Excavated From the Double-Edged: Technological Thought and Endangered Space

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Constructive criticism of contemporary architecture requires that we begin by establishing an intellectual "context" for the work. Like a building's physical context, this context of thought allows us to attempt an assessment of the work's appropriateness, meaning, and importance; we need to remind ourselves of the inhospitable intellectual situation in which an architecture has been conceived, developed and built. The narrow and limited way architecture is understood and defined in contemporary society, resulting in the emaciated experience we have of architecture today, has been far more difficult for architects to overcome than the financial, material and physical limits usually understood to inhibit or prevent the construction of meaningful places. The work may be better evaluated after examination of this limiting definition of architecture — the context of contemporary conceptions of architecture — and the manner in which this work has responded to it. In undertaking this, the following issues should be considered:

First, whether in contemporary culture there is really any possibility of avant-garde work and therefore of being "on the cutting edge;" the way this is effected by therelation of fashion and progress to architecture; and what the consequences of positions "on the edge" are for those who assume them in a time dominated as ours is by technological thinking. *Second,* what effect thearchitect'scritical position has upon architecture and building itself as the most public of acts; what visions of the future — optimistic, pessimistic or utopian — underlie these positions; and how this technologically-defined concept of projecting the future conflicts with the making of architecture as the place of present experience. *Third,* the various ways in which an architectural project may be experienced as a distraction utilizing technological fantasies; as a breaking of the habits of technological thought; or as an act of resistance to the production of a world increasingly determined by technological thinking. *Fourth,* the realization that the relationship between technology and space is anything but neutral; that technological thinking threatens and endangers architecture and space; and that what architecture itself may be in the our world is largely determined by the nature of the relationship established by the architect between technology and space in the act of designing and building.

These four issues — fashion, fantasy, distraction, and the technical — will be presented as a series of dilemmas, concerning the relationship between architecture and technological thinking, which architects today may be seen as confronting or concealing in their work. It will then be necessary to support architecture that constitutes a rejection of those aspects of technological thought not conducive to the making and experience of places, suggesting ways in which architecture may be made in the very shadow of its opposite, excavated from technology's double edge.

FASHION AND PROGRESS (EDGES)

> In our need for more and more rapid replacement of the worldly things around us, we can no longer afford to use them, to respect and preserve their inherent durability; we must consume, devour, as it were, our houses and furniture and cars as though they were the "good things" of nature which spoil uselessly if they are not drawn swiftly into the never-ending cycle of man's metabolism with nature... The danger is that such a society, dazzled by the abundance of its growing fertility and caught in the smooth functioning of a never-ending process, would no longer be able to recognize its own futility — the futility of a life which does not fix or realize itself in any permanent subject which endures after its labor is past.'
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> — Hannah Arendt

In this investigation of the place of technological thinking in the making of contemporary architecture, we will begin with the apparently innocent fact that most published work is presented as coming from the edge of the discipline of architecture; it is considered to be on the "cutting edge" of architectural design, its authors part of a contemporary "avant-garde." The intention, on the part of architects, of resisting today's status quo — ironically represented by classical coverings for space and its high-tech services — leads to the assumption of an avant-garde stance and the production of cutting edge work. This would seem to be the choice: either status-quo or avant-garde. Yet, we should note that the cutting edge, when part of a society defined by technological thinking, has two edges; it is double-edged. While one edge is performing in an instrumental way the task we intended, the other edge is manipulating us, its "operators," because by engaging technology in amerely utilitarian manner ("without thinking"), we are acting to project forward the world as defined by technological thinking. It is difficult to avoid being cut by one edge or the other.

