

Media Ecology and the Arts

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In the realm of aesthetic inquiry, media ecology deals not only with the ways in which technological change is implicated in cultural conceptions of art, but also with how an art piece communicates and affects human perceptions, feelings, concerns, understandings, and values. This paper's objective is to outline how, as technologies change, conceptions of time and space change and, as a result, art changes; indeed, sometimes an entirely new art form is created. Specifically, the paper discusses some of the influences and consequences of late-19th- and 20th-century technology and how they gave rise to a new genre called, *installation art*, which is in and of itself a forum for both technophilic and technophobic reactions to time-space characterization and simulation.

Media Ecology and the Arts

IF we wish to comprehend and decipher messages of cultural and technological challenge and change, we must continually engage in the perusal and study of artistic endeavors. The arts are indispensable tools for understanding the human condition. As McLuhan (1964) explains, artists are those individuals, in any scientific or humanistic discipline, able to grasp the implications of their own actions and of new knowledge in their time. "If men were able to be convinced that art is precise advance knowledge of how to cope with the psychic and social consequences of the next technology, would they all become artists?" he asks. "Or would they begin a careful translation of new art forms into social navigation charts?" (p. 71) McLuhan personally declares himself "curious to know what would happen if art were suddenly seen for what it is, namely, exact information of how to rearrange one's psyche in order to anticipate the next blow from our own extended faculties" (p. 71). It is a curiosity shared and, hopefully, encouraged by this paper.

Media ecology traditionally studies the ways in which technologies and informational systems reshape cultural conceptions, values, and practices. John Thompson (1990), in his book, *Ideology and Modern Culture*, calls for "a depth-hermeneutical" approach to art, saying that

even works of art which seem timeless and universal are characterized by definite conditions of production, circulation and reception, from relations of patronage in sixteenth-century Florence to the showrooms of a modern gallery or museum, from the courts of eighteenth-century Vienna to the concert halls, television screens or compact discs today. (pp. 281-282)

In other words, an artwork is a repository of meaning capable of revealing not only its creator's intended message, but also the ecological conditions of its birth, place, time, and cultural milieu.

I would like to engage in a brief media ecological look of installation art to show how, as technologies change, conceptions of time and space change and as a result, art changes; in the case of installation art, an entirely new art form may be created. However, as media theorist Dennis McQuail (1994) points out, one cannot establish a definitive technology-culture “effect” because “technologies themselves are also cultural artifacts and there is no way of breaking into the circle” (p. 108). Technologies have a mediated impact on cultural practices; their “effects” can be described only as observable patterns of consequence emerge. I will argue that as new uses develop, individuals as well as institutions may create new cultural forms and meanings.

In the art criticism of the 1960s and 1970s an interesting linguistic evolution occurred—works of art installed in various galleries, museums, and exhibition contexts become sporadically and increasingly referred to as *installations*. By the 1980s and 1990s, one found references to installation as an art form, as a genre in and of itself; in 1990, the first Museum of Installation Art opened in London. Installation is, in fact, a very recently pioneered form of art making and display. Its rapid evolution and increased presence in public venues, galleries, museums, art festivals, and non-traditional sites require critical characterization and explanation.

What is installation art? Installation is a hybrid form of practice and inquiry drawing upon many disciplines and histories, from architecture and performance art, to painting, sculpture, film, and video. The most significant qualifying characteristic of installation as a postmodern artistic discipline is its refusal to concentrate meaning in a core, favoring instead the consideration of a number of elements and the mutual interrelationship of these elements to one another. In the same way ecology studies the relationship between a system and its environment, installation art will often focus on the relationship between objects and their context, or between objects, viewers, and acts of intervention. Exhibition and spectatorship within temporal-spatial conditions are implicit in the work, made manifest by the work, or challenged by it.

