Mundus Imaginalis: Time in Cyberspace

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Abstract

Temporality, the thread of time, is in fact the container for the demarcation of real or imagined events in our lives. Historically, philosophers have crystallized the definitions of time within parameters of succession. Western philosophy indulges in the inflated importance given to the notion of the past and the grandiose role it plays in referencing our modes of temporal existence. The structure of our uni-dimensional timeline in this case is perpetually tipped, like a see-saw with only one body at one end, outweighed by our constant gaze turned in the direction of past events. Even our present state of being is quickly drowned into our obsessive claim that 'what is,' no longer exists. And, as for the future, its contours of possibility, potential and prospect are quickly confined into limiting parameters of 'what shall be' must follow 'what has been'. A co-dependency occurs in this definition between the past and the future. Our Western culture prides itself in its nostalgic adoration of loss and unreachable aims. But this uni-dimensional timeline, this static thread of temporal representation does not allow for a transformational representation of reality.

What is time?

What is time? Where is it? Does time hold a space? A visual presence in the concretization of our mind? Temporality, the thread of time, is in fact the container for the demarcation of events in our lives – real or imagined. Historically philosophers have crystallized the definition of time within parameters of *succession*. Time as a succession of nows – a uni-dimensional line of events. Past, present, future. An evolutionary succession of events, moving flatly along a line, centered upon the reference of the past. The past plays a crucial role in the Western structural representation of time. The visualization here is simple: time can be visually illustrated by a clear, fine thread, a continuous line which can be broken neatly into pieces, fragments, numerically measured in succession. Western philosophy indulges in the inflated importance given to the notion of the past and the grandiose role it plays in referencing our modes of temporal existence. The structure of our uni-dimensional time line in this case is perpetually tipped, like a see-saw with only one body at one end, outweighed by our constant gaze turned back in the direction of past events. Even our present state of being is quickly drowned into our obsessive claim that what is now, already is, no longer. And, as for the future, its contours or possibility, potential and prospect are quickly confined into limiting parameters of 'what shall be must follow what has been.' A co-dependency occurs, in this definition between the past and the future. Our Western culture prides itself in its nostalgic adoration of loss and unreachable claims. But this uni-dimensional time-line, this static thread of temporal representation does not allow for transformational representation of reality.

The Fragmentation of Time from the Essence of Being

Western philosophy relies heavily on the collocation of space in order to inject dimensionality and 'depth of perception' into our temporal representation. This leads to the marriage of time and space as structural definition of *being* and *existence.* This representation is limiting in that it does not allow for the complexity of 'essence of being' of movements of psyche, unbound by time and space. How, would we integrate, according to this lopsided definition of time, the concepts of *animus*, *soul* and *psychic energy*? One way certainly has been the realm of

religion and or magic. The occult, the dark and terrifying realm of inexplicable manifestations of reality. We suddenly find ourselves speaking of the collapse of time and leaps of faith as we try to account for seemingly uncountable exchanges between the succession of “nows” as definition of time and the expression of unbound energy as definitions of being. Heidegger transgresses these seemingly irreconcilable elements and unifies them into a set of propositions in his lecture On Time and Being.

Heidegger – Time, the Fourth Dimension and the Unification of Time and Being

Heidegger begins with Western Philosophy’s uni-dimensional definition of time as a succession of “nows” and leaps into definitions of time as a three and four-dimensional dimension. Heidegger begins his lecture by minutely defining being as a form of presencing and time as a notion of giving or extending forth. He states:

“Time itself is nothing temporal, no more than it is something that is. It is thus inadmissible to say that future, past and present are before us ‘as the same time.” Yet they belong together in the way they offer themselves to one another. Their unifying unity can be determined only by what is their own that they offer themselves to one another. But what do they offer to one another” Nothing other than themselves –which means; the presencing that is given in them. With this presencing, there opens up what we call time space.” (Heidegger 14).

He goes on to say:

“How are we to determine this giving of presencing that prevails in the present, in the past, in the future? Does this giving lie in this, that it reaches us, or does it reach us because it in itself a reaching? The latter. Approaching, being not yet present, at the same time gives and brings what is no longer present, the past, and conversely what has been offers future to itself. The reciprocal relation of both at the same time gives and brings about the present. We say “at the time and thus ascribe a time character to the mutual giving to one another of future, past, and present, that is, to their own unity.” (Heidegger 11).

From these claims, Heidegger is now able to go through his propositions on time and space and his ‘stretching of time’ from a uni-dimensional structure to a three-dimensional representation. In this way, Heidegger gives time a dimensionality of high complexity. First raising its definition from uni-dimensional as a succession of nows to a three-dimension quality by introducing the notion of opening and of extending of being onto the reciprocal state of temporality.

“Dimensionality consists in a reaching out that opens up, in which futural approaching brings about what has been, what has been brings about the opening up of openness. Thought in terms of this threefold giving, true time proves to be 3-dimensional.” And then later:

“…the unity of time’s three dimensionality consists in the interplay of each toward each. This interplay proves to be the true extending, playing in the very heart of time, the fourth dimension, so to speak – not only so to speak, but in the nature of the matter.” (Heidegger 15).

