through and with the immediate sense of trace and clue. Consciousness is not like the deer's hoof that left a print seven hours ago. It is not permanent in the sense of a physical thing, but is permanent as the precondition for any physical thing as such.

Clearly what is presumed by those who deny the existence of awareness is linear, spatialized time. By contrast, Husserl's choice of the word "clue" (and the now fashionable "trace") partakes in the metaphysical language of imprinting. According to this metaphysical notion ("clue"), that which leaves a clue is no longer present, and cannot be "caught," but only surmised. Yet, consciousness of the clue or the trace, and its temporal constitution as trace and clue is ever-present—unavoidably so. Consciousness does not need to be "caught," or "apprehended," or "grasped" for it is never absent. Its very presence has the sense of transcendental condition for... Our over-dependence on the phrase "consciousness of..." seems to have led us into a metaphysical habit of thinking in terms of object-things.

The appearance of consciousness is ever-present as the transcendental conditions for clues and traces; for permanence and flux. Consciousness is achrononic "processing," not thing. Likewise, perception is much more than simple "stimulus" which is a figment of the analytic (fragmenting) imagination. In the case of consciousness as well as perception, there is no-*thing* to be caught! In fact, the act of catching must be constituted by the very process it desires to hunt down. It is as if the hunter who is stalking the lion is riding on the lion's back and doesn't know it. No matter how the hunter tries he cannot find the lion, but his very trying is dependent on his feline mount. What enables our investigation of consciousness of... is being conscious.

The motive to seek further adumbrations, a distinctly perspectival sense of partial existence, is always experienced as a future project with an ideal goal of fully correlated (if not identical) intention with intuition. But it is the very and essential slippage of flux which outruns any such accomplishment as a once and for all fixation so that the issue of partiality remains as a paradoxically permanent aspect of human existence. The permanent quality is better expressed as being originary which does not partake of any temporal sensibility such as expressed by the term "permanent." Hence, the Aristotelian conviction in favor of probability—rhetoric.¹⁰

This is precisely where Heidegger and Derrida misinterpret Husserl's transcendentalism. Granted, the ancient word is perhaps an unfortunate choice, however, the point is that to be transcendental does not mean to be eternally permanent but to be the source of time itself. Flux is not the problem but a

¹⁰ It must be recalled that while empiricist "scientists" often claim Aristotle as their champion against Platonic idealism, Aristotle maintained the position that science/art/philosophy are essentially different from rhetoric because they make true claims derived from infallible premises (syllogistic reasoning). By essential contrast, Aristotle argued that any claim that relies on enthymematic probability is by definition rhetoric. Therefore, Aristotle would define what passes for statistical "science" today as mere rhetoric. Furthermore, the modern empiricist is self-contradicting because she must deny the existence of both inductive and deductive modes of thinking because neither form of reasoning is an empirical thing.

consequence. Achronicity is the answer. It is unavoidable. It is not the tracing of traces but the very precondition for tracing. Flux appears to be a problem only when we are obsessed with fixation.

We are always faced with perpetual beginnings. The idea of identity, as the perfect correlation of intuition and intention turns out to be always already complex. This is the source of the complexity of perception as compared with the hypothetical simplicity of stimuli.

INTEGRALITY AND THE PROBLEM OF ONTIFIED TIME

The very foundational conditions for apodictic knowledge proves to be so slippery that Husserl must abandon the identity of apodicticity and settle for the epistemic standard of "adequacy." And yet, he was often depressed because he apparently failed to understand the full import of his work. For he did achieve apodictic knowledge concerning identity and adequacy. The distinction between the two, reveals the problem of partiality as the very problem of ontified time. That which is never fully given remains ahead of all efforts to naturally ontify (presentify) them.

In other words, Husserl was disappointed not by his failure but by the fact that his own natural attitude prevented him from appreciating the full consequence of what he had achieved. Thus the streaming nature of being-in-the-world, nay of the world as mine, demonstrates the essentially partial, that is perspectively existential, sense of transcendental consciousness and its correlate the total world horizon. Neither is given as a monolithic ground. Ground turns out to be both indubitable and ungraspable in the natural sense. Husserl brought us to the very brink of an entirely new attitude—the integral.

World horizon and transcendental consciousness of "it" are mutually implicated. Likewise, past, present, and future are mutually implicated so that partiality always presupposes the whole. *The condition for implicate sensing may be named transcendental consciousnessing.* Recall that naming was earlier defined as a transcendental process. Thus, what is being stated here is a highly self-reflexive process of constitutional identifying.

Anticipation and retention as partial fulfillments lead to expectation as a temporal expression of motive. Expectation of what is not present, is future oriented but yet based on retention. The mutual implication of the two senses have expectation as their present nexus. For instance, I expect "X" to occur on the basis of past experience. This is essentially rooted in the perspectival/existential personal kinaesthetic awareness of spatial movement perceived as time. Although the adumbration of free-variant imagination can also demonstrate identity through difference, it lacks the same temporic quality as kinaesthetic constitution because it is not essentially spatial.

The space/time continuum is an abbreviated version of the modern Western spatialized sense of time. Because it is spatial, the modern sense of time leads to perspectival fragmentation into a corpuscular agglomeration of moments. The primary consequence of the monadism of kinaesthetic physicalism is partiality. This is the essence of the metaphysical prejudice that Husserl failed to escape. He failed because he did not fully expose and explore *the relationship between space and time* which defines the predominant metaphysical prejudice of the modern world. The only way to do this, as Gebser demonstrates, is to see time through

space and vice versa. Even here, the concept of "through" fails to bring to appreciation the idea of diaphaneity which Gebser attempts to illustrate.

What must be presentiated is the transcendental, as the achrononic and aspatial condition for space and time. For the modern, this tandem of space and time is co-constituting. To presentiate the transcendental, however does not mean that we must launch a safari. Rather, we only need to appreciate the necessary conditions for the process of implicate experience itself (co-constituting).

