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A STUDY OF THE AFFINITY BETWEEN ARTISTIC IDEOLOGIES BASED IN VIRTUAL REALITY AND PREVIOUS IMMERSIVE IDIOMS

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INTRODUCTION

Frame and Excess

To the rear in front of on top of underneath all around

Claude Thibaut: Isn't this radical uncertainty brought about by Virtual Reality likely to challenge man's vision of himself and the world?
Jean Baudrillard: Certainly, because it is the system of representation that is at issue. The image that he has of himself is virtualized. One is no longer in front of the mirror; one is in the screen, which is entirely different.
-from Philosophy Discussion with Jean Baudrillard: Interview by Claude Thibaut, March 6, 1996

Space is an ambiguous field where positions change, where viewpoint becomes scene, seer becomes object, and where depth is the very reversibility of dimensions that unfold with the movements of the body.
-Allen Weiss, Mirrors of Infinity: The French Formal Garden and 17th Century Metaphysics

In the realm of the affective imponderable, the image provided by my nerves takes the form of the highest intellectuality, which I refuse to strip of its quality of intellectuality.
- Antonin Artaud, Manifesto In Clear Language

To the process of the dissociation of man and body, Virtual Reality brings a new variation, another way for the body to disappear.
-David Le Breton, The Body in the Modern Imagination

Transparency is the property of the eyeball,

projected outward as luminous space, interpreting quanta of energy in terms of the gelatinous fibers in the head.
-Alan Watts, The Joyous Cosmology

The evolution of art is something internal, something philosophical and
is not a visual phenomenon.
-Lucio Fontana, from his last interview

Following, the reader will find an extensive proem to Immersive Ideals / Critical Distances, a generously illustrated synthetic exploration of art histories, cultural ideologies and metaphysical ontologies based on the principal defining characteristic of Virtual Reality (VR): immersion. The primary explanatory goal of the research conducted here into immersive ideals will be to enthuse art theory by submitting it to a complex dialogical cross-examination which hinges on the concept of immersionability so as to define an historical and current philosophic sense of immersive visualization. Through this exploration I shall seek to define the main attributes of what I will designate as immersive culture and its ideational background and paradigmatic implications as related to art theory.

The resulting aesthetic theory of immersion will not merely be about VR however (even though with VR immersion attains a rare acuity) but about its antecedent philosophical concepts which immersive virtual technology retrospectively re-emphasizes; a web of concepts which are themselves associated with other concepts corresponding to other technological and metaphysical conditions. The criteria for including and exploring the divers art historical examples and their context which appear in Section B will be whether they contribute towards flushing out a satisfactory aesthetic theory of immersive consciousness and advance the formation of an association of artworks and assemblage of philosophic ideas which can be designated as indicative of immersive culture. But I will show more than which art strategies give rise to aesthetic immersive experience when. I will also give an account, as full as possible, of how and why these experiences occur. The how question will be initially addressed in Section A; the section which addresses the inquiry into immersive technology and psychology along with background philosophical theories which will be useful in determining the why question. By nonreductively synthesizing the which, when and how of aesthetic immersionability, an extensive explanatory theory of aesthetic immersive consciousness and its possible functions will be suggested in Section C with a number of theoretical whys.

Immersive Ideals / Critical Distances is then an interdisciplinary study of Virtual Reality's "key feature", immersion (Heim, 1998, p. 54) and virtual immersion's foreshadowing sources, ideal topos, and ensuing influences as applicable to art theory in the formation of a general philosophic immersive theory of culture. The philosophic rhizomatic theory of Gilles Deleuze (1925-1995) and Félix Guattari (1930-1992), at a general level, supports such an interdisciplinarianconnectivist approach towards theorizing immersive experience, as rhizomatic theory encourages philosophic non-linear and non-restrictive interdisciplinary thinking and hence reinterpretation, which in this case will proceed from the point of view (not a point in fact anymore, but an orb) of virtual immersion. (Deleuze&Guattari, 1987) A rhizome literally is a root-like plant stem that forms a large entwined spherical zone of small roots which criss-cross. In the philosophical writings of Deleuze and Guattari the term is used as a metaphor for an epistemology (that in philosophy which is concerned with theories of knowledge) that spreads in all directions simultaneously. (Deleuze&Guattari, 1994, p. 7) More specifically, Deleuze and Guattari define the rhizome as that which is "reducible to neither the One or the multiple. (...) It has neither beginning nor end, but always a middle(milieu) from which it grows and which it overspills. It constitutes linear multiplicities with n dimensions having neither subject nor object... ." (Deleuze&Guattari, 1987, p. 21)

