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.

TOWARDS A CORREAL ARCHITECTURE

Reflections on Frederick Kiesler

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ABSTRACT

This thesis approaches the work of Frederick Kiesler as an attempt to resolve many of the issues resulting from the technological circumstances of the late twentieth century. It concerns the problematic caused by the gap existing between the senses and imagination, which causes a break between perceiving the world and the human act of creation. This fact reflects the way that nowadays reality has been "instrumentalized", locating man in a realm in which the human body does not interact according to its inherent capacities. Kiesler, through his theory of "Correalism", searched for underlying continuity, and proposed that man inhabit his world as a participant, where senses and imagination become one for reinterpreting the event of architecture, bringing forward the possibility of "enlivening" space. The relevance of "Correalism" for contemporary architecture becomes more significant when seen through a phenomenological perspective, which suggests that "reality" should be apprehended through the link between the embodied self and its contiguous world. Correal architecture should bring about a "more sensitive" experience of space by creating an interacting dynamic that would reflect man's existence as a whole.

ABRÉGÉ

La présente thèse considère l'oeuvre de Frederick Kiesler commer une tentative de résoudre plusieurs des questions résultant du contexte technologique de la fin du vingtième siècle. Elle s'adresse à la problématique causée par le fossé existant entre les sens et l'imagination, qui signifie une brisure entre la perception du monde et l'acte humain de création. Ceci reflète la façon dont la réalité a aujourd'hui été « instrumentalisée », plaçant l'homme dans un lieu dans lequel le corps humain n'interagit pas selon ses capacités inhérentes. Kiesler, par sa théorie du « Corréalisme » a recherché la continuité sous-jacente, et proposé que l'homme soit un participant du monde qui l'entoure, au sein duquel les sens et l'imagination s'unisssent dans la réinterpréation de l'événement architectural, amenant ainsi « l'animation » de l'espace. La pertinence du « Corréalisme » pour l'architecture contemporaine devient plus significative lorsqu'elle est envisagée d'une perspective phénoménologique selon laquelle la « réalité » devrait être saisie par le lien qui existe entre le moi incarné et son monde contigu. Une architecture co-réelle vise à favoriser une expérience « plus sensible » de l'espace en créant une dynamique interagissante qui considère l'existence de l'homme dans sa totalité.

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Many years later, as he faced the firing squad, Colonel Aureliano Buendía was to remember that distant afternoon when his father took him to discover ice. At that time Macondo was a village of twenty adobe houses, built on the bank of a river of clear water that ran along a bed of polished stones, which were white and enormous, like prehistoric eggs. The world was so recent that many things lacked names, and in order to indicate them it was necessary to point. Every year during the month of March a family of ragged gypsies would set up their tents near the village, and with a great uproar of pipes and kettledrums they would display new inventions. First they brought the magnet. A heavy gypsy with an untamed beard and sparrow hands, who introduced himself as Melquíades, put on a bold public demonstration of what he himself called the eighth wonder of the learned alchemists of Macedonia. He went from house to house dragging two metal ingots and everybody was amazed to see pots, pans, tongs, and braziers tumble down from their places and beams creak from the desperation of nails and screws trying to emerge, and even objects that had been lost for a long time appeared from where they had been searched for most and went dragging along in turbulent confusion behind Melquíades' magical irons. "Things have a life of their own," the gypsy proclaimed with a harsh accent. "It's simply a matter of waking up their souls."[1]

[1]Gabriel García Marquez, *One Hundred Years of Solitude*, translated by Gregory Rabassa, Harper & Row Publishers, New York, 1971, p. 11.

INTRODUCTION

This late twentieth century suffers from the distance between the inherent physiological reactions of our body, which have split away from the psychological reactions of our mind, thus detaching the fundamental human link between imagination and senses. The act of perception has been affected by this gap, which can be seen as an outcome of the increasing "instrumentalization" given the incessant advances of technology, settling reality into a "pre-equipped world", which is to be seen, touched, smelled and sensed in a standard way. As a result, reality is experienced as a "given", in which our sensations are diminished to a minor role operating by convention on a kind of archetypical memory. Therefore, our own experience of the world has been disconnected from a personal engagement to it. Reality is, then, to be lived in a rational and precise manner, where imagination plays barely no role or appears only as if it was an act of

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science-fiction, where one "switches on his mind and imagines, then comes back to reality". This condition is a characteristic of Modernism and its goal of technological progress. Prior to Modernism, the continuity of the world was taken for granted as evidenced in theories of imagination and belief in magic.

The history of imagination shows that it was, in fact, originally related with the process of perception itself. To perceive, more than to observe or to inspect scientifically, meant to discover the world through a process of deduction from the clues given by the senses. The act of perceiving was linked directly with the fact of imagining. To perceive did not mean to analyze predetermined indicators, but to gather together reality through experience and perform one's own interpretation of it, and thus to participate in the world as something "shared", instead of as something "given". Experience was the provider of meaning in a reality in which one's self could encounter a sense of belonging to the whole through the very fact of understanding one's "embodied consciousness" as a "synesthetic" participant[2].

It is commonplace to say that the eighteenth century marks a turning point in the history of Western aesthetics. In this period the idea of imagination as a mirror reflecting external reality began to give way to the notion of the mind as a lamp which radiates its own inner light on the objects it perceives. The artist was no longer seen as a craftsman-like imitator of nature, but as an inspired genius who brings new worlds into being, spontaneously generating original creations out of the depths of his own mind. From the end of the eighteenth century onwards imagination assumed a central role in the theories of knowledge as well as in the theories of art, and creative imagination became a hall-mark of original genius.

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[2]Both terms: "embodied consciousness" and "synesthesia", are used by Maurice Merleau-Ponty, *Phenomenology of Perception*, translated by C. Smith, Routledge & Kenan Paul, London, 1962.

This notion of creative imagination reveals the disjunction between the senses and imagination as a unity, which was the understanding prevailing until the eighteenth century. From Aristotle to the time of Kant, imagination was primarily regarded as a faculty to translate the impressions received from the outside world through the senses into mental images. Although these mental images were always suspect, and subject to verification by the intellect, they nevertheless corresponded to the world of human experience. Later on, this passive role of the imagination turned into a more active role in which these incorporated images could be combined to produce images of non-existing things.

The concept of imagination has thus varied greatly through time. Originally the term "imagination" and its linguistic equivalents, *phantasia* and *eikasia* in Greek, *phantasia* and *imaginatio* in Latin, referred to the image-making capacity of human beings. In general, it represented man's intuitions brought forward by his perceptual world, where sensations were basic elements of experience in their own right. It was, as well, a faculty for building an inner experience that depended on man himself, the images that he invested with particular meanings, and the way these images clustered.

For Aristotle, as for Plato, a *phantasia*[3] was the picture in the mind that resulted from the perception of something that was present to the senses, or from the memory of something that was once present to the senses. Imagination presented the messages of the senses to the conscious mind as an "appearance", a unified picture, in which a part of imagination was also the *sensus communis*, the

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[3]See Aristotle, *The Oxford Translation of Aristotle*, translated by J. Barnes, Princeton, 1984.

Also Plato, *The Collected Dialogues of Plato*, E. Hamilton and H. Cairns, Princeton, 1973.

common sense which compared the senses of sight, hearing, taste, smell, touch, and combined them into the percept, called the *aesthesis*, or *phantasia*. Such percepts were preserved in the memory as images.

Aristotle even thought that some dreams and visions were not caused by the Gods but by bodily states, reflecting what had been perceived and showing some dissatisfaction or imbalance in physiological conditions. Inspiration was then understood as coming from the *phantasia*, from something experienced or perceived, which was to be interpreted to create something else. Creation was a continuous rhythm coming from the very fact of being and it was not until the Renaissance that the poet's ability to make a poem, for instance, came to be labelled and discussed as "imagination", often implying some kind of supernatural inspiration. Aristotle explained the act of creating a poem as that of reflecting the poet's impressions in experiencing the world. He defended mimetic poetry, poetry based on verisimilitude, but was more concerned with the poet's art, his *techne*, than with his inspiration from some outside source.

The combination of inspiration, coming from the act of perception, with "true opinion" and practical know-how was called magic in the world of the Neoplatonists. Magic was believed as coming from the realm of experience, in which most of us live and work, alluding as well, the realm of imagination, which was directly related to the skill of applying what was perceived or "sensed" to the act of creating. The word "Magical", up to and including during the Renaissance, was used to describe any kind of operation that was believed to happen, but could not be completely explained and described. Practical knowledge of the chemistry of pottery-making and glazing, for instance, was magical for the alchemists contemporary with the Neoplatonists, as they knew that certain things regularly

came to pass in certain circumstances, but could not explain why. With the later Neoplatonists of the fourth and fifth centuries, magic and imagination together became a favoured means of communication with the divine. Magic became then *theurgy* and was to be used in rituals and incantations to compel the presence of divine forms, but they still maintained that when the soul was in a healthy state, *phantasia* could be as reliable in its visionary as in its perceptual workings.

An important change in the state of things affected directly the continuity between perceiving the world and the act of creation in reference to imagination. It was with Democritus that a distinction was made between the "primary" and the "secondary" qualities of things. The "primary" qualities are materially in things, in their material constitution, and the "secondary" qualities, like colour, taste, warmth, and so forth are not part of the constitution of things themselves, but are supplied by the senses of the human perceiver. The "primary" qualities were the scientific, quantitative concepts like shape and mass; the "secondary" qualities were the aesthetic concepts of how things appear to the senses, how they feel. Later, the new scientific rationalism was interested in "primary" qualities and the growing pre-Romantic sensibility in art was interested in the "secondary" qualities as they belonged to imagination, to the creative part of the mind.

This division remains today to the detriment of the processes of perception and creation. "To feel" has been identified with the "secondary" qualities and to "experience" with the "primary". The present lack of fusion between the "sensible" and the "non-sensible" still places imagination far from the Neoplatonic understanding of it as a means to be involved in human life at all its levels, in a wise, "down-to-earth", living way. Imagination is thought of as something that belongs to a different sphere than the "real world" and is understood only in terms

of the "secondary" division, denying any chance to restore the continuity in the process of perception, and therefore in that of creation.

Even if we are still far from understanding what it means to perceive in this "instrumentalized" late twentieth century, phenomenology seems a possible vehicle to restructure the relation between the "bodily senses" and the "mental imagination", to recover the one and only connection that may reestablish unity in human beings, and therefore provide them with a sense of belonging to a wholeness. This connection should be considered by architecture in order to reveal meaning through the fact of its experience, providing a possibility for escaping the present detachment between us and our perception of space.

The present thesis is meant to interpret the work of Frederick Kiesler as an attempt to restore this sense of wholeness. Kiesler devised a theory of architecture as a language that should establish a correspondence between man and his "created" reality. "Correalism" is meant to lead man to fulfil his need for a nexus to a "total environment"[4] in which he might discern a sense of correspondence to the world, the continuity between himself and his space, and the affinity to be built between his active energy and the stillness of architecture through recovering the link between imagination and perception.

"Correalism" aims at establishing principles that would enhance man's experience of the world, in particular of architecture, by highlighting his own means for perceiving and reinterpreting space, depending on the virtues of his imagination. Through his writings, his theatrical stages, his role within the

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[4]Kiesler uses the word "environment" in a very specific way, not related to our current ecological concerns. See part one of this thesis.

INTRODUCTION

Surrealist movement, his lifelong project of the "Endless House", and the Shrine of the Book Museum in Jerusalem, Kiesler searched for an architecture meant to be a participatory event. This thesis takes the position that Kiesler's work can be understood profitably from a phenomenological perspective and that its legacy is relevant for a contemporary architecture in which senses and thought should still matter.

The main source for my research on Kiesler has been the Archives of American Art in New York, where every newspaper clip, writing, article, documentary and souvenir has been carefully filed by Mrs. Kiesler, except for his unpublished manuscripts on vision and perception and on architecture and magic. Despite the fact that the information is complete enough to create an extensive idea about his work, the material still has a fragmentary character, given the fact that it has not yet been fully compiled. A valuable basis though, for discerning a sense of coherence in his work is his own book *Inside the Endless House*, a journal that collects his impressions, poems, commentaries and reflections on the way he sees the world. This book has been a valuable tool for giving unity to the thesis. Its quotations, used as parts openings, use Kiesler's own work to bring a sense of continuity to the elements gathered together here. Kiesler's thought is presented in two parts, each one related to his life's search for underlying continuity. Correalism in part one, and Surrealism in part two, are seen as contemporary strategies for finding meanings from which to gain correspondence to a vision of the world as a whole.