Another point that must be remembered, is that the transcendental origin of the constitution/integration of all perspectives reveals them to have the sense of being adumbrations. Adumbration means partiality which implicates wholeness, present as an invisible sense of moving horizon. When I spatially turn around, I expect to see "the rest" (the other part) of the room which is expected to be there "at rest," with duration if not permanence waiting to be discovered and rediscovered. Rediscovery, which presumes duration, is the necessary condition for reliable "knowledge." As adumbrations coalesce into identity which transcends contingent direct "personal" (empirical—for that epistemological prejudice) "observations," the phenomenon is given as intention. It is "prior" to adumbrations that slip into the past which is what I do not and cannot now spatially see. As I turn, what was before my eyes is now presumably behind. I am motivated to move in order to achieve the coalescence of identity. It is the perception of the whole as identity, that I expect to behold and this expectation motivates me.

A simple sequence of discrete (unrelated) stimuli cannot, by definition, constitute perception as such. Curiosity may be essentially understood as an active pursuit of further partialities/adumbrations with ideal intention fixed as expectation—a position that may well be thwarted thus supporting the idea that perception "determines but does not embody meaning" (684).

Partiality presented as adumbration essentially demonstrates the always alreadiness of internal-time consciousness as slippery adumbrations and imaginative variations passively and actively constituted into perception.

The reason Husserl abandons apodicticity for adequacy is because he demonstrates that the givenness of identity is also always slipping or fluxing. But he apparently failed to realize that this fact is itself apodictically given even though it is not "fixed" in the sense of the natural attitude. The awareness of the slippage is itself slipping in so far as it is presentified as a phenomenon itself, for the correlate to this experience of flux. The consciousness of flux, is itself always ahead. The identity of consciousness of... and the "object" is precisely what ancient Taoists wished to reveal with their question "what is blowing, the wind or my awareness of the wind." The origin remains pre-ontified, nontemporalized, nonspatialized. "It" cannot be located spatially or temporally but, diaphaneously, it is inescapable.

The paradox here is that the slippage can be conceived of essentially. It is a permanent condition which is constituted as slippery and directional. From this realization, one can begin to build back from the merely adequate sense of partiality toward the sense of apodictic fulfillment.

Experience is essentially partial. This new way to the transcendental field (along with the positive doubt back to the *ego cogito* and the bracketing of the natural thesis) is to grasp the flux as a permanent condition for the appearance of all phenomena. Essentially, all phenomena are temporal, that is fluxing including the

artful dodger, the transcendental ego. Fluxing is the fundamental predicate to the transcendental experience. "It" constitutes the "clues" and "traces," and so it is ever-present as the invisible requisite to visibility.

IDENTITY AND SYNTHESIS

Rather than battling time in order to render a timeless truth, Husserl brings us to appreciate flux as constituted and constituting, just as Gadamer champions prejudice as a necessary condition for experience. Prejudice as a categorial origin should not be mistaken for contingent/temporal prejudices. Likewise, the *ego cogito* remains invisible yet indubitable. Because he missed the radicality of the achrononic quality of the *ego cogito* Jean-Paul Sartre (1956) confused the invisible with nothing.

Rather than enumerating adumbrations as monadic perspectives and lamenting partiality as only enthymematic "degrees of truth," the essential fact of truth is that it is inescapably given as a partial intuition which presupposes a wholeness that is made present through reflection on the essential condition of the intuition of partiality as a universal category of experience. To speak of adumbration(s) in the plural is to fall into the trap of ontification and naturalization. Such expressions reveal the modern propensity to spatialize (existentialize) time as a series of discrete events that must then somehow be synthesized into an identity. Rather, it is suggested here that the fulfillment of identity is systatically co-constituted with the sense of partiality. To speak of an essentially perspectival quality of experience is to implicate a nonpartial sense of world horizon. The sense of the whole as background, is inextricably implicated with the sense of the partial as foreground. One does not make sense of one without the other. Text and context are co-determining just as movement implicates the horizon as an always present yet changing "boundary." Thus the whole truth is about permanent potentiality, essential contingency, and what is revealed is an apodictic certainty about the mere adequacy of presently "held" evidence.

For science, the appreciation of the essential provisionality of evidence as partiality is the temporic precondition for curiosity, discovery, motive, and life. The foundation of science and life alike is the achrononic/aspatial preontified conditions for time and space.

Insofar as Husserl and Gebser have demonstrated that science is of this world and not about it, scientific certainty (which has been deemed worthy of discussion by practically all of the great theoretical thinkers of modernity from Bacon to Wittgenstein to Quine to Derrida) its meaning for the world ironically presupposes a provisional status as the necessary condition for knowledge. Scientific knowledge which presumes nothing more than probability is according to Aristotle, mere rhetoric. It is persuasive, authoritative, and powerful.

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FROM CONSCIOUSNESS TO TECHNOLOGY: CYMATICS, WAVE PERIODICITY, AND COMMUNICATION

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For a man (sic) to change his basic, perception-determining beliefs—what Bateson calls his epistemological premises—he must first become aware that reality is not necessarily as he believes it to be. This is not an easy or comfortable thing to learn, and most men (sic) in history have probably been able to avoid thinking about it. But sometimes the dissonance between reality and false beliefs reaches a point when it becomes impossible to avoid the awareness that the world no longer makes sense. Only then is it possible for the mind to consider radically different ideas and perceptions.¹

Mark Engel

TECHNOLOGY AS A PRODUCT OF ATTITUDE

Consider the figure of speech that technology is an "echo" of consciousness. In this essay, that suggested relationship will be considered in the light of 1) common sense reasoning 2) examples of cross-disciplinary agreement and 3) evidence from the new science of *cymatics*, a branch of acoustics which considers vibration, wave periodicity, and their effects.