But Heidegger does not stop here. He moves one step further into his ground-breaking statement:

“True time is four dimensional.”

The claim relies on drawn out definitions of infinite exactitude and complexity where Heidegger brings forth propositions of great semantic precision as building blocks for his proposition. By making this claim, Heidegger reintegrates the notion of being in its infinite possibility of representation. This claim also allows for the integration of my definition of 'essence of being' into the notion of time and interaction and exchange in realms both bound and unbound by time.

Pushing past the veil of spatial and temporal elements, beyond containers of existence, exist the free realm of unbound psychic energy. In psychology, this realm is defined by the unconscious and the world of dreams – confined by censorship and the barriers between conscious and unconscious thought. In religion, this realm is evoked by the notion of God, angels and saints. In science, it is omitted altogether and always pushed back into stratified and structured justifications of facts and the laws of nature. What about technology? Where does animus fall in our techno poetics? What is the role of technology in the definition of being, if any?

Technology has found its way into the role of substitution for the bridging of animus and body. A substitute for the transfer of psychic energy. A simulation of transference of soul into the incarnation of flesh. Baudrillard discusses the concept of transparence in relation to technology and the emptiness our culture carries within at all times. The transparence of 'contentless' media, the transparence of invisible individuals in the world of signs prevails in our society as we settle into this new century. Graffiti for example has as its purpose to mark the space we occupy in a city, to concretize the existence of its author, not in identity or naming but in transparent unidentified marking. The sign in this case resembles the blaring of a voice, devoid of any sense or content but magnifying the notion of existence as a space occupied by matter. The body in our techno world of the machine has also become matter devoid of meaning – occupying space. My body holds a space in front of you but do you know to read it?

Baudrillard discusses this notion of unidentified marking in cities in the form of graffiti as an attempt to fill the void of our senseless existence. In this, in the face of uncertainty, that the drive for concretized manifestation of existence is the strongest. The blaring voice rarely expresses but simply marks the space it occupies.

"Ce qu'on peut voir dans les graffiti recents de New York ou de Rio. La generation precedente disait "J'existe, je m'appele Untel, je vis a New York." Ils avaient une charge de sens, quoique presque allegorique: celle du nom. Les derniers sont purement graphiques et indechiffrables. Ils dissent toujours implicitement: "J'existe, mais je n'ai pas de sens, je ne veux rien dire." Necessite de parler quand on n'a rien a dire. Cette necessite est meme d'autant plus grande qu'on n'a rien a dire, comme il devient d'autant plus urgent d'exister quand la vie n'a plus de sens." (Baudrillard – L'Echange Symbolique. 28).

And in this world, what if technology and the forms it has taken in the disembodied realm of virtual reality and the online would be to replace the role of the unity between soul and body in embodied communication?

Synchronicity, Telepathy and Transfer of Psychic Energy

An anecdote:
Spring 1993

The snow had been falling all morning; when I looked outside the living room window I understood the notion of confinement. We would not leave the house today. A group of us had found our way into the Catskills on this late spring blizzard morning. We had gathered there as a group and had become somehow, cohesively warm and communicative with one another despite the fact that most of us had never met before. We were all linked by a single person. A chain of friends. We decided to play a game in the whiteness of the living room light. Outside, a distant sun was shining casting a glaring reflection onto the snowdrifts surrounding us. The game was a derivation of charades. The rule governed that one person would leave the room leaving the

group to decide on a famous person from any era to be discovered by the guesser. The person then would re-enter the room and proceed to ask a number of yes/no questions in order to bring to light the identity of the mysterious person. I hated guessing games and when came my turn to leave the room I felt annoyed and frustrated at the prospect of having to ask an infinite number of questions which would or would not yield success. I would never have the patience. I exited the room and reentered after minutes. Immediately, I felt overwhelmed by the endless possibility of questions. On the second question, I expressed my annoyance and discouragement to the group. A close friend of mine in the group then turned to me and calmly proposed that she reveal to me the identity of the person to be guessed via telepathic channeling. I had never done such a thing before and did not take the proposition seriously, but in my playful mood, I agreed. She simply said: "OK, close your eyes and I will 'tell you who it is.' A second passed and in the absence of my thoughts and the darkness of my vision, I clearly and distinctly received the information. "Marlon Brando." I jumped and felt startled by the loudness of her voice in my head, when in fact I had not 'heard' anything at all, at least not out loud. My friend knew we had successfully made the exchange and simply looked at me smiling. I, incredulous blurted: "Marlon Brando." The group broke out in exclamation, and surprise, excitement and a little fear.

How do we quantify the invisible? Quantum Physics is the science of possibility. Perhaps, the day will come someday when every high school student takes a course in telepathy and psychic soul searching. But the quest for our understanding of the occult has been a fascination for generations. And among the seekers, are the most unlikely of culprits. Derrida discusses telepathy and the transfer of psychic energy in situations of openness. In other words, if one is not open to the "other side" as I like to call it, the connections will not be made.