Concerning the metaphorical tropes of this exploration, I immediately want to say that even as I have proposed in the title of my investigation what looks to be a binary opposition between immersion and distance, I don't conceive of this opposition as a simple binarism, but rather it is far more gradient, dialectical, and phenomenological than that. The emphasis taken here will be on treating the histories of art and philosophy as multi-layered, heterogeneous, idealistic constructions; as

operative assemblages of connections and frequencies which once linked elucidate various chimerical disembodied (Mitchell, W. J., pp. 43-44) relationships between the protoplasmic body-image and spatial conceptions (what Jean-Louis Boissier sees as the consequence of "all interactive situations" which he maintains "entail a virtualization of the body by the production that they imply in the fluctuating data of digitalization" (Boissier, 1994b, p. 2)) within a generalized ideal sense of immersionability which manifested in art and philosophy over time. This approach is consistent with Gilles Deleuze's awareness that every condition includes a history of its ideal events. (Deleuze, 1990)

However, I will accord top primacy to enthused participatory notions of artistically mediated awareness within this study and not retreat into an easy extolling polemical stance concerning the necessity for critical distance, even as I appreciate the intellectually productive and cognition-raising abilities of critical distance.

To endeavor an understanding of immersive propensity in relationship to our effort to discern an extensive pattern of inferred passions which may together suggest a number of immersive ideals requires, I believe, the judicious use of the process of Deleuzian/Guattarian nomadic thinking. (Deleuze&Guattari, 1986) Accordingly, Deleuzian/Guattarian immersive descriptions would be composed of variously formed segments, stratas, and lines of flight which involve territorializing as well as deterritorializingspacio/psychic activities. (Deleuze&Guattari, 1983, p. 2) Even so, I acknowledge in advance that all methods, explanations, and theories (including the nomadic) inevitably distance consciousness from its first sense of full and total participation. This acknowledgment will remain a particularly important point of consideration in this dissertation as ideas of spacio/psychic critical distance and non-distanced (non-spatial) disembodied fusion rub up against each other and influence the psychic space required for reflection on the thorny concept of aesthetic immersion (which entails a lack of distance) as the atmospheric gulf between the immersant and the immersive aesthetic environment is ideally dissolved in VR's exemplary standard and goal of perfect functionality: total-immersion.

Total-immersion, that state of virtual being which is considered the holy grail of the VR industry, can be characterized as a total lack of psychic distance between the immersant's body-image and the immersive environment (accompanied by a "feeling of plunging into another world").

(Heim, 1998, p. 18) Total-immersion is implied complete presence (Barfield &Weghorst) within the insinuated space of a virtual surrounding where everything within that sphere relates necessarily to the proposed "reality" of that world's cyberspace and where the immersant is seemingly altogether disconnected from exterior physical space. As such, total-immersion promotes a conflated but promiscuous ontological feeling (awareness/consciousness) where aesthetic cognition of the limits of the aesthetic environment attain the actual state of "the generally non-mathematizable subjective world of consciousness"

(Shear, p. 194) itself: non-spatiality. (McGinn, pp. 220-223) This ideal standard of total conflation, a standard which the VR industry itself has established for VR, will carry a good deal of the explanatory burden in the formation of a theory of aesthetic immersive consciousness.

A rhizomatic recombinant mythos based on ideals of total-immersion detected in art and philosophy which explores certain hypothetical states of semi-disembodiment (i.e., semi-deprivation of normal cognitive body-image; or what Mark Pesce identified as what occurs in the mind when the self, via technological extensions, removes itself from itself (Pesce, 1993)) needs to weave the strands of art historical immersive manifestations sub specie immersivis (from the point of view of immersion). By doing so, probable questions will be raised around immersion concerning totalizing idealisms (all assertions of totalities in this text are recognized as cognitive unification operations) and their imaginative effects on the ways we today model the world in art.