Examples of installation art include Robert Smithson’s and Christo’s site-specific and time-based, large-scale installations; Dan Flavin’s and Robert Irwin’s space containment and visibility controlled environments; Gordon Matta-Clark’s and Dan Graham’s investigations of architecture as social space; Barbara Kruger’s and Joseph Kosuth’s environmental explorations of the structure of language and signs; Charles Simonds’s miniature archeological installations of an imaginary civilization he calls, “Little People”; Bruce Nauman’s, Nam June Paik’s and Wolf Vostell’s use of video as object and performance; Vito Acconci’s and Joseph Beuys’s performance installations; the Body Art, “living sculpture” installations of Gilbert and George; Colette’s tableau vivants; and Ana Mendieta’s ritualistic earthly imprints in which her body functions as both site and image. Installation’s expanded object-events confirm the arbitrariness of being and provoke a reevaluation of the relationship between art and reality. Installation will take us from site-specific environments, which can be known and completed only by the viewer’s presence and participation, to the fully immersive (i.e., head-mounted display, body suit, and glove) three-dimensional conceptual environments of virtual reality. The ideological latitudes and attitudes of installation art have come to include experiments in extensionality, displacement, emplacement, and transcendence, encompassing a broad range of works dealing with acts of “placing” and “misplacing”—from physical incarceration, containerization, and habitation, to territorial incursion, navigation, acts of

population and depopulation, investiture, anchorage, dislocation and disarrangement, storage, packing, and wrapping. Installation is a means by which to locate and experience the passing of tradition and reinventions of self, society, and everyday life.

While installation art has been evolving as a new art form with different branches and offshoots, installation as a genre can only be truly understood and appreciated with dialectical and continuous reference to the debates and protean aesthetics of modernist and postmodernist discourse. Installation art is a reaction and accommodation to the technological and philosophical changes that began in the 19th century and accelerated in the 20th century—changes so sweeping in scope and significance that many have characterized them as a revolution in worldview, a paradigm shift from a “modern” to a “postmodern” construction of “reality,” “knowledge,” and “society.” Postmodernism purports to break with modernism, to reformulate and reform the space and place of art, the role of the artist, and the cultural field of aesthetic signification. Installation art as a postmodern art form takes the form of installation as expanded sculpture (emphasizing context, site, and environment) and installation as expanded theater (emphasizing performer, performance, and public). The three most significant features that gave rise to the possibility of installation art were (a) the use of ready-mades, their associationally charged presence, and the reverberations inherent in questioning the distinction between art and non-art, reality and artificiality; (b) the use of collage as a means of exploring divergent or complementary relationships; and (c) the shift from an atomistic view of an art work to a systemic one, i.e., looking at a number of different and interacting elements as a whole in which the meaning of a work of art is a function of content, context, system of production, and frame of reference.

Content, context, production, and frames of reference are, of course, embedded and defined in time and space. Both time and space indicate relationship and order and may be viewed as actual and concrete, or metaphorical and abstract. To elucidate and articulate all the definitions, properties, and values ascribed to time and space within the context of art and experience would result in immense and voluminous examination beyond the reach and scope of this paper. What can be done is to outline in broad strokes the major paradigmatic shifts in time-space conceptualization, and briefly describe how installation art evolved into a forum for all the various reactions to time-space characterization and technology.

Most cultural theorists (Havelock, 1971; Innis, 1951; McLuhan, 1988; Shlain, 1991) attribute the creation of a first science of space to the Greeks as a function of their having developed the first streamlined alphabet. Its linearity also changed the notion of time from a cyclic one to a linear, directed, and progressive-linear one. The alphabet transformed the preliterate or acoustic space of the Greeks into a visual space; although the multi-locationalism of 20th-century Cubism, with its simultaneous exhibition of interiors and exteriors of objects, heralded a return to a painterly form of acoustic space.

It was, however, Euclid, the Greek mathematician and father of geometry, who systemically codified space. Leonard Shlain (1991), in his book, *Art and Physics*, describes Euclid’s space as “uniform, continuous and homogenous . . . no potholes, bumps or curves and everywhere was presumed to be the same” (pp. 30-31). If space had no substance, it therefore followed that one could place objects, forms, and figures in space without affecting the space or the objects. Space could not interact with mass or

form because it was essentially nothing; it “was the empty container in which Greeks could arrange the things of their reality” (p. 20).