"Une surface de plus en plus offerte a tous les phenomenes refuses naguere au nom d'un certain discours de la science, aux phenomenes de la "magie," de la "voyance," du "sort," des communications a distance, aux choses dites occultes. Rappelle toi et nous, nous n'aurions pas avance d'un pas dans ce traitement de l'envoi (l'adestination, la destinerrance, la clandestination) si parmi toutes les telechose nous ne touchions a telepathie en personne. Ou plutot si nous ne nous laissions pas toucher par elle. Oui, toucher, parfois je pense que la pensee de "voir' ou d'"entendre", touché y met les pattes, et que voir ou entendrea revient a toucher a distance – tres vieille pensee, mais il faut de l'archaique pour acceder a l'archaique. Toucher, once les deux bouts a la fois, toucher du cote de la sceine et ladite objectivite technique s'en emparent maintenant au lieu de lui resister comme auparavant…(Derrida 286).

Derrida defines telepathy as "a psychical counterpart to wireless telegraphy." As we deconstruct cyberspace and examine both its ontological and structural implications, we are faced with sparse but nonetheless fascinating theory. It is interesting to realize that in examining what has been written about cyberspace so far, very little addresses the notion of *time*. Time needs to be addressed both in terms of its definition in cyberspace, but also in relation to the implications its notion takes on for our modes of expression, perception and even memory both in and out of the disembodied realm.

Definition of time in Cyberspace

Before defining time in relation to cyberspace, it is important to differentiate between the two types of cyberspace which I address in this analysis. As Allucquere Rosanne Stone proposes in her chapter: *Will the Real Body Please Stand Up* in Benedikt's Cyberspace's First Steps, cyberspace has been the object of an evolution. The realm of online communities certainly represents its initial and infantile stage of development. This type of disembodied realm differs greatly from virtual reality's cyberspace where the user(s) extend some type of visual representation of self in the system. The notion of time in both of these realms shifts accordingly due to the inherent differences or representation of self in both of these realms. In the disembodied cyberspace of the online, the users create and recreate their personas through the

power (and limitation) of written language on a screen monitor. It is, through the appropriate of language that these users paint their own reality of self-representation. The ‘space’ of the user in this type of cyberspace is represented by the presence of text in the system or even yet, by some kind of cartographic representation of the user’s ‘locations’ in the system. Whatever form the echoing of these personas takes on, the spatial representation of these users is minimal and almost inconsequential to the user’s interaction. This greatly differs in the disembodied realm of virtual reality where users actually hold a representation of self in the embodiment of a changing yet present ‘virtual body’. This ‘body’ often undergoes ‘movement’ through the various ‘spaces’ of the virtual worlds ‘occupied’.

Time in cyberspace is liquefied, constantly shifting, evolving and mutating according to the shifting of ‘movement’ real or imagined users undergo in the virtual realm itself.

Distance, Time, and Devotion

Automatic writing session right out of sleep: 05/01/1995

Stretching forward into the notion of distant space, their bodies flow, move forward into deployment of the motion. Collisions always take place at the relative speed of light and when flesh tears, it is not without sympathy that we all do deny responsibility. Continuous relativity of motion. I swing my arm in the moon shaped swing of motion. I stretch it far beyond the air and its resistance against the feel of light. The ball bounces, pushes itself both near and far in a collision of atomical flight. Atoms fly, and with their energy, the stars rebound – a twisted fate – the fear within and for all of its distant echoing. I hold a place in my rescue, a dream of space – a space of dream. Distant notion…if I hold you dangling at arm’s length, so close your face from my anchored fingers, I see your feet in the curvature of your soles, sinuous line of perfected symmetry. How do you hold yourself upward on such distorted symmetry? Rumblings of rumble, waves of ocean, do you hear the darkness?

Time as Relativity of Motion

Historically, physicists are split in their definition of time between the theoretical claims made by the theory of relativity and the non-relativist theorists of time. A brief highlight of these theories is helpful in laying down the basis for an understanding of time in relation to the realm of cyberspace.
Einstein’s Theory of Relativity makes a number of central claims:

1. There is no observable absolute motion, only relative motion.
2. The velocity of light is constant and not dependent on the motion of the source.
3. No energy can be transmitted at a velocity greater than that of light.
4. The mass of a body in motion is a function of the energy content and varies with the velocity.
5. Matter and energy are equivalent.
6. Time is relative.
7. Space and time are interdependent and form a four-dimensional continuum.
8. The presence of matter result in a ‘warping’ of the space-time continuum so that a body in motion passing nearby will describe a deflection of light rays passing through a gravitational field.