During the twentieth century, numerous schools of thought have held that visible forces such as machines, classes of people, social institutions, bureaucracy have controlled or shaped the consciousness of humanity. Skinnerian determinists, strict Marxian materialists, and some technocrats have argued that consciousness is the offspring, not the parent, of technology, or of social programming assisted by technology. The thesis of this paper does not contend with their assumption, but rather holds that theirs is a special case within a smaller context. Below, a much larger context will be examined.

Within that larger context it may be suggested that just as *vibration* produces *form*, so *attitude* produces *technology*. In symbolic scientific shorthand, this hypothesis could be abbreviated $V/F = A/T$ or *vibration* is to *form* as *attitude* is to *technology*. Later concrete evidence for this claim will be provided from the science of cymatics. At the outset, however, it is necessary to understand the conventional perception of technology and consciousness.

OPTICAL AND COGNITIVE ILLUSIONS

A primary illusion within human perception is the imagined reality that technology and other physical materials exist in a solid state, rather than within a liquid, gaseous, mixed, or undefined state. Such an illusion holds that machines, media, buildings, and other *objects* should be excluded from the wisdom of modern physics, which holds that sub-atomic interaction, electro-magnetic fields, wave mechanics, and energy transmission are ubiquitous.

Human beings appear to be solid. Yet we know that persons are comprised primarily of liquids, that their survival depends upon gasses, and that their atomic and molecular structure involves dynamic energy fields difficult to fully comprehend. Like people, machines *only appear to be solid* within the range of daily perception: in the redirected words of Erick Jantsch, "Structure is an

incidental product of interacting processes, no more solid than the grin of a Cheshire cat." ²

In challenging the notion that technology is a separate solid, one can posit that technology exists as much *inside* as *outside* of human beings. For example, according to George Feuerstein, the interdisciplinary thinker Jean Gebser "distinguishes between *Innertechnik* (internal or psychotechnology) and *Aussentechnik* (external or exotechnology). For Gebser, *Innertechnik* and *Aussentechnik* are naturally complementary—a complementariness that was turned into a duality through the Cartesian split between the *res extensa* and the *res cogitans*, which is endemic to the mental–rational consciousness."³ Such a Cartesian duality or split seems congruent with the notion that outer forms (cf. technology) and inner forms (cf. consciousness) are dissociated.

For Gebser, *outer* technology is described by human measurement and seems to exist within the human construction called "space"; *inner* technology (cf. consciousness), however, exists within an immeasurable, spaceless domain. In Gebser's own words within *Verfall Und Teilhabe*.

The playground of the measurable and thus of our technology is space, which came to our awareness at that time (of the Renaissance) and which was consequently discovered by us. The playground of the non–measurable and thus of Asiatic technology is the spaceless interior (of consciousness) ⁴

Such an awareness of *inner and outer* technology can be instructive when considering communication, in which *inner* (thought and feeling) communication precedes *outer* (interpersonal or mass) communication. But, in taking this notion one step further, is it not possible that both inner and outer communication (and technology) are aspects of a larger communication process? Birdwhistell notes: "An individual does not communicate; he (sic) engages in or becomes part of communication. In other words, he does not originate communication; he participates in it." ⁵

Similarly, technologies, however they are defined, neither communicate, nor originate "communications". They exist within a larger, inseparable ocean of wave vibration; there is no evidence to suggest that technologies are composed of material or energy distinctive from other solar energy–matter.

The dream that technologies, consciousness, or even systems are separate components worthy of isolated inspection is rudely disrupted by a plethora of post–Newtonian discoveries. Physicists such as Heisenberg, Planck, Love sick, Einstein, Waskom, Glashow, Bohm, and Sheldrake, among others, may be summoned to the witness stand. For the moment, and for this essay, however, let us introduce the Swiss scientist, Hans Jenny, whose research in cymatics, a branch of acoustics, is especially instructive and germane. His findings imply that all objects, organisms, and phenomena presently known to human beings, are illusionistic in form.

Jenny's cymatics experiments, which draw upon physics (especially acoustics) and other branches of the natural sciences, suggest that the seeming physical components of observable reality are comprised of and by various levels of periodic vibration. In Jenny's words

Events do not take place in a continuous sequence, in a straight line, but are in a continual state of vibration, oscillation, undulation and pulsation. This also holds good of systematized structures. On the largest and smallest scale, we find serial elements,

repetitive patterns, and the number of fiber stromata, space lattices, and reticulations is legion. And if we turn our eyes to the great natural domains, periodicity expands to include the ocean itself. In organisms of course, we find pure oscillatory phenomena rising to a higher plane in the formation of sound; and language itself appears on a still higher plane within the same field. If an inventory were to be drawn up of periodic phenomena in the realm of the organic, it would have to include the whole scope of morphology, physiology, biology, and histology. But we mustn't forget the inorganic world here we encounter vibrations in a pure form, more specifically in waves. In the vast spectrum extending from gamma radiation, through the ultraviolet and visible light to infrared (heat rays) to electric waves (microwaves and radio waves), we have a field which may be termed periodic in the purest sense of the word. Periodic structure is a salient principle in, say, the space lattices of mineralogy. What insights into vibration and periodicity have been gained in the vast range extending from the cosmic systems (rotations, pulsations, turbulences, circulations, plasma oscillations, periodicity of many kinds in both details and the whole) down to the world of atomic or even nuclear physics (shell model of nucleus; nucleon structure; organization of meson clouds)! Here again the idea of periodicity is all embracing. ⁶

If Jenny's vision is accurate, then the components of "reality" discussed by intellectuals—technology, institutions, classes, resources, etc.—are all analogous to characters in a television program: they appear to interact but are in fact part of a larger invisible broadcast signal. The fact that each television character appears separate is meaningless in the larger scheme of things where all broadcast television images are seen as the visible outcome of invisible waves.

Continuing this analogy, one way of viewing the new paradigm, as in this case presented by Jenny, is to visualize that all form—human, mineral, vegetable—is broadcast throughout the solar system (and probably beyond). Thus it is only meaningful to discuss the *effects* "television" has on "children" or the "computer" has upon "institutions" or vice versa in a *fictional* context, that is, in the way one discusses the relationship between "Kermit" and "Miss Piggy" or between "Roger Rabbit" and other "Toons"—as shared illusions translated at the surface level of human perception.