In this respect, this dissertation is informed by an idea adapted from the Swiss art historian Heinrich Wölfflin's (1864-1945) Principles of Art History in which Wölfflin argued for a classification of styles based on historical modes of ideal imaginative beholding. Beginning with the aesthetic theories of his teacher Jacob Burckhardt

(1818-1897), particularly Burckhardt's doctrine of equivalents in art (whereby visual and ideal values are seen as interchangeable), Wölfflin developed the concept of an ideal imaginative beholding which defines the formal disposition of an era's style in tandem with his theory of prefigurations, which postulated intuitive method as inclusive in art. (Wölfflin, 1915)

Accordingly, we will be studying imaginative and intuitive ideals of total-immersion both from my point of view as a practicing artist and as an art theoretician. Hence, besides preparing the reader for bounces back and forth between the first and the third person voice in the text,

I shall establish straight away my fundamental contention that all art is conceptual and imaginative because art only exists conceptually

(Kosuth), and that it participates in the imaginative metaphysical realm of externalized fabulation (Scholes), a notion which I find consistent with Georg Wilhelm Friedrich Hegel's (1770-1831) concept of art as idea rendered sensible. (Hegel, 1979) In this view, art is a fabrication, an imaginative beholding which makes us realize exactness through the powers of intuitive caprice. (Picasso) It seems to me however that one must take this basic understanding a bit further and maintain that art is utterly dependent upon, and is in fact, metaphysics: the philosophical study of the basic concepts of existence which include epistemology, ontology, and aesthetics as inaugurated by Aristotle's

(384-322 BC) commentators. Or to put it the other way around, as the German philosopher Friedrich Wilhelm Josef von Schelling (1775-1854) did, "Without metaphysics, not only is there no philosophy, but no art". (Schenk, p. 184) For the idealist philosophers, of which Schelling belonged and for whom Hegel is considered the culmination (Aiken, p. 71), metaphysics is not a sort of magical super-physics but rather ideology itself. (Aiken, p. 115) Art's philosophical/metaphysical (and hence hypothetical) ideological underpinnings may not often be stated explicitly within the work however, as more times than not art smoothly participates in the dominant metaphysics and ideology of the culture in which it appears. (Eagleton) Therefore the critical distance gained from a congregation of explicit metaphysical/ideological conceptions are fundamental to the understanding of immersive art (i.e., art which attempts to include everything of perceptual worth within its domain ambiently but coherently and accordantly in an overall enveloping totality that is concerted, continuous, and without overly evident frame or border), just as they are with all art, as art is never transparent but always stems from concealed and forgotten theory-laden processes of idealization. (Wolff, 1993, p. 105)

So to begin I shall identify that in the schematized ideological aesthetics of virtual immersion the immersant discovers an all-over, metaphysical and indeterminate algorithmic depth (the basis of any computer program is an algorithm, a prescribed set of rules that define the parameters of a solution to a problem (Knuth)) and I can say forthwith that this is VR's raison d'être as it concerns art and art's discursive influence on our states of consciousness, which is only a start. Next we need to define what we mean by consciousness. This is not an uncomplicated matter, for as the philosopher and specialist in consciousness studies Dr. David Chalmers says in his seminal essay "Facing up to the Problem of Consciousness"; "there is nothing that we know more intimately than conscious experience, but there is nothing harder to define". (Chalmers, 1995, p. 200)

Fundamental psychology breaks consciousness into two essential categories: the state of awareness and the subjective aspect of neurological activity (i.e., the impression of self so produced, whatever its actual cause). (O'Doherty, E. F.) There are sub-categories and variations of these however, for example some researchers define consciousness as the totality of experience at any given instant, as opposed to mind, which is the sum of all past moments of consciousness.

(Metzinger) Schelling, in agreement with Immanuel Kant (1724-1804), maintained that the only thing which we can have direct knowledge of is our consciousness. (Schelling, 1988) However, consciousness, in Aldous Huxley's (1894-1963) view, (as influenced by William James' (1842-1910) study The Varieties of Religious Experience: A Study in Human Nature (James)) is mainly an abridgment application which allows us to construct a coherent world view based on selective oblivion. (Huxley, Aldous, 1970, p. 22) Lately, Brian Massumi, Research Fellow at the Humanities Research Centre of the Australian National

University, author, and a prominent English translator of Deleuze and Guattari, upheld Huxley's/James' "subtractive" understanding of consciousness by seeing both will and consciousness as "limitative, derived functions which reduce a complexity too rich to be functionally expressed".

