Maintenance Art, Architecture, and the Visibility of Time

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ABSTRACT: No matter how well built, architecture is consumed in time. The only remedy against a building’s degeneration is maintenance—fixing deterioration once it becomes visible. There are three human acts with physical consequences: to create, to destroy, and to maintain. Of these three, maintenance requires the greater vigilance, observational skill, and intimacy. Real buildings are unavoidably captive to time’s transformations. Despite how hard architects try to reduce its effects, time refigures a building—which over its lifetime alternates between periods of shabbiness to moments of shine. Between a building’s opening day and its demolition is the period of maintenance.

Maintenance is seldom discussed by architectural theoreticians; perhaps because maintenance has long been associated with drudgery, menial tedium, and the non-heroic efforts of janitors, maids, and grounds keepers. In 1973, conceptual feminist artist Mierle Laderman Ukeles famously recast maintenance into art by washing down the Wadsworth Atheneum in Hartford, Connecticut with her performance pieces, “Maintenance Art—Washing, Tracks, Maintenance: Inside/Outside.” Subsequently, many artists have imitated her event in various settings and situations.

Maintenance is the slow and careful adoration of the built. Architects can recognize instantly the shades of neglect in a place not properly maintained. Architectural educators would do well to include the implications of maintenance and maintenance art in their classes. This essay seeks to spark critical discourse on the role of maintenance and maintenance art in architecture. Caretaking and upkeep are recast as thought-provoking acts of cultural intervention. Using examples from design theory, art, and literature, this essay describes the art of maintenance envisioned in intimate acts of cleaning, repairing, and renewing.

KEYWORDS: Maintenance, Maintenance Art, Time, Mierle Laderman Ukeles, Phenomenology

INTRODUCTION

“Maintenance is a drag; it takes all the fucking time . . . . MY WORKING WILL BE THE WORK”—Mierle Laderman Ukeles, “Manifesto for Maintenance Art (1969)”

No matter how well built, architecture is consumed in time. The only remedy against a building’s degeneration is maintenance—fixing deterioration once it becomes visible. There are three human acts with physical consequences: to create, to destroy, and to maintain. Of these three, maintenance requires the greater vigilance, observational skill, and intimacy. Maintenance means affecting what we build by endeavoring against the entropic forces that prey on architecture.

Unless confined to a rendering, architecture never keeps its original conception. Real buildings are unavoidably captive to time’s transformations. In 2010, David Leatherbarrow suggested that buildings are clocks that visualize the imprint of time. Despite how hard architects try to reduce its effects, time refigures a building—which over its lifetime alternates between periods of shabbiness to moments of shine. Between a building’s opening day and its demolition is the period of maintenance. Maintenance sustains, forestalls ruin, and rejuvenates after dereliction—imprinting, and sometimes erasing, the effects of time on whatever we build. No specific example of maintained architecture is dissected in this essay; but essential aspects of maintenance, as collected through lived experience and everyday encounters, can be gleaned from these descriptive passages.

Maintenance is seldom discussed by architectural theoreticians; perhaps because maintenance has long been associated with drudgery, menial tedium, and the non-heroic efforts of janitors, maids, and grounds keepers. Maintenance, or the lack of it, will determine a building’s longevity or whisper its demise. Maintenance cooperates carefully with building. The architecture we revere, we maintain. What we devalue,
we neglect. A building's vitality is coupled precariously to its corruption. After we finish building, we are obliged to either act and maintain or stand by and witness the progress of ruins.

1.0 MAINTENANCE

"If a better type of civilization is ever to be developed, one of the very corners of the scheme must be understood of and reverence for labor. Reverence for labor is the basis of art, for art is the labor that is fully worthy of reverence."—W. R. Lethaby

The world happens around us whether we reckon it or not. Bugs burrow beneath our feet, wind scatters with effect, pockets of air-suction pull, water flows over surfaces, and droplets cling to undersides—soaking absorbent materials deeply. The daily sweep of sunlight bakes a building, causing every part to expand irregularly and every joint to creak, crack, and widen a little more each time.

Maintenance doesn't oppose construction; it is counterpart and progeny to construction. Maintenance is better considered the opposite of vandalism. Maintenance and vandalism occur in similar, dilapidated contexts, at the cusp of decay, or in moments of decline. Maintenance is both venerate and preventative. Vandalism is deliberate and destructive. Both maintenance and vandalism are expressive of feelings aimed oppositely; one is geared to sustain, the other, to defame.