If vibration interpenetrates the discernible whole, nothing short of a revolution in perception is required to understand notions such as communication and technology: each medium, institution, director or auteur, system or process, only *seems* to be an agent of change, cause, or effect. All forms proceed upon a channel of vibration like a fleet of noodles on a sea of whirlpools. More importantly, different forms originate from specific vibrations, just as different notes are emitted from a trumpet when the musician changes the vibration between the lips.

More startling than our existence as pulsation patterns is the implication that individual consciousness itself, like a local television station (in the smaller context) is programming or recreating the form of our environment. To discover common sense analogies of this invisible/visible relationship is not difficult: hidden winds contour the trajectories of falling leaves and rising kites; magnets and their invisible fields control the direction of adjacent iron filings and distant compasses. Still the notion that consciousness *preforms* the environment, like winds and magnets, is challenging, as is the supposition that we and our technologies are delicately held together by intangible waves.

EXAMPLES OF TRANS-DISCIPLINARY AGREEMENT

The notion of ubiquitous vibration may be traced to the pre-Socratics (among others), for whom the phenomenon of an endless flux was not atypical. Later Plato's vision of the "ideas" of things preceding or superseding (depending upon translation) things in themselves is a discernible great-grandparent to the axiom "vibration adumbrates form."

Moreover, Aristotle's description of *formal cause* fits the picture of an invisible *mold* (a deceptively static image) shaping the time and space of material activity. Even the ancient Hebrew, Oriental, and early Christian references to "Heaven" (or some synonym) and "earth" (or the like) may suggest two realms, say, of the visible and invisible, or of vibration and form. At the discrete level of human function, this polarity might well include attitude (cf. consciousness) and environment (cf. technology). Thus, within a more scientific sign language, one might abbreviate $V/F = A/T$. In essence, vibration is to form as attitude is to technology.

What is the relationship between vibration and attitude? For Yale technology historian, Siegfried Giedion, vibration is perceived at the level of human consciousness and termed attitude. In *Mechanization Takes Command*, Giedion writes:

Tools and object are outgrowths of fundamental attitudes to the world. These attitudes set the course followed by thought and action. Every problem, every picture, every invention, is founded upon a specific attitude, without which it would never have come into being. ⁷

Transposing his perception from consciousness to society (i.e. collective consciousness) and from technology to architecture (i.e. collective shelter technology), Giedion notes in *Space, Time, And Architecture* a similar relatedness between the intangible and tangible. In both instances Giedion refers to a transparent agent which permeates his subject matter no less than his discipline.

Architecture can give us an insight into this process just because it is so bound up with the life of a period as a whole. Everything in it, from its fondness for certain shapes, to the approaches to certain building problems which it finds natural, reflects the conditions of the age from which it springs. ⁸

What are these "conditions of the age" of which Giedion speaks if not pre-physical attitudes and atmosphere?

Another prominent historian of technology, Lewis Mumford reveals a similar premise when he writes "Behind all the great material inventions of the last century and a half was not merely a long internal development of technics: there was also a change in mind."⁹

Like Giedion and many others, Mumford thinks of the immediate vibrational envelope containing or preceding technology in socio-cultural terms, as he indicates in *Technics and Civilization*: "Not merely must one explain the existence of the new mechanical instruments: one must explain the culture that was ready to use them and profit by them so extensively."¹⁰ In short, such instruments are a response to, or utterance by, pre-existing conditions.

Academics like Giedion and Mumford, who see their discipline as related to other disciplines, or their subject matter as related to society/culture, and not rare: communication, for example, is often perceived as an interdiscipline.¹¹ But the perception of an overarching discipline, within which all disciplines are carried by

a common current (and all thinkers/researchers tune in overlapping segments of the same broadcasts as their subjects and surroundings), is both novel and disorienting.

In consulting "other" disciplines, one is reminded that the notion of an invisible essence existing within visible forms is not uncommon. Einstein's formulation of a cross-over point between energy and matter ($E=MC^2$), for example, would apply equally to human brains and technologies. Genuine understanding and application of (post-) Einsteinian research would radically alter the very premise of both disciplinary and interdisciplinary thinking. Moreover, the discoveries of (post-) Copernican astronomy have had radical implications for human thought. Nevertheless, the current disciplinary methodologies still act upon the assumption that the earth, if not its inhabitants or their tools, is the focal point of the universe.

Given the findings of astronomy, nuclear physics, biology and chemistry, perhaps human beings need not only a larger (macro) perspective and smaller (micro) perspective; they also require a *change of state* from a fixed to fluid perspective— a mode of thought which not only recognizes ubiquitous cycles, frequencies and waves, but no longer jams or blocks these vibrations with rigid attitudes and dogmatic concepts.

When Whitehead described the traditional Western view as "the trust that the ultimate nature of things live together in a harmony which excludes mere arbitrariness", he inferred that we sense an underlying stream of reality far less crystallized than our knowledge.¹² Consider below the evidence of cymatics.

CYMATICS

Confronted with anomaly or with crisis, scientists take a different attitude toward existing paradigms, and the nature of their research changes accordingly. The proliferation of comparing articulations, the willingness to try anything, the expression of explicit discontent, the recourse to philosophy and to debate over fundamentals, all these are symptoms of a transition from normal to extraordinary research.¹³

Thomas Kuhn

Cymatics (from *kyma* <wave> and *ta kymatica* <wave matters>) is the study of vibratory phenomena and the much larger world of their effects.¹⁴ Within the tradition of E.F.P. Chladni, who had laid down the experimental principles of acoustics (*Die Acoustik*, 1802), the word stretches to include such diversified works as G. V. Bekesey's 1928 experiments with the cochlea to R. Heinberg's *Resonance* (1977).¹⁵ Undoubtedly, due to the apparent familiarity of the sound of the word, it may become occasionally confused with the more abstract theoretical schools of thought such as semantics, cybernetics, or semiotics. Hence great care must be taken to introduce cymatics as a formal subdiscipline of Physics, a laboratory science, and, as previously described, potentially a "general field" science which both unites and changes present knowledge within existing disciplines.