For "the cutting edge" clearly establishes an avant-garde agenda, and with it the ideas of progress and change — highly technological concepts. The double-edged quality of technology is exemplified here first by the strange pair, fashion and progress. Technological thinking may suggest that there is a difference and therefore a real choice between these two — that progress is more "scientific" and therefore superior to fashion — yet spatial thinking reveals that they are the same; that fashion is merely and most dangerously the way progress is realized when it becomes cyclical — change for its own sake. Technological thinking today defines progress as fashion, as style changes. When progress becomes routine, as it has today, there

is no difference between fashion and progress, and the status quo itself consists in the constant "change" of fashions; *"What is new is not in the least 'revolutionary' or subversive; it is what allows things to stay the same."*

Being "on the cutting edge," being part of the now-perpetual avant-garde, makes one inevitably fashionable in today's world, because media information has largely replaced direct experience in the assessment of architectural space. How is it that most of us "know" architecture today? Through publication, which is not at all the same as through the direct experience of space. The publication of architecture has not only, as Kenneth Frampton noted, drawn the veil of photography across architecture but, in the need to "explain" in a way that is "timely" and reflects "the latest ideas," has put the architects-as-authors' words between themselves and their work — often the architects' words act to distance, alienate, and disengage their own work from them.' Spaces and forms, born of the architects' own hands and eyes, are pushed away through these publicized "explanations," falling into the realm of "contemporary ideas," losing the personal touch so important for the creation of architectural places. Architects often become lost in the latest ideas, and it is worth recalling Martin Heidegger's caution that "the latest" idea or form is of the least value. Architects should also heed the advise implied in Wilbur Wright's statement made in declining to give a speech in 1908; *"I know of only one bird — the parrot — that talks; and it cannot fly very high."*[4]

The "latest" style in architecture inevitably utilizes the "latest" ideas and devices of design; recently this has resulted in references to "fragmentation," "incomplete" constructions, and "experimental" architectural designs, all of which happen to be a part of the traditional disciplines of design in art and architecture, now "reinterpreted" (read: copied without reference to sources) by those promulgating the latest fashion. When these de-composed mechanisms of the discipline of design are utilized in a merely instrumental manner, they lose their direction and meaning. In architecture understood as something that helps form the lifeworld, as something that acts to gather us together (according to Heidegger), fragments matter to us only if we want to put them back together again. The unfinished only matters to us if we are willing to attempt it's completion, if that which it implies in completion is meaningful and worthy of the effort required. In history, the unfinished speaks both of the plans for finishing and the event that disrupted it; the Sienna Cathedral is the perfect example. Decomposed fragments and intentionally "unfinished" designs have nothing to do with the inscribing of life that occurs in engaged making, which never intends fragments without wholes, and which always holds the vision of a perfect completion; compositions made with the intentionally fragmentary and unfinished are literally meaningless.

Technological thinking, in its "latest" fashionable form, is absolutely opposed to the idea of integration; fragments and incomplete places are the primary products of the technological definition of space — toattempt to produce more of them is hardly any kind of resistance to the ever-increasing demands of technology. Architects cannot reject progress defined as fashion while embracing the means most commonly utilized in its production. Architects must beware of the contemporary tendency, aided and abetted by the "hot house" of the media, to accelerate their development and maturity as architects, skipping over the idea of order to get more quickly to the (fashionable) disorder. Before architects can reach the point that the parts of their designs are as powerful as the wholes they comprise, the architects must *"traverse the field of integration,"*[5]; must relearn what is essential in their discipline.

Experimentation, as originally defined, was a primary means of integration or synthesis, and was opposed to the idea of specialization, of subdivision and separation into fields of knowledge; experimentation was directly related to that most synthetic of actions, experience. Technological thinking does not support this definition of experimentation, which has therefore been "reinterpreted" in today's world. As Adorno has noted, experimentation in the arts has developed from being the testing of hypotheses (relating means to ends throughexperience) to merely not knowing what one is making (drawing with eyes closed); as a result, the experimental and the intuitive have both reached new low-points in the quality expected of them in design. Experimentation has been reduced to making things different for the sake of difference; art as routine difference, with no way to engage and criticize the technologically-defined world. Experimentation once denoted risk-taking, but what is put at risk when we do not connect means and ends; when we have no ends; when we do not know what we are doing; when we do not care what we are doing as long as it is "different?"