The ‘problem’ of the theory of relativity can be illustrated by the following case. The case of Peter and Paul. Paul travels to a distant star and returns two years older, according to his clock and his physical state. Peter, who has remained on earth has aged, according to his clock two

hundred years and has therefore long succumbed to death. Based on this case, Einstein, Lorentz and Bergson derive their conclusions. Both Lorentz and Einstein are relativists and therefore claim that both Peter and Paul's time is relative to their existence. Both physicists differ however on the subtleties of explaining the theory behind the relativity of time. The difference which generated great confusion in the early 20th century is actual quite simple and clear: Professor Herbert Dingle in his introduction to Bergson's *Duration and Simultaneity* summarizes these differences quite succinctly:

> "Suppose there are two clocks, A and B, relatively at rest, widely separated points, and suppose they are synchronized with one another according to Einstein's and Lorentz's prescription. For simplicity, suppose that, if there is an ether, they are at rest in it. Now let a third clock, C be set to fare with A and then moved from the point of A to the point of B at high uniform speed. On both theories it will read an earlier time than B on arrival. On Lorentz's theory this will be because its motion through the ether has retarded its rate of working on Einstein's theory it will be because the definition by which B is set gives it a later time than that of C." (Bergson 25).
>
> Bergson in turn, believes in the absolute essence of time and makes the statements that the absolute continuity of time applies to both Peter and Paul.

The Duality of Time in the *real* and *virtual* Body

Time in cyberspace will be defined here with a central focus on the last three points of Einstein's theory of relativity:

6. Time is relative.
7. Space and time are interdependent and for a four-dimensional continuum.
8. The presence of matter results in a 'warping' of the space-continuum so that a body in motion passing nearby will describe a deflection of light rays passing through a gravitational field.

The interdependency existing between space and time according to the theory of relativity results in some puzzling implications for the realm of cyberspace.

The notion of time in cyberspace is the object of a split duality between the virtual self of the user and its real and actual body outside of the machine. It is crucial to make this important distinction when addressing time in the disembodied realm. For each disembodied representation of the user, there exists an actual user, embodied somewhere outside of the machine. Two separate clocks are perpetually ticking in relation to the duality of these two bodies: *real* and *virtual*. To use the analogy of the machine, the brain of the user, their cortex located somewhere in the protected embedment of the skull acts the central 'drive' of the user's perceptions. The time by which this brain apparatus functions is 'constant' (as constant as the relativity of time allows) and existent in relation to the reality of matter and the embodiment of flesh. Beyond the skull and outer layers of the cortex, within the system of the machine exists another clock. A mythical, perpetually shifting, constantly evolving and always liquid clock. It's ticking is only confined to a space of transformation, whose represented forms take on a million faces. The face of time is shifting here.

The complexity of this idea is layered with the dependency of time and space. Space and time are co-existent and intertwined. In the weaving of the fourth-dimension continuum the three coordinates of space join that of time into the complex structure of the space-time continuum. In order to hold onto this thread of theory, let us go back to the theory of relativity and the two claims that"

7. Space and time are interdependent and form a four-dimensional continuum.

8. The presence of matter results in a 'warping' of the space-time continuum so that a body in motion passing nearby will describe a deflection of light rays passing through a gravitational field.

It is the latter claim that is the focal point in this discussion. The measurement of time is directly dependent on the motion of matter through space at the speed of light. The case of Paul and Peter clarifies the construction of this argument. Paul who has traveled to a distant star comes back two years later, aged only two years. Peter who has remained on the earth has aged 200 years.

The complexity of this idea holds crucial implications for cyberspace as space is constantly changing and the representation of matter and its motion always shifting.

Time in relation to either the embodiment of the user outside or the disembodied virtual representation of the user inside is relative. Relative to the motion of either bodies, real or virtual. My clock is ticking outside of the machine (real time) counting the minutes, hours, days my actual body faces. My body ages, its cells continue to decay outside of the machine. The time continues to trickle, changes takes place, the light of day shifts, the motion of outsiders around me continues to pervade. Inside, my clock ticks otherwise. It is important to realize the impact the interdependency of time-space continuum has in the light of this state of split duality. What happens to time – factor in relation to the two different bodies virtual (v) and actual (a)? The shifting of either body, their relative motion, impact the shifting of the time factor in either realm.

Incomplete Notions of Cyberspace – *Where* is time?

Few if any of the existing works on cyberspace and its ontology deal with the implications of time in this disembodied realm. The focus has been, as it traditionally in approaching spatial/temporal realms to focus on the spatial element of the analysis. This is true of Benedikt's book Cyberspace First Steps. Although it does present some fascinating approaches to cyberspace, it leaves the notion of time outside of its approach altogether. Some of the theory which focuses on spatial parameters of reality in relation to cyberspace allows for further development in comparing to cyberspace tot he realm of the imagination and or dimension of dreams. The definition then begs for the injection of our previously defined 'relative time' real or virtual. If any comparisons can be made between cyberspace and already existing and defined realms, then it would have to be the realm of the imagination and dreams.

In her chapter *Will the Real Body Please Stand Up*, Allucquere Rosanne Stone generally compares the realm of cyberspace to "lucid dreaming" on an interactive level. She states:

"Their participants (of electronic communities) have learned to delegate their agency to body-representatives of other individuals. They have become accustomed to what might be called lucid dreaming in an awake state. – to a constellation of activities much like reading, but an active and interactive reading, a participatory social practice in which the actions of the reader have consequences in the world of the dream or the book: (Benedikt 94).