We have many names for grime and dilapidation; the accumulation of dirt, the wear from weather and use—if explored fully, the list would be long, graduated, and varied. Mold, lichen, moss, pestilence, weathering, wear, waste, pollutants, residue from bodily contact, dust accumulation, soiling, silting, and myriad forms of water damage are just a few. Altogether, they comprise the agonists of maintenance.

A building is a matter of intelligence, will, and work. During design, a building is mostly an abstraction of the world. After construction and once a building encounters the world, other aptitudes must be engaged in order to maintain a building. A building is a presence in time; without continued care and attention, it will wither to ruin. Over the course of its useful life, a building requires many people of various intelligences cooperating in its creation and retention. Buildings are peopled participations in time.

Maintenance is the caretaker of architectural excesses. 'Maintaining' as a word, means to practice an action habitually. It found its way into English lexicon via the Old French, maintainer, which combines two terms from Latin: manus, or 'hand,' and tenare, which means 'to hold.' Its fundamental meaning suggests a holding in which the hand plays a part. Synonyms include tenure, or 'to possess for a time,' and tenant, which means 'to occupy a property for a time.' So basic to maintenance are language-laden notions that include: hand, holding, possession, and time. At the core of maintenance is a simple wish and expectation applied generously to body, events, and place: continuance.

If not engaged, the world rusts. If engaged vigorously, the surface of the world wears to a polish. Maintenance applies additional layers onto a building. We speak of sanitizing or the stripping of grime as though the places we inhabit are bodies to be cleaned, like evidence of good hygiene. Simple solvents such as water are essential to the proper upkeep of buildings—yet abrasive and penetrating solvents slowly disintegrate materials. Contradictions appear in the cultural art of maintenance; maintaining can also mean challenging longevity. Maintenance is the slow and erosive adoration of the built.

Society points its members away from maintenance work. We are conditioned to its general avoidance. However, a maintenance worker is not a drudge or spectator to ruin. A spectator never engages, only watches. The poet Charles Olson stated that the spectator asserts an ownership which is absentee. One cannot maintain a thing and remain a spectator absent of an active or creative role. Maintenance means observing closely, scrutinizing, and acting in a methodical way—planning, protecting, and organizing so as to retain and resist. A maintenance worker participates directly and empathically in the life of a building or a landscape. Maintenance means participation. We enact our environment always—and we participate with things when we care for them. Certainly, there is an ethical dimension to maintenance work that should transfer over to architecture but seldom does. The intentions of architecture are typically distant from the ethics of maintenance. The building, as a material presence, is the hinge upon which the practices of design and maintenance sway.

Maintenance forms an enduring bond between a person and a place. The bond between people and their place must be complex, reciprocal, and active—otherwise it will fall into ruin. If architecture is to be of any lasting importance, then architects must broaden the scope of design to include the totality of human inhabitation. Architects cannot be spectators; we must understand the dual importance of inhabitation and maintenance. Charles Olson, when considering the topics of geography and poetry wrote, "... any
humanism is as well place as it is the person... If we acknowledge ourselves as beings embedded in time's broader context—as capitulations of a past that cannot exist unless tethered responsibly to the future—then we'll maintain our place. Maintaining in place implies also sustaining in time.

Ethos, before it ever meant the pattern of a person's behavior, meant an accustomed place—suggestive of comfort and protection against inclemency and the ravage of time. An architect may have ethics, but a building emancipated from its maker and enduring against both weather and use acquires its own ethos. The ethos of a building determines how well it withstands. For a building, weather is fate. So how a building withstands its climate reveals the character of the building. Maintenance corrects against decline, allowing the building to endure and remain purposeful a little longer. If a building's purpose endures, then so will its ethical meaning.