PART ONE

"From a cup to us" and the awareness of continuity

A cup rests on the table top.
In between is a saucer.
The table top rests on four legs,
the legs rest on the floor.
The floor is supported by beams,
the beams by columns,
the columns by foundations,
and the foundations are stuck in the ground.
The dugout is secured by the crusts and shells
of the earth, kept alive by the vibrant tension
of the heat and fire at the core.

Up in the room the cup is waiting for
its fulfilment, a liquid to be poured in
by a human hand through a vessel
(a secondary object) which contains the coffee, milk, tea, water
or whatever fluid will fill it.
The fulfilment of the object continues
when it is lifted up to the lips;
the mouth will suck it in
and the belly will swallow it up
You and I sitting in a chair at the table
are simultaneously aware of the space
and dimension of the room,
its height and width,
its misty corners, lit and shadowed sections,
aware of a link by a window
between indoors and outdoors,
through which we see the streets,
buildings, people or sky.
The sun strikes into the room at her willful angles
and her consecutive orders makes us feel the hours
of the day, the passing time and space.
Years and eternity are in this cycle.
You are in the midst of it.
Evidently our physical change within a room
or outdoors is constantly linked to
an ever-shifting co-ordinate of the melting forms,
Kinetic, static, colors,
blunt, hazy,
all objects commanded by their agitating forces.
All environment is an extension of us.
We can never escape the embrace of surroundings,
natural or artificial.
This is the sensory and physical monastery
we are living in and we must make the best of it
to be able to enjoy the present.
We become aware that our independence

is only a state of mind,

and that this state of mind,

if it is not to die or to be driven into a

psychotic realm, must draw its life-forces

from the energies of the universe in total

and in parts, however fleeting

that relation might be,

but always relying on its continuity,

the only constant in an ever-changing world,

a result of the correalism of our existence.

    Awareness of continuity

    is the new content of the plastic arts.

The arts shall therefore not only reflect this

inter-relationship of man with his environment,

but must mutate it by means of man's

inborn craftsmanship

to be the ever-new creator of a technological

world, call it science or art,

basic or applied.

    However competitive it might be with nature,

    the link between the two must never be broken

    if our work is to survive us.[5]

In Kiesler's view, the word continuity acquires a distinctive meaning in which things belong one to another in an orderly sequence, resembling what happens in a scenario for motion pictures, where the close coordination of all details is needed to ensure the smooth performance of the production. In a "Correal" world, as in a film, the idea of reality counts on this interdependence for constituting a wholeness that might be sensed by anyone willing to play a participative role.

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[5]Frederick Kiesler, *Inside the Endless House.* Simon & Schuster, New York, 1966, pp. 152-154.

This position is significant for architecture as it gives primacy to man's participation in the space in which he lives. Unlike film, music or painting, which we can voluntarily quit, architecture envelops us, giving the opportunity for a direct relationship with the experience of reality as a participatory event of interchanging sensations, which should provide a feeling of continuity between the oneself and space. Such is the basis of Kiesler's thought. The awareness of continuity depends on one's way of engaging reality, counting on each one's imagination for producing the guidelines to be followed. In this "world-to-be-shared", the sense of continuity is given by the idea of surroundings, vicinity or environment, meaning a close connection in which the elements conforming reality are based on one another, resembling the process of editing a production, where my text comes right after someone else's hint.

In his writings on "Correalism"[6], Kiesler describes a "balanced reality", whose elements are called environments and are meant to constitute an unbroken wholeness. The key term "environment" is to be understood not only as every condition and influence that affects the development of a thing, but as a term that includes the possibility of an intertwining between them. The word "intertwining" is useful in this sense because it reveals a sense of something being correlated to something else. It means to join closely by the means of an analogical resemblance in order to create a unity. The understanding of the word environment as an

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[6]The term "Correalism" was introduced by Kiesler as a registered name to be used in pamphlets and articles appearing in numerous publications. These articles had a wide thematic and presented all sorts of topics, from an elephant's foot to Duchamp's "Big Glass", from the wonders of sound reproduction to the basis of photography, from a new approach to building design to the innovative techniques for theatrical stages, etc. They are filed in the Archives of American Art, Smithsonian Institution, New York.

intertwining opens the possibility of an analogical basis for the process of creation. To make an analogy is to create a metaphor from an existing basis, which is an image based on its reflection. This analogy or reflection is something "other" than that upon which it is based. The reflection, however, is intertwined or correlated with the original basis that inspired it. The interpretation of "Correalism" as a metaphorical perception of the world seems to be consistent with Kiesler's thought. It gives a sense of unity through the active participation of man's imagination in the process of perceiving and reinterpreting the reality in which he lives.

Kiesler proposed to implement "Correalism" in three ways, always maintaining the sense of continuity as a constant. One is visionary in planning to attain continuity by dealing with a reality conformed by four environments, man, nature, technology and art, which are to be connected together in the process of creation. A second manner called "Biotechnique" is paradoxically functional, and deals with "Correalism" as applied directly to the technical production of shelters. The third direction is more speculative and intuitive. It is closely connected with the issues of perception and participation, and refers to the use of "Correalism" for the "enlivening" of architecture: rendering inanimate matter animate through restoring man's imagination to the process of perception.

In the first situation[7], Kiesler deals with the problematic relation between man, nature, technology and art. His idea of a "balanced reality" is of a state in which nature, technology and art get attuned together by the intervention of man as the inventor of his own reality. Kiesler presents man as the pivotal component of his context since "all environment is an extension of us". Man is a "nucleus of unseen forces", affected by physical and psychological conditions surrounding

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[7]See Frederick Kiesler, *Correalism*, manuscript, Archives of American Art, New York, 1930.

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him, that create a "sensory and physical monastery"; man is the provider of continuity in a reality in which everything depends on him for creating "the only constant in an ever-changing world", a continuous cycle that refers to the creation of connections between nature, technology and art.

Kiesler describes man as the only creature to exist in a technological environment of his own creation, suggesting that he should find inspiration in nature for creating technology and for obtaining a more "humanized" interaction in which technology would be nearer to his own position in reality. For devising this change he argues that only art would give the right basis, as "only the artist is near enough to nature to find a solution for this encountering":

"The phenomenon of art is the inventor of a reality which we don't find in nature. It is the only road to truth with the sensuousness of life. There is no yes or no. It is. Accept the term "art" or not; old-fashioned, debased, nevertheless it grows out of that extra-sensory perception now in disgrace with magicians of our daily mechanics. It is the constant link between the Known and the Unknown. It grows out of an inborn instinct, unites with the intellect, and creates the directives for a man-made world. A marriage of mutations. The gulps of milk presuppose the hot rod of the steer, the milk nourishes my blood and the blood feeds the energies of my brain. The evolving dream is as practical as the excrement of the bread eaten and digested. The dynamisms of diverse entities lose their identity when they integrate or disintegrate. They are equal in power to the flow of life and death. How shallow are terms, words, compared to the instantaneous four-dimensionality of instinct, gradually being reduced by our limited sensory perceptions of a three-dimensionality to two dimensions, and finally to a flat calligraphy of writing or the stroke of brush, to the one dimensionality which naturally fails the grip of physical reality. It is not the measure of depth that we are seeking, but the stenogram of the surface".[8]

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[8]Frederick Kiesler, *Inside the Endless House*, Simon & Schuster, New York, 1966, p. 134.

PART ONE

Kiesler claims that the relation between the natural and the technological environments can be resolved should technology find its inspiration in nature. This idea of finding inspiration in nature for creating technology indicates his aim for seeing the world from an analogical point of view that would allow man to interpret his own reality. To attain this goal he advises that man, as the creator of his own technological environment, should find inspiration in the arts, since only the artistic environment creates from an "extrasensory perception" that is closer to nature. Kiesler proposes that the artist take an active part in the formation of a new image of the world in which art would provide the basis for man to be aware of his unity with the rest of reality. In Correalism, the arts become the "ever-new creator of a technological world". The role of art is to provide the balance between the technological, natural and human environments in order to correct the instability created by man's misuse of technology. This misuse was Kiesler's main concern, confronting the distance between man and his technologically "instrumentalized" context. For Kiesler, the technological environment as conformed by tools, had a utilitarian meaning, but these same tools could also affect the psychological state of man:

> "Tools can be shirts or shelters, cannons or poetry, telephones or paintings,
> to fulfil man's physical and psychological needs, but they usually have an
> effect on a part of the environment of man for which they were not
> designed. Architecture, for instance, is a tool that provides shelter from the
> natural environment, but the arrangement of space also affects the
> psychological state of man. Poetry and painting are obviously not necessary
> for the physical well-being of man, but their effect upon his psychological
> activity is significant".[9]

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[9]Frederick Kiesler, "On Correalism and Biotechnique", *Architectural Record* (XXXVI) September, 1939, pp. 60-75.

Kiesler gave particular importance to the concept of the "health"[10] of man, to be preserved by the influence of art, since art can make man feel his integration to a totality. He also believed that a proper application of technology, taking into account both his physical and his psychological needs, could occur only when the pursuit of profit is abandoned. Each man could then achieve health by fulfilling his needs without excess. Man's health should be the ultimate purpose of technology, by acknowledging man's surrounding environments. The effect of technology upon man's psychological state is directly reflected in the physical activity of his body. Tools such as architecture, poetry and painting, or the arts themselves, are "co-real" for Kiesler because they affect man's psychological state, creating a direct link between the human and the technological environments. In this perspective, the artistic environment is understood as a source of man's health, both physical and psychological, which should be the ultimate purpose of the technological environment considering the effect that it has on man.

A parallel can be drawn between Kiesler and Italian philosopher Gianni Vattimo[11] concerning the relationship between technology and art. For both, art appears as the ultimate possibility to undermine the dominion of technology. Vattimo proposes a "contamination" of the languages of technology and science by

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[10]His understanding of psychosomatic health as the purpose of architecture is in line with the early European tradition, particularly in the Renaissance.

[11]For Vattimo's understanding on this relation see:

Gianni Vattimo, *The End of Modernity: Nihilism and Hermeneutics in Postmodern Culture*, translated by Jon R. Snyder, The Johns Hopkins University Press, Baltimore, 1991.

Gianni Vattimo, *The Adventure of Difference: Philosophy After Nietzsche and Heidegger*, translated by Cyprian Blamires with the assistance of Thomas Harrison, The Johns Hopkins University Press, Baltimore, 1993.

the language of art[12], in order to leave behind a Modernity characterized by the still widespread preeminence of technology.

Vattimo uses Martin Heidegger's definition of the work of art as the "setting-into-work-of-truth", in so far as "it sets up a world and it sets forth the earth"[13]. Rather than immortalizing or idealizing the work of art, Heidegger proposes that it should display its "earthiness", its mortality, and become subject to the action of time, in order to reveal a sense of truth. Truth in the work of art is explained by the meaning of the Greek word *aletheia* which signifies, according to Heidegger, "a mode of knowing in the process of creation that apprehends what is present". The work of art is truth as long as it resolves the conflict between man and the preeminent technological reality, giving a sense of wholeness. For Kiesler, Vattimo, and Heidegger, the arts should give the basis for the constitution of technology. They claim that man must engage his imagination to apprehend what is present, and from there, create something else. Art, being a product of the imagination, should serve as a bridge to associate man with his world, and to balance the role of the technological environment within the other environments. Applying this understanding to "Correalism" places the work of art as a means to express the continuity of reality, revealing the possibility of the intertwining of the environments.

But, from this point of view, Kiesler's "Correalism" as an aim for linking man, nature, technology and art together can be seen as reductive as it omits the

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[12]Even if Vattimo offers no direct example of the way that the languages of technology and science could be contaminated, he makes clear that the idea is not to aestheticize them, but to collapse the difference between technology and art. Kiesler, instead, refers to a mimesis between both. He differs from Vattimo's idea of collapsing them and, on the contrary, proposes instead to differentiate them.

