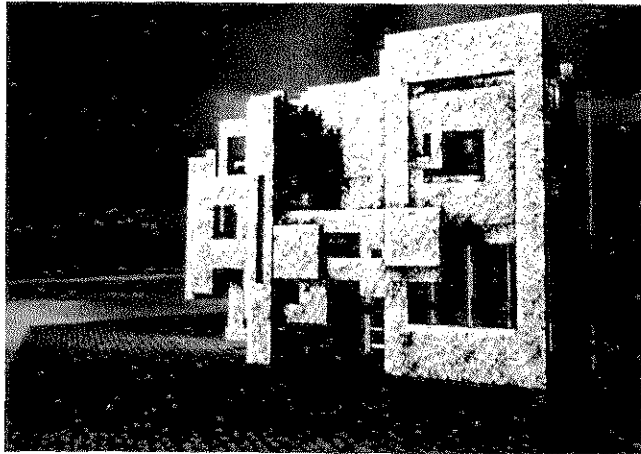


Marcos Novak

6 >> "Liquid Architectures in Cyberspace" (1991)



Marcos Novak, Liquid Architectures. © Marcos Novak.
Courtesy of Marcos Novak.

"Liquid architecture is an architecture that breathes, pulses, leaps as one form and lands as another. Liquid architecture is an architecture whose form is contingent on the interests of the beholder; it is an architecture that opens to welcome me and closes to defend me; it is an architecture without doors and hallways, where the next room is always where I need it to be and what I need it to be."

<< Marcos Novak describes himself as a "trans-architect," due to his work with computer-generated architectural designs, conceived specifically for the virtual domain, that do not exist in the physical world. His immersive, three-dimensional creations are responsive to the viewer, transformable through user interaction. Exploring the potential of abstract and mathematically conceived forms, Novak has invented a set of conceptual tools for thinking about and constructing territories in cyberspace.

In this essay, Novak introduces the concept of "liquid architecture," a fluid, imaginary landscape that exists only in the digital domain. Novak suggests a type of architecture cut loose from the expectations of logic, perspective, and the laws of gravity, one that does not conform to the rational constraints of Euclidean geometries. He views trans-architecture as an expression of the "fourth dimension," which incorporates time alongside space among its primary elements. Novak's liquid architecture bends, rotates, and mutates in interaction with the person who inhabits it. In liquid architecture, "science and art, the worldly and the spiritual, the contingent and the permanent," converge in a poetics of space made possible by emerging, virtual reality technologies.

Novak describes his work as a process of metamorphosis, a "symphony of space," in which 3-D constructions have the properties of music, an experience he has since referred to as "navigable music." His is a poetic language that attempts to describe the indescribable—"cyberspace as habitat of the imagination, a habitat for the imagination." >>

INTRODUCTION

What is cyberspace? Here is one composite definition:

Cyberspace is a completely spatialized visualization of all information in global information processing systems, along pathways provided by present and future communications networks, enabling full copresence and interaction of multiple users, allowing input and output from and to the full human sensorium, permitting simulations of real and virtual realities, remote data collection and control through telepresence, and total integration and intercommunication with a full range of intelligent products and environments in real space.¹

Cyberspace involves a reversal of the current mode of interaction with computerized information. At present such information is external to us. The idea of

cyberspace subverts that relation; we are now within information. In order to do so we ourselves must be reduced to bits, represented in the system, and in the process become information anew.

Cyberspace offers the opportunity of maximizing the benefits of separating *data*, *information*, and *form*, a separation made possible by digital technology. By reducing selves, objects, and processes to the same underlying ground-zero representation as binary streams, cyberspace permits us to uncover previously invisible relations simply by modifying the normal mapping from data to representation.

To the composite definition above I add the following: Cyberspace is a habitat for the imagination. Our interaction with computers so far has primarily been one of clear, linear thinking. Poetic thinking is of an entirely different order. To locate the difference in terms related to computers: poetic thinking is to linear thinking as random access memory is to sequential access memory. Everything that can be stored one way can be stored the other; but in the case of sequential storage the time required for retrieval makes all but the most predictable strategies for extracting information prohibitively expensive.

Cyberspace is a habitat of the imagination, a habitat for the imagination. Cyberspace is the place where conscious dreaming meets subconscious dreaming, a landscape of rational magic, of mystical reason, the locus and triumph of poetry over poverty, of "it-can-be-so" over "it-should-be-so."

The greater task will not be to impose science on poetry, but to restore poetry to science.