(Massumi, 1995, p. 90)

Dr. John Lilly, by using cognitive psychology's computational model of the mind, defined consciousness as the human biocomputer's "self-metaprogrammer". The biocomputer's programming, according to Lilly, is that set of internally consistent instructions which prepare, send, store, process, and select signal information in and out of the biocomputational activity of the brain, most of which can be adjusted through a self-metaprogramming process initiated by the self-metaprogrammer. (Lilly, 1974, pp. 138-139) According to Deleuze, consciousness is "the passage, or rather the awareness of the passage, from less potent totalities to more potent ones, and vise versa." (Deleuze, 1984, p. 21) This hypothesis receives support from Thomas Metzinger when he writes in Conscious Experience that "...holism is a higher-order property of consciousness" and that "this global unity of consciousness seems to be the most general phenomenological characteristic of conscious experience...". (Metzinger, p. 30) Hence the 19th century German philosopher Johann Gottlieb Fichte's (1762-1814) theorized "unity of consciousness" in which "all the opposites are united" (Fichte, 1889, p. 84) is confirmed by Metzinger's findings. Dr. Chalmers in his book The Conscious Mind also confirms Fichte's theory by putting forth a notably unaccustomed elucidation of consciousness by discarding the dominant reductionist inclinations of modern science (with its experiential template that selectively filters and shapes awareness (Poincaré)). Chalmers established that previous cognitive neuroscience did not explain how subjective experience emanates from neural processes in the brain (an organic assemblage which consists of an estimated 13 billion neurons). For Chalmers consciousness is to be circumscribed as "the phenomena of experience" (Chalmers, 1995, p. 201) which must be conceived as a totality: an irreducible manifestation that subsists at a basic stratum which cannot be conceived of as the aggregate of simpler corporeal parts. (Chalmers, 1996)

When we bring together and cross-link the above concepts of consciousness we see that consciousness basically is the awareness and appreciation of the feeling of being. Indeed Chalmers states that "there is a direct correspondence between consciousness and awareness". (Chalmers, 1995, p. 212) This ontological definition of awareness as consciousness (an ontological, therefore essentially a metaphysical definition) will establish initial understandings into immersive consciousness and its place in constituting a supplementary art history in accordance with Deleuze's alternative history of philosophy. (Douglass, pp. 47-48) However, the preferred decisive point in understanding total-immersion in the context of art is its facilitation of a more potent conscious-totality in the creative art audience produced by merging the audience's perceptual circuitry seemingly with the artwork. In this light it might be possible to define immersive states of consciousness as conditions and orders of conscious awareness in which perception-cognition (i.e., visual awareness linked to the process of forming intelligence) is found to consist of more than everyday (non-conceptual) vision (Ivins, 1975) typically reveals by merging it with some manifestation suggestive of a transcendent more. This condition may be thought of as a bypassing of habitual processes of spatial thinking (Howard & Templeton) through an assiduously expanded macro-vision/intelligence based on conditions of excess which provides the immersant with an unfilled sense of internal union with unrealizable breadth through implicative art.

By states of immersive consciousness I mean then our miscellaneous neurological/ontological sense of the gradient unity of sentient self in internal rapport with its surrounding milieu (Wilson, E. O., 1998); that visual/mental property of atmospheric self-attentive awareness, cognizance, and feeling that allows us to experience a sense of nexus with our ostensibly unified surroundings, albeit laced with vicissitudes. I have observed in myself that immersive states of consciousness tend towards unconstrainment while being based on a routine sense of shifting-self (immersed in degrees) within the ambient biosphere which is experienced when self-

attentive.

In that my usage of the term, immersive consciousness corresponds to an aesthetic moment's totality of experience when viewer and view coalesce, immersive consciousness' metaphysical depth is not a pre or non post-modern (Sarup) metaphysical depth free from consciousness of its diverse objectives and results and pluralistic influences (plurality and diversity are essential to Post-Modernism (Jencks, p. 6)) as according to Theodor Adorno (1903-1969) in his Aesthetic Theory, art and aesthetics must not try to erase fractures through integration but rather to "preserve in the aesthetic whole the traces of those elements which may have resisted integration". (Adorno, 1984, p. 271) Consequently, as the reader will soon see, Immersive Ideals / Critical Distances contains traces of a wide number of diverse cultural, philosophical and theoretical concepts along with numerous extant art examples which I found useful in drawing out the sense in which immersive cultural traits (and the various pluralistic states of immersive consciousness which accompany them) are especially pertinent as I have been able to identify them and their background ideals over the span of time.