[13]See Martin Heidegger, *Basic Writings*, Harper Publishing, San Francisco, 1977.

friction and distance already existing between these elements. His proposition seems overly optimistic if one considers the indifference with which art is regarded today as reflecting the way man experiences his world without counting on the imagination as a means for experiencing it. Kiesler's aim seems unattainable as well, if we regard the present relation between nature and the other three environments as full of obstacles and devoid of nearness. In our reality, nature is already something so detached in its own essence from its relation to man that such a project for putting them together seems hopeless. It can be thought that Kiesler, being aware of these impediments, paradoxically proposed a "more applicable" way for "Correalism", dealing with the actual production of things.

Kiesler introduced the term "Biotechnique" as a mechanism for studying the permanent action of the word "function" in architecture and to explore in which way the different environments could be correlated in direct reference to the construction of shelters and the design of items of daily use. The main concern in these studies was, again, the technological environment, and the claim that through its proper manipulation man would be capable of maintaining a balance within the other environments, thus ensuring his physical and psychological health.

For Kiesler, the key to a biotechnical approach towards a correalistic wholeness would depend on the understanding of the qualities of the technological product itself, beneath its process of deterioration. His understanding of technology referred not only to the actual production of things, but also to history, linking the technological cycle of transformation with historical change itself. In this perspective, he proposed to alter the actual state of the cycle of changes within the technological progress to, in some way, try to modify the historical process of constant production and consumption. In his study of changes within this process

he explored the evolutionary development of tools. He considered the "standard"[14] type tool as the one created for the purpose of meeting an absolute need. A standard knife, for instance, designed for the basic purpose of cutting, develops a "variation"[15], which evolves for specific auxiliary purposes: a knife to cut cheese and another to cut meat. The variation performs the same function than the standard, but more punctually and therefore less effectively when seen in reference to the general cycle of production. From the standard also develops the "simulated"[16], which is also a derivative like the variation, but with a huge lack of efficiency not only in its material, but also in its purpose.

In order to study this more closely, Kiesler devised a 12 step sequence explaining the "anatomy" of technological change. He called the first step, the establishment of the standard, including variation and simulation; step two is the absorption of it into the common usage, its vulgarization; the third is the evidence of its deficiency; step four is the experimentation to overcome its defects; five, the discovery of another option; six, the invention of this option; step seven, the study of its endurance; eight, the projection of the need for the improved item; nine, the production and circulation; step ten, its advertising; eleven, its availability and finally twelve, its recognition as an absolute need, which leads to the adoption of a new standard, or step one, that again will be absorbed in the cycle.

Kiesler was aware of the complexity of the dynamic links in the chain and of the fact that changes took place very fast. Fearing that society would not see the

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[14]Frederick Kiesler, "On Correalism and Biotechnique", *Architectural record* (XXXVI) September, 1939, p. 62.

[15]Ibid, p. 62.

[16]Ibid, p. 62.

need for fundamental changes in the values of technology, he claimed that the modification of the cycle should be done based on the ethics of technology itself. Such a change was to be done by manipulating the technological environment in order to decrease the rate of the cycle. It consisted in eliminating the simulated products, which are the widest in distribution, the shortest lived and the most rapidly replaced, and also distort the properties of the standard. He proposed instead to increase the duration and quality of more appropriate standard types.

With respect to architecture, Kiesler thought that an improvement of its standard could be done by using a continuous tension construction method[17], in which buildings would be strengthened by minimizing the number of joints, which fail under stress or cause damage to structures due to natural settling. "In a building made of a single type of material, its molecules will hold together naturally". He also proposed that spaces should be conceived for more than one purpose, providing the possibility of transforming their role. Theatres, for instance, should contain centers for various kinds of performances and stages for different audience-actors configurations.

In order to pursue the studies on "Biotechnique", he created a design laboratory at Columbia University, from 1936 to 1942, dealing with ways to improve the standard in products such as furniture and construction materials. He then generated ideas for systems which complied with the restrictions imposed by both the physical and the psychological aspects of the human environment, and for defeating the defects found in previous systems. The effects that each product had on the natural environment were evaluated and portions of the technological environment were changed to accommodate the new system.

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[17]Method proposed for the construction of the "Endless House".

These biotechnical proposals advocate basically a weakening of the simulacra by basing the creation of improved standards on linking the "use values" with the "aesthetic values". In a sense, this idea can be related to the Surrealistic aim of diminishing the use-value of technology. Marcel Duchamp, for instance, collected everyday objects and installed them into an artistic context. The mere fact of their choice questioned their consumption by society. Kiesler's proposal in this sense is valid as long as the true quality of the standard prevails, but in his cycle of technological changes the need for the replacement of the improved standard remains. His biotechnical considerations to challenge technology by finding an improvement of quality through a rhetoric given by art have yet to find a place in our contemporary reality characterized by a constant cycle of consumption and replacement. With his biotechnical project for architecture, Kiesler seems to be omitting as well that a change of the standard in architecture should be done from a more profound basis than that of its mere production. Such a change is more likely adopted when linked to the "enlivening" of architecture.

The third direction that Kiesler finds for "Correalism" develops issues of perception and participation and refers to the "enlivening" of architecture, for rendering inanimate matter animate through the restoration of man's imagination to the process of perception. This idea comes from his rejection of Functionalism as producing "dead architecture", placing man in spaces that did not correspond to his need to identify himself with the space in which he lives.

"No. The limited function of the square has ended. No frames, be they of gold. The T-square has done its share. It has dehumanized design and dry-cleaned it. The Victorian age with its over stuffing was put on a diet. The fat is gone. The bony structure speaks once more through a transparent

skin. After feasting - fasting too is over. We can start to live a normal life again.

A new aesthetic unfolds its wings, freed from the prison of the grid. It tries to rise our being beyond the mere physio-functional. It does not depend on richness of materials, equipment or decor; it sets a scale to measure the distance between ourselves and reality; to help our awareness of it. The progressive achievements of mechanical service are something to behold. But our lives can not be based on it; neither can architecture.

Beyond the seductive horizons of the intellect - the heart remains the initial and ultimate beat of fecundity or death.
The prison of the grid in design is history - past".[18]

Living in the age of Functionalism, Kiesler criticized its misuse of technology, which unbalanced the correal continuity and created a rupture between man and architecture. Opposition to Functionalism was common in Kiesler's time. It was particularly discredited after it developed into an "International Style", considered an architecture for producing "boxes to live in". In Kiesler's opinion Functionalism regarded architecture from a strictly operational point of view, and was dominated by a technology used solely for purposes of efficiency. He considered that it gave exaggerated preeminence to formal combinations, thus reducing architecture to a rational practice whose main concern was to build in a practical and economical manner. This introduced a distance between architecture and man. Functionalism therefore produced "dead architecture" that did not reflect man's continuity with his environment. Architecture, for Kiesler, should no longer be based on its "rationalization", but on "sensitizing" space. This would correct what he described as "prophylactic building design with total amnesia of ethics, an

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[18]Frederick Kiesler, "The Art of Architecture for Art", *Architectural Forum*, October, 1957, pp. 125-131.

architecture camouflaged by cosmetics which, inside, showed only its solid emptiness."[19]

Kiesler's understanding of architecture as something that may be perceived as enlivened or dead can be traced to his understanding of nature, influenced by the views of the Expressionist movement[20]. Expressionism began as a reaction to Naturalism and its purely figurative representation of nature. It proposed a drastic change in the perception and representation of nature, in which the work of art was meant to be a reinterpretation of nature, showing man's emotions through the image of natural things. The Expressionists intended to reflect their sensibility by translating their subconscious feelings into symbols. Expressionist symbology portrayed a nature "sensibilized" with the human-like ability for emotions. Nature was meant to be experienced differently by each viewer, implying the viewer's participation in the work of art itself. This "humanization of nature" is similar to Kiesler's aim to develop an architecture which could engage man in the process of its perception. If, for the Expressionists, the question of altering the purely figurative representation of nature was related to disclosing an emotional dimension in which the viewer would feel his correspondence to the work of art, it can be said that, in the same sense, Kiesler was searching for the same type of disclosure by aiming to create spaces directed to this emotional dimension. In this way the senses would be linked to the imagination for perceiving an "enlivened" architecture.

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[19]Ibid, p.129.

[20]Even if Kiesler did not take part in the Expressionist movement as such, he did share ideas, while growing up in Vienna, with his close friends Kokoschka and Schonberg, who later both became prominent members of the movement. His friendship with Klimt is also well known.

Kiesler's distinction between animate and inanimate matter is to be understood as well from this basis[21]. His understanding of animate matter seems always related to nature, while technology is considered as inanimate matter. He argues however that inanimate matter can become animated or "enlivened". Given his interest in the concept of interpretation, it seems likely that he thought that it could be accomplished through a process of mimesis. "Mimesis" comes from the Greek *mimeisthai*, which means to imitate. But, in order to understand its right sense, one should know that to imitate in music, for instance, is to repeat a melodic theme of a different pitch or key from the original, or with modifications of rhythm or intervals that do not destroy the resemblance. Mimesis is the process through which something gets reinterpreted. Kiesler's intention to transform inanimate architecture into animated architecture involves this process of mimesis, in which man acts as the one that reinterprets space, rendering it "enlivened" by pulling out its sense through his senses.

"Color clock of the endless house. Daylight is transmitted through a prismatic glass crystal of three basic colors, gradually shifting to each in turn from dawn to dusk. The rays are filtered into the interior through a convex mirror, and the dweller can gauge the hour by the colour of the tinted light around him. Instead of depending solely on a mechanical clock, splintering his life into minute particles of time, he becomes aware of the continuity of time and his own dynamic integration with natural forces...the psychologically evocative quality of the endless house. Light coming in parallel to the floor spills to the curving partitions of the interior,

[21]"From 1900 I was pursued through high school years, the years at the Institute of Technology and the Academy (in Vienna) in the relationship between animate and inanimate matter. The old masters at the museums in Vienna, and the hand drawings at the Albertina, did a great deal to deepen that interest. How could a master paint a tree or a jar as if it were alive? What could he do to it that the legendary dead matter becomes living: was it art that made it alive? Was it superimposed on the dead model, or was it extracted from its invisible hiding place in that form?". Lillian Kiesler, *Frederick Kiesler, Biography*, Archives of American Art, Smithsonian Institution, New York, p. 165.

transforming it into a vast succession of shadows beyond shadows...one can easily surmise the tremendous range of visual stimulation available to the dweller's imagination...However fantastic such projects sound from a practical standpoint, let the reader rest assured that all necessary mechanisms are readily available on the market today. The lighting experts have simply failed to coordinate them properly in the home...The lighting system is quite feasible, and so is the endless house itself".[22]

The Endless House[23] became Kiesler's "non-built symbol". It was described by him as being "poetry of unity in itself", the direct expression of man's wholeness in a single continuum, space through space. Its mission was to be an "enlivened" space that would reflect man's conditions as a vital being, exposing him to different sensations not previously considered as part of the program of a standard family house. It served as a place for a liberation of the senses, which were to be connected to spaces through the mind in order to create a perceptual event through the analogical imagination of the inhabitant's reinterpretation.

A correspondence is to be made between the proposals for the Endless House and the experience of reading the book *Inside the Endless House*, as both set out to provide a sensory experience. In the book, Kiesler seems to be exposing himself, while writing, to all the sensations of the Endless House at once, and it can be seen as the project's representation of its own content through writing. Writing about the house is understood throughout the book as a more appropriate method to

[22]Frederick Kiesler, "Endless House and its psychological lighting", *Interiors* (CX) November, 1950, pp. 122-29.

[23]The sense that Kiesler gives to the word "endless" refers more precisely to the idea of continuity, instead of that of infinity. It seems connected with the understanding of the Hebrew notion of eternity as something more spatial than temporal. This point is developed by Thorleif Boman, *Hebrew Thought Compared with Greek*, translated by Jules L. Moreau, W. W. Norton & Company, New York, 1970.

represent the Endless House than building it, or constructing a model of it. Writing permits one to express what is not drawable about the project, but tellable, not by giving a description of it, but by analogy to sensorial perceptions of everyday living. It is consistent with Kiesler's desire to present architecture as an event, beyond archetypical means of representation. Writing and reading are participatory phenomena for both writer and reader, and their interdependence is similar to the coupling between architecture and perception.

In his book, he describes the sensations and emotions to be perceived in the Endless House. The title of the book is suggestive of man's immersion into a sea of feelings, and both works seem to carry the same intentionality of sensory experience. The project as well as the book act as representations of the relation between mind and perception, in which the perceiver, the person inside the house or the person reading the book, is exposed to a phenomenological experience in which to take part.