Today there can be no true avant-garde, for it has been usurped and reinterpreted as fashionable change; the production of difference for its own sake. Hannah Arendt has pointed out that the only type of architecture truly different from the universalizing tendencies of technology is the bounded space of public appearance. This involves use of a space ineveryday experience, respect for theessential nature of things in its construction, and preservation of the lifeworld through its spatial permanence. *"Tlze idea of construction, which has been fundamental to modernism, has always implied the primacy oj constructive methods over subjective imagination."*[6]

UTOPIA AND APOCALYPSE (FUTURES)

> It is just as uncertain whether world civilization will soon be abruptly destroyed or whether it will be stabilized for a long time, in a stabilization, however, which will not rest in something enduring, but rather establish itself in a sequence of changes, each presenting the latest fashion.'
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> — Martin Heidegger

The double-edged quality of technoiogy when used in an instrumental manner is exemplified by a second strange pair, utopia and apocalypse. In today's world, technological thinking has defined both as projections of possible futures onto contemporary life. Utopia as defined by technological thinking becomes the classical or historical revivalist "escape" from technology and its impact by visual semblance, nostalgia. and the surface which does not reveal or relate the technological determinism that lies underneath; a false positive that does not escape but embraces technological thinking. Apocalypse as defined by technological thinking becomes the futurist or anti-humanist "embrace" of technology and its impact by visual distraction, nihilism, and sublimity disassociated from its real consequences; a false negative that does not embrace but escapes from its ultimate implications. Both involve the presentation of a smoothly-functioning technologically-serviced universalizing civilization as the comfortable and acceptable setting for the particular utopian or apocalyptic fantasies of each. Neither impels us to act, and we are thereby rendered incapable of resisting these technologically-defined visions by recognizing differences between habits of dwelling on earth (respecting the essential nature of materials and places), and habits of commanding the earth (ordering its resources, spaces, and inhabitants to conform to our fantasies).

The problem with these technological utopias and post-apocalyptic visions is not that they are wrong. but that they could come true; that with their cool and distant projections of possible futures. nostalgic or nihilist, they predict the very real consequences of abandonment of the world and its shared vision of an optimistic, humane future based on the public realm and genuine dwelling on the earth. Thus they may lead to a real apocalypse, or real utopia (the passive habits of a civilization without any real political action that the theories of behavioralism predict; a destruction of the public realm just as surely as that resulting from the apocaiypse of nuclear war), because we forget to preserve and protect and build the world.

Rather than proposing permanent and positive images as an alternative to post-apocalyptic "future histories" (best documented in movies such as "Blade Runner" and "Mad Max"), many contemporary architects "on the cutting edge" have been playing with the visual energy and sublime aspects of such pessimistic imagery, accepting to some extent both the inevitability of such a future and the desirability of such a transitory world-view. Architecture is a fundamentally optimistic undertaking, yet either of these visions of the future provokes an opposing pessimistic attitude and a corresponding lack of action on behalf of the future and the necessary permanence of the public realm. In this sense, much of this playful "post-nuclear" work is surely seductive, as are the utopian fantasies of the postmodern, but we are uncomfortable with ourselves for being seduced, because it is clear that these projects are not speaking to our best and most optimistic vision and hope for the future.

When it is engaged in its civilization and culture, architecture focuses on the optimistic, presenting what is best in mankind, precisely because, unlike the other arts, its primary task is to create permanent places for human experience and action. The romantic impulse in art, on the other hand, has always been fascinated by projecting those same optimistic forms and spaces into ruins, and presenting the dangerous forces that accomplish ruin. When, as today, anything optimistic has been reduced to the escapist and the "feel-good," the pessimistic becomes the norm for the avant-garde. Yet, technological thinking acts to determine even this which seems its opposite; the real escapism is the distraction of predetermined, preprogrammed pessimism and false danger, requiring no thought and no action. An optimistic proposition requires action to achieve it; it inspires action. A pessimistic proposition requires inaction to achieve it; it inspires inaction. Architects must choose whether their works will be either the place of action for a positive future, or the place of inaction for a negative future.