In the Middle Ages, however, Euclidean space and Aristotelian time (i.e., time as duration and measure) gave way to theological representation. McLuhan (1964) notes, for medieval man, as for primitive man, space was not homogenous; it did not *contain* objects—each object or thing *made* its own space. In medieval art, there was no rationally connected space into which an object had to fit (p. 149). Lewis Mumford (1963) also characterizes the medieval world as one in which space and time were two relatively independent systems. Space was organized symbolically—e.g., heaven above, hell below—and actual spatial relations were subordinate to allegorical correspondences. Time comprised past and contemporary events simultaneously. It was a symbolic world of space and time in which “everything was either a mystery or a miracle” (pp. 18-20). Mumford describes time and space in Gothic art as successive and unrelated; “the immediate and the eternal, the near and the far were confused.” He adds that in the Renaissance, space and time were coordinated into a single system through a unique monocular viewpoint in which “events remained fixed within a single frame established at a set distance from the observer whose existence with reference to the system was innocently taken for granted” (p. 342).

Indeed, the Renaissance was a turning point in time and space conceptualization. By 1435, Leon Battista Alberti published a treatise on the laws of perspective, which were firmly grounded in Euclidean principles. The perspectivist paradigm basically described a painting as reflecting that which a painter looking through a peephole fixed at a specific location in front of a window would see—a picture of an unmoving, one-eyed view of the outside world.

From the 13th century to the 1860s, perspectivist conventions prevailed in artistic depictions, while from the 15th to the early-20th century, Western civilization relied on classical physics to corroborate ideas of Euclidean space and progressive time. “Before relativity, no scientist could conceive that the present moment was not a clear picture of many events in space occurring in one arrested instant of time. According to Einstein, this clarity was an illusion” (Shlain, 1991, p. 135). Einstein’s theory of relativity would show that perceptions of the world were actually observer-dependent. Time was a local internal feature of a system of observation; all temporal coordinates were relative to a specific reference system (Kern, 1983, p. 18).

Indeed, the two events that most significantly challenged previous time-space paradigms were the introduction of the camera (1839) and Einstein’s special theory of relativity (1905). The photographic medium and concomitant notions of veracity and instantaneity would increasingly be seen and interpreted as a challenge to mimetic art forms and movements (i.e., realism and naturalism), and to their authority and standards in matters of presentational and representational truth, while the uniform and continuous space of Newton would be jettisoned in favor of Einstein’s scheme in which space and time are so interdependent that they cannot be conceived of as separate—they should be considered one entity, that is, *spacetime*. Newton’s idea of space and time as dynamic, as events developing with the passage of time (i.e., in a one-dimensional movement from past to present to future) would be re-positied by Einstein’s special theory of relativity as stasis—events do not develop, they *are*.

“Einstein pronounced the doom of continuous or ‘rational’ space,” McLuhan (1964) writes, “and the way was made clear for Picasso and the Marx brothers and *MAD*” (p. 150). Shlain (1991) takes up this very point, writing, “Explicit in Einstein’s formulas and implicit in a Cubist painting is the concept that all frames of reference are relative to one another” (p. 192). There is no sequential time in Cubism; representations are neither of a fixed moment in space nor of a timeless ideal. Cubism and, immediately thereafter, Futurism were both attuned to the concept of simultaneity. According to Einstein, everything is simultaneous at light speed in spacetime. In Duchamp’s famous 1912 Cubist-Futurist painting, *Nude Descending a Staircase No. 2*, the figure exists in past, present, and future, with no element privileged over any other; the figure’s position is a function of its moving through a space-time continuum, where space and time are inseparable. Later, video technology and software, with their space-organizing and time-organizing structures, would promote an “anywhere, anytime” sensibility wherein information is instantaneous and simultaneously available—time appears to collapse and space seems to dissolve.

Sociologists and art theorists such as Daniel Bell (1976), Anthony Giddens (1991), David Harvey (1989), Fredric Jameson (1991), Victor Burgin (1987), and Margot Lovejoy (1989) describe modernity or postmodernity in terms of a specific experience of space and time or time-space transformation. The search for the “here-ness” of here and the “now-ness” of now became a critical 20th and 21st century philosophical, psychological, and aesthetic quest for meaning, identity, and ontological security.