2.0 MAINTENANCE AS ART AND MAINTENANCE ART

"Maintenance has to do with survival, with continuity over time. You can create something in a second. But whether it's a person, a system, or a city, in order to keep it, you have to keep it going. I think that one thing we must do is value and learn from those who provide this service."—Mierle Laderman Ukeles

Throughout Juhani Pallasmaa's book, The Thinking Hand, he emphasizes the hand's role in creation, in making new things. However, he forgets to mention the hand's role in maintenance. After the initial flurry of creativity, the hand continues to be needed in the continuity of inhabitation. A building, in its fixedness, seeks to be maintained. The artwork, in its mobility, can be exchanged or reproduced. Art, when it becomes something else happened, a piercing through the wall of work into a new place. That "new place" where her work entered—a situation that deconstructed the context where art is typically manifest and replaced menial labor with concept art—was a place where her working became the artwork. Her works elevated hidden and dismissed acts of maintenance and equivocated them with art. This watershed work, as well as all her subsequent works, required a place to maintain, a person to do the maintaining, and a reason for something to be recovered and cared for. Ukeles' work at the Wadsworth Atheneum has become iconic, and is often repeated through similar performances in different contexts by other artists.

However, Ukeles' work is not without artistic precedent or derivation. Two performance sidewalk cleaning pieces by Fluxus artists were performed a decade earlier. In both instances the group, comprised of different members, called themselves Hi Red Center. The first event was held on October 16, 1964, and encompassed the cleaning of a section of street in Ginza, Tokyo. The second similar cleaning event was held in July 1966 around Grand Army Plaza in New York City. George Maciunas, a key member of Fluxus, photographed the event. These performance pieces were conducted with the appearance and rigor of art conservation. White coats, white gloves, surgical masks, officiating armbands, and folding signs cordoning off the area marked for cleaning were used in the performance. A gradually more precise set of cleaning implements were employed—beginning with brooms and moving on to scrub brushes, tooth brushes, and cotton swabs. The work was absurdist in its pseudo-scientific precision. However, it revealed the rather complicated division between the effort that goes into conserving something cherished and the effort expended to maintain something ordinary. Like most happenings, the art was cleverly embedded in the act.

Ukeles' themes were also foreshadowed in the iconic photography of Gordon Parks. The exploitation and suppression of maintenance workers, which includes matters of race and gender, was revealed in American Gothic, Washington, D.C. In 1942, Gordon Parks posed Ella Watson, a Farm Security Administration maintenance worker, who held her mop and broom under an American flag in an image recalling Grant Wood's iconic painting American Gothic from twelve years earlier. Looking sternly, if not accusingly, at the camera, Park's portrait of Watson conveys a society which continues to divest its liberties along lines of race, gender, and association with maintenance work.
The work, "I Make Maintenance Art One Hour Every Day," was part of a show held September 16-October 20, 1976, in the Whitney Museum's Downtown branch facility in 55 Water Street in New York City (the branch existed from 1973 to 1983). 55 Water Street, a dull and anonymous high-rise development designed by Emery Roth & Sons, is distinguished by being the largest single office building in New York City by floor area. Ukeles enlisted the building's 300 maintenance workers to assist her in this performance piece. The distinctions between maintenance and sanitation art get blurred, but Ukeles' fundamental sentiments remain the same: the demonstration of care, of support, of life, of working being the art work. Her work undermines our society's normative expectation for art: that art must be heroic and outstanding, not supportive and invisible.12

Over the last four decades, the situations for Ukeles' works have increased in scale, scope, and participation. Her works began in domestic settings and then shifted, intentionally and gratefully by her account, to public domains. Over the years, places have included discrete museums (Wadsworth Atheneum, 1973), landscapes (Vassar College, 1974), or public sidewalks (Wooster Street in SoHo, NYC, 1974). Her work then expanded in scale from one of the largest high-rise office buildings in NYC (55 Water Street, 1976) to the entire system associated with the New York City Department of Sanitation (1978-1980, beginning with "Touch Sanitation Performance"), which included Fresh Kills Landfill, the largest landfill on earth (as part of "Flow City," 1989-2002). The number of participants in her work increased from Ukeles herself at first, to several volunteers, to 300, to 8,500, and on to the entire waste flow of millions of New Yorkers (as in her work related to the 59th Street Marine Transfer Station in Manhattan, 1983-1996).

Themes of empathy, healing, recovering divisions, and caring instead of neglecting suffuse Mierle Laderman Ukeles works. Ukeles' works switched from her doing the work alone to establishing situations where the work of others could be documented, presented, celebrated, redeemed, and transformed into art. Her work reveals the flipside to what society considers profane or undesirable; she seeks to redeem implied divisions. Her work is a redefinition of the role of both art and the artist. She makes art mean more than being an expressive impulse of the individual artist. She revises art into something that selflessly expresses other people and recovers places in society where art never deigns to enter.