Architecture is the framework for life's actions and experience. While its influence on those actions and experiences may certainly be profound, architecture is not itself an art object; it is not "expressive," and it is not critical commentary on society. It makes a place for experience, it does not take the place of experience. Architecture is inherently optimistic in its capacity to frame and house experience. Pessimistic propositions of architecture (utopian or apocalyptic) are inherently interpretive and expressive; architecture attempting to take over the production of cultural criticism. Such projections of the future only act to extend the logic of technological thinking, and even disastrous predictions do not question technology's essential nature, only its logical destiny. This technologically-defined concept of projecting the future conflicts with the making of architecture as the place of present experience. Architecture's only method of criticizing either the status quo or a pessimistic vision of the future is to provide the framework for positive, optimistic actions of which human beings are capable; providing a space for the critical and cultural actions of public, political life.

Despite what may be said to the contrary by those who wish to hide in the "social," the decline and fall of the modern public realm is not a collective issue; it is a matter of personal responsibility and is an ethical decision for an architect. Our future is determined by individual choice, and there are consequences to projecting false utopias and apocalyptic visions into the future. Architecture builds on the past and towards the future, and it links past and future in present experience. If we are not contributing towards the construction of a positive (another thing altogether from utopian) world-view, we are either acquiescing or contributing to pessimistic visions becoming reality. Rather than putting us into a building where the decision as to the nature of our future has already been made for us (if the future already "exists," the choice is no longer ours to make), we could inhabit an architecture that puts us at the moment of choice, that makes evident the potential for individual experience, individual ethical decision — making us experience the tension between contrasting visions of dwelling on earth, optimistic and pessimistic; putting us in the position of having to confront the consequences our choices.

DISTRACTION AND RESISTANCE (POLITICS)

> The inferno — there are two ways to escape suffering it. The first is easy for many: accept the inferno and become part of it so that you can no longer see it. The second is risky and demands constant vigilance and apprehension. Seek and learn to recognize who and what, in the midst of the inferno, are not the infemo, and then make sure they endure, give them space.[8]
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> — Italo Calvino

There are three ways to place architecture, as it relates to technological thinking, in the political life of contemporary society. First, there is architecture defined by the distraction of technology, where we are invited to see only the falsely positive features of the world defined by technological thought; distraction that utilizes the imagery of technological "wonders" to take our thought away from the very real casualties and limitations of such a world, to lull us into accepting the world as defined by technology. Such architecture can take the form of DisneyWorld, a distractive realm of technological "magic" for the middle class which, like the "mansionette" suburbs it serves, is isolated from the realities of contemporary urban life; or "stealth buildings,"[9] post-apocalyptic playpens for rich inhabitants built behind defensive walls in the inner city.

During the riots following the Rodney King verdict in Los Angeles, contemporary architects were abruptly reminded of the fact that their context is not value-free, that there is a price to pay for transforming the danger of life on inner city streets into design motifs, and that much of their talent and constructive efforts have been dedicated to the entertainment and distraction of the city's wealthier citizens during this period of decline for the urban poor. The physical destruction from the riots has also been sobering for these architects; post-apocalyptic imagery used to excite the interiors of restaurants is not quite so sublime an experience when one is faced with the real thing in East Los Angeles. It has become painfully clear that the racial, ethnic, and economic disintegration of America refuses to generate appropriately sublime imagery — the South Bronx is still a little too real to be subjected to the distancing necessary for this effect; the Claude Glass does not work on the smoldering ruins of East Los Angeles.

Not surprisingly, in the aftermath of the riots in Los Angeles there has been a sudden rush to reinterpret and re-present much recent architectural theory and design as being supportive of subcultures, as setting the conceptual groundwork for revolution by the suppressed, as being subversive in a way that could contribute to fundamental change. Those with the "latest" ideas are at the center of this "translation" of their private distractions into public instigations of "change," refusing to admit that they are absolutely opposed to any real change in the status quo — on which they, as fashion makers, are entirely dependent — and opposed to the creation of any valid public realm that might foster a real redistribution of power; these fashion designers still fail to *"recognize the seductions of the public realm as well as the impotence of the private."*[10] Architects who make public space cannot engage in this reprehensible reinterpreting of histories and values; as Frank Lloyd Wright noted, *"the architect's sins are permanent sins.""*