This chapter is an investigation of the issues that arise when we consider cyberspace as an inevitable development in the interaction of humans with computers. To the extent that this development inverts the present relationship of human to information, placing the human within the information space, it is an architectural problem; but, beyond this, cyberspace has an architecture of its own and, furthermore, can contain architecture. To repeat: cyberspace *is* architecture; cyberspace *has* an architecture; and cyberspace *contains* architecture.

Cyberspace relies on a mix of technologies, some available, some still imaginary. This chapter will not dwell on technology. Still, one brief comment is appropriate here. A great number of devices are being developed and tested that promise to allow us to enter cyberspace with our bodies. As intriguing as this may sound, it flies in the face of the most ancient dream of all: magic, or the desire to will the world into action. Cyberspace will no doubt have physical aspects; the visceral has genuine power over us. And though one of the major themes of this

essay has to do with the increasing recognition of the physicality of the mind, I find it unlikely that once inside we will tolerate such heavy devices for long. Gloves and helmets and suits and vehicles are all mechanocybernetic inventions that still rely on the major motor systems of the body, and therefore on coarse motor coordination, and more importantly, low nerve-ending density. The course of invention has been to follow the course of desire, with its access to the parts of our bodies that have the most nerve endings. When we enter cyberspace we will expect to feel the mass of our bodies, the reluctance of our skeleton; but we will choose to *control* with our eyes, fingertips, lips, and tongues, even genitals.

The trajectory of Western thought has been one moving from the concrete to the abstract, from the body to the mind; recent thought, however, has been pressing upon us the frailty of that Cartesian distinction. The mind is a property of the body, and lives and dies with it. Everywhere we turn we see signs of this recognition, and cyberspace, in its literal placement of the body in spaces invented entirely by the mind, is located directly upon this blurring boundary, this fault.

At the same time as we are becoming convinced of the embodiment of the mind, we are witnessing the acknowledgment of the inseparability of the two in another way: the mind affects what we perceive as real. Objective reality itself seems to be a construct of our mind, and thus becomes subjective.

The "reality" that remains seems to be the reality of fiction. This is the reality of what can be expressed, of how meaning emerges. The trajectory of thought seems to be from concrete to abstract to concrete again, but the new concreteness is not that of Truth, but of *embodied* fiction.

The difference between embodied fiction and Truth is that we are the authors of fiction. Fiction is there to serve our purposes, serious or playful, and to the extent that our purposes change as we change, its embodiment also changes. Thus, while we reassert the body, we grant it the freedom to change at whim, to become liquid.

It is in this spirit that the term *liquid architecture* is offered. Liquid architecture of cyberspace; liquid architecture in cyberspace.

PART ONE: CYBERSPACE

Poetics and Cyberspace

Well then, before reading poems aloud to so many people, the first thing one must do is invoke the *duende*. This is the only way all of you will succeed at the hard

task of understanding metaphors as soon as they arise, without depending on intelligence or the critical apparatus, and be able to capture, as fast as it is read, the rhythmic design of the poem. For the quality of a poem can never be judged on just one reading, especially not poems like these which are full of what I call "poetic facts" that respond to a purely poetic logic and follow the constructs of emotion and of poetic architecture. Poems like these are not likely to be understood without the cordial help of the *duende*.

—Federico García Lorca, *Poet in New York*

The *duende* is a spirit, a demon, invoked to make comprehensible a "poetic fact," an "hecho poético." An "hecho poético," in turn, is a poetic image that is not based on analogy and bears no direct, logical explanation (Lorca, 1989). This freeing of language from one-to-one correspondence, and the parallel invocation of a "demon" that permits access to meanings that are beyond ordinary language, permits Lorca to produce some of the most powerful and surprising poetry ever written. It is this power that we need to harness in order to be able to contend with what William Gibson called the "unimaginable complexity" of cyberspace.

How does this poetry operate?