Margot Lovejoy (1989), in *Postmodern Currents*, asserts that photography “catalyzed the modern ethos in art,” while electronic technologies ushered in the age of the postmodern (p.1). In 1839, with the invention of photography presented to the public, the classicist critic Delaroche declared that painting was dead; but, as Lovejoy demonstrates, each time new conditions arise, the question of “What is Art?” resurfaces. “The question is not whether art is dead,” she writes, “but how the need for it has been transformed by technology, how technology has changed its very nature, the way it is used and its very form” (p. 267).

Andreas Huyssen (1986), in his book, *After the Great Divide*, takes the position that no single factor influenced the emergence of 20th-century avant-garde art as much as technology. “From Dada on,” he writes,

the avant-garde movements distinguish themselves from preceding movements such as Impressionism, Naturalism, and Cubism not only in their attack on ‘institutional art’ as such, but also in their radical break with the referential mimetic aesthetic and its notion of the autonomous and organic work of art. (p. 9)

He continues:

The invasion of the very fabric of the art object by technology and what one may loosely call the techno-logical imagination can best be grasped in artistic practices such as collage, assemblage, montage and photomontage; it finds its ultimate fulfillment in photography and film, art forms which cannot only be reproduced, but which are in fact designed for mechanical reproduction. (p. 9)

Indeed, for Mumford (1963), writing in the 1930s, the motion picture, more than any other traditional art form, symbolized and expressed the “modern” day world-picture and its concomitant conceptions of time and space. He believed that only the motion picture, with its ever-present camera eye, use of close-ups, synoptic views, and shifting events, was capable of truly representing “with any degree of concreteness the emergent world-view that differentiates our culture from every preceding one” (p. 342); only motion pictures had spatial forms always shown in and through time, and only motion pictures had the unique capacity of symbolizing and expressing the world beyond an individual’s direct perception or grasp (p. 343). Of course, subsequently, television’s round-the-clock colonization of time and global coverage created time-without-time, time-within-time, space-within-space, and space-beyond-space possibilities for aesthetic and cultural expression. Television’s erasure of everyday understandings of distance and duration gave rise to new definitions of site-specificity and situation (Ferguson, 1990).

Along with the recognition of photography’s technological prowess in yielding an accurate imitation of external reality came the increasing realization that the most perfect reproduction of a work of art lacks presence in time and space—“its unique existence at the place where it happens to be” (Benjamin, 1992, p. 513). Benjamin wrote that *aura* (i.e., the uniqueness of an original work of art) “withers in the age of mechanical reproduction . . . the technique of reproduction detaches the reproduced object from the domain of tradition. By making many reproductions, it substitutes a plurality of copies from a unique existence” (p. 514). But, as Benjamin argued, this in turn can open up new progressive possibilities:

Mechanical reproduction emancipates the work of art from its parasitical dependence on ritual. To an ever greater degree the work of art reproduced becomes the work of art designed for reproducibility. From a photographic negative, for example, one can make any number of prints; to ask for an “authentic” print makes no sense. But the instant the criterion of authenticity ceases to be applicable to artistic production, the total function of art is reversed. Instead of being based on ritual, it begins to be based on another practice—politics. (p. 515)

Whereas modernism originally emphasized notions of authorship, originality, the uniqueness of the created object, and the use of traditional standards of aesthetic evaluation, photomechanical reproducibility and the dissemination of imagery, followed by electronic reproductive media (e.g. photocopiers, video copiers, faxes, and computers), further transformed both the role of art in society and its meaning. Much of what has become central to postmodern theoretical and critical discourse refers back and forth to the introduction of photography and its subsequent time-space bias and power.

Issues having to do with authorship, subjectivity, and uniqueness are built into the very nature of the photographic process itself. Issues devolving on the simulacrum (authenticity versus artificiality), the stereotype, and the social and sexual positioning of the viewing subject are central to the production and functioning of advertising and other mass-media forms of photography. Postmodernist photographic activity may deal with any or all of these elements and is worth noting, too, that every work constructed by

the hand . . . is frequently predicated on the photographic image.
(Solomon-Godeau, 1984, p. 76)

Jean Baudrillard takes Benjamin's ideas of the impact of image technologies on art even further. In his book, *Simulations*, Baudrillard (1983) writes that it is no longer a question of imitation, nor of reduplication, but of substituting "signs of the real for the real itself"; it is no longer a question of "a false representation of reality, but of concealing the fact that the real is no longer real" (p. 25). The distinction between original and copy has been destroyed, the "very definition of the real becomes: that of which it is possible to give an equivalent reproduction" (p. 146). Since technology today is capable of endless reproduction or cloning of information and images, from television and photography to fax machines and computers, the notion of authenticity, according to Baudrillard, is essentially meaningless and that is why we must of necessity recognize that reality has been superseded by *hyperreality*. The media no longer represent reality but constitute it.