Initially, Dr. Hans Jenny (1904–77) conducted research in zoological morphology near his birthplace, Basel, Switzerland. By the 1950's, he was induced by the problems of modern physiology and biology to study the phenomena surrounding experimental periodicity (*Gesetz Der Weiderholung*, 1962). Testing the observable phenomenon that form is choreographed by vibration (cf. earthquake and geological formation relationship; mezzo soprano voice and shattered glass

relationship), Jenny conducted a wide variety of experiments to discover the specific relationship between *sound* vibration and discrete substances. His experimental vibratory patterns were generated through a variety of devices from crystal oscillators and electronic tonoscopes to ordinary hand bells. His malleable materials covered a vast spectrum of gasses, liquids, and solids including mercury, kaolin paste, lycopodium powder, plastics, streams of gas, and flames. By measuring and altering the frequency and amplitude of vibrations, Jenny produced and reproduced a cornucopia of forms and patterns. Viewed in the aggregate, these vibrationally-induced shapes suggested precise relationships between frequency and form.

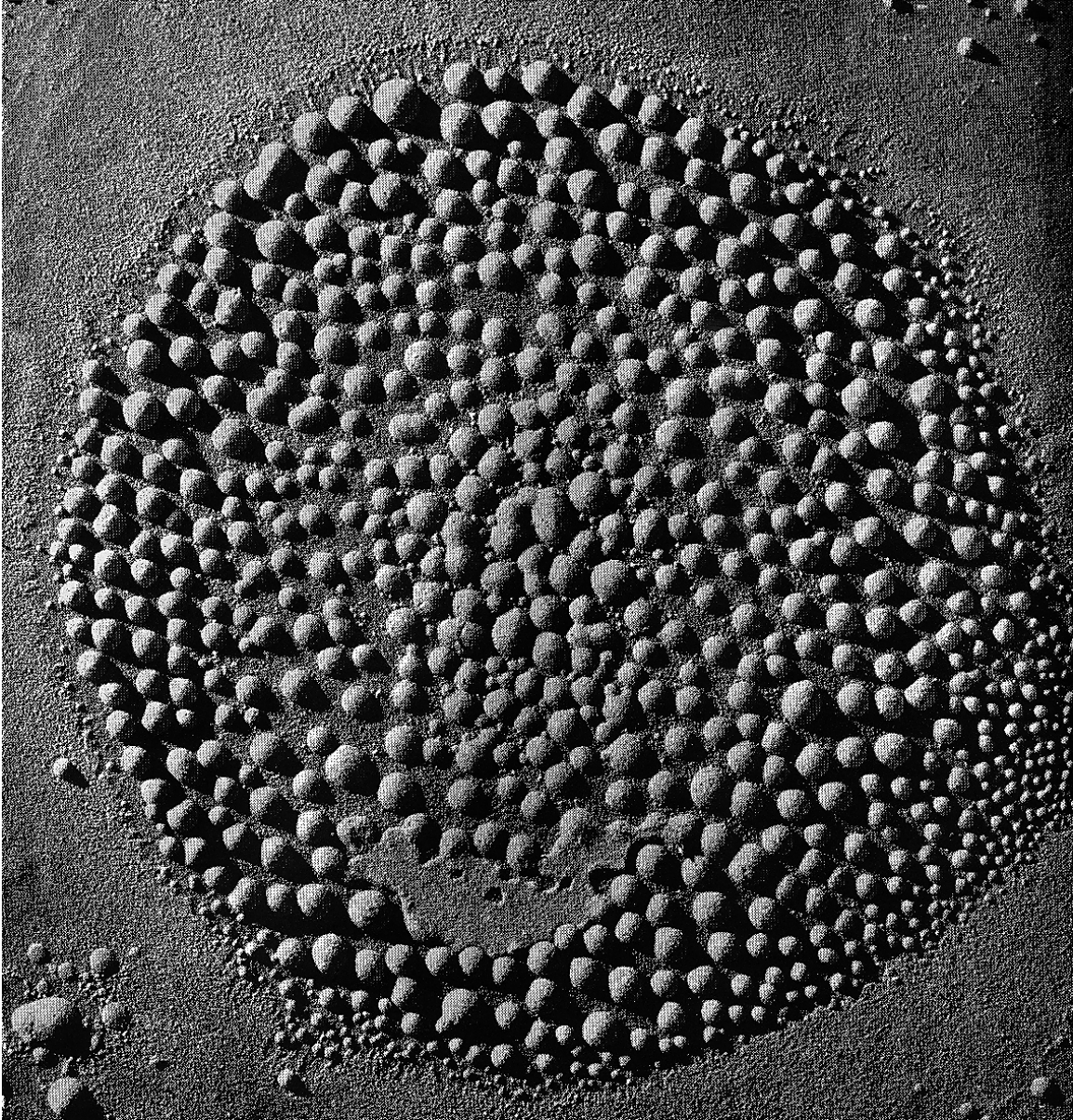


Figure 1 A layer of glycerine has been made to vibrate by a tone acting upon a diaphragm. The result is a continuous formal pattern (54, 45).¹¹

¹¹ All pictures and captions are from Hans Jenny's Cymatics book. Page numbers followed by a comma and the number Jenny used for pictures are given at the end of each caption in parenthesis.