3.0 ARCHITECTURE AND THE ART OF SLOW-MOVING ARRANGEMENTS

"One can read the time of day in the depth of the shadow, time of the year in its angle, and of history, in its shine or its stain. We inherit differences among things, one another, and most importantly, we tend to care for the differences between the essential elements of architecture."—David Leatherbarrow

Architecture knows no passive voice. A building, though appearing still, is forever in motion. A building is an event, always on the move. A building is not so much a stable place as it is a particular flow—a confluence of movements, wearings, cleanings, removals, and replacements that imprint time on buildings. Place and building, weather and wear—all four are joined indissolubly. We cannot remember tangibly without architecture.14

A work of architecture implies its continued involvement in culture as a material entity. As Hannah Arendt wrote in The Human Condition,

"The durability of the human artifice is not absolute; the use we make of it, even though we do not consume it, uses it up. The life process which permeates our whole being invades it, too, and if we do not use the things of the world, they also eventually decay, return to the over-all natural process from which they were drawn and against which they were erected . . . What usage wears out is durability."15 Maintenance is typically more than menial labor. When done carefully, maintenance is never drudgery; it is necessary and beneficial to the higher orders of human culture. Architecture, if inhabited, is never ideal nor permanent. Architecture is not, as Pallasmee suggests, a dam built against time.16 A building persists as a transforming vision of itself as a material presence. Architecture is a timepiece, marked by the ravages of life and careful maintenance.

We endeavor to build so that living may endure; architecture is the domestication of time. Buildings are a not a "permanence in transience" as indicated by Pallasmee.17 Instead, a building is a marker of time's passage—impermanent and coruscating. A building is a slow-moving arrangement that marks change and is marked by change. Architecture decomposes in time and needs maintenance; a building is a transience in a habituated present. Maintenance both retains and alters, and by altering, maintenance makes subtle changes. We return to witness the change—sometimes with sentimentality and nostalgia, sometimes with surprise. The impermanence of architecture marks time's passage for which maintenance is the metronome.

A building is both a thing and an activity. More precisely, a building is a thing enacted by the people who inhabit it. A building is held together in slow, nearly geological, flux. Buildings sustain us so long as we
sustain our buildings. Architecture is less the art of space as it is an expedition in time. Rafael Moneo suggests that eventually, after the efforts of architects and builders subside, a building takes on a life of its own. Moneo believes that the completed building, immersed in its culture and climate, is the real aim of architecture. He states that:

"Architecture implies the distance between our work and ourselves, so that in the end the work remains alone, self-supported, once it has acquired its physical consistency. Our pleasure lies in the experience of this distance, when we see our thought supported by a reality that no longer belongs to us."\(^{18}\)

A building is a converter of time—and maintenance repairs time's ravages while introducing its own subtle changes. A building is enacted; it is not an object made for our abstract admiration. A building emplaces human action. Architecture is a constant work; after design and construction provide presence, that presence demands maintenance. You cannot escape what never goes away; time's presence and its effects are inescapable. Building is bitter and fatal. All that is built will eventually fall to ruin. Yet we continue to build knowing that every building will find a similar fate.

4.0  TIME

"Eternity is in love with the productions of time."—William Blake\(^{19}\)

"Each work of architecture is a time machine."—Adolfo Natalini\(^{20}\)

Buildings are as fugitive to our lives as time, always departing but enriching memory. Time is a material to be used in architecture just as brick, stone, or steel. Through what medium does time flow? It is present in the interaction of all material things: living bodies, buildings, geologies, and the surrounding firmament. Things are gods—and time is the interplay of things.\(^{21}\) Things are gods and time is their dance.

Time is never cut with the razor sharpness of the synchronized clock. The clock parses out time like a commodity. Time is spread open so that every moment has temporal thickness. Time lived holds together memory and anticipation, procrastination and vigilance, failure and fidelity. A painted still life simultaneously stops time and opens time up to a depth of experience where moments contain other moments in a matrix of possibilities and past reflections. The stilling of life's temporal movement allows us to see with an integrated depth of experience. The still life is the thoughtful compliment to the motion picture.

Each now is a made anew, compounded and distinct—due to its joining to a specific setting—and each building is shot through with attended pasts, multiple nows, and anticipated futures. Time is a ribbon unrolled, stretched, overturned, knotted, and bowed. A building is a complex of contemplations, a composite of life, and a matrix of associations, occasions, and varied attentions each vital to an unfolding whole. There is a strong phenomenological link between the painted still life and a building in peak maintenance.