Concepts, like subatomic particles, can be thought to have world lines in space-time. We can draw Feynman diagrams for everything that we can name, tracing the trajectories from our first encounter with an idea to its latest incarnation. In the realm of prose, the world lines of similar concepts are not permitted to overlap, as that would imply that during that time we would be unable to distinguish one concept from another. In poetry, however, as in the realm of quantum mechanics, world lines may overlap, split, divide, blink out of existence, and spontaneously reemerge.² Meanings overlap, but in doing so call forth associations inaccessible to prose. Metaphor moves mountains. Visualization reconciles contradiction by a surreal and permissive blending of the disparate and far removed. Everything can modify everything: "*Green oh how I love you green,*" writes Lorca, "*Giant stars of frost / come with the shadow-fish / that leads the way for dawn. / The fig tree chafes its wind / with its sandpapered branches, / and the mountain, untamed cat, / bristles sour maguery spears.*"

If cyberspace holds an immense fascination, it is not simply the fascination of the new. Cyberspace stands to thought as flight stands to crawling. The root of this fascination is the promise of control over the world by the power of the will. In other words, it is the ancient dream of magic that finally nears awakening into some kind of reality. But since it is technology that promises to deliver this dream,

the question of "how" must be confronted. Simply stated, the question is, What is the technology of magic? For the answer we must turn not only to computer science but to the most ancient of arts, perhaps the only art: poetry. It is in poetry that we find a developed understanding of the workings of magic, and not only that, but a wise and powerful knowledge of its purposes and potentials. Cyberspace is poetry inhabited, and to navigate through it is to become a leaf on the wind of a dream.

Tools of poets: image and rhythm, meter and accent, alliteration and rhyme, tautology, simile, analogy, metaphor, strophe and antistrophe, antithesis, balance and caesura, enjambment and closure, assonance and consonance, elision and inflection, hyperbole, lift, onomatopoeia, prosody, trope, tension, ellipsis . . . poetic devices that allow an inflection of language to produce an inflection of meaning. By push and pull applied to both syntax and symbol, we navigate through a space of meaning that is sensitive to the most minute variations in articulation. Poetry is liquid language.

As difficult as it may sound, it is with operations such as these that we need to contend in cyberspace. Nothing less can suffice.

I am in cyberspace. I once again resort to a freer writing, a writing more fluid and random. I need to purge a mountain of brown thoughts whose decay blocks my way. I seek the color of being in a place where information flies and glitters, connections hiss and rattle, my thought is my arrow. I combine words and occupy places that are the consequence of those words. Every medium has its own words, every mixture of words has a potential for meaning. Poets have always known this. Now I can mix the words of different media and watch the meaning become navigable, enter it, watch magic and music merge. . . .

Underlying Considerations

Minimal Restriction and Maximal Binding The key metaphor for cyberspace is "being there," where both the "being" and the "there" are user-controlled variables, and the primary principle is that of *minimal restriction*, that is, that it is not only desirable but necessary to impose as few restrictions as possible on the definition of cyberspace, this in order to allow both ease of implementation and richness of experience. In addition, *maximal binding* implies that in cyberspace anything can be combined with anything and made to "adhere," and that it is the responsibility of the user to discern what the implications of the combination are for any given circumstance. Of course, defaults are given to get things started, but

the full wealth of opportunity will only be harvested by those willing and able to customize their universe. Cyberspace is thus a user-driven, self-organizing system.

Multiple Representations Cyberspace is an invented world; as a world it requires "physics," "subjects" and "objects," "processes," a full ecology. But since it is an invented world, an embodied fiction, one built on a fundamental representation of our own devising, it permits us to redirect data streams into different representations: selves become multiple, physics become variable, cognition becomes extensible. The boundaries between subject and object are conventional and utilitarian; at any given time the data representing a user may be combined with the data representing an object to produce . . . what?

Digital technology has brought a dissociation between data, information, form, and appearance. Form is now governed by representation, data is a binary stream, and information is pattern perceived in the data after the data has been seen through the expectations of a representation scheme or code. A stream of bits, initially formless, is given form by a representation scheme, and information emerges through the interaction of the data with the representation; different representations allow different correlations to become apparent within the same body of data. Appearance is a late aftereffect, simply a consequence of many sunken layers of patterns acting upon patterns, some patterns acting as data, some as codes. This leads to an interesting question: what is the information conveyed by the representation that goes beyond that which is in the data itself? If a body of data seen one way conveys different information than the same body of data seen another way, what is the additional information provided by one form that is not provided by the other? Clearly, the answer is *pattern*, that is, *perceived* structure. And if different representations provide different perceived information, how do we choose representations? Not only do different representations provide different information, but in the comparison *between* representations new information may become apparent. We can thus distinguish two kinds of *emergent* information: *intrarepresentational* and *interrepresentational*.

I substitute the characters on this and the next page of this text with grey scale values; two images emerge, pleasingly rhythmical. The gray tone of the letter e stands out, forming snakes along the pages; I apply spline curves to the snakes, and, in another space, my text itself is changing—what will it say? Now I combine the two pages, and convert the result into a landscape, using the grey values to represent height. What snakes were left after the combination of the two pages

become Serpent Mounds. The Others who were reading my text with me a while ago are now flying over this landscape with me, but only I can command it to change. Today. . . .