The comparison between the realm of fiction or the dream world can be made easily on a theoretical level as is illustrated in the previously detailed argumentation. This needs to be taken at least two steps farther. However compelling and challenging this comparative analysis of cyberspace in relation to the realm of the imaginary may be, the fact remains, cyberspace, unlike the imagination implies interaction with other immersed beings. It is the notion of the "other," as an unpredictable, constantly mutative, independent, protean other that applies a layer of complexity to the notion of cyberspace as an immersive experience in the imaginary. Stone does not offer any propositions of any sort on the impact and or implications that such an experience may have. She simply makes the claim that this immersion is like "an active reading and interactive reading but not go any further with that proposition. In order to fully grasp the vastness of impact cyberspace has on the process of interaction, it is crucial to stay with the realization of "immersive interaction with other" a little while longer.

In his chapter *Cyberspace: some proposals*. Michael Benedikt delves into the notion of space and its definition in an approach at structural analysis of cyberspace. His claims and proposals are quite interesting. Benedikts's principles of cyberspace have enabled me to further this analysis and extend it to a comparison of cyberspace to the realm of the imagination. Benedikt however does not touch upon the notion of time at all which is both odd and limiting. A sound definition of time in cyberspace can be derived from variations made on Einstein's theory of relativity, Bergson's continuity and Simultaneity and as well as Heidegger's Time and Being.

Part II – Cyberspace and the Realm of the Imagination: Defining Cyberspace.

In his book Cyberspace: First Steps: Michael Benedikt examines cyberspace by defining it through the representation of seven principles. These principles are useful in understanding the parallels drawn between cyberspace as an 'artificial illusory space' (Benedikt 119) and the space of our "everyday world" (Benedikt 119).

Benedikt's principles are closely linked to five topographical elements which both define the physical realm or reality (space) and the realm of fiction (imagination). The topographical elements are as follows: 1) Dimensionality, 2) Continuity, 3) Curvature, 4) Density, and 5) Limits. It is easy to perceive their links to the central concept of space. It is interesting and challenging to draw the links that exist between these elements to the five elements defined by Aristotle in developing the concept of "Tekne Rhetorike" Tekne meaning "the art" and Rhetorike "of persuasion". Aristotle refers to these five elements as "Inventio, dispositio, elocutio, action, and memoria." (Barthes 124 L'Aventure."

If we adhere to the definition of cyberspace as an imaginary realm where the seeds of our imagination can take form and develop into a limitless number of forms, events, representations and embodiments, then it is important to define the five topographical elements by which these representations and embodiments can exist. Without the various structural aspects of these elements (inventio, dispositio, elocutio, actio and memoria) the representation and event taking place in cyberspace could not exist. For example, without continuity, the event would become meaningless. If I suddenly began to ramble in a discontinuous fashion, this text would lose its very reason for existing: meaning.

When an artist decides to capture an idea, she needs to abide to certain, somewhat flexible rules of development which will allow the idea to take full form for consumption. From the second an idea is born, from the very moment it becomes an entity, in and of itself, it bares a shape of continuous development. The idea has a core, a topic, a focus which allows both its creator and the perceivers to hold it, mold it, shape it anew. This core is "dimensionality," it is what Aristotle calls "inventio." It is the essence of the idea, the topic of a story. Once it exists, the idea can soar, spring forth ahead into the journey of conveying. This stage is held together by "dispositio" or "continuity." Just as space (physical or abstract) always bears a quality of continuity and smoothness, the idea is transpierced by a single thread of continuum. "Dispositio" is the art or telling a story, carrying the reader on a path, through the motion of the ideas flowing throughout the story. This does not have to be linear process. It is merely a way of catching a piece of the thread, anywhere along the body of the story and following it through to another place.

Now, our idea not only has a core but a thread onto which it can grow, travel, move forward. But how will it latch on to other ideas? It needs "curvature" to do so. What Aristotle calls "elocutio." A parallel can be drawn between the concept of a point in space and that of a word in the body of a text. A curve can then be compared to set of words arranged in a certain way as to form a sentence.

"A point in a three-dimensional coordinate system represents a single three-variable state, a curve, a contiguous set of three-variable states and so on." (Benedikt 134).

In the realm of physical space, objects have a curvature by the mere fact that they have dimensional characteristics – they have a body, a shape which can be perceived, touched. In the

realm of the imaginary, the concept has a body, whether in a text, the way the words come together to form sentences, a style of writing, or, in a more abstract way: the way in which our mind connects ideas together, the way in which it loops, coils, latches and convolutes ideas.