The Endless House symbolically represents the sensory properties of Kiesler's continuous time-space concept. It was planned as a monolithic shell in which man's senses were to feel a "continuous flow" from the floor into the wall, the wall into the roof, the roof into the wall, the wall into the floor, creating an enclosure for the dynamic equilibrium of the body in motion, encompassing both space and senses and fulfilling man's need to participate within the event of architecture.

"The visible about us seems to rest in itself. It is as though our vision were formed in the heart of the visible, or as though there were between it and us an intimacy as close as between the sea and the strand. And yet it is not possible that we blend into it, nor that it passes into us, for then the vision

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would vanish at the moment of formation, by disappearance of the seer or of the visible. What there is then are not things first identical with themselves, which would then offer themselves to the seer, nor is there a seer who is first empty and who, afterward, would open himself to them -but something to which we could not be closer than by palpating it with our look, things we could not dream of seeing "all naked" because the gaze itself envelops them, clothes them with its own flesh. Whence does it happen that in so doing it leaves them in their place, that the vision we acquire of them seems to us to come from them, and that to be seen is for them but a degradation of their eminent being? What is this talisman of colour, this singular virtue of the visible that makes it, held at the end of the gaze, nonetheless much more than a correlative of my vision, such that it imposes my vision upon me as a continuation of its own sovereign existence? How does it happen that my look, enveloping them, does not hide them, and, finally, that, veiling them, it unveils them?".[24]

In discussing the continuous relationship between the visible and us, Maurice Merleau-Ponty describes an intimate tie created by the correlation between the things and the seer in the process of the uncovering and covering their presence. This same sort of relation is to be found in the creation of a correlation designed to "enliven" space in order for man to find a correspondence with his own world. This aim for "enlivening" architecture would involve man directly with the space he is perceiving and would therefore "humanize" this space. Perception is man's basic way of "being engaged in the world" as it provides a sense of recognition of his dependence on his bodily condition as well as on his mind. The process of reinterpretation, closely linked with the act of perception, provides a "space of resemblance", brought by man's recognition of architecture as that which mirrors himself. Reinterpretation enables man to transform his perception, depending on his state of mind, in order to consolidate his reality through his own reflection and

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[24]Maurice Merleau-Ponty, *The Visible and the Invisible*, Northwestern University Press, United States, 1968, pp. 130-131.

to appropriate space through his own experience. This appropriation through reinterpretation provides the basis for understanding the "enlivening of architecture" as the experience of wholeness.

In this perspective, Correalism can be seen as relying on the very basis of reinterpretation, seeking to "enliven architecture" through man's participation in space. Architecture acquires, thus, the sense of an event relying on man's intervention[25]. Man's perceptual ability to take part in the event of architecture requires an understanding of the essential connection between senses and imagination, between mind and body. This understanding of man as "embodied knowledge" is the basis of phenomenology. In "The Question Concerning Technology" Martin Heidegger articulates this relationship between the embodied consciousness and the world. For Heidegger perception holds the potential to bring man beyond a "technologically reductive reality" by introducing a process of self transformation that would ground meaning in man's pre-reflective consciousness[26].

The prevailing assumption that man may give meaning to his world by mere mental associations, not connected with the experience of perception, discards the fact of his own presence into the reality in which he lives in. This problematic affects architecture directly, considering it as the result of a mere bidimensional process, the outcome of building a reductive space based exclusively on its breadth

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[25]The idea of event in Kiesler's proposals goes back to his interventions on theater and his aim for considering the audience as actors. In his understanding, event has the connotation of a participative phenomenon, in which the senses and their effect on the mind give the key to its fulfilment.

[26]Martin Heidegger, "The Question Concerning Technology", *Basic Writings*, Harper Publishing, San Francisco, 1977, pp. 283-318.

and height, without counting as well on its third dimension, that of depth, to be provided by man's own experience of space.

Phenomenology considers man's bodily experience as the source for meaning[27]. It relies on the primacy of man's perception and seeks to bridge his experience with the realm of his existence, by proposing a gathering between him and reality. For Merleau-Ponty the act of perception comes even before that of vision. Placing emphasis in the sensorial faculties of our body, he states that when man perceives an object he reinterprets his visual sensation immediately, identifying it with other related sensations. This generates a ground in which to find a basis for giving meaning to the perceived object, called "synesthesia". It is through this synthesis that man rediscovers what he perceives at every level, experiencing and understanding a world that considers his existence as an "embodied consciousness" from which to grasp his sense of human being as a whole.

This consideration of the process of perception, as what provides man with a sense of wholeness by his own appropriation of reality, indeed, reiterates man's natural integrity of both feeling and imagining, relating experience to his capacity to understand and to engage his own psyche in it. Kiesler sees architecture as a series of events that are linked to a deep unconscious process, as a means to exercise man's imagination in the process of perception. This fact acts as a key for apprehending space and creates a phenomenological connection to architecture.

It can be deduced that Correalism aims at the creation of a phenomenological reality relating man to his wholeness by engaging body and senses together in the

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[27]see Maurice Merleau-Ponty, *The Primacy of Perception*, Northwestern University Press, United States, 1964.

process of perception, and allowing man to participate in space through reinterpretation. This process seeks to differentiate each of the components of reality and to correlate them through the "sharing" of their meanings, in order to create a wholeness that would eventually allow inanimate matter to become enlivened. Correalism may be understood as man being at the centre as he both perceives and reinterprets architecture. Nature provides the "enlivened matter", which is the basis for the reinterpretation of an architecture resembling man. Technology produces "inanimate matter" that may become "enlivened" through its mimesis from nature. Art provides the basis for the reinterpretation of nature into technology through the use of imagination, thereby reminding man of his capacity for wonder. Continuity is about the concordance of the environments conforming reality in a co-real world where the analogical process of reinterpretation prevails.

Kiesler found, in the realm of theatre, a place for applying both his intentionality for improving the quality of technology as well as for developing spaces in which man would be invited to be a participant. His work in the design of theatrical stages revolved around the notions of time, space, speed and mobility, and was connected to his belief in the use of technology to fulfil the need for intersubjectivity in theater[28]. Many of his theatrical projects proposed spaces in

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[28]The idea of theater as an intersubjective event goes back to ancient Greece. The Vitruvian directives for the architecture of the Greek theater describe a place that should give identical possibilities for participation for all the audience. It is inscribed at equal distances from the place of the action, so that the voice and action will reach everyone with equal power. The intersubjectivity was to be grasped when the theatrical event accomplished its wholeness through applying all its principles. Vitruvius describes this sense of wholeness in the term "Eurythmy", denoting beauty and fitness in the adjustments of the members, when they fulfil proportionality towards the whole, as well as symmetry. The idea of symmetry, which is the agreement between the elements, implies a relation of correspondence, which in theater is to be provided by the proper arrangement of its elements for enhancing the participatory perceptiveness of the audience towards the play.

movement that were meant to stimulate the consciousness of the members of the audience, in order to expand their capacity of perception.

In 1923, Kiesler premiered in Berlin the designs for two plays, *R.U.R.* from Karel Capek, and *The Emperor Jones* from Eugene O'Neill. For *R.U.R.*, the stage was composed of a series of suspended mirrors that reflected the action throughout the entire stage, giving to the audience, through a reflection of itself, the impression of participating in the play as actors. Technology was used in order to captivate the audience's senses and enhance its participation, with an electromechanical stage set created to activate by itself the changes of sets, music and lights, as well as to project a film on the backstage to give a sense of constant movement[29].

The word theater has its origins in the Greek "Theatron", in which the verb "Thea", means to view and to participate. Greek theater developed a doctrine on "Harmonics", about the relation between audience and play, through the recognition that the act of viewing embraces the development of a critical opinion, engaging the action of seeing with the action of thinking, therefore of reinterpreting. In Greece, theater was meant as a place for interaction, focused on the importance of developing the relationship between the play and man's senses.

[29]"It was in the first act that I employed a motion picture instead of a backdrop. Using back stage for the movie projector...Every evening the fire department of the city of Berlin came in with loud fanfare to play water on the projected screen making it beautifully translucent, for which I was grateful. In the last act, for the chemistry laboratory scene of the play, I designed a whole abstract forest of neon lights, brilliantly colored, projecting from ceilings, walls and floor, flashing off and on. In fact, throughout the entire play, everything was in constant change and movement. Lights shone on the audience, the side walls moved, it was my theatrical concept to create tension in space."

"Excuse me, this is what I did,...The frozen picture is brought to life. The stage is actively engaged. The still life comes alive. The means of enlivenment are: movement of lines, shrill contrast of colors. Transition of surfaces in relief into three-dimensional Man (actor). Play of moving colored lights and spotlights on the stage. Rhythmically accented, the speech and the movement of the actor coordinated. Tempo. To the left, a huge iris diaphragm...The iris slowly opens: the film projector rattles and throws a film image onto the circle. Suddenly, it is over and the iris closes. To the right, a Tanagra-Apparat is built into the anteroom in the mirrored image of the apparatus. The keyboard

The purpose of the stage design for *The Emperor Jones* was to break down the distance between proscenium and auditorium in order to provide an explicit involvement between the actors and the audience. The stage was a square-shaped funnel with inclined floors and ceilings that transformed itself depending on the events of the play. It created an impression of multiple mobility and constant change, as its sides and ceiling opened up and moved in sections back and forth across the stage, and semitransparent material dropped, revolving from the ceiling.

Later on, in his project for the Endless Theater[30], Kiesler conceived a space to place the actors on a circular platform that revolved around its centre so that there was neither back nor front of the action. This project further advanced his search for an intersubjective theater and generated his concept of "Space-stage", in which space was used for the experience of a continuous event. This search echoes a Greek tradition, considering theater as a participative phenomenon, and also reflects Kiesler's interest in the theater of the Renaissance, in particular for the "Theatrum Versatile" built in Antwerp in 1599. The set of this theater was designed as an allegory of war and peace. It was a conical stage tower with spiral ramps, that rotated 180 degrees, showing on one side a representation of peace and on the other one an image of war. Kiesler was also influenced by the constructivist artist, Vladimir Tatlin, who designed, for the Third International Fair in Moscow in 1920, a huge spiral metallic tower that symbolized the socialist's liberation of humanity to be attained when the summit of knowledge was reached; and by the kinetic

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operator at the desk organizes his commands. The seismograph in the middle rocks fitfully forward. The turbine control in the lower middle rotates uninterruptedly. The production tabulator leaps forward. Work sirens go off. Megaphones shout orders, give answers." Lillian Kiesler, *Frederick Kiesler, Biography*, Archives of American Art, Smithsonian Institution, New York, pp. 166-167.

[30]Kiesler first showed the "Endless Theater" at "The Theater and Music Festival of Vienna" in 1923.

construction of Dadaist artist Laszlo Moholy-Nagy, which consisted of an engine that gave motion to metallic pieces which in turn reflected diverse lighting effects that shone on both players and audience.

With Space-stage, Kiesler addressed the problematic of the traditional concept of the stage, which is space only to the actor, but appears to the audience as two-dimensional. By stating that theater was dead, he was arguing its disconnection from technology and its resemblance to a "peep-show", placing the production in one box and the audience in another, and preventing communication between the audience and the action, given their heterogeneous dimensionality[31]. Kiesler meant to revitalize theater by giving it depth and freedom of movement, liberating the proscenium from its back-stage as well as from its frame, so that the stage would be seen with uniform clarity from all points in the audience and the space would allow for an intersubjectivity experience[32].

Kiesler applied the concept of Space-stage as well in the project of the Universal Theater, prepared originally for a competition in 1931 and presented

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[31]Due to the success of his theatrical stages and concepts, Kiesler was invited to New York to organize the International Theater Exposition in 1926. On his arrival he made a declaration to the effect that "the theater is dead" and wrote the essay "The Debacle of the Modern Theater", claiming that drama, poetry and scenic formation have no natural milieu and that the public, space and actors are artificially assembled, without any unity of expression, resulting in a place in which "communication lasts only for two hours and during which intermissions are the real social event". See Frederick Kiesler, *Catalogue of the International Theater Exposition*, New York, 1926, Archives of American Art, Smithsonian Institute, New York.