From Poetics to Architecture We have examined various aspects of cyberspace from a viewpoint that stresses the power of poetic language over ordinary, reductive language. Poetic language is language in the process of making and is best studied by close examination of poetic artifacts, or, better yet, by making poetic artifacts.

The transition from real space to cyberspace, from prose to poetry, from fact to fiction, from static to dynamic, from passive to active, from the fixed in all its forms to the fluid in its everchanging countenance, is best understood by examining that human effort that combines science and art, the worldly and the spiritual, the contingent and the permanent: architecture.

Even as cyberspace represents the acceptance of the body in the realm of the mind, it attempts to escape the mortal plane by allowing everything to be converted to a common currency of exchange. Architecture, especially visionary architecture, the architecture of the excess of possibility, represents the manifestation of the mind in the realm of the body, but it also attempts to escape the confines of a limiting reality. The story of both these efforts is illuminating, and in both directions. Cyberspace, as a world of our creation, makes us contemplate the possibility that the reality we exist in is already a sort of "cyberspace," and the difficulties we would have in understanding what is real if such were the case. Architecture, in its strategies for dealing with a constraining reality, suggests ways in which the limitations of a fictional reality may be surmounted.

Architecture, most fundamentally, is the art of space. There are three fundamental requirements for the perception of space: reference, delimitation, and modulation. If any one is absent, space is indistinguishable from nonspace, being from nothingness. This, of course, is the fundamental observation of categorical relativity. This suggests that cyberspace does not exist until a distance can be perceived between subject and boundary, that is to say, until it is delimited and modulated.

A space modulated so as to allow a subject to observe it but not to inhabit it is usually called sculpture. A space modulated in a way that allows a subject to enter and inhabit it is called architecture. Clearly, these categories overlap a great deal: architecture is sculptural, and sculpture can be inhabited.

We can now draw an association between sculpture and the manner in which

we are accustomed to interacting with computers. The interface is a modulated information space that remains external to us, though we may create elaborate spatial visualizations of its inner structure in our minds. Cyberspace, on the other hand, is intrinsically about a space that we enter. To the extent that this space is wholly artificial, even if it occasionally looks “natural,” it is a modulated space, an architectural space. But more than asserting that there is architecture within cyberspace, it is more appropriate to say that cyberspace cannot exist without architecture, cyberspace is architecture, albeit of a new kind, itself long dreamed of.

PART TWO: LIQUID ARCHITECTURE IN CYBERSPACE

... and we can in our Thought and Imagination contrive perfect Forms of Buildings entirely separate from Matter, by settling and regulating in a certain Order, the Disposition and Conjunction of the Lines and Angles.

—Leon Battista Alberti, *The Ten Books of Architecture*

Visionary Architecture: The Excess of Possibility

Just as poetry differs from prose in its controlled intoxication with meanings to be found beyond the limits of ordinary language, so visionary architecture exceeds ordinary architecture in its search for the conceivable. Visionary architecture, like poetry, seeks an extreme, any extreme: beauty, awe, structure, or the lack of structure, enormous weight, lightness, expense, economy, detail, complexity, universality, uniqueness. In this search for that which is beyond the immediate, it proposes embodiments of ideas that are both powerful and concise. More often than not these proposals are well beyond what can be built. This is not a weakness: in this precisely is to be found the poignancy of vision.

The Space of Art In imagining how information is to be “spatialized” in cyberspace, it is easy to be overwhelmed by the idea of “entering” the computer in the first place, and to only consider relatively mundane depictions of space: perspectival space, graph space, the space of various simple projection systems. Humanity’s library of depictions of space is far richer than that: synchronically and diachronically, across the globe and through time, artists have invented a wealth of spatial systems. What would it be like to be inside a cubist universe? a hiero-

glyphic universe? a universe of cave drawings or Magritte paintings? Just as alternative renditions of the same reality by different artists, each with a particular style, can bring to our attention otherwise invisible aspects of that reality, so too can different modes of cyberspace provide new ways of interrogating the world.