An understanding of this immersed self-attentive shifting-self requires a surpassing of the limiting tropes of logical positivist empiricism (Mach, 1914) however, as immersive consciousness starts in the non-delineating darkness of closed but debonair eyes. This buoyant, dark, non-delineation, as Dr. John Lilly's report "The Effect of Sensory Deprivation on Consciousness" shows, provides a wide range of self-attentive potentialities for immersive consciousness which run counter to the dictates of logical positivism. (Lilly, 1962) Logical positivism was the early-20th century philosophical movement which emerged from the Vienna Circle group of philosophically minded scientists and logicians organized around Moritz Schlick (1882-1936) as influenced by the anti-subjectivist, positivist, empirical philosophy of the Austrian physicist and philosopher Ernst Mach (1838-1916). Logical positivism was based in opposition to the idealist philosophy of Hegel and hence stressed the exclusive value of logic and positivism (Comte) over self-attentiveness. Schlick and the Vienna Circle's other members; Otto Neurath (1882-1945), Kurt Gödel (1906-1978) and Rudolf Carnap (1891-1970) maintained that only verifiable statements (verified by observation or empirical data) were meaningful. Statements about art were nonsense to them. (Stewart, p. 85)

A consideration of this self-attentive immersed shifting-self is post logical positivist also in that it accepts various theories of consciousness which discuss consciousness as being emergent rather than representational. (Churchland, 1986) Sigmund Freud (1856-1939) (who we must remember was a theorist who rooted his theories in anecdotal evidence and whose writing was literary) identified an artist as one who offers insights into such an emergent consciousness as it emerged from within the unconscious realm. (Ellenberger) Moreover, Martin Heidegger (1889-1976) maintained that being, which we shall study here, is the most unconsciousness of concepts because we are thoroughly immersed in it. (Heidegger, 1962) Siegfried Zielinski, foremost theoretician of media at the Köln Academy of Media and Ph.D. in philosophy, proposes that consciousness is our most unconsciousness interface, as it is "where world/worlds/reality/realities are formulated" (Hoekendijk, p. 3), an observation which compliments Fichte's contention that "all reality is in consciousness". (Fichte, 1889, p. 84)

The terminology consciousness means verbatim with knowingness and stems from the Latin verb scire (which means to know), as does the word science. But that is not all there is to it as applied to art, for consciousness in art seems to be ultimately like a web woven in the mind/body of various silken-strands spun forth from interlacing states of unconscious desire (Meier) which semi-automatically control the paradigmatic creation and reception of art. (Lilly, 1974, p. xviii) This definition coincides with R. G. Collingwood's definition of consciousness, in paradigmatic art terms, as that which is a "kind of thought which stands closest to sensation or mere feeling" as "transformed into imagination". (Collingwood, p. 223) Paradigmatic consciousness has emerged in the 20th century due largely to the philosophical work of the American philosopher Thomas Kuhn who has argued that scientific "progress" does not simply occur in stages based on neutral observations but that all observation is theory-laden. For Kuhn, the history of science, and I would

argue art as well, is characterized by revolutions in outlook. (Stewart, p. 93) Indeed unconscious desires shape the paradigms which contour intentional expressions in art through the subtle powers of sublimation when the sexual desires of the libido are turned into cultural ones via the mediation of the artist's ego. (Freud, 1958) The question of how Freudian unconscious desires are manifest in conscious cultural production and interpretation will be one of our minor themes here throughout. This is a non-problematic working assumption in that even those which maintain that art is fundamentally a materialistic, social, and conscious product (Wolff, 1993, p. 1) acknowledge that the role and function of art is located in its power to transformtionally change consciousness. (Wolff, 1993, p. 92)

We may begin then by establishing that bi-conscious visual acumen involves a spectral feedback between the perceiving agent and the broad consciously and unconsciously perceived atmospheric aesthetic surroundings. Ergo, with total-immersion as a model for how we may procure bi-conscious visual aptitude and awareness in its fullest intensity, we shall carefully check peripheral vision (Marr) in relationship to the spatial experience of virtual immersion (Henry & Furness) as military investigations have shown that intensified peripheral perceptions lead to sharpened psycho-motor reactions in human beings and hence to a more comprehensive cognizance of their rapport with their total surroundings. (Psotka, Davison & Lewis) It is salient that human vision operates through a cooperation between the more conscious foveal area at the center of the visual field (which takes in information concerning shape and pattern via an enormous amount of rapid eye movements (Carpenter)) in union with the surrounding, more unconscious, peripheral retina (which gathers atmospheric information on the total scope of the space one is within). (Rheingold, p. 207) The central fovea is made up entirely of cone photoreceptors and is the part of the eye that detects fine detail and is specialized for light adapted photopic viewing conditions. Although cones exist throughout the retina, they are by far most concentrated in the fovea. Foveal cones are specialized for finer acuity as each foveal cone has a dedicated channel to a ganglion cell and, as a result, does not have to share inputs with other receptors. This allows for small receptive fields, providing fine acuity. (Piantaneda, Boma&Gille)