"Pop art" (i.e. popular art) appropriated reproduction technologies and image scavenging to valorize popular culture and the mundane. Huyssen (1986) calls pop art, in its broadest sense, the context in which ideas of the postmodern first arose; he goes on to claim that essential to postmodernism is its rejection and criticism of modernism's elitism and hostility to mass culture (p. 188). Pop art, with its precedents in Dada and aversion to the non-representational subjectivity of Abstract Expressionism, appropriated mass culture's iconography, techniques, and styles, and began to incorporate everyday objects and images into its work, ranging from commercial debris to techniques of commercial advertising and industrially-produced, found objects. The combination of fine and commercial art became acceptable as part of a trend towards producing multi-layered and multi-textured meanings to appeal to varied and various audiences at different levels. John Carlin (1988) calls pop art the "dominant form of realism in the late twentieth century" (n.p.) and lauds it as a form that replaced the mimetic basis of realism with a semiotic one. "The primary artistic reference is no longer nature, but culture—the fabricated system of signs that has taken the place of things in our consciousness. In short, landscape has become sign-scape" (n.p.). By the end of the 20th century, distinctions and boundaries between high or elite culture and popular or mass culture shifted, changed, and at times, merged. The modernist concept of each era needing a definitive representative style collided with postmodernism's promotion of hybridity, eclecticism, and plurality of styles. The modernist concept and demand that each medium be pure and separate was superseded by a postmodern desire for eclectic content and organization. Furthermore, within postmodernism, practice is "defined not in relation to a given medium—sculpture—but rather in relation to the logical operations on a set of cultural terms, for which any medium—photography, books, lines on walls, mirrors, or sculpture itself—might be used" (Barthes, 1972, p. 67).

Whereas the Futurists and Constructivists reveled in the power and productivity of the machine age, celebrating, imitating, and simulating the potential of technology, the Dadaists and Surrealists caricatured, critiqued, and questioned the merits and values ushered in by new technologies, insisting that subjectivity gave order to the world and that art should focus on consciousness, a private realm in which time and space are free to combine in surprising and logically unaccountable ways. The post-1917 Russian avant-garde embraced technological advancements as part of its goal to eliminate all ideological

and practical barriers between industry, labor, and art—to make art part of everyday life and enable the useful and beautiful to coalesce. The spontaneity and subjectivism of action painting and Abstract Expressionism, as exemplified by Rothko and Pollock, gave way to the parodic benday dot cartoon images of Roy Lichtenstein, with their frontal flattened sense of space; to Warhol's 15-minutes-of-fame icon paintings and celebrity silkscreen serial prints (Jackies, Mona Lisas, and Marilyn Monroes); to James Rosenquist's large-scale compositions of fragmentary images rendered in billboard-movie poster slickness; to Claes Oldenburg's colorful Brobdingnagian soft sculptures (e.g., 9-foot slice of cake, 10-foot ice-cream cone, and 7-foot across hamburger); and to Robert Arneson's Duchampian influenced, satiric ceramic sculptures (e.g., his toilet, toaster, and typewriter pieces). Here, objects are no longer presented as unique or exalted in a fragmented visual field or arena of competitive multiplicity. Mixed media works evocative of stage sets filled with found objects and ready-mades, populated by human surrogates, and charged with social commentary, also began to appear at this time, among them George Segal's tableaux with plaster cast figures modeled from the human body and Edward Kienholz's human-scale assemblages.

Once theatrical tableaux became populated with human figures, an urge to animate and perform art, that is, an urge towards live-art forms, came to the fore. At the same time, these new forms showed that the performance site of a performance installation is often not a theater. Performance sites often add their "own identity and history and the weight of its meaning to the performance" (Danto, 1996, p. 15).