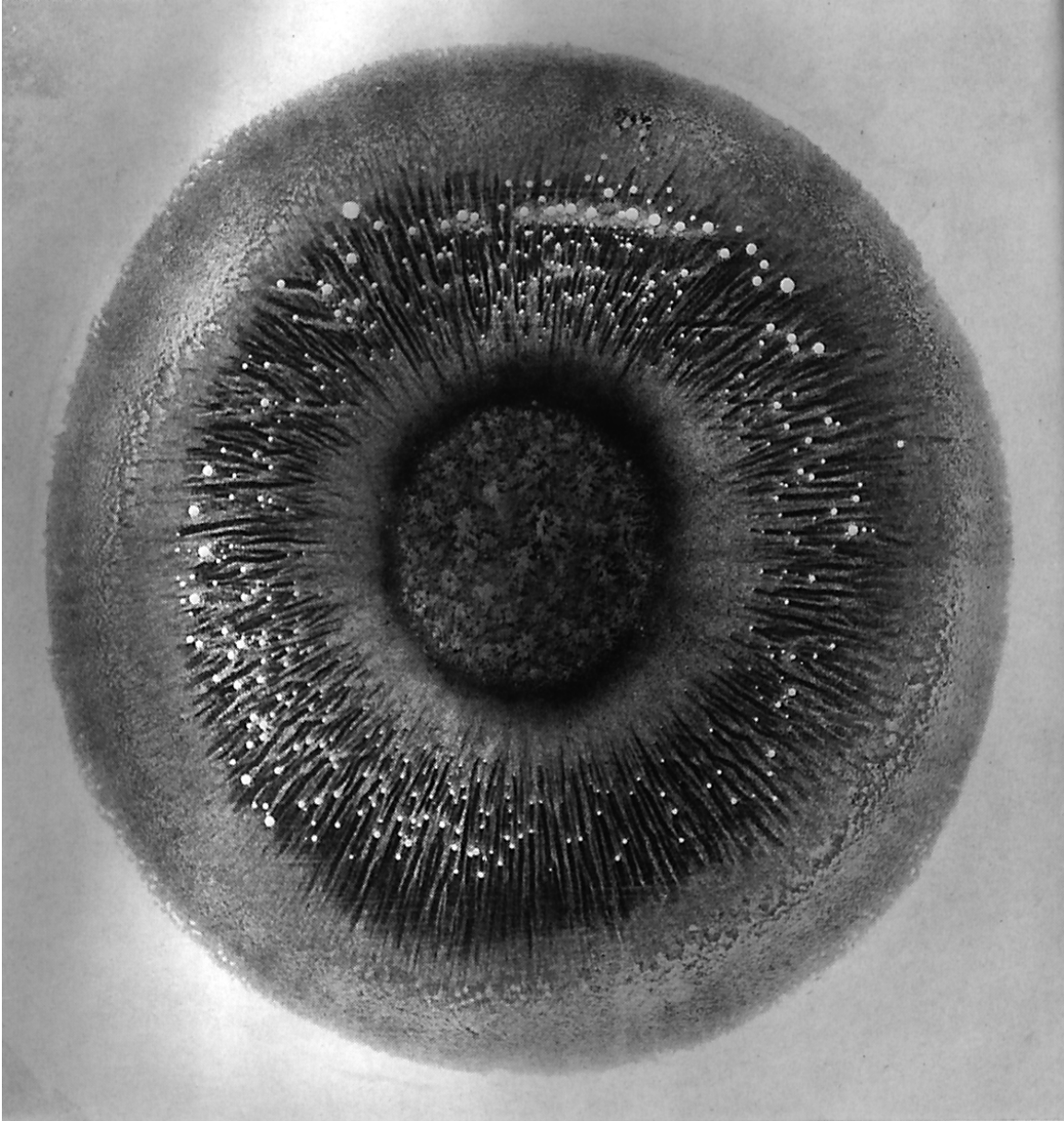


Figure 2 A layer of glycerine has been made to vibrate by a tone acting upon a diaphragm. The result is a continuous formal pattern (54, 45).¹²

Figure 3 The pictures change on the exciting frequency or amplitude being slightly modified. They must be conceived as being in motion and also subject to interference phases (60, 51). Videotaped and filmed records of Jenny's work show a world as fascinating as those found through microscope and telescope. Not only do specific harmonics galvanize symmetrical forms and shapes; in many cases, particles rotate, form tiny globes, and even form larger figures which literally dance in obedience to vibration.¹⁶ Such a picture potentially poses as much challenge to evolutionary theory as evolution posed to religious cosmologies: the implications of cymatics are

¹² All pictures and captions are from Hans Jenny's *Cymatics* book. Page numbers followed by a comma and the number Jenny used for pictures are given at the end of each caption in parenthesis.

that humans neither ascended from apes nor descended from a deity's laboratory; instead life forms are constantly recreated in the likeness of vibration.

Figure 4 Acoustic irradiation transforms the uniform layer of lycopodium powder into a number of round shapes in which there is upward, outward and then inward movement of the powder. They also circulate round the figure. (100, 82))

If vibration can be *creative* of new forms, it can also be *destructive* when manipulated or misunderstood. As Lawrence Blair reports

Professor Gavreau nearly quit his job at the top of a Marseilles office block due to perpetual illness until he discovered that, because of its particular proportions and materials, his office was resonating at an inaudible frequency to an air conditioning plant in a neighboring building. The frequency was making him sick but he was able to cure himself simply by recovering his walls with a less resonant material. Gavreau became so fascinated by sound and intrigued by the whole range of low frequencies produced by the police whistle with a pea in it, he built a giant six-foot version of it powered by compressed air. The unfortunate technician who first tested his whistle died instantly, a postmortem revealing his internal organs had been thoroughly scrambled by the sound. ¹⁷

At the opposite end of the spectrum, Dr. Peter Manners, an English doctor, has been using his knowledge of cymatics to develop a new approach to healing. The following four quotations from Manners' article "The Future of Cymatic Therapy" build a staircase of logic from the premise to the application of Manners' approach:¹⁸

1) As physicians, we dare not stand aloof from the recent amazing advances in physical science, and segregate the human entity from other entities of the physical universe, whether the object of our different sensations is a healthy man or merely a mass of diseased tissue. We are, in any case, only dealing with a congregation of vibrant atoms, which, in their combination, are the basic constituents of everything that exists.