[32]The propositions for this redesign of the stage, in order to be seen unambiguously by all spectators, consists in raising its floor to mount gradually to a diagonal plane so all motion is translated into spatial distancing giving a clear cubic effect. The side wings close in gradually as they recede so the action falls away in the far corners. The overhead of the stage is inclined to the highest gallery's angle of vision so the stage becomes a kind of four-sided funnel opening towards the audience.

again, in 1961, for a competition sponsored by the Ford Foundation. The seats were organized in an inclined spherical pattern, so that all members of the audience could see one another and absorb each other's reaction. The Universal Theater represented, in Kiesler's search for theatrical intersubjectivity, its strongest expression, since one's reaction depended on the rest of the audience, providing a "shared" meaning for the reinterpretation of the event. Through this phenomenon, architecture can allow man to feel his belonging to the wholeness and can be seen, therefore, as a direct application of Correalism.

Kiesler's attempts to redesign the architecture of theatre, in order to enhance the participation of the audience, can be understood as a search for reinforcing the cathartic effect of ancient theatre[33]. Catharsis is a feeling of emotional purification[34] or relief, attained in theater through one's feeling mirrored in the theatrical "imitation" of the actions of man. This "imitation" permits one to know the world through its theatrical representation. The audience participates by recognizing itself in the play, through a process of mimesis, which allows the reinterpretation of the play.

Kiesler's Correalism, which considers man as a participant-actor in the experience of space, allows him to become actively involved in facing his own reality. Kiesler's technologically oriented proposals for enhancing this experience are valid as they search to maximize the effect of catharsis through the architecture of the theatre.

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[33]See Aristotle, *Politics and Poetics*, translated by Benjamin Jowett and Thomas Twining, Viking Press, New York, 1967, pp. 223-265.

[34]In Greek the word *Katharsis* comes from the word *Katharos*, which means to clean.

PART ONE

An architecture conceived as a place to experience intersubjectivity through a "shared" meaning may help to resolve the problematic of identity in the realm of the social reality. Kiesler's attempt at using architecture as an appropriate setting for intersubjectivity, seeks to provide a "common-sense" where a collective reciprocity of perspectives would be experienced, allowing space to express, through Correlation, the wholeness of man's reality.

> The arts shall therefore not only reflect this
> inter-relationship of man with his environment,
> but must mutate it by means of man's
> inborn craftsmanship
> to be the ever-new creator of a technological
> world, call it science or art,
> basic or applied.
>> However competitive it might be with nature,
>> the link between the two must never be broken
>> if our work is to survive us.[35]

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[35]Frederick Kiesler, *Inside the Endless House*, Simon & Schuster, New York, 1966, p. 154.

PART TWO

"A survival of the imagination" in a surrealistic perspective

May 27, 1956

Man is flesh-made, I read again, not exactly as I wrote it, in fact: man is spirit, it is printed, although no one of us has ever seen either the spirit or the soul; yet soul and spirit have a corporate implication, like a fluid solidity, yet devoid of quantity and spatial extension, like a whiff, a breeze, like ectoplasm that flows in and out of our corpus, a wind through a ghost house.

Are we so sure that animal is not soul, that animal does not at least have what we call extra-sensory perception, or instinct of an abstract nature? Are we truly sure that plants have not soul or at least soul-intelligence?

Are we ready to guarantee that rocks and crystals are not soul; and that water is not; and that light is not; and that darkness is nothing else but a raggy shroud of the day? How about architecture and painting and sculpture - might they have a life of their own and a nervous system generating a spirit, a spirit generating a nervous system, a pulsation forth and back, an immortality, man-made, perhaps madman-made, but made existent and not perishable like intelligence?

Scientists claim now to have found experimental proof that plants have a nervous system in the manner of the human being, although not exactly the same. They, scientists and curio-seekers of natural laws of chance, have explained that termites have a language of their own, apparently; otherwise how could they communicate through solid walls without knocking at them? Two million termites, inhabitants of a giant concrete home building in which they live, act simultaneously, most of them not seeing one another, separated by walls, floors and barricades of solid concrete construction of their home edifice, yet think, feel together, know, communicate, wireless, touchless, without earphones and alphabets or Morse codes.

A dog, we are told, will salivate when accustomed to expect the serving food at the sound of a bell. I have seen men already belching when they sat down to dinner, before the food was served. Is man superior to animal?

In all honesty, if as a man of this globe and society I can muster it, the assumption that man is the pinnacle of creation seems, in this age of equality for all, split into animals, minerals and vegetables, inside and outside, micro-here and micro-beyond, throughout the ages of Confucius of China, Plato of Greece, Einstein of Palestine, Hooton of the U.S.A., with all due respect to their indulgence in blindfolded visions of the unseen, in their attempt to verify and fortify the traditional self-glorification of Homo-sapiens - this assumption is, in fact, a most average animal act.

But honestly, it seems to me, that all our investigations should indulge in deeper humility rather than in this persistent effort to affirm with ever-

increasing scientific machinations the idea of a natural superiority of man over matter, no matter if flesh, mineral, vapor or crystal.

Are there not enough proofs of the contrary? And this without resorting to the witness of continually progressive war techniques among them. Has the master-man mastered himself in his relations to the other masters in his terrestial life? His outer conflicts, using axe or guided missile - is their original animal instinct? Perhaps man's battle cry is a survival of the imagination? What are we here for, to battle, to split up, or to co-ordinate? Man remains a maniac of egocentricity.

Sure, I am not an exception, being duly infested with the tradition of feeling superior to the animal, vegetable or any other kingdom: me, the animal-rex.[36]

Kiesler's idea of unveiling the soul of things, based in the belief that things "might have a life of their own", describes the world as a coherent system in which all of its elements are linked in silence by a kind of blindfolded vision of the unseen. This vision demands the restoring of a place for the imagination in the very understanding of what it means to be alive. Surrealism is based on the same demand for creating an attitude towards reality that may provide a proper place for the "survival of the imagination".

While Kiesler came to New York in 1926 with the idea of pursuing his career in theatrical design, his intentions for creating and "correal" architecture that would enhance man's participation in the experience of space led him naturally to the Surrealist movement, in which he played a dynamic role[37].

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[36]Frederick Kiesler, *Inside the Endless House*, Simon & Schuster, New York, 1966, pp. 35-36.

[37]Since 1942, Kiesler played an active role in the Surrealist movement. He designed two major installations, "The First Papers on Surrealism" in that year at Art of this Century Gallery in New York, and the *Exposition internationale du Surréalisme* in 1947 at the Maeght Gallery in Paris. In addition

When Kiesler was returning from the war to Vienna in 1918, André Breton was already part of the Surrealist underground movement within Dada. The Dada movement was a radical movement which meant to destroy the deceit of reason and to discover an unreasoned reality. It assumed that there is neither good nor evil in anything, but only an awareness of the chaos and of the hypocritical truths from the established order. Dada attempted to undermine established authority in artistic, literary and political circles. Breton regarded Dada as the movement that would create the necessary "void" for the Surrealists to bring forward a new content, in order to fill the lack of direction in man's action and thinking.

In 1924, Breton seized the initiative and broke with the Dada movement, by issuing the *Premier manifeste du Surréalisme*[38]. Almost at once, he and his followers published a journal and began a series of exhibitions, some of which Kiesler must have seen while staying in Paris during the 1925 World Fair. Surrealism was introduced in the United States with a series of small exhibitions during the late 20's and the early 30's. Even before the outbreak of the Second World War, the Surrealists were experiencing difficulties in Europe because of their

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to the mounting of these exhibits, Kiesler contributed to other activities of the group. In 1943, he participated as an actor in the Hans Richter film "8X8", (which consisted in 8 segments, each one dealing differently with a chess game) as well as in Maya Deren's experimental film on Surrealism. In 1944 he exhibited at the Julien Levy Gallery in New York a chess set he had designed, along with several Surrealists. In 1947, the Surrealists sponsored at the Hugo Gallery in New York, "Blood Flames", an exhibition to raise funds for the war relief of French children and prisoners, in which Kiesler was one of the contributing artists; and in at least two occasions he published articles as one of the editors, together with Breton and Marcel Duchamp, for the *VVV Magazine*, which was the monthly publication of the Surrealists. Kiesler kept contact within the group, even until their activities were less frequent.

[38]For the complete manifestoes of Surrealism see André Breton, *Manifestes du Surréalisme*, Gallimard, France, 1991.

known association with the Communist party. The German occupation of France in 1940 was accompanied by a large exodus of artists and intellectuals. Many members of the Surrealist movement chose New York as a destination, where Kiesler came to know them and promote them in artistic circles[39].

The "Art of this Century" exhibition, organized by Peggy Guggenheim and designed by Kiesler, is considered as the statement of the arrival of Surrealism in America, and it initiated Kiesler into the movement. He was asked to devise a new method for displaying Surrealist art, which he did in a collaborative venture with Duchamp, who was at that time living in Kiesler's apartment having just arrived from occupied France. While Duchamp designed an installation filling one of the rooms with crisscrossed strings resembling a labyrinth's web, Kiesler further elaborated some of his earlier "Endless" concepts.

Kiesler called the concept for his design, which was applied throughout the whole exhibit, "Display in Space". Frameless paintings were fastened to convex wood walls with adjustable pivoting sawed-off baseball bats in suspension. This contrasted with an undulating wall of blue canvas on which projected pictures could be seen controlled by an invisible light beam activated by the visitor's contact. There was also a painting library with mobile stands and bins to be manipulated by the visitor, thus displaying a private exhibit for himself, and a spiral wheel that, when turned by hand, set a presentation containing reproductions from Duchamp's

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[39]"During the 1940's Kiesler strengthens his ties to the Surrealists, many of whom have recently emigrated to New York. He has close associations with André Breton, Kurt Seligman, Salvador Dali, Luis Buñuel, David Hare, Joan Miró, Max Ernst, Matta and Yves Tanguy. He also becomes better acquainted with visual artists in New York, especially those who would come to be known as the New York School..." Lisa Phillips, "Frederick Kiesler, Chronology 1890-1965", *Frederick Kiesler*, Whitney Museum of American Art, New York, 1989.

"Valise" in motion. There were, throughout the exhibit, chairs designed by Kiesler for multiple functions, which stood in all directions and indifferently became tables, benches or trestles. The idea of "Display in Space" was to activate the visitor's eye and engage him in a "private event", searching for a subjective relation with the work of art, in which the connection between personal perception and the reinterpretative mind would prevail. This relation proposed a participatory event, in which enabling architecture linked perception with the viewer's intervention. This resulted in the creation of art itself, as it is the viewer who finishes the work through his own reinterpretation.

> "The viewer must recognize his relevance in the act of seeing and receiving as a participant in the creative process of art no less essential than the artist's own intervention, in order to break down barriers and correlate himself within the artistic environment".[40]

Kiesler was thus experimenting with the crucial question of participation in architecture in terms of a subjective relationship to space, reflecting his awareness of the importance of the visitor's role in experiencing art. The visitor had, for instance, to adjust the display changing its adaptable heights and angles, in order to find his own optimum perception. Every arrangement required the visitor's intervention and will to be introduced into the process of reinterpreting the work of art. Kiesler's frameless works of art eliminated frames acting as barriers across which man looks from the world he inhabits to an "alien" world in which the work of art exists. This dispensed with the duality between vision and reality and created a sense of one correal wholeness.

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[40]T. H. C, "Kiesler's Pursuit of an Idea", *Progressive Architecture*, July, 1961, p. 115.

For the *Exposition Internationale du Surréalisme*, Kiesler went further in creating a correlation between the visitors and the art itself. His concept was that painting, sculpture and the architectural components of the exhibit would metamorphose into one another. The work of art could no longer be seen as an isolated entity, but was to be considered within the context of its environment, which should become as important as the work of art itself. Kiesler thought that the work of art should breath into its surroundings and inhale the realities of its context.