Secondly, there is architecture defined by the exaggeration and eventual disruption of technology, where, due to the excessive and inefficient use of technical materials and forms, we are broken of the habits of thought imposed on us by technology, shaken out of our utopian Disney dream, and allowed to see the other "dark" side of technology; the decidedly undemocratic, anti-spatial, non-public realm where all decisions consist of selecting from the limited menu offered by the technological definition of the world. The greatest

danger for such work is the tendency, seemingly almost impossible to resist, to be seduced by one's own forms, to slip back into merely playing with the exciting forms of technology. This is compounded by the fact that this seduction of excessive forms acts most forcibly to distract the architect from the spatial critique underlying the original intention of this approach; the technological form replaces the spatial form (place) as the object of desire. To use technological imagery is to run the gravest risk of seduction by technological thinking; the imagery cannot be easily or cleanly separated from its origin, and despite their statedgoal of making places in the lifeworld, architects have not proven very resistant to the allure of technology as an end in itself.

Third, there is architecture as places where there is the possibility of resistance to definition by technological thinking; architecture as the building of another world — one that has a history more substantial than mere fashion-changes, one that has political action rather than mere consumption, one that makes valuations based on human experience and not only technological reckoning and calculating. As Mayne and Rotondi have written about their work. *"Technology supports use, not the other way around. The issue is to develop a definition of appropriateness while questioning current notions regarding the optimization of technology."*[12] Such resistance must actively engage technology to reframe it and regain control of space and its experience; technology defined by the world, not the other way around.

Architects cannot accomplish this alone to be sure, but they play a pivotal role, for the primary necessity for the establishment of the public realm is the space of public appearance, the place of human experience and political thought, for *"no activity can become excellent if the world does not provide a proper space for its existence."*[13] This is not an "enclave" that shuts out the unpleasant aspects of the technologically-determined world for escape into a substitute world (a good definition of the DisneyWorlds), but aplace where public and political life of action may be reconstituted for a community; a place of engagement, not distraction. The primary task of the architect in our time is not the construction of new structures fortechnologically-determined "living," but the preservation, reconstitution, construction, and extension of the public realm. The making and using of public places are acts of resistance to determination by technological thinking; *"It means choosing, expending time, going out of one's way, thinking of the other as a subject: the opposite of distraction."*[14]

TECHNOLOGY AND SPACE (EXPERIENCES)

> Not least to blame for the withering of experience is the fact that things, under the law of pure functionality, assume aform that limits contact with them to mere operation, and tolerates no surplus, either in freedom of conduct or autonomy of things, which would survive as the core of experience, because it is not consumed in the moment of action."
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> — Theodor Adorno

Despite the tendency of technological thinking — with efficiency, economy, utility as ends in themselves rather than means to some more humane end — to define the world purely in terms of measurement, calculation and position, architects should not — indeed cannot — choose between technology and space. The relationship between them is the crucial determinant of the quality or even existence of any true experience and inhabitation of a work of architecture. In the first instance, technological thinking rejects definitions involving specific places and experiences thereof; universal space only locates objects and volumes by a series of coordinates; it cannot recognize individual places as having a life and meaning of their own outside the standard coordinate system. Sites are to be bulldozed, climates are to be air-conditioned, local cultures are to be civilized, streets are to be used only by cars, windows are to be sealed shut, and doors are to open automatically. Individual and cultural experience is ruled out of this order of universal space; *"With the disappearance of the sensually-given world, the transcendent world disappears as well, and with it the possibility of transcending the material world in concept and thought."*[16]

In the second instance, space rejects technology, with the call for a return to primitive, archaic modes of inhabiting space, or to the spatial systems of previous historical periods. But technology has always been a part of mankind, including the so-called "primitive" whose mind matched ours, and whose technology was far better integrated into their life and spaces; if we are to use primitive or archaic cultures as models, we have some considerable ways to go before we will match them in this last aspect. It is oniy now becoming clear that our "research" on cultures and civilizations we choose to label as "primitive" and "archaic" is woefully insufficient, and that these cultures were far better integrated in their technology, construction, space-making. precision of discrimination between public and private, and balance with nature. Recent efforts to reconstitute classical or vernacular styles of construction are hopelessly superficial, only acting to cover the machinations of technological determinism, and (intentionally) having nothing to do with the actual experiences available to the inhabitants of those cultures.