Dr. Albert Abrams

2) Now if you are prepared to admit that sound waves which are transmitted through the air by bells, which have different structures from each other, will have a different character, you will also have to admit that electronic waves transmitted through vibrant molecules having a different structure from each other, will also have different characters. Then we can be quite sure that vibrant electrons forming a cancerous molecule must be differently numbered, differently arranged, from those forming the tubercular, or any other pathological molecule; and equally sure that the waves, or radiations, they respectively sent out, will also be different in character. There will be the tubercular wave, the malaria wave, and, if you like, the sulfur and the quinine wave.

Dr. Peter Manners

3) Sonic oscillation, when applied to the human body, will effect a micromassage of tissues and cells which will effect a balance and improve blood circulation, metabolism, and the pulsing of the nervous system and endocrine glands.

All-Union Research Institute, USSR

4) It has been found that wounds heal in two-thirds of normal time when bombarded with sound waves

Records Department, Guyis Hospital, London.

While it is far too early to determine the total effectiveness, implications, and applications of Manners' pioneering treatments, his work does not seem in any way

foreign to the larger and more commonplace world of music therapy, a precursor to "sonic wave massage", which therapy dates to ancient records.¹⁹

Figure 4 On a crescendo the round heaps migrate to the centre following the topography imposed by vibration. The numerous radial pathways can be seen (101, 83).

Figure 5 As the amplitude is varied, the pattern goes through a number of changes. The dynamics of the moving mass of lycopodium particles alter, depending on whether the tone is loud or soft (108, 89).

Figure 6.1 Minor changes in viscosity bring about the changes in the forms seen. The liquid has been rendered more fluid. When greater amplitudes are used the masses are flung high and ejected. The experiment can be continued in this direction until the liquid forms a spray. The waves also increase in height and look like cuffs or pots although they are also in a state of flow (149, 131).

Figure 6.2 These fluid, flowing sculptures assume any number of different forms. Wall-like waves rise in some places. Where trains of waves interpenetrate in lattices, the waves rise in columns. Even these phenomena which persist for some time are "living." The mass flows and pulsates within itself. If the tone is stopped, the liquid returns to its uniform state (149, 132).

Figure 6.3 If the liquid is of a more viscous character figures of the most varied kind take shape. The club-shaped configuration seen here has actually been raised out of the mass by the vibration. It is not a finished sculpture but a configuration in a state of flux. The substance flows up the stem of the club and circulates. These figurines also pulsate in themselves. They may also move around depending on the topography of the vibration. Such processes are not purely adventitious but can be reproduced systematically (149, 133).

Figure 7 The transition from the liquid to the solid state brought about by vibration can be seen in this and the following figures. (Solidescence under the action of vibration.) The process can be exemplified by cooling, evaporation, chemical rearrangement, etc. The liquid state is invariably taken as the starting point. Oscillation causes the substance to form waves. These figures (134, 135) show wave fields of this kind. What can still be seen here as static liquid becomes solid and rigidifies during the experiment (150, 134 & 135).

PARADIGMS LOST

For a multiplicity of reasons, the popular suspicion that human beings are to some extent controlled by their environment, by electronic media and the machine age no longer holds novelty. The quasi-determinist preachments of modern thinkers such as Jacques Ellul²⁰, Marshall McLuhan²¹, and Harold Innis²², albeit accurate in the smaller context, depend upon the assumption that species are somehow isolated components surrounded by other components such as mass media, institutions, and technology. Such a vision, albeit useful as a map to every day existence, no longer seems credible as a key to understanding a world of fluid vibration. "Components" do not factually exist outside the range of sensory interpretations. According to Jenny,

The whole is of a periodic nature and it is this periodicity which generates and sustains everything. Three fields—the periodic as the fundamental field with two poles of figure and dynamics— invariable appear as one. They are inconceivable without each other. It is quite out of the question to take away the one or the other; nothing can be abstracted without the whole ceasing to exist.²³

PARADIGMS REGAINED

For the moment let us discuss the smaller context of daily appearances and trust 1) the imaginary outlines between objects perceived in human vision and 2) the misleading organizational processes of the human mind. Even in such a "seeing is believing" world, is it not equally sensible to affirm that consciousness is transforming technology? On the surface of the matter alone, are not mass media

and other technologies invented, maintained, programmed, and obsolesced by the compulsions and attitudes (cf. "vibes", as used in the vernacular) of human beings?

Therefore the reigning behaviorist–cum–determinist paradigm is correct in the smaller context illustrated by this analogy: if a drunk falls in his/her shower, s/he may be burned or chilled by the water. The technology of the shower may be all powerful to one who has already abdicated control, who cannot rise to adjust the temperature knobs. If we assume that human beings are drunk, or sleep–walking, or dazed, or insane, or paralyzed by *habitual unthinkingness*, to that extent they are controlled by the surrounding technical world. If a pilot falls asleep while steering a plane, from one perspective one could assert that the technology (airplane) will kill him.

If there is an awakening to technology's nature, effects, and origins (in consciousness), a different dimension of action and control is possible. One may adjust the shower controls and steer the airplane. But unless there is this understanding and counterbalancing creative action, technology programs (via media), obsolesces (via automation), and destroys (via weapons) people by means of their own inventions.

A corollary to this line of thinking deems that "no significant change occurs without first a change in *thinking*." In essence, Descartes could have said "I think. Therefore it is." As human consciousness changes, "it" (external reality) can change. In Plato's terms, until there is a pre–existing idea (or wave length) for an invention, the latter cannot take form. Similarly, if consciousness is distorted and malevolent, can we be surprised if destructive (nuclear, atomic, terminal) technologies appear?