For this exhibit, Kiesler realized with Duchamp, Ernst, Miró and Matta a collective manifesto in space, which was called the "Hall of Superstitions", where Breton had planned the presentation of various mythical themes. The twenty-one steps of the staircase to the upper galleries were to appear like the spines of books carrying twenty-one titles corresponding, metaphorically, to the twenty-one major arcades of the tarot, taking the visitor to various stages of initiation into Surrealism. This experience was followed by the Hall of Superstitions itself, which was a labyrinth in a long rectangular room, divided into twelve octagons. One of them contained an egg-shaped white grotto built out of a hand made curved chicken-wire structure covered with plaster and canvas. Another room had artificial rain falling steadily on banks of grass and one of its dry corners was reserved for a billiard table where passersby stopped to play. Beside it was a room with a peephole to see *Le Rayon Vert*, a piece built out of blue and yellow gelatine sheets that were to produce an optical phenomenon similar to the green flash that sometimes occurs when the sun sets on the sea. And there was also a room reserved for tarot's themes, which displayed, inside a hole, an owl, a bat and a raven reading tarot cards, as if they were reading destiny. In the window display of the gallery there were rubber female breasts mounted on velvet, seducing visitors to come in. These

were also displayed on the catalogue's cover, accompanied with written signs reading *Prière de toucher*.

In the Hall of Superstitions, Kiesler introduced a dimension into architecture in which events could not be dissociated from spaces, and where spaces could not be separated from deep unconscious processes. In his article "The Magic Architecture of the Hall of Superstitions", Kiesler described this display in the sense of a correality manifesting itself throughout the whole space as a changing relationship of events, which were based not only on the perception of the five senses, but also took into consideration basic psychological needs.

In 1942, Kiesler's publications in the *VVV Magazine* included, in the first issue, an essay concerning the relationship between vision, perception, imagination and dream, as a process to find sources for design through man's ability for reinterpretation. He argued that direct dream imprints exist in the memory, and developed a sequence to explain the reinterpretative translation to be done from dreaming to design. For him, the remembrance of dreams could be divided into five orders. The first was related to the dream itself; the second, to its imprint in the memory; the third, to any design imagined from it; the fourth, to its process of interpretation into a drawing; and the fifth, to the consciously reinterpreted dream composition. The dream drawings were thought of as a means for gathering the dream images and a method for the translation of subconscious elements into a conscious reality[41].

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[41] Frederick Kiesler, "Some Testimonial Drawings of Dream images", *VVV Magazine* (I), 1942, pp. 27-32.

The second issue of the *VVV Magazine*, was a special edition whose back cover had a hole inserted instead with wire netting, representing a reproduction of one of Duchamp's studies of a female torso in profile. This page was designed to perform what Kiesler called the "Twin-Touch-Test", intended to excite the reader's perceptual skills. By putting the magazine flat on the table, lifting its back cover into a vertical position and touching hands through both sides of the wire screen towards themselves, the twin, touch and test was to be felt like a dream in real life, so the readers could share the sensation of touching a "real dream" paradigm. In this issue, Kiesler also presented his "Surrealist chair" of at least eighteen different uses. A flat small model of the chair, originally created for the "First Papers on Surrealism", was pivoted from the centre of the page, inviting the readers to rotate it themselves in order to understand its metamorphosis. The article treated the relevance of applying Correlation to design:

> "Correlation...as an approach to architectural planning...to unify in one structurally continuous building the visionary magic of the theater,...currently in the galleries of Peggy Guggenheim's "Art of this Century". I utilized it again to break down the physical and mental barriers which separate people from the art they live with, working toward a unity of vision and fact, as prevailed in primitive times, when seemingly conflicted experiences existed in complete harmony, when the God and the representation of the God, the demon and the image of the demon were equally immediate and real, thus following the processes of natural growth, developing the flow of inherent forces which produce forms while integrating and disintegrating at varying speeds, a continual rebirth of all organic and inorganic life and of plastic arts, technology and architecture,...are thus made to reveal, to the cosmic blindness of the human eye, nature's own design force, the ultimate significance of the unknown, that eternal matter which builds the poet's, the architect's or the plastic

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artist's structure on the orbits of energy which simultaneously correlate and design".[42]

Kiesler's attempt at correlating plastic arts, technology and nature with man's perception is connected with the proposals for the use of analogy[43] in Surrealism[44] as both, Correalism and Surrealism, imply a process of reinterpretation based on personal imagination. The use of the "analogy" denotes a reinterpretation, in order to go beyond the evident meaning of a word, providing a distinct image based on each one's perspective. The analogical process has a direct link with the word eurythmy[45], which is a way for finding a sense of wholeness, as it searches to uncover a likeness between things that are otherwise not alike.

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[42]Frederick Kiesler, "Design-Correlation", *VVV Magazine* (II), 1942, p. 76.

[43]For this direct reference between Surrealism and analogy see Octavio Paz, *The bow and the Lyre*, University of Texas Press, Austin, 1973.

[44]*Surréalisme, n.m. Automatisme psychique pur par lequel on se propose d'exprimer, soit verbalement, soit par écrit, soit de toute autre manière, le fonctionnement réel de la pensée. Dictée de la pensée, en l'absence de tout contrôle exercé par la raison, en dehors de toute préoccupation esthétique ou morale...Le surréalisme repose sur la croyance à la réalité supérieure de certaines formes d'associations négligées jusqu'à lui, à la toute-puissance du rêve, au jeu désintéressé de la pensée. Il tend à ruiner définitivement tous les autres mécanismes psychiques et à se substituer à eux dans la résolution des principaux problèmes de la vie...A plus juste titre encore, sans doute aurions-nous pu nous emparer du mot supernaturalisme, employé par Gérard de Nerval dans la dédicace des "Filles du Feu". Il semble, en effet, que Nerval posséda à merveille l'esprit dont nous réclamons.* André Breton, *Manifestes du Surréalisme*, Gallimard, France, 1991, pp. 35-36.

Supernaturalism was based on the belief in supernatural forces or mediums to produce effects in the universe. The supernatural means phenomena, which in philosophy has the connotation of something known through the senses rather than through the thought, something understood as distinct from the thing itself.

[45]Vitruvius describes the sense of wholeness in the term *Eurythmia*, denoting beauty and fitness in the adjustments of the elements, when they fulfil proportionality towards the whole, as well as symmetry. The idea of symmetry, which is the agreement between the elements, implies a relation of correspondence, directly linked to the use of the analogy.

Eurythmy, in the Vitruvian sense, required the fulfilment of the affinity between things through a proportional system, that related them together to the same wholeness. Analogy[46] represents a method for finding the equality of ratios, disclosing a correspondence towards the whole and establishing a direct resemblance through the agreement of attuned parts. The search for this analogical disclosure that would provide the basis for feeling a sense of belonging to a wholeness is, in fact, comparable to Kiesler's proposals for the "sharing" between the four "Correalist environments". They, as well, would enhance the required correspondence in order to find a sense of wholeness in which the idea of analogy plays a basic role in the process of reinterpretation. Analogy would provide the appropriate language for a common meeting of both experience and imagination, in the search for "belonging to a wholeness".

Analogy was used by the Surrealists to accomplish one of their most consistent goals, which was to transform everyday objects into a category of Beings. This is comparable with Kiesler's proposals for the "enlivening of architecture". Through the use of the imagination, the Surrealists' aim was to make objects appear as alive by correlating them with what they evoke. They meant to establish a bridge that related the object to that to which it refers, endowing it with its proper narrative and therefore, with life. This analogical approach would lead to a harmonious vision of the world, in which everything is comparable to everything else. The world therefore, would no longer be considered as a conglomeration of fragments, apprehended by compartmentalized logical thinking, but as a wholeness in which everything seduces everything else.

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[46]The word analogy has its roots both in the Latin and in the Greek word *analogia*, which means the equality of ratios related to the proportionality towards the whole.

This view of the world is opposite to that of rationality, which has distanced human perception from the sensibility of the world, immersing it into an homogeneous "instrumentalized" reality that split mind and body, physical and phenomenological truth. Ever since thought has been identified with calculative reason, there has been a gap between creation and the meaning of the world resulting in a world full of sameness and standardization, in which imagination has been treated as a mere supplement to the process of conceiving things. The Surrealist approach appeared as the bridge intending to connect this gap by considering inspiration as coming out from a living reality and as a chance given to all men to reach beyond themselves. The challenge of the Surrealists was to overcome modernity through finding the alterity of things by the means of the imagination. The Surreal work of art emerged as something that could change its form and shift itself into something else, through engaging the observer's imagination in the process of reinterpretation. Surrealism represented an appealing alternative to logic by considering reason as only one of the forms of imagination. The ability to imagine gives man the ability to transform the entire universe to the image of his desire. This required a vast transformation of reality and suggested the distortion of rational standards, providing the opportunity for "the otherness" to appear.

Surrealism was a reaction against a standardized rational vision of the world in which the otherness did not exist. It claimed that the heterogeneity of things should be the basis for the comprehension of a reality in which the subjectivity of Being should prevail. This idea of otherness was crucial as it served as the tool to overwhelm reason itself and to lead to an ultimate revolution of the perceptive sensibility. The object would become interchangeable within man's subconsciousness in order to escape from any utilitarian notion and give itself to

subjectivity. If the object becomes "subjective", the self disintegrates and becomes the other, an illusion, a congregation of sensations, thoughts and intentions, that would let the inner mind express itself whenever no specific idea is imposed. The subconscious would then seem to take control and flow, teaching how to touch with the mind and to think with the body in order to recover the unity given by the understanding of the universe as an order of correspondences. This exploration of the subconscious would generate the disclosure of wonder in everyday life, involving a kind of trip back to childhood that would recover the powers of the imagination.

L'esprit qui plonge dans le surréalisme revit avec exaltation la meilleure part de son enfance. C'est un peu pour lui la certitude de qui, étant en train de se noyer, repasse, en moins d'une minute, tout l'insurmontable de sa vie...Des souvenirs d'enfance et de quelques autres se dégage un sentiment d'inaccaparé et par la suite de dévoyé, que je tiens pour le plus fécond qui existe...Voici "les éléphants à tête de femme et les lions volants" que, Soupault et moi, nous tremblâmes naguère de rencontrer, voici le "poisson soluble" qui m'effraye bien encore un peu...[47]

...L'imagination est peut-être sur le point de reprendre ses droits. Si les profondeurs de notre esprit recèlent d'étranges forces capables d'augmenter celles de la surface, ou de lutter victorieusement contre elles, il y a tout intérêt à les capter, à les capter d'abord, pour les soumettre ensuite, s'il y a lieu, au contrôle de notre raison.[48]

...Cet été les roses sont bleues; le bois c'est du verre. La terre drapée dans sa verdure me fait aussi peu d'effet qu'un revenant. C'est vivre et cesser de vivre qui sont des solutions imaginaires. L'existence est ailleurs.[49]

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[47]André Breton, "Manifeste du Surréalisme (1924)", *Manifestes du Surréalisme*, Gallimard, France, 1991, p. 52.

[48]Ibid, p. 20.

[49]Ibid, p. 25.

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Surrealism undressed reality from the idea of the utility of things, in order to provoke the questioning of their value and create a place for the imagination and to escape from an idea of the world as a vast utensil filled either with useful or unuseful things. It proclaimed instead that it is never possible to see the object in itself, and that therefore it can not be judged by its utility, as its existence depends on the subjectivity of the person perceiving it.

The idea of discarding the validity of superficiality and of apparent justification was expressed through various methods for rendering a common object into a Surreal device. This happened, for instance, by transforming images from dreams in order to find an alterity from reality. Therefore what appeared was singular or unusual. It occurred also when shifting an ordinary object from its conventional utilitarian world in order to make its uniqueness emerge, or when the object was transformed by humour creating a recognition between object and subject by its nonsense. These methods of creation had the non-conformist mission of abolishing the idea that the concept of truth is unique and singular, taking away all its outermost appearances, by being able to finally show a "subjectivized" truth that would eventually reveal the Being's own tendency to hide itself.

In Surrealism, man is true as long as, in some way, his hidden reality coincides with him. At that moment, the world, recreated by imagination, no longer shows its utilitarian horizon, but its magnetic evocation of the otherness. This "openness" intended to resolve the opposition between the self and the world, the interior and the exterior, the action and the thinking by returning to the use of the imagination in order to reestablish the connection with the human wholeness, and to live a receptive relation between the subject and the object.

Kiesler's proposals for seeking a subjective relation to space through the recognition of the correlation between man's perceptiveness and the inherent energies of his environments are similar with the intentions of the Surrealists. Both Surrealism and Correalism explore a wide view of the world that opens the possibility to reinterpret reality as conceived through the fact of its own creation. They are not to be regarded as theories about reality, but instead, as concrete exercises towards liberating the act of imagining from its current deterioration. Both claim to find in the world itself an inspiring attitude that invites one to act upon one's own disposition in facing reality.