By the mid-sixties, pictorial space was no longer the scene of revolution: artists moved outside the picture into forms of production unprecedented, for the understanding of which pictorial aesthetics was of relatively little use. There were happenings, there was performance, there was installation, there was that shapeless array of avant-garde gestures known as Fluxus, there was video, and there were mixtures of multimedia artworks—combinations of readings, performances, video, soundwork and installation. . . . Art no longer was viewed as a progressive developmental history, but as a diffuse, polymorphous, fluid and interpenetrating set of endeavors that underwent constant change. . . . Ultimately, the whole infrastructure of the art world—the collection, the gallery, the art journal, the art critic, the work, were inevitably redefined. (p. 15)

Ilya Kabakov characterizes the entire history of painting as founded on the possibility of illusion—painting only offers the existence and possibility of what is presented in its window-world. The space behind the painting is lost, yet that is where the real world resides. According to Kabakov:

Painting educated us to feel that an illusion exists in the world which is an inseparable part of the universe and the world. Installation resolves this problem in a fundamentally different way: there are no illusions at all . . . the main prop of an installation is that it plays precisely with the fact that all the elements are known, yet what is put together is not the sum of these objects—it is a completely unknown new entity . . . the installation has brought to life a completely new system of combinations. (Kabakov & Groys, 1992, pp. 258-259)

Therefore, in order to understand installation, one must look at its component parts—its site, context, and historical emplacement. The unified design of an installation is to be understood via its material or animate subjects, objects, and context. The circle of understanding will then include, to varying degrees, an analysis of subject (as in the case of performance installations) and/or object qualities (color, texture, scale, proportion, space, and structure) and associations; temporal traits and continuity; the artist's presence, absence, or intentions; the historical moment; the consciousness of the interpreter; the present act of interpretation; and the past of the work in order for the installation to become as comprehensible as possible. Installation is essentially a reconstructed, pre-meditated world, a new kind of theater that functions without analogy, because, as Kabakov says, “the world is now without analogies” (Kabakov & Groys, 1992, p. 265). Installation functions according to principles of addition and compensation: “Insofar as the world has ceased to be real, solid and material, the installation compensates for this by its insolent materiality. . . . The material appearance of reality in art is entirely connected with the absence of reality in life itself” (p. 265). Installation forces the issue that in perceiving a work one is occupying one's own space; but that space is not separate—it co-exists with what is being perceived.

We can now see how the aforementioned movements and expanding fields of sculpture, performance, pop, and mixed media works, with their underlying aesthetic, social, and political implications, began to aggregate themselves in various avatars for exhibition and demonstration and, in the process of “installing” themselves, became “Installations.” Installation in the form of expanded sculpture (emphasizing context, site, and environment) and in the form of expanded theater (emphasizing performer, performance, and public) has become the postmodern genre par excellence because it adheres to the fundamental definition of the postmodern art object as “neither exclusionary nor reductive, but synthetic, freely enlisting the full range of conditions, experiences, and knowledge beyond the object.” Far from seeking a single and complete experience, postmodern installation consciously strives toward “an encyclopedic condition, allowing a myriad of access points, an infinitude of interpretive responses” (Fox, 1987, pp. 29-30), thus joining the struggle to invent new realities and consummate measures of vision and experience.

Heidegger (1964), in his essay, “The Origin of the Work of Art,” declares that “the artist is the origin of the work of art. The work is the origin of the artist . . . [and that] art is all the more the origin of both artist and work” (p. 650). He maintains that “to be a work means to set up a world” (p. 671). Installation, with its visual glossolalia, iconographic cannibalizations, and parodic reinventions of reality, sets up a world in which each shape and image has cultural meaning based on prescribed codes, beliefs, and social information. Installation fits Baudrillard's (1983) belief that “it is no longer a question of a false representation of reality (ideology), but of concealing the fact that the real is no longer real, and thus of saving the reality principle” (p. 25). In looking at the evolution of installation as a distinctive postmodern genre, one is ineluctably and hopefully happily led to contemplate the ways in which a work of art “sets up a world” and reflects the meanings and order (or disorder) of the noumenal and phenomenological realms in which we reside.

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