In the third instance, technological thinking defines and thereby threatens space, subsuming the idea of place and experience into its calculations, and providing a semblance of these to re-place the absent reality. Whatever meanings the word has recently beengiven. we are all aware what is meant when we say that the instant history of the Disney "worlds" and of the postmodern shopping malls is in a fundamental way unauthentic. In this way, technological thought threatens space in that it denies the possibility of place-making. and it threatens man in that it does not allow man to inhabit the earth and space in the manner called for by his essential nature. Space itself, in its essential nature as it relates to the inhabitation of man, is endangered by the imposition of an "ordering" logic, and is in danger of being extinguished. Space, in terms of the dwelling place, is endangered in the modern era as much by machine technology as by information technology; both threaten experience, as both turn the world into something to be manipulated and operated, not inhabited. Heidegger correctly sees no real difference between the machine age and the information age, as they are but two manifestations of the same technological thinking. The current interest in cyber-space, virtual reality, and other manifestations of the computer are quite direct in their attack upon human experience and its place in the world.

In order to oppose this, architecture should emphasize the idiosyncrasies of individual experience. standing against universal rationalization of space and its occupation. As Heidegger has noted, order is not formally defined, but arises from the care for what is essential in each thing, space, material; order and care come into presence most clearly with respect to experience. Architects may attempt to heighten awareness and enrich experience through the articulation of surface and the gestures of details works; through the exaggeration of technology, (the "surplus" mentioned by Adorno above), rather than through the elimination of all but the essential (as in Tadao Ando's work). To keep fromfallinginto the abyss of the latest fashion, architects have focused on their fascination with making things, making spaces. Thom Mayne has said, *"Beauty is thus the consequence of a profound intimacy with material things; it cannot be possessed beyond the moment,"*[17] revealing the experiential intentionunderlying the richness of form in their work. It is precisely the details, materials, doors. windows, walls, furniture — and the resulting spaces — that make evident an engagement in experience; Mayne describes his work as "the manipulation of and emphasis on surfaces [space-making], *not the making of objects."* [18] But here one must be very careful, for the danger is greatest where one attempts to use technology against itself.

Finally, in the fourth instance. the space of dwelling. of inhabitation, of experience, defines technology and the way it is employed

in the making and sustaining of places in thelifeworld. This involves a return to fundamental human definitions of space and what it means to dwell on the earth, and it makes its valuations based on experience; *"In order that there may be founded an essential relationship between technology and man in respect to their essence, modern man must first and above all find his way back into the full breadth of the spaceproper to his essence."*[19] By no means does this indicate that the danger is past. Space is always endangered by technological thinking, and the danger must be confronted and redefined through experience, precisely because technology is apart of our essential nature. The danger itself is the key: only humans could have thought of technology, and only human arts can discover (uncover) its essential nature. *"Technology is therefore no mere means. Technology is a way of revealing... it is something poetic. Essential reflection upon technology and decisive confrontation with it must happen in a realm that is, on the one hand, akin to the essence of technology and, on the other, fundarnentally different from it... Techne thus conceived has been concealed in the tectonics of architecture since ancient times."*[20]

Technology's danger to man is not first and foremost from lethal machines or weapons of mass destruction, as Heidegger has noted, but from technological thinking that does not allow man hisessential manner of relating to the world and to each other. So long as we see technology as merely instrumental, it has control of us, and we will be unable to see technology itself in a different light. Art and architecture, because they too come from techne, offer hope within the danger. When space itself — space determined by measures of efficiency and economy rather than human experience — is in danger, we have a chance to see another way. Dwelling (space) is related to nearness and opposed to the distancing of technological thinking, which becomes systematic in the specialized subdivisions of human work. Architects should never accept or operate within the specializations of the building arts; rather they should engage the earth and landscape, furniture and interiors, structure and engineering, materials and construction. In this the relation to the earth — what Heidegger calls the *"setting back into the earth"*[21] — is critical. This results in the particular aspect of nearness that has as many implications for spatial, physical and tactile experience as it does for the visual.