"Space, so hard to define, is so translucent in its endlessness that until coagulated into solid form, it cannot be perceived. Space in nature always seems to be a void -an emptiness encompassing solid bodies. The Endlessness of space once had meaning only in a connection with the "outer cosmos". But modern research taught us that space can also be endless in the inner sanctum of the micro-atom: you think you have come to the final unit and then you find you can split that "final" unit -and a new world is disclosed. The inner perspective of the inner sanctum is a new enigma for us of the twentieth century. The cyberneticist can calculate the effects of such inner doings and undoings with great precision by enlarging his natural senses through keener machines with perceptions far beyond our inborn capacities. Remember opera glasses, manufactured to extend our natural vision? And telescopes to bring the outer world closer to us. But now we have electronic microscopes which are telescopes in reverse; they peer into the inner world. And so when science tells us now that it is possible to envision a world of the "inner cosmos" almost as endless as the outer space, we can hardly believe it, but it is a fact nevertheless.

What does that all mean to us as plastic artists? It means that in a single sculpture, for example, we could present the infinite totality. That does not necessarily entail being a realist or non-objective, it means condensing continuity by using the specific techniques of one's craft. The point is not to get stuck in the material and its technique, but to express the force that holds

the parts of a composition together. Thus the artist creates a new gravitational field, into which the observer is drawn. The second possibility is that you conceive of a sculpture, a painting, a building, a dance which expands from the nucleus of an idea to such vast dimensions that you can you can "live with it". Art itself becomes the environment; in other words, the work steps down from the pedestal where it was an illustration of some idea or some memory and expands to become a living space. Thus it defines total space and induces endlessness in a concrete form...the mere terminology of "living space" would guide you to architecture".[50]

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[50]Frederick Kiesler, *Inside the Endless House*, Simon & Schuster, New York, 1966, pp. 394-395.

EPILOGUE

Even if nowadays the imagination is commonly regarded as separate from perception, Western philosophy from Aristotle to Merleau-Ponty has considered them continuous. Imagining and perceiving coincide in crucial ways that include the extension of one act into the other, the repetition of one by the other, or the resemblance between the two acts. In all cases the relation between the two can be understood under the heading of "continuity".

If one searches for coherence in the act of perception, one must address the question of how to get a sense of "continuity" in this technologically driven late twentieth century, where the process of gathering images through the act of "perceiving the world" has been replaced by that of consuming images from the

contemporary "image polluted context". In this "fragmented setting", what is the place for "continuity" between senses and imagination, between perception and creation?

To evaluate Kiesler's attempt to establish continuity within our contemporary context we must return to the act of creation itself[51] and the way it has changed through time. In the Premodern period, to create corresponded to the image of the artist as a craftsman. The medieval icon-maker based his making in the imitation of the transcendence; with Modernity he became an "inventor" that was "enlightened" by his imagination. In Post-modern terms, the artist became a "bricoleur", who plays with fragments, which are endlessly reflected on each other increasing their number in a context already full of images. This circumstance creates a sense of loss, harming the process of finding reference and threatening the actual place of imagination in the continuity of the act of creation.

If this condition of "fragmentation" in Post-modernism is to be undermined, a specific approach in the act of creation should be considered, based on the "plurisemantic nature of imagination"[52] and its analogical faculties for recovering a sense of unity through the process of referentiality. If we are to restore a place for the imagination in the process of creation, the task of the contemporary creator should be to find reference in both a historical and a narrative way, by proposing to review history and reinterpret it, in order to establish a sense of continuity in the creative act. The creator should inscribe his own narrative in the plurality of history by echoing what was recorded before in its intersubjective realm. The

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[51]For a study about the relation between imagination and creation see Richard Kearney, *The Wake of Imagination: Ideas of Creativity in Western Culture*, London, 1988.

[52]In Kearney's sense.

contemporary sense of imagination should go back to the realm of a collective understanding in which things and words have a common meaning to which the creator should refer and which he should translate into his own work. In this way he would recover the connections presently disregarded with the disruption of the relations between perception and creation, senses and imagination. Phenomenology is consistent with this perspective:

> "The phenomenological world is the sense which is revealed where the paths of my various experiences intersect, and also where my own and other people's intersect and engage each other like gears. It is thus inseparable from subjectivity and intersubjectivity, which find their unity when I either take up my past experiences in those of the present, or other peoples' in my own".[53]

But, a discrepancy is evident here between the phenomenological understanding of continuity in perception and today's common understanding of the act of perception, with the prevailing divergence between senses and imagination. To overwhelm our contemporary "fragmentation" and recover the continuity that phenomenology refers to, we should deal with the problem of historical perspective and find authentic echoes in our own time based on things created on a different understanding in a former time. Thus the role of interpretation in the act of creation becomes primary for bringing back a sense of continuity to it.

The difficulty found in Kiesler's work is related to this understanding, in which his Correalistic proposals do not seem always to correspond with their intentionality. He does seek to emphasize the link between senses and imagination,

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[53]Maurice Merleau-Ponty, *Phenomenology of Perception*, Translated by C. Smith, Routledge & Kegan Paul, London, 1962, p. xx.

but his projects do not seem at all to "intersect" the intersubjective common ground. The "Endless House", for instance, which projects a place where one is supposed to be freed from every restriction for the senses, presents itself in such an "out of this world" manner, that the mere idea of building it finds no place. His understanding of imagination has a hint of science fiction: his work appears more like "imaginary" or coming out his inventive geniousity, than "imaginative" in the original sense as a result of the act of perceiving the world. Kiesler's work is more in its proposals, so full of propitious suggestions, but there is a gap between its intentionality and its materiality. Could this gap be the same gap between senses and imagination, or between perceiving and creating? A phenomenological intervention in architecture would be propitious if the proposals for restoring a sense of continuity are combined with finding an intersubjective language that would be effective within the common ground of our late twentieth century reality.

Kiesler's proposals, though, offers valuable programmatic guidelines for the "enlivening" of space. The importance of Kiesler's work for a contemporary practice of architecture is more than opening out the possibility for a Correal reality. It is also based in what may be the most constant element in his work: the will to question the place of man in relation to space. The relevance of his questioning of program in architecture refers to the intentionality to affect the world itself. Spaciality appears dependent not only on the fact of man's experience, but also on a reality to be constructed by man's own participation. The world is, in this view, presented as part visible and part invisible, to be completed through the very act of perception. Its meaning is given by man's role, as it demands imagination in the process of perception, bringing further the possibility of experiencing a phenomenological reality, in which each space could be perceived differently, depending on the subjective realm of placing one own's narrative and on the

intersubjective realm of history. This fact, in terms of contemporary architecture may contribute to restore cohesion, wholeness and continuity.

"How Things Hold Together

How "Things" hold together is quite miraculous. It's too strange for us humans to understand the way molecules click, cells divide without losing hold of each other. We build by making joints after joints. Nails for wood. Bolts for iron. Welding for steel. Pearls, rolling all over the ground, we string together. Friendship has invisible ties as strong as iron. The relationship of family members is a complicated mechanism, yet natural to us. Links between those members are made of instinct, that is right, made of it, triggered by psychological impulses propelled by emotions. They shake hands with each other without touching. You see human bodies, you see intervals between them, but neither our eyes nor ears nor noses nor hands can grip the flow of the power that holds them together or pulls them apart. The intervals between them seem empty spaces, dump voids.

The physicist tells us, presuming, that heavenly bodies, fixed or moving in cosmic space, unattached to one another by any material bond, are held by a magnetic and gravitational field. It, too, is un-visible, un-heard, un-tasted, un-touchable.

...My making several units of paintings, galaxies, separated from one another at different intervals, is an attempt to make painting not an illusion of reality, but real. It is anti-art and pro-life. The galaxy replaces the single painting with several continuous images which can be read from left to right, right to left, or up and down, down to up or in any flow, inward or outward. The power which binds these units together is not composition-in-perspective but the observer, yes, that guy who stands or walks through a gallery, the collector at home who looks up from his armchair while reading the evening paper, anyone who passes by is a potential power of correlation.

...But however inventive we might be, we must not forget that the artist-creator can never be extraterritorial. His territory will always remain his life experience. All art is, of course, only an abstraction of what exists. The binding force between art and life is the cohesive strength of the personality. This force is inexplicable. It must be lived to be understood".[54]

Kiesler life's search for "holding things together" through the linking force of man's imagination, may be seen as an attempt of discovering a contemporary equivalent for the original role of magic, understood as an outcome of the very experience of the world. Kiesler wrote explicitly about the relation between architecture and magic, but this manuscript has not been made public. Nevertheless in one of his articles[55] he makes explicit that magic is to be understood in terms of the role of man in discovering what his own reality means when related to the process of perceiving the world. Kiesler's goal for the "enlivening" of space searches for an architecture of "contact" with reality in which everyone perceives what the world may mean, and translates it through his own interpretation.

"Magic architecture is a tool of realistic life. it performs wonders in the development of mankind, just like the sun light performs wonders in the development of plants, being a constant environmental companion...It relies on self-confidence, and self-confidence on the discovery of natural capacities. It holds the balance between the two extremes of man a) the desire for the machine b) the denial of science. Its magic consists solely in the discovery of capacities in the natural ore of a being, -and by refining it brings forth the latent qualities".[56]

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[54] Frederick Kiesler, *Inside the Endless House*, Simon & Schuster, New York, 1966, pp. 214-215.

[55] "Frederick Kiesler 1923-1964", *Zodiac 19, A Review of Contemporary Architecture*, Milan, Italy, 1969, p. 49.

[56] Ibid, p. 49.

In these terms, architecture may be seen as a mirror for reflecting our relation with the fact of "being-in-this-world" as performers of our own reality. Kiesler's idea was to "wake up" the soul of things and "enliven" them by replacing our role of observer with that of actor participating in the act of perception. This would serve as a means for reactivating the role of man in his experience of the world and would give a sense of "correlation" to it.

BIOGRAPHICAL NOTES[57]

Frederick Kiesler gave different dates to his birth, often 1892 or 1896, and even though he was born in Czernowitz, Romania, he always named Vienna as his birthplace. He studied at the "Imperial and Royal Institute of Technology" in Vienna which he abandoned to enter the Academy of Visual Arts, which he in turn left in 1913 without any diploma. After serving in the German military press corps for three years, he returned to Vienna in 1917.

He grew up and lived in Vienna, the cultural capital of Europe at the turn of the century, where he gathered in cafes with such well-known artists as Kokoschka, Schonberg and Kafka. Life in Vienna was deeply marked by the first World War which resulted in the end of the Austro-Hungarian monarchy and by the necessities of reconstruction. This need to start anew brought about a sense of liberation from past constraints. When the socialists came to power in Austria, the realisation of a socialist utopia, which would later find its expression in Functionalism, seemed within reach. Kiesler, who identified himself with the

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[57]The following notes are selected from biographies in the catalogues of Kiesler's two major exhibitions, in Vienna and in New York, as well as from Lillian Kiesler's Biography on Kiesler.

tradition of Austrian architects Otto Wagner, Adolf Loos and Joseff Hoffman, whom he viewed as the precursors of modern architecture, did not share this utopia, and dissociated himself early on from Functionalism. In fact, in 1917 he decided to break away and work on stage designs for theater, with such success that in 1923, following a performance, he was asked by Van Doesberg, Moholy-Nagy and El Lissitzky to become the youngest member of the abstractionist *De Stijl* group.

In 1926, Kiesler came to New York, invited as the organizer of the "International Theater Exposition" at the Steinway Building. His arrival, as well as his statements on theatrical design, were so much promoted by the press that he became almost immediately very well-known in the art circles of the city. He stayed in New York until his death in 1965, where he developed his career as architect, painter, sculptor, art critic, philosopher, teacher, poet, actor, stage designer and writer. Even if he is most recognized as the architect of The Shrine of the Book for the Dead Sea Scrolls, the highlights of his work are the development of his philosophy of Correalism, his interventions within the Surrealistic movement during the 40's, and his designs for theater.

1890.   Born September 22 in Czernowitz, Romania, also called the Austrian Bukovina (now Chenovtsy, Ukraine).

1908.   First record of Kiesler in Vienna at the *Wiener Technischen Hochschule*.

1910.   Enters *Akademie der Bildenden Kunste* in Vienna to study painting and printmaking. Leaves without a degree. While studying at the Academy meets Otto Wagner, whom he considered, followed by Joseph Hoffmann and Adolf Loos, the major influence in creating new movements in architecture in Europe. He actually regarded himself as the third generation of this new movement in Vienna.