The development of abstract art by Malevich, Kandinsky, Klee, Mondrian, and other early modern artists prefigures cyberspace in that it is an explicit turning away from representing known nature. Perhaps artists have always invented worlds—one is reminded how varied the representations used in the arts have been—from Chinese watercolors, to Byzantine icons, to the strange, conflicting backgrounds of Leonardo—but those worlds usually made reference to some familiar reality. Even when that reality was of a cosmic or mystical nature, we find an assumption of similarity to the everyday world. Modern artists took on the task of inventing entire worlds without explicit reference to external reality. Malevich is pertinent: his *architectones* are architectural studies imagined to exist in a world beyond gravity, *against gravity*. Created as an architecture without functional program or physical constraint, they are also studies for an *absolute architecture*, in the same sense that we speak of absolute music, architecture for the sake of architecture. Paul Klee, in his dairies, speaks about being a “god” in a universe of his own making.

The paintings of Max Ernst or, even more so, Hieronymous Bosch come to mind, for their ability to create mysterious new worlds. In the works of these artists we not only see worlds fashioned out of unlikely combinations of a code consisting of familiar elements, but also meaningful crossings of expected conceptual and categorical boundaries.

As with cyberspace, the space of art *is* architecture, *has* an architecture and *contains* architecture. It *is* architecture in its ability to create a finely controlled sense of depth, even within depictions that are inherently two-dimensional; it *has* an architecture in its compositional structure; and, by depiction, it *contains* architecture. It can serve as a bridge between cyberspace and architecture. . . .

Cyberspace Architecture

Architecture has been earthbound, even though its aspirations have not. Buckminster Fuller remarked that he was surprised that, in spite of all the advances made in the technology of building, architecture remained rooted to the ground by the most mundane of its functions, plumbing. Rooted by waste matter, architecture has nevertheless attempted to fly in dreams and projects, follies and cathedrals.

Architecture has never suffered a lack of fertile dreams. Once, however, in times far less advanced technologically, the distance between vision and embodiment was smaller, even though the effort required for that embodiment was often crushing. Most "grand traditions" began with an experimental stage of danger and discovery and did not become fossilized until much later. Hard as it may be for us to fathom, a gothic cathedral was an extended experiment often lasting over a century, at the end of which there was the literal risk of collapse. The dream and the making were one. Curiously, the practice of architecture has become increasingly disengaged from those dreams. Cyberspace permits the schism that has emerged to be bridged once again.

Cyberspace alters the ways in which architecture is conceived and perceived. Beyond computer-aided design (CAD), design computing (DC), or the development of new formal means of describing, generating, and transforming architectural form, cyberspace encodes architectural knowledge in a way that indicates that our conception of architecture is becoming increasingly musical, that architecture is spatialized music. Computational composition, in turn, combines these new methods with higher-level compositional concepts of overall form subject to local and global constraints to transform an input pattern into a finished work. In principle, and with the proper architectural knowledge, any pattern can be made into a work of architecture, just as any pattern can be made into music. In order for the data pattern to qualify as music or architecture it is passed through compositional "filters," processes that select and massage the data according to the intentions of the architect and the perceptual capacity of the viewer. This "adaptive filtering," to use a neural net term, provides the beginning of the intelligence that constitutes a cyberspace and not a hypergraph. This, of course, means that any information, any data, can become architectonic and habitable, and that cyberspace and cyberspace architecture are one and the same.

A radical transformation of our conception of architecture and the public domain is implied by cyberspace. The notions of city, square, temple, institution, home, infrastructure become permanently extended. The city, traditionally the continuous city of physical proximity, becomes the discontinuous city of cultural and intellectual community. Architecture, normally understood in the context of the first, conventional city, shifts to the structure of relationships, connections and associations that are webbed over and around the simple world of appearances and accommodations of commonplace functions.

I look to my left, and I am in one city; I look to my right, and I am in another. My friends in one can wave to my friends in the other, through my having brought them together.

It is possible to envision architecture nested within architecture. Cyberspace itself is architecture, but it also contains architecture, but now without constraint as to phenomenal size. Cities can exist within chambers as chambers may exist within cities. Since cyberspace signifies the classical object yielding to space and relation, all "landscape" is architecture, and the objects scattered upon the landscape are also architecture. Everything that was once closed now unfolds into a place, and everything invites one to enter the worlds within worlds it contains.

I am in an empty park. I walk around a tree, and I find myself in a crowded chamber. The tree is gone. I call forth a window, and in the distance see the park, leaving.

Liquid Architecture

That is why we can equally well reject the dualism of appearance and essence. The appearance does not hide the essence, it reveals it; it is the essence. The essence of an existent is no longer a property sunk in the cavity of this existent; it is the manifest law which presides over the succession of its appearances, it is the principle of the series.