The nearness that comes from the development of detail connected to experience binds material and meaning. While machines and technology consume their materials, architecture may act to make materials present *"as if for the first time,"*[22] as Heidegger said of the Greek temple's marble. While instruments, as defined by technological thinking, have a severely limited number of forms they may take, architecture of the gestural detail and the articulated surface has an inexhaustible variety of forms for each material; a kind of ecstatic existence for the purpose of being experienced as a unique place. Architects, when they attend toarchitecture's nature as a craft, will discover that craft involves the understanding of and respect for that which is unchanging in a material's characteristics — but no repetition of exact forms. This involves care, as Heidegger has noted. In this sense, those with the latest ideas and forms could care less; they are careless, in that they are not interested in making permanent the lifeworld of humankind. They are by definition disengaged; it is their disengagement from the things of the world that defines them. "Forthesecurrent masters ofemptiness, thestakes are indeed those of a game. That is where we differ."[23]

In the context of this discussion of technological thinking and endangered space, much recent work is at best ambiguous. As architecture must now be excavated from the double-edged condition of technological thought, the positive, engaged choice for architects today would seem to be between projecting and making. Projecting is an extending andexaggerating of an existingcondition, wherein technological thinking is used against itself, and made to reveal its own emptiness and meaninglessness. As such, it can perhaps only be critical, being unable to fully articulate an alternate condition to definition by technological thinking. Exaggeration can be constructive only by utilizing the excessive production of technological society to make barricades against its own optimization. On the other hand, making is a grounding and discovering of an original condition for architecture, and focuses on thedefinition of the public realm and the experience of life within it. Making is constructive, and as Arendt said, *"To live together in the world means essentially that a world of things is behveen those who have it in common, as a table is located between those who sit around it; the world, like every in-between, relates and separates men at the same time... Only the existence of a public realm and the world's subsequent transformation into a community of things which gathers men together and relates them to each other depends entirely on permanence."*[24]

NOTES

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3 Kenneth Frampton, *Modern Architecture* (London: Thames and Hudson, 1980).
4 Robert McCarter, ed., *Building: Machines* (New York: Princeton Architectural Press, 1987). (Wilbur Wright quote, from essay by Kaplan, Krueger, and Scholz).
5 Theodor Adorno, *Minima Moralia* (London: Verso, 1974). *Aesthetic Theory* (London: Routledge & Kenan Paul, 1984).
6 Ibid.
7 Martin Heidegger, *The Question Concerning Technology* (New York: Harper & Row, 1977). *Poetry Language Thought* (New York: Harper & Row, 1971). *Basic Writings* (New York: Harper & Row, 1977).
8 Italo Calvino, *Invisible Cities* (New York: Harcourt Brace Jovanovich, 1974).
9 Mike Davis, *City of Quartz* (New York: Vintage, 1992).
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11 Frank Lloyd Wright, *In the Cause of Architecture* (New York: McGraw-Hill, 1908 and 1975).
12 Thom Mayne, Michael Rotondi, *Morphosis: Buildings and Projects* (New York: Rizzoli, 1989). *From the Edge* (Los Angeles: SCI-ARC, 1991). Morphosis project texts, courtesy of the office of Morphosis Architects
13 Hannah Arendt, *The Hurnan Condition* (Chicago: University of Chicago Press, 1958).
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15 Ibid.
16 Hannah Arendt, *The Human Condition* (Chicago: University of Chicago Press, 1958).
17 Thom Mayne, Michael Rotondi, *Morphosis: Buildings and Projects* (New York: Rizzoli, 1989). *From the Edge* (Los Angeles: SCI-ARC, 1991). Morphosis project texts, courtesy of the office of Morphosis Architects
18 Ibid.
19 Martin Heidegger, *The Question Concerning Technology* (New York: Harper & Row, 1977). *Poetry Language Thought* (New York: Harper & Row, 1971). *Basic Writings* (New York: Harper & Row, 1977).
20 Ibid.
21 Ibid.
22 Ibid.
23 George Steiner, *Real Presences* (Chicago: University of Chicago Press, 1989).
24 Hannah Arendt, *The Human Condition* (Chicago: University of Chicago Press, 1958).