The fourth topographical element is that of “density” or “actio.” In order to understand the concept of physical density, it is helpful think of it in terms of a variation of one element in comparison to the norm of a stable element. (see fig 1). The first element, that which will vary can be referred to as space () and the second one will be space *. Any action, or movement (in actio) will result from the ratio of variation between the two elements. These words can be interchanged with any other words reflecting opposition and variation from one another. But for the sake of our argument, we will stay with these concepts. “Actio” closely resembles density in that it represents a variation of the representation of the ideas in comparison to the norm of the text. In a play, it is the acting, in a speech, it is the intonation of a voice, in cyberspace, the movements of the user in whatever form she/he may have chosen to be represented.

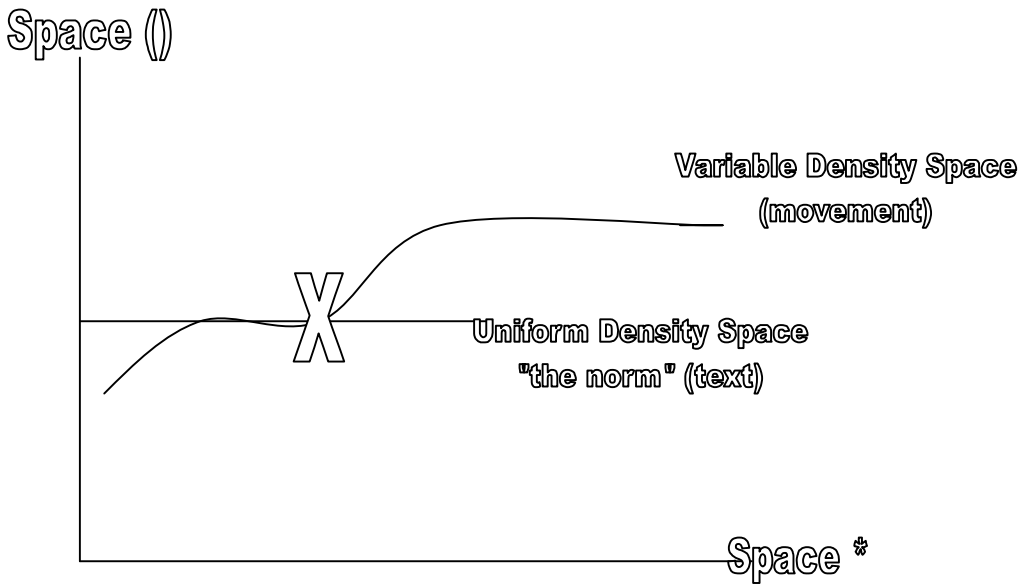
Space (|)
Variable Density Space
(movement)
X
Uniform Density Space
"the norm" (text)
Space *

Figure 1

The last of the topographical elements is that of “limits” or “memoria”. It is the easiest to understand but perhaps the most interesting. The concept of boundaries and limitations has accompanied each and everyone of us throughout our journey so far – it is safe to assume that it will continue to do so until the very end. In space, the concept is visible: how big is a point, a room, a field, the ocean, the sky, the universe?

“Will cyberspace have edges to blackness, walls of final data? Or will it be endless? Like a planet, so that traveling for long enough in the same direction we find ourselves back where we started? Or might it be possible to present cyberspace phenomenally as four-dimensional sphere, where striking out in any (three-dimensional) direction brings one eventually back to where one started? (Benedikt 152).

It is important to recall the fact that rules are made to be broken and that if cyberspace is defined as finite, the concept of infinity in the way cyberspace is used can be applied. It is the same in our use of memory in recalling a particular moment in time, or retrieving a specific item of information stored. Even though the content of our memory in recalling a particular moment in time, or retrieving a specific item of information stored. Even though the content of our memory is limited (a set number of elements have been entered into its storage capacity since our birth) the way in which we can recall things, the possibility of associations made from the act of recollection is limitless and infinite. This is a loaded concept – especially in the age of computers. Could memory become obsolete? Would the user of cyberspace still need to remember anything outside of its realm? The possibility of user entering cyberspace and instantly downloading previous interactions having taken place in cyberspace is a jolting concept. Once the user is back into reality, he or she could instantly “forget” until entering the realm once again!

As Marcos Novak states in his chapter on Liquid Architecture of Cyberspace:

“Cyberspace is a habitat of the imagination, a habitat for the imagination. Cyberspace is the place where conscious dreaming meets subconscious dreaming, a landscape of rational magic, of mythical reasons, the locus and triumph of poetry over poverty, of “it-can-be so” over “it-should-be-so” (Benedikt 226).

This realm of the imaginary is also that of the “poetic realm” where meaning is transcended, the world of fiction, the dimension of our dreams, the space where creativity takes form where ideas are born and take shape freely.

It is therefore possible to compare the way literature is created and the way cyberspace is used. In other words, the user in cyberspace is very much like the artist; it is important to place the emphasis on the world “like” in that the user is not the artist. Cyberspace can then become the dimension where man becomes God – as Baudelaire stated: “L’artiste est a lui-meme son pretre, son roi, et son dieu.” (Charles Baudelaire Les Curiosites Esthetiques). The artist is his own priest, king and God. This particular definition of cyberspace can perhaps lead to a clearer understanding and a thought-provoking exploration of some of the fascinating possibilities of cyberspace as a realm for the imagination. As does literature, cyberspace requires an attachment to certain “rules” and structures – even if later, it means transcending and breaking some or all of those rules. As Novak said it, the realm of “it-can-be-so” and not “it-should-be-so,” but it is important to define these rules in order to understand exactly what it is that we are transcending.