... But essence, as the principle of the series is definitely only the concatenation of appearances; that is, itself an appearance.

... The reality of a cup is that it is there and that it is not me. We shall interpret this by saying that the series of its appearances is bound by a principle which does not depend on my whim.

—Jean-Paul Sartre, *Being and Nothingness*

The relationship established between architecture and cyberspace so far is not yet complete. It is not enough to say that there is architecture in cyberspace, nor that *that* architecture is animistic or animated. Cyberspace calls us to consider the difference between animism and animation, and animation and metamorphosis. Animism suggests that entities have a "spirit" that guides their behavior. Animation adds the capability of change in *location*, through time. Metamorphosis is change in *form*, through time *or space*. More broadly, metamorphosis implies changes in one aspect of an entity as a function of other aspects, continuously or discontinuously. I use the term liquid to mean animistic, animated, metamorphic, as well as crossing categorical boundaries, applying the cognitively supercharged operations of poetic thinking.

Cyberspace is liquid. Liquid cyberspace, liquid architecture, liquid cities. Liquid architecture is more than kinetic architecture, robotic architecture, an archi-

ture of fixed parts and variable links. Liquid architecture is an architecture that breathes, pulses, leaps as one form and lands as another. Liquid architecture is an architecture whose form is contingent on the interests of the beholder; it is an architecture that opens to welcome me and closes to defend me; it is an architecture without doors and hallways, where the next room is always where I need it to be and what I need it to be. Liquid architecture makes liquid cities, cities that change at the shift of a value, where visitors with different backgrounds see different landmarks, where neighborhoods vary with ideas held in common, and evolve as the ideas mature or dissolve.

The locus of the concept "architecture" in an architecture that fluctuates is drastically shifted: Any particular appearance of the architecture is devalued, and what gains importance is, in Sartre's terms, "the principle of the series." For architecture this is an immense transformation: for the first time in history the architect is called upon to design not the object but the principles by which the object is generated *and varied* in time. For a liquid architecture requires more than just "variations on a theme," it requires the invention of something equivalent to a "grand tradition" of architecture at each step. A work of liquid architecture is no longer a single edifice, but a continuum of edifices, smoothly or rhythmically evolving in both space and time. Judgments of a building's *performance* become akin to the evaluation of dance and theater.

If we described liquid architecture as a symphony in space, this description would still fall short of the promise. A symphony, though it varies within its duration, is still a fixed object and can be repeated. At its fullest expression a liquid architecture is more than that. It is a symphony in space, but a symphony that never repeats and continues to develop. If architecture is an extension of our bodies, shelter and actor for the fragile self, a liquid architecture is that self in the act of becoming its own changing shelter. Like us, it has an identity; but this identity is only revealed fully during the course of its lifetime.

Conclusion

A liquid architecture in cyberspace is clearly a dematerialized architecture. It is an architecture that is no longer satisfied with only space and form and light and all the aspects of the real world. It is an architecture of fluctuating relations between abstract elements. It is an architecture that tends to music.

Music and architecture have followed opposite paths. Music was once the most ephemeral of the arts, surviving only in the memory of the audience and the

performers. Architecture was once the most lasting of the arts, reaching as it did into the caverns of the earth, changing only as slowly as the planet itself changes. Symbolic notation, analog recording, and, currently, digital sampling and quantization, and computational composition, have enabled music to become, arguably, the most permanent of the arts. By contrast, the life span of architecture is decreasing rapidly. In many ways architecture has become the least durable of the arts. The dematerialized, dancing, difficult architecture of cyberspace, fluctuating, ethereal, temperamental, transmissible to all parts of the world simultaneously but only indirectly tangible, may also become the most enduring architecture ever conceived.

I am in a familiar place. Have I been here before? I feel I know this place, yet even as I turn something appears to have changed. It is still the same place, but not quite identical to what it was just a moment ago. Like a new performance of an old symphony, its intonation is different, and in the difference between its present and past incarnations something new has been said in a language too subtle for words. Objects and situations that were once thought to have a fixed identity, a generic "self," now possess personality, flaw and flavor. All permanent categories are defeated as the richness of the particular impresses upon me that in this landscape, if I am to benefit fully, attention is both required and rewarding. Those of us who have felt the difference nod to each other in silent acknowledgment, knowing that at the end of specificity lies silence, and what is made speaks for itself, not in words, but in presences, ever changing, liquid. . . .