The peripheral retina is attentive to changes in the total environment, signaling to the foveal area where to focus within the entirety of space. (Rheingold, p. 207) This peripheral retina is populated mostly with rod-receptors, along with a small proportion of cones. Rods, though absent in the fovea, number approximately 120 million in the retina compared to about 6 million cones. Thus there are approximately 120 million sensors in the retina and only 6 million channels into the brain from the retina. (Youngblood, p. 46) Rods are specialized for viewing dim illuminations but do not code color or fine detail. Rather, rod inputs link with neighboring rod and cone inputs to one ganglion cell in a (more unconscious) process called spatial summation. (Piantaneda, Boma&Gille) Spatial summation results in larger receptive fields attentive to the space which "surrounds the body, is before and behind, past and future, where one is both seer and object seen." (Weiss, p. 34)

All that will be said concerning immersive perception, cognition, and interpretation will indirectly infer back to this atmospheric process called spatial summation with its process of understanding enlarged receptive fields. And in terms of this summative sense influencing an immersive cognitive-visuality, it is reasonable to make use of the holonogic schematic model of Arthur Koetler in that no set or frame of perceptions may be viewed in isolation or as a single part of a finite perceptual collection within a synthetic holonogic model. (Koetler) This cognitive-visual model is applicable to immersive (unframed hence expanded) visual intelligence in that, as the artist CaroleeSchneemann has written, "Vision is not fact, but an aggregate of sensations". (Schneemann, 1968, p. 12) Victor Burgin supports Schneemann's claim when he writes that "seeing is not an activity divorced from the rest of consciousness; any account of visual art which is adequate to the facts of our actual experience must allow for the imbrication of the visual with other aspects of thought". (Burgin, p. 53) Thus anholonogic model of cognitive-vision would be appropriate when analyzing virtual immersion in that when immersed inside the mise en scène of a Virtual

Environment (VE), view-point/ego-center

simultaneously implodes and explodes (and vice versa) as observation is deprived of its habitual perceptive boundaries. According to Koetler'sholon concept (established in Beyond Reductionism) instead of cutting up immersive perceptual wholes into discrete focal parts, immersion should be scrutinized and understood using synthetic sub-whole sets found within the ambient atmospheric spectrum of immersive perception's entirety. (Koetler) It is the exposé of the synthetic atmospheric phenomenology of such holonertic sight (dependent on the linked and amassed sum-total of views) which will concern us here as even though our scopic information is largely determined by the way our eyes work horizontally implanted in the front of our face (cross-blending visual fields), our interpretations of that visual data are far from intractable. (Haber &Hershenson) We are equipped with eyes with dominant frontal properties which look straight on of course, but in holonogic cognitive-perception there is also aware attendant fringes to sight which seep in peripherally.

Such an approach is consistent with, and indeed epitomizes, the ideals of hermeneutics, as in hermeneutics the central notion is that we cannot grasp the meaning of a portion of a work until we understand the whole, even though one cannot understand the whole until one understands the parts which make it up. (Caputo, 1987) However, hermeneutics is not merely a paradox, since hermeneutics indicates that any feat of interpretation occurs through time, with adjustments and modifications being made to one's comprehension of both the parts and the whole in a circular manner, until some type of resolution is attained. (Gadamer, 1976)

Useful here also in grasping the workings of the holonogic/hermeneutic model is the influence of Aaron Gurvitch and his gestalt psychology which was developed in order to formulate a phenomenology that recognized the relation of the dynamic field that encompasses both foreground and background perceptual moments to more rigorously define the nature of perception. (Koffka) Gestalt theory's precepts emphasize that the whole of anything is greater than its parts. Indeed it emphasizes that the attributes of the whole of anything are not deducible from analysis of the parts in isolation. Instead gestalt studies make use of the methods of phenomenology, the description of direct psychological experience with no restrictions on what is permissible in the description. Gestalt psychology sought to encompass the qualities of form, meaning, and value that prevailing psychologists had either ignored or thought to fall outside the confines of science. (Horgan) Moreover, gestalt psychology emerged in part as an attempt to add a humanistic dimension to what was considered a barren approach to the scientific study of mental life. In the field of art theory, Ernst

Hans Gombrich's conceptual involvement with gestalt ideas of vision (Kanizsa) is evidenced in his books Art and Illusion: A Study in the Psychology of Pictorial Representation and The Image and the Eye: Further Studies in the Psychology of Pictorial Representation; books which articulated the relativity of vision in terms of visual art.