BEYOND PARADIGMS

Most challenging of all is the fact that consciousness may not fully observe itself. Like Jenny's experiments, all patterned manifestations of thinking—language, arts, and ideas—only reveal the outer, distant view of a black hole. For vibration is more than the subject of this essay—it is also the essay's essence and author.

All of these observations point toward the need for a renaissance in the *mode* of thinking. It is not a new paradigm nor frame of reference which is needed to understand the post–Einsteinian world, but a primal change in the state of consciousness. As Koestler, Huxley, Bohm, Blair, and others imply, the brain seems designed to function at a different rhythm and intensity, within a larger wave field, than its current habits of paradigm formulation permit.

Even a new language must make use of the old; hence this paper is not exempt from appearing to create its own *components* such as *vibration*, *form*, and *consciousness*. But these abbreviations symbolize, rather than duplicate a larger reality. Such words are not rigid categories, but touchstones, signposts, and abstract descriptors. Nor can thorough understanding be the pretense of this writing any more than can other human knowledge, which might more accurately be called ignorance.

There is no intention to replace the worship of determinism, behaviorism, or other theory with some other equally insular word, such as "cymatics". Indeed that science is embryonic, minuscule, and no less prone to human error and bias than other sciences.²⁴ Instead this paper, rather than proclaiming a new academic

fundamentalism, seeks merely to introduce examples of thinking which infer the likelihood of technology being one manifestation of thought, and form being one product of vibration. Indeed vibration is posited as the conveyor belt which connects, undergirds, and animates Gebser's *inner* and *outer* technology.

At the outset, technology was likened to an *echo* of consciousness. The human-made, technical world may also be seen as a *broadcasting* or *outering* (cf. uttering) of not only conscious thought, but also subconscious and unconscious perception. The invisible is not separable from the visible. Nevertheless, the formula $V/F = A/T$ is simply a symbol to induce, challenge, and transform our own thought about thought. For from the largest context currently available to human perception, it makes little sense to reduce a vast reality to modules such as consciousness and technology or vibration and form. Nor can these phenomena be separated from each other any more than one can pluck a ripple from its pond.

ENDNOTES

¹ Engel, Mark, in Preface to *Steps To An Ecology Of Mind* by Gregory Bateson, p. vii.

² Jantsch, Erick, *Design For Evolution*, p xvii, as quoted in Fisher, Aubrey, "The Pragmatic Perspective Of Human Communication", p. 210, in Dance, Frank E.X., *Human Communication Theory*.

³ Feuerstein, Gebser's Integral Consciousness and Inner-Technology/Outer-Technology", in *Gebser Network Newsletter*, (Spring) March 1991 (Volume 8 No. 1)

⁴ Gebser, Jean, *Verfall Und Teilhabe: Uber Polaritat, Dualitat, Identitat Und Den Ursprung*, pp. 15 ff.

⁵ Birdwhistell, quoted in *Pragmatics Of Human Communication* by Watzlawick, Beavin, and Jackson, p. 70.

⁶ Jenny, Hans, *Cymatics*, pp. 10, 11-2.

⁷ Giedion, Siegfried, *Mechanization Takes Command*, p. 3.

⁸ Giedion, Siegfried, *Space, Time, And Architecture*, p. 19.

⁹ Mumford, Lewis, *Technics And Civilization*, p. 3.

¹⁰ Mumford, Lewis, *Technics And Civilization*, p. 4.

¹¹ Stephen Littlejohn's essay "An Overview of Contributions to Human Communication from Other Disciplines" (Dance, pp. 243-285) offers a cogent discussion: "At its best the study of human communication constitutes an interdiscipline in which communication processes are investigated using insights from several traditional disciplines." (p. 244) Well-known examples of independent interdisciplinary thinking include the works of, for example, Carey, Gerbner, Innis, Jamieson, McLuhan, Thayer, and Theall.

¹² Whitehead, Alfred N., *Science And The Modern World*, p. 19.

¹³ Kuhn, Thomas, *The Structure Of Scientific Revolutions*, pp. 90-1.

¹⁴ Jenny, Hans, *Cymatics*, p. 14.

¹⁵ Heinberg, Richard, *Resonance*, Toronto, Read/Lee and Associates, 1977. 16) Although excellent photographs are available in Jenny's *Cymatics*, patterns involving motion are more vividly demonstrated in film and videotape. In lecture format this introduction to visually observable cymatics includes the 30 minute videotape (excerpts) of Peter Manners' voice-over of Jenny's filmed experiments. The film, introduced briefly by Manners in lecture format, includes over twenty-five minutes of close-up photography and cinematography of cymatically induced formations, motions, and designs.

¹⁷ Blair, Lawrence, *Rhythms Of Vision*, p. 117.

¹⁸ Manners, Peter, "The Future of Cymatic Therapy: Sound and Vibratory Pattern Research," *Technology Tomorrow*, Vol. 3, Number 3, June, 1980.

¹⁹ For example, the account of David playing for King Saul in Hebrew literature, the Pied Piper of Hamelin folk tale, and the multiple cultural histories in which mothers and surrogates (nurses, sisters, servants) sing lullabies to troubled, sick, or fearful infants all predate yet foreshadow cymatic therapy.

²⁰ See, for example, *The Technological Society* by Jacques Ellul, p. xviii, "As I see it, individual decisions are always made within the framework of this sociological reality, itself pre-existent and more or less determinative."

²¹ See, for example, *Understanding Media* by Marshall McLuhan, p. 38, "Specialist technologies detribalize. The non-specialist electric technology retribalizes."

²² See, for example, *The Bias Of Communication* by Harold Innis, p. 34, "We can perhaps assume that the use of a medium of communication over a long period will to some extent determine the character of knowledge to be communicated."

²³ Jenny, Hans, *Cymatics*, p. 176.

²⁴ Which, on the other hand, is not to surmise that the field is an isolated fad: in addition to Jenny in Switzerland, Bruner in Germany, and Manners in England, Harold Saxon Burr, the eminent neuroanatomist at Yale University for thirty years, conducted extensive field theory research.

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