Cyberspace is a tool for a conscious user, not a dreamer – this tool therefore represents a rhetorical capacity for the user which is based on certain rules of action.

In the same way that physical space presents us with the “freedom to move” (Benedikt 126), imaginary space allows our mind the freedom to create freely. Our ideas can soar to no end while respecting certain principles by which they can be consumed as ideas, devoured by others, by the receivers of their product. As is stated in chapter 7 of Cyberspace:

“The design of cyberspace is, after all, the design of another life-world, a parallel universe, offering the intoxi-achieved – a dream thousands of years old: the dream of transcending the

physical world, fully alive, at will, to dwell in some Beyond – to be empowered or enlightened there, alone or with others, and to return." (Benedikt 137).

Let's explore the correlations existing between Benedikt's principles of cyberspace in order to see how they link cyberspace directly to the realm of the imagination.

1. The Principle of Exclusion (PE)
2. The Principle of Maximal Exclusion (PME)
3. The Principle of Indifference (PI)
4. The Principle of Scale (PS)
5. The Principle of Transit (PT)
6. The Principle of Personal Visibility (PPV)
7. The Principle of Commonality (PC)

The first principle is the Principle of Exclusion (PE). This principle states:

"Two non-identical objects, having the same extrinsic dimensions, and dimension values, whether at the same time, or including times as an extrinsic dimension at the outset, is forbidden, no matter what other comparisons may be made between their intrinsic dimensions and values." (Benedikt136).

In other words, two identical objects cannot exist at the same place, at the same time. If this were the case, there would be a case for solipsism – since both entities would be one and the same. In the realm of fiction, this principle exists and is represented in the construction of a story – or entity of the imagination. It is the principle of comparison of two objects or elements – such as the comparison between the two different objects of different extrinsic qualities – due to their intrinsic sameness, they can be compared – light and darkness for example (they are both the entity of "light").

The second principle is the Principle of Maximal Exclusion (PME):

"Given any N-dimensional state of phenomenon, and all the values, actual, and possible – on those N dimension, chosen as extrinsic dimension – as "space and time" – that set of (two or there, or four) dimensions that will minimize the number of violations of the Principle of Exclusion (Benedikt 139).

The second principle states that two entities of different intrinsic qualities cannot be interchanged. True cannot be false, existence cannot take the place of death. Reality and cyberspace can be linked by this principle through the definition of the metaphor. The metaphor in fiction allows certain elements to be linked even though relation is of complete intrinsic oppositeness. For example, in the sentence: "The King is sun." both entities "king and sun" are of different intrinsic qualities and yet they are linked in a metaphor. The role of the metaphor in fiction as Aristotle stated is to have a transference of words.

The third principle – The Principle of Indifference (PI) is truly the reality check. It defines the reference points we have in common with the outside world.

"The felt realness of any world depends on the degree of its indifference to the present of a particular "user" and on its resistance to his/her desire." (Benedikt 160).

PI is the principle that deals with perception and understanding of what is perceived. The level of understanding and the process of perception are intertwined in the perceiver's desires. "What is real always displays a measure of mysterious even gratuitous, complexity." (Benedikt 160)..in fact exceeds what we know, always. This complexity is reality's "song of seduction." Cyberspace, as does the imagination should maintain that level of mystery, opaqueness, ambiguity. Objects should not merely reflect their exact explanation. An interesting aspect explored by Benedikt is that in a world that is real, life goes on living whether you are there or not.

The kitchen table will still exist even if you exit the kitchen, leave the apt, or even die. But in an imaginary world such as cyberspace, things wait for the user. When logging on things are as they were left. Should this continue to remain true in cyberspace? Absence, from a certain "reality" has a cost. In this aspect, cyberspace would then lack the personal dimension existing in the dream or in the acid trip (as Benedikt tells us). Things go on without you, information is missed. Perceptions and conclusions are made in your absence, the syndrome of paranoia quickly develops as the user is forced to ask: "What has happened in my absence that could be harmful to my well-being, to my existence?" In exploring the creation of cyberspace, this concept will certainly be of some importance.

The Principle of Scale is simply the principle of coherence and understanding. It sates that:

"The maximum (space) velocity of user motion in cyberspace is an inverse, monotonic function of the complexity of the world visible to him." (Benedikt 162).