Such an extensively engrossed holonogic/ hermeneutic approach towards cognitive sight, as outlined above, would be in opposition to what Donald Lowe in his History of Bourgeois Perception identifies as the "bourgeois perceptual field", which he characterizes as "fundamentally non-reflexive". (Lowe, p. 26) In that our adult creativity derives primarily from our conspicuous potential for abstraction (which characterizes our genus) and in our craving and manipulation of abstractions (Worringer), what is at stake here is the adult acceptance (or rejection) of our entire atmospheric impressions as our genuine optical-field of conscious creative interest; an abstract optical-field which calls on the retina's tremendous expansive qualities of which the descriptions of the scientist and the doctor have not done suitable justice. Early on in the 20th century Marcel Proust (1871-1922) in his masterpiece Remembrance of Things Past, links such a craving to sense and understand the entire field of atmospheric impressions (through intimate observations) with the compunction to penetrate exterior matter in order to understand the precision of the sensuality behind the aesthetic. (Proust) Still, this ephemeral aesthetic-vision has only been addressed by the rare visual artist, such as Wassily Kandinsky (1866-1944) when he spoke of this field's felt scopic atmosphere as a space's stimmung. (Kandinsky, p. 2)

One way to better apprehend the ambient optical field's felt scopicatmosphere is to think of it in terms of a study of cognitive-visual acoustics. This is equitable in that sight itself is nothing other than a continuous pattern of perpetually changing light-data recorded on the retina which we humans process through the aggregated internal acts of discerning. To understand cognitive-vision as being non-inflected with subtle properties akin the acoustic properties of echo, range, pitch, timbre, and tone is to discern all visual moments as being indiscriminately equal, and as flat. Cognitive-perceiving is continuously allocated by tones of recognition, ranges of totality, and distributed visual echoes as humans produce a full interpretation of the plethoric information which hits their retinas in order to assign it cultural meaning. (Brennan & Jay) More precisely, such an acoustic-like cognitive-visuality would involve the equivalent to what in acoustics is called envelope. Envelope, in musical sound, involves the onset, growth, and decay of a sound. Growth consists of the rate of increase of a sound to steady-state intensity. Duration refers to the steady-state of a sound at its maximum intensity, and decay is the rate at which it fades to silence. Envelope is an important element of timbre, the distinctive quality, or tone color, of a sound. Every musical instrument has its characteristic attack, growth, duration, and decay pattern. My supposition is that so do aesthetic visual moments (but not in term of time; in terms of peripheral spatial intelligence) when holonogicly self-attended to.

By studying such an envelope vision in terms of immersion, in a sense this thesis participates in the recent investigations of visuality into what Martin Jay has called the "ocular character of all Western culture" and the "Cartesian perspectivalism that dominates the modern era" (Brennan & Jay, 1996, p. 31), a Cartesian perspectivalism which, according to Hal Foster, separates subject from object, "rendering the first transcendental and the second inert". (Foster, 1988, p. x) Such investigations include Guy Debord's critique of the Society of the Spectacle (Debord, 1983), Jacqueline Rose's investigation into the sexuality of the objectifying, male, patriarchal gaze (Rose), and Michel Foucault's (1926-1984) analysis of the panopticon paradigm. (Foucault, 1979) For example, according to Foucault the major effect of the panopticon (a circular prison designed by the British philosopher Jeremy Bentham (1748-1832) based on his principles of "happiness calculus") is to induce in the prison inmate (and by extension anyone) a state of consciousness that assures the automatic functioning of power. (Foucault, 1979, p. 201)

It must be remembered here that in philosophy synthetic statements are those statements judged to be true or false in relationship to the world (but which are not necessary ones), as opposed to analytical truths, which are necessary, and hence cannot be otherwise. In philosophy it is important to make this distinction between synthetic and analytical statements. Only when we acknowledge that this investigation partakes in synthetic activity might we enter the concept of holonogic cognitive-vision into consideration, and only if we understand holonogic cognitive-vision to be a synthetic psychological thought-vision without any one particular vector but rather a plethora of them united into one void of the suppositional central vanishing-point which the horizon-line had previously established.