Time is a gathering body of experience understood both backwards and forwards.\(^{22}\) Time is not passing but accumulating (curiously withering as it gathers). Time and space are ceaseless presences lodged everywhere. Imagine simply an hourglass with its pinched, conjoined chambers—losing and gaining in a single flow; accumulating and diminishing simultaneously. The future is consumed while the past accumulates; time is a relation. Matter accumulates time while filling the margins of space. Time has a fineness and an indivisibility like human consciousness. Is time the mind of matter? Is matter the body of time?

Time in human terms, like place, is a continuity of feeling, and only as a continuity is it exactlying human. Made inwardly human, time is an elastic entity that immerses us in the infinite. Time cannot be divided if it is to be truly lived. Maintenance preserves that continuity while simultaneously infusing that continuity with subtle and sometimes unexpectedly abrupt differences. As Heraclitus has been interpreted as saying, "Time is a child building a sand castle by the sea."\(^{23}\) Time is enacted just like a building is enacted, and maintenance is one of those key and infusing actions that merge time, life, and building into a totalizing experience. Maintenance workers are the conservators of tomorrow.

Property is made and remade, maintained, and renewed so as to be continuously occupied. Our material culture is humanity's real time keeper. So architects should commence with a definition of architecture as the intermingling of time and materials as rendered through a place. A building, through continued habituation and maintenance, will be many spaces temporally arranged.

CONCLUSION

"I think architecture has always been a way of measuring time, I like to think of buildings as clocks, calendars, and chronicles. Vitruvius saw the design of timepieces as one of the architect's chief skills.
Surely, the registration of time is one way that architecture confers orientation on the activities of our lives.——David Leatherbarrow

In his essay, "Melancholy and Time," Pallasmaa links architecture to death when he writes, "Architectural constructions are a defense against the anxiety of death, disappearance, insignificance, and non-existence." He supposes that architecture is about assuaging death. He interprets a building as a permanence that aims to halt time. But a building is never final, indifferent, impervious to change, ideal, or autonomous.

The goal of architecture should be maintenance because it signals that a building is fulfilling enough to be worth retaining, remembering, and revisiting. If appreciated by those that live there, even the most mundane building is an enlargement of life. Architecture is not built to suppress or express our anxiety over death. Instead, we build in order to affirm, enrich, and accommodate life's activities—and we build for the perpetuation of a life in which maintenance is clearly integral.

Pallasmaa is right to suppose that buildings should protect us from outside threats and inner fears. But architects should emphasize protection, including its myriad synonyms, and not fixate anxiously on some predicted loss. Fear is a ubiquitous and uncontrollable feeling; but protection is essential to architectural expression. Protection comes from caring; and caring continues through the task of maintenance. For architectural expression to be whole, we must include the sensibilities of maintenance into the fold of architectural practice.

Grime and debris used to be local considerations that demanded local solutions. However today, waste and sanitation are forces, machine-driven flows, that bridge between localities that together form a global waste stream. Waste is a foul pallor that spreads. It is sometimes exchanged and traded willingly; but many times it is imposed unwillingly on someone else, somewhere else. Even the products with which we clean and sanitize become a danger to broader ecological systems. Maintenance and sanitation, once the discrete activities of a caretaker, have become a massive worldwide system. And like all forms of systematization, it demands vigilant management and careful regulation.

Architects can recognize instantly the shades of neglect in a place not properly maintained. Architectural educators would do well to include the implications of maintenance and maintenance art in their classes. At one time, the students of Auburn University's Rural Studio were expected to repair the enduring works of their predecessors. This exercise seems to have had multiple pedagogical aims. First, to experience working with one's hands and to learn how materials fit together. Repairing is the first step to building. Second, to observe closely what details and conditions do not work in the Hale County climate and learn how to imagine something better. Third, to get comfortable working outside, in the sun, heat, and humidity—to acclimate the body to the rhythms of weather, the heft of materials, and the contortions that a body that builds must endure. And fourth, to retain the continued trust of the community, to demonstrate that the commitment by the Rural Studio to the inhabitants of Hale County is lasting, and to show that what we build we mean to endure. Maintenance accords with the fundamental neighborly sense that keeps community together. Through maintenance, we retain our humanity.