In other words, the faster the user moves in cyberspace, the lesser the complexity of the environment in which she or he is moving. This can also said to be true of information and our understanding of it. The level of understanding of a concept is inversely proportional to the level of its complexity. Benedikt uses the example of the Japanese gardens to illustrate this point. This miniaturized garden is complex with its rivers, mountains, trees and seas. A person exploring the garden cannot see the entirety of the garden as some of it is hidden, offering partial views, the visitor obtains more and more information on the garden as he or she advances but accessing this information is a slow process in that there are numerous obstacles everywhere: rocks, bridges, narrow twisted paths. But as Benedikt states:

"The visitor to the garden nonetheless feels powerful: his every initially registered motion makes a difference to what he sees..." (Benedikt 162).

The opposite is true of wide-open spaces where access to information and invisibility is nearly instantaneous. The viewer feels minimized – speed of movement is increased, complexity reduced. This principle is important in that it represents the way in which we access information by moving through and through.

The fifth principle is the Principle of Transit (PT):

"Travel between two points in cyberspace should occur phenomenally through all intervening points, no matter how fast (save with infinite speed), and should incur costs to the traveler proportional to some measure of the distance. (Benedikt 168).

The concept of instant presence from any point to any other point could therefore not occur. If the user finds himself in the realm of Zadar fighting the forces of evil, he could not instantly escape from danger by appearing in the realm of good without having to spend energy and efforts on the escape. If I want to go into the bedroom, I must pass by all the intervening points that lead me from this chair to the boundaries which indicate the entrance of the bedroom. The same holds true in the realm of fiction and text. All ideas and pieces of the text are linked by what is referred to in semantics and literature as "connectors". Words such as "and," "but," even though," "somehow" are nodes onto which meaning can be latched on. The same holds true in cyberspace where certain nodes of information would lead to new entities of information.

The principle of Personal Visibility (PPV) addresses the concept of perception of self and that of the other. It states:

"Individual users in/of cyberspace should be visible, in some non-trivial form and at all times, to all other users in the vicinity, and individual users may choose for their own reason whether or not, and to what extent, to see, display any or al of the other users in the vicinity." (Benedikt 177).

This principle reflects an ethical dimension and it can certainly be argued whether this particular principle is valid or not in the creation of cyberspace. Who has not dreamed of being invisible at one time or another? The freedom to move freely in the presence of others without the implications of being seen or acknowledged is an ancient fantasy. We quickly slip into the argument of voyeurism where one's desire to lurk and indulge is the voyeur aspect of self, becomes evident. This principle is closely linked to the concept of the user of cyberspace being both the user and the creator where the notion of the sender and receiver becomes confounded into one. As the user logs in, she is seen, and she sees. Receivers and senders become reciprocal units.

The last principle is that of Commonality which refers to "interpersonal communication and the social dimension." It is closely linked to the principle of indifference and yet they differ. This principle "requires that all corners to a given domain at a given time in cyberspace are to see/hear largely the same thing –the same place, the same objects, the same people – or at least some subsets of one "thing", and that the same direction considered as "up".

It is the common language communicators share –when I perceive a table and point to it, you know that what I am pointing to is a table, not a flower, or a forest fire. When I touch the surface of the glass that separates me from the outside, I know that the glass is glass; it is not my skin nor is it yours. It is the reference I have with myself and the world around me. There exists, in literature the principle of reality which is synonymous with that of Indifference. The famous linguist Roman Jakobson defines it as "the referential function." It is the web of references used constantly in order to maintain our grasp on what is real and what is not.

Michael Heim makes a crucial point in this chapter on *Virtual Reality: Theory, Practice, and Promise* in which he defines virtual reality as a space and experience which should not merely reflect our existing reality with all of its anchoring elements of stability such as space and time. He states:

"The ultimate VR is a philosophical experience, probably an experience of the sublime or awesome. For the sublime, as Kant defined it, it the spine-tingling chill that comes from the realization of how small our finite perceptions are in the face of the infinity of possible, virtual world is to settle to inhabit. The final point of a virtual world is to dissolve the constraints of the anchored world so we can lift, anchor, not to drift aimlessly without points, but so we can explore anchorage in a few new places and, perhaps, find our way back to experience the most primitive and powerful alternative embedded in the question posed by Leibnitz: "Why is there anything at all rather than nothing?" (Heim 120).

Once we have defined all of the elements which anchor us to a realness, once we have touched the rigidity of the surface of reality, we can decide to dissolve the solidity of these anchors. WE can decide to let go, drift freely, far and wide, into the depth of our imagination. The exploration should not take the path of a non-sensical delirium which bears no value to the explorer but it should always maintain a level of probing, a degree of enlightenment. It should enable us to continue our journey and go on discovering who we are, what we represent and why we are here.

I AM NOT I

I AM THIS ONE
WALKING BESIDE ME WHO I DO NOT SEE
WHOM AT TIMES I MANAGE TO VISIT,
AND WHOM AT OTHER TIMES I FORGET;
WHO REMAINS CALM AND SILENT WHILE I TALK,
AND WHO FORGIVES GENTLY WHEN I HATE,
WHO WALKS WEHRE I AM NOT,
WHO WILL REMAIN STANDING WHEN I DIE."

From Juan Ramon Jimenez

Light and Shadows,
Translated by Robert Bly.

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