The synthetic notion being pursued here then is of an atmospheric and holonogic cognitive-vision constituted by what goes on in and behind the head as much as by what is in front of it. Hence it is a synthetic cognitive-vision in accordance with Immanuel Kant's dictate that philosophy ought to investigate how we understand our world. (Lyotard, 1994) Tim McFadden in his text "Notes on the Structure of Cyberspace and the Ballistic Actors Model" in Michael Benedikt's Cyberspace: The First Steps (Benedikt, 1991, pp. 335-362) adapted the concept of the holon's ambiguous relationships in the early-1990s as a model for understanding the synthetic configuration of cyberspace in that holons, like cyberspace, have both synthetic cohesion and separateness as their structural elements. (McFadden) I find that the model holds true and is valuably useful in conceptualizing the complexity of ambient immersive optics in virtuality. Christine Buci-Glucksmann recognized and termed this ubiquitous perspective the Icarian gaze in her book The Cartographic Eye. (Buci-Glucksmann) This notion as well compliments Roy Ascott's synthetic awareness of what he calls cyberception, as articulated in his essay "The Architecture of

Cyberception". According to Ascott, "cyberception involves a convergence of conceptual and perceptual processes in which the connectivity of telematic networks plays a formative role. "

(Ascott, 1994)

Certainly it is true that hidden in us and in connected computer space there is something so large, so astounding, and so pregnant with the darkness of infinite space (Rucker, 1984) that it excites and frightens us and thus returns us to the experimental and to a state of stimulating desire and perceptual restlessness. But more specifically, how any one space feels is the aim of any immersive simulation, and the most complex discernment to gauge. When people commonly speak of "getting the feel" for a new place, I believe they are referring to their unconscious holonogic-visual analysis of said space as any feeling of an environment is established by unconscious exchanges of immersive information.

Unconscious particularly in art because there are clearly no objective mimesistic values attributable to the felt qualities of art's space, for as Jane Harrison tells us in Ancient Art and Ritual, art is not mimesis (Bogue, 1991, pp. 77-78), but rather mimesis comes from art's emotional expressions. (Harrison, p. 21) Too, László Moholy-Nagy (1895-1946) points out that "every cultural period has its own conception of space, but it takes time for people consciously to realize it". (Moholy-Nagy, 1947, p. 56) We must additionally recognize that ideal immersive onsciousness (the silk of the peripheral unconsciousness) takes place not only over time but within the emotional brain and that much of immersive consciousness is supra-sensible. Therefore it is appropriate that metaphysical (ideological) ideals in rapport with their externalization in art will throw this dissertation through its entire trajectory.

Concerning virtual space, all that we consciously know is that cyberspace is a total abstraction (Pesce, Kennard &Parisi) which is constructed, in philosophical terms, as a universality without totality. (Lévy) Gilles Deleuze gives us a further explanation via the French author Marcel Proust in his book Bergsonism by defining the virtual as that which is "real without being actual, ideal without being abstract". (Deleuze, 1988, p. 96) Ensuing Deleuze, Pierre Lévy in Becoming Virtual: Reality in the Digital Age defines virtuality as a complex of trends, tendencies, constraints, goals and forces linked to a creative problem solving process. (Lévy) Brian Massumi, another Deleuzian in conspicuous agreement with Lévy, defines the virtual as a "pressing crowd of incipiencies and tendencies" which produce "a realm of potential". But for Massumi the virtual is also "a lived paradox where what are normally opposites coexist, coalesce, and connect...". (Massumi, 1995, p. 91)

There is no physical protoplasmic body evident in VR's virtual space, merely an attention-vector that responds to spatial cues. (Balsamo) In this respect the virtual body conforms to the technical "inhuman" abstract body which Charles Wentinck describes as a body which has "no contact with the surrounding atmosphere". (Wentinck, p. 157) An immersant moves in virtual space by shifting a felt interest such that an impression of movement is conveyed. How our states of feeling and interest and consciousness are variegated by experiences within the total abstraction of cyberspace will be of prime interest as we look to see how abstract ideas and ideals impact upon the motivational theories and practical employment of artists in the past and now.

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