1911-12.   Receives "Therese Dessauer Prize" and "Kaiser Franz Josef artist's grant".

1914-17.   Serves in the German military press corps.

1918-19.   He paints two portraits in which parts of the body are disconnected from one another. Another painting was composed on twenty separate pieces of cardboard of varying sizes that he installed together on a wall and called "Galaxy".

1920.   Marries Stephanie Fischer in the Vienna Synagogue. Reports that he worked with Adolf Loos on a postwar slum-clearing project in Vienna, though this has not been confirmed. Later in his life he translates Loos's *Ornament and Crime* into English.

1923.   Designs the Berlin production of Karl Capek's *R.U.R.* and receives great acclamation for his electromechanical stage set. Following a performance Kiesler meets Hans Richter, Theo Van Doesberg, Laszlo Moholy-Nagy, and El Lissitzky and is asked to join the *De Stijl* group as its youngest member. *R.U.R.* opens also in Vienna. Designs the Berlin production of Eugene O'Neill's *Emperor Jones* in which he crystallizes the notion of the "Endless" as that of a "continuous tension" in space. First sketches of the "Endless House".

1924.   Architect for the "International Exhibition of the New Theater Techniques", part of the "International Music and Theater Festival of the City of Vienna". The exhibition includes a revolutionary "Space Stage", an elevated "theater-in-the-round" designed by Kiesler for Vienna's *Konzerthaus*, as well as the "L+T" installation system, a network of vertical and horizontal supports exhibiting hundreds of stage and costume designs, posters and models of Avant-Garde theater productions. He exhibits at this occasion the first plans for the "Endless Theater". For the Festival he also designs the poster, the catalogue, the ticket and the stationary in a Constructivist style. Designs the Vienna production of Tristan Tzara's *Mouchoir des Nuages*.

1925.   Invited by Josef Hoffman, director of the "Exposition Internationale des Arts Décoratifs et Industriels Modernes" in Paris, to design a theater display. In the *Grand Palais* he builds a monumental environment *De Stijl* style, with stage models, theater plans and costume designs by Viennese artists. He calls it visionary architecture for a futuristic "City in Space". While in Paris, he organizes a protest against the exclusion of the members of the *De Stijl* from the Parisian exhibit of applied arts. He proposes to build an "Optophon Pavilion", an automatic theater without actors in which a mobile machine for partly abstract or realistic visual and phonetic plays could run automatically. He shows the plans hanging between two trees outside the *Grand Palais*. Kiesler prepares plans for an "Universal", an "Endless" theater without stage, elaborating further his "Space Stage" concept. He receives an invitation to direct a major exhibition of theater design in New York from Jane Heap, editor of *The Little Review*.

1926.   Kiesler and his wife travel to New York on the ship "Leviathan", with works from the Paris theater exhibition packed in more than forty crates. The "International Theater Exposition" opens at the Steinway Building in New York with Jane Heap and Kiesler as the organizers. Kiesler writes a provocative article in the catalogue called "The Theater is Dead", and lectures about the theater of the future. He introduces the "Optophon" and the "Autotheater", which he describes as an empty room without stage or actors automatically playing a symphony of colour, light, music and movement, he also promotes the "Endless Theater" and his concepts for a "Four-Dimensional Theater". Kiesler and Princess Matchabelli found the experimental "International Theater Arts Institute" in Brooklyn, where Kiesler was to teach theater architecture and stage-craft.

1927.   Kiesler and his wife find temporary work at the Anderson Galleries, supervising the exhibition that Katherine Dreier has organized about *La Société Anonyme*. Kiesler proposes turning one of the rooms into a telemuseum, with walls as screens for transmitting pictures.

Kiesler volunteers to design for Mrs. Dreier one of the projects for the Museum of Modern Art.

1928.   Designs store windows for Saks Fifth Avenue. Designs a cinema in the Greenwich Village for the Films Arts Guild. The theater is proposed to be a magnascreen of automatically controlled extension, a "screen-o-scope" of continuous projection.

1929.   The Film Guild Cinema opens. Brentano publishes his book *The Modern Show Window and Store Front.*

1930.   Brentano publishes his book *Contemporary Art Applied to the Store and its Display.* "During the 30's Kiesler expands his network of friends in America. Many of them are expatriates from Europe or the Soviet Union, among them...Marcel Duchamp, Edgard Varese, Fernand Léger, Alexander Calder, Max Ernst and Museum of Modern Art curator Philip Johnson". Designs the "American Union of Decorative Artists and Craftsmen Exhibit" in the Grand Central Palace. Travels to Paris with Stefi, where he meets frequently with Mondrian, Varese, Calder, Arp, Le Corbusier, Kokoschka and Tzara. Receives certification as architect from New York State.

1931.   Develops design for a prefabricated, standardized single-family dwelling, and applies for its copyright calling it "Nucleus House". Prepares plans for a competition for a theater in Woodstock, New York, which he titles "The Universal", a theater proposing a proscenium stage that could be converted into an arena. Kiesler wins the competition against Frank Lloyd Wright, but the project is never realized because of lack of funds.

1932.   Lectures at various places on *Ornament and Crime.* Participates with pictures of the Film Guild Cinema building at The Museum of Modern Art's "International Exhibition of Modern Architecture".

1933.   Writes to Jean Badovici, a friend from Paris, that he intends to found "Correlation, Inc." -a company for industrial planning- and to

publish a quarterly with the same name. Works as a designer for Sears for standard housing, develops the "Space House". Works as stage designer for The Julliard School of Music, until 1957. Kiesler is commissioned to redesign the Modernage Furniture Company store.

1934.   Begins to work on a book entitled *Magic Architecture*, on which he will work on intermittently for ten years; the manuscript is yet unpublished.

1935.   Receives an award in Buffalo for the best store design for his remodelling of a shoe store. Kiesler is offered a commission to design a house for a Duchamp collector, but declines the offer on the grounds that, as principle, he does not take any planning without having had personal contact with the client.

1936.   Kiesler becomes an American citizen. He takes part in the exhibition "Cubism and Abstract Art".

1937.   He publishes in *Architectural Record* a series of articles on "Design-Correlation". Kiesler buys Duchamp's painting "Thermometer". He is appointed associated professor at the Columbia University School of Architecture and founds a laboratory for "Design Correlation", seeking to connect research on life processes with a scientific approach to design. Works on the "Vision Machine", an investigation on perception and architecture.

1938.   Kiesler lectures on Duchamp's "Large Glass". Works on the "Mobile Home Library" in the Laboratory.

1939.   Member of the "Advisory Council for the Advancement of Science and Art" at Cooper Union.

1940.   Kiesler takes part actively within the Surrealist movement. He is described by the French press as *chef d'état-major du complot Breton*. Kiesler lectures on architecture as "Biotechnique".

1941.   "Ten Years of American Opera Design" is held at the Public Library, showing many of Kiesler's designs. Mondrian arrives in New York at Kiesler's invitation. Forms an advisory committee to provide scientific advice for his "Visionary Machine". The group is composed of an industrial engineer, the New York Times science editor, a neurologist, and the Nobel Prize on chemistry Dr. Urey.

1942.   Researches on dream images for the "Vision Machine" and publishes about it in the first issue of the Surrealist publication *VVV Magazine*. Marcel Duchamp lives in Kiesler's apartment. Peggy Guggenheim invites Kiesler to devise "a new exhibition method for objects" at her Art of this Century gallery. Kiesler's work at Columbia University comes to an end.

1943.   Publishes again on *VVV Magazine* about "Correlation", linking the "Endless House" to the multi-functional stool designed for Art of this Century.

1944.   Works on a book on "Biotechnique" (unpublished). Participates in "The Imaginary of Chess" with various Surrealists artists.

1947.   Designs the Surrealist exhibition Bloodflames. Flies to Paris to design the installation for the *Exposition Internationale du Surréalisme*. Writes an article entitled *L'architecture magique de la salle de superstition*. Writes *Manifeste du Corréalisme*. Works on "Tooth House" sketches. Duchamp appears bared to the waist in Kiesler's eight part portrait, Kiesler calls it a "Galaxy".

1948.   Creates a large wooden construction for the set of Milhaud's *Le Pauvre Matelot* at Julliard, presently part of the "Modern Sculpture Collection" at the Museum of Modern Art.

1949.   The outstanding stage design for Mozart's Magic Flute, made by Kiesler, opens at Julliard.

1951.   CBS Network selects Kiesler as the Architect of the Year 1950. Works on a wooden Galaxy for Philip Johnson, to set it up in his home in New Canaan. Participates in a symposium at the Moma on "The Relation of Painting and Sculpture to Architecture". Writes to his friend Max Bill: "A veritable resurrection of the whole attitude towards my work has taken place in America". Teaches design research seminar at Yale.

1952.   Kiesler's Galaxy for *Le pauvre Matelot* is included in "Fifteen Americans" exhibition at the Moma. An "Endless House" model is exhibited at the "Two Houses: New Ways to Build" at the Moma, along with Fuller's "Geodesic Dome".

1954.   Kiesler exhibits painted "Galaxies" at the Janis Gallery.

1955.   Builds a temporary theater for the "Empire State Music Festival" in Ellenville, N.Y., an enormous multifunctional tent. Visits his friend Picasso in France during the summer.

1956.   Appears in Hans Richter's *8 x 8* as a minotaur. Kiesler and Bartos design a gallery space in the Carlyle Hotel, they establish then their firm together.

1957.   Retires from the Julliard School of Music. Publishes "The Art of Architecture for Art" in *Art News* and "Design in Continuity" in *Architectural Forum*. Flies to Jerusalem to start conceptual work for The Shrine of the Book to house the recently discovered Dead Sea Scrolls.

1958.   Receives a grant to do preliminary plans for erecting the "Endless House" in the garden of the Museum of Modern Art. Works on the series called "Shell Sculptures".

1959.   Flies to Montreal to discuss the possible building of the "Endless House", the project falls through. Travels to Brasil, Italy, and Germany. The Ford Foundation awards Kiesler a grant to design an

"Ideal Theater" for America. Completes the Caramoor Theater in Katonah, N.Y.

1960.   Takes part in the exhibit "Visionary Architecture" at the Moma, exhibiting a large model of the "Endless House". The 1:1 scale model in the courtyard is never realized. Travels in Italy.

1961.   Solo exhibition "Shell Sculptures and Galaxies" opens at Leo Castelli Gallery. Negotiates for construction of an "Endless House" in West Palm Beach, Fl., but somehow it never gets through. Delivers plans and model for the "Universal Theater" to the Ford Foundation. At his own expense he has the model cast in aluminium. Signs the building contract for The Shrine of the Book.

1962.   Begins "Landscape Sculpture" series. Travels to Tel Aviv to inspect the construction site for The Shrine, travels then to Paris and Amsterdam. Gets invited to design a "Grotto for Meditation" in Indiana, in memory of the theologian Paul Tillich. Dissolves the collaboration with Bartos.

1963.   Works on a thirty-seven pieces environmental sculpture called "Us, You, Me". Participates in a group exhibition at the Leo Castelli Gallery. Works on assembling journal notes and other writings for publication, published posthumously by Simon & Schuster in 1966 as *Inside the Endless House*. Stefi Kiesler dies.

1964.   Kiesler suffers a heart attack, while in the hospital marries Lillian Olinsey. "Frederick Kiesler: Environmental Sculpture" opens at the Solomon Guggenheim Museum. Works on his 50-foot "Bicephalous" sculpture. Writes "A reminder to Myself: A New Era of the Plastic Arts Has Begun".

1965.   Kiesler flies to Jerusalem and takes part in the opening ceremony of The Shrine of the Book. The Architectural League of New York awards Kiesler and Bartos the Gold Medal for Design and Craftsmanship for The Shrine of the Book. Dies December 27, the

funeral has the spirit of a theatrical event. Eulogies are delivered by the director of The Museum of Modern Art Rene d'Harnoncourt, Jack Lenore, Sydney Kingsley, Virgil Thomson and E.E. Cummings. Robert Rauschemberg rolls a tire down the aisle, props it near the coffin and paints it blue, yellow, green, white and red. The Julliard String Quartet plays Mozart and Schonberg.

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