There develops a four-sided conversation between designing, the physical building, its eventual wearing, and its maintaining. Maintenance binds, cares for, and puts things in relation. Maintenance means that we cannot leave a building alone: it must either be engaged with or deteriorate. Material changes reveal time's interconnectedness. "Maintenance-free" materials discourage our interaction with buildings and steal away time's concomitance with place—making us dismissive, forgetful, and lost. Maintenance has the capacity to form a bond between us and building—making us empathic and gentle listeners who pay attention to place.

Touching confirms a things presence. Maintenance, as a form of touching, confirms a lasting presence. Touch, and the doubt of presence is confirmed through touching. Clean or repair something and the doubt of persistence is confirmed through maintenance. Dilapidation, weathering, and wear exist everywhere and always in varying measures and degrees. Even demolition doesn't delete a building's being. A work of architecture, like its counterpart maintenance, is never finished, never ending, and nearly everlasting—for even after archeologists sift through debris and touch again the traces of materials which have lasted through the ages, it will still be possible to perceive the former patterns of human life crystallized in those fragments.

REFERENCES


ENDNOTES


A personal note I took while attending a lecture by David Leatherbarrow, "Making, Invention, and Involvement (in the World)," which was part of the 26th National Conference on the Beginning Design Student, Made: Design Education & The Art of Making. The lecture was held Saturday, March 20, 2010 at the University of North Carolina at Charlotte. Graciously uploaded to Vimeo on June 30, 2010; http://vimeo.com/12991396 (last accessed 1/16/13).


Charles Olson, Letters for Origin: 1950-1956 (New York, NY: Paragon House, 1989) 103. The actual quote is: "For to be a spectator is to assert an ownership in it which is absentee . . ."


I am applying the Heraclitian fragment, "character is fate," to building. 'Ethos' is translated by both Guy Davenport and Charles Kahn as 'character.' See Guy Davenport, Herakleitos and Diogenes (San Francisco: Grey Fox Press, 1979) 9 and 22. Also, see Charles H. Kahn, The Art and Thought of Heraclitus (Cambridge, UK: Cambridge University Press, 1987) 81, 260-261.


Clearly, Pallasmaa decided not to be extensive in his discourse on the hand and focused exclusively on its capacity to create. However, the thinking hand is just as important in maintenance as it is in creation. Mierle Laderman Ukeles makes that argument clear through her art. See Juhani Pallasmaa, The Thinking Hand: Existential and Embodied Wisdom in Architecture (West Sussex, UK: John Wiley & Sons, 2009).


In his editorial "Conservation Cleaning/Cleaning Conservation," Jorge Orteo-Pailos connects Ukeles' performances at the Wadsworth Atheneum with subsequent works by other artists. In particular, he points out the work of Carmen Perrin, a Bolivian-born Swiss-French artist. Her art confronts action with contexts. Known for her collaborations with architects (including Herman Hertzberger) and her interventions into landscapes, Orteo-Pailos looks at a specific piece by Perrin titled, "Swiss Path, Geneva itinerary," completed in collaboration with works by artists Richard Long and Max Neuhaus. In her work, Perrin and others removed layers of earth and animal life from enormous glacier-driven white granite stones. This act of cleaning was understood as a temporary intervention, removing 1500 years of geologic sedimentation. The work uncovered a very personal relation between habitual action and place. As she put it,
"We clean the stones with simple repetitive motions. We listen to the sounds of the forest... Our postures, right up against the earth and the stones, remind you of a scene from an archeological dig. The hidden treasure is essentially in the action, in the focused consciousness. Many of the stones are huge. However, their folds, their bumps, their wrinkled, and their roughness invariably bring to mind our flexibility, our weight, our texture, our joints, our measurements."

Perrin's art embodies experience in its making. The work intimates the conscious attention demanded when carefully cleaning or maintaining things. Her removal of time's marks upon stone becomes the sculpture itself. Only afterward does the unexpectedly pristine granite arrest the spectator with questions about this intervention in time. See Carmen Perrin, *Contexts: Public Situations* (Basel, Switzerland: Birkhäuser, 2004) 63-64.


13 David Leatherbarrow, transcribed from his lecture, "Making, Invention, and Involvement (in the World)," from the 26th National Conference on the Beginning Design Student.


17 This is a section title from the essay "Melancholy and Time." See Juhani Pallasmaa, *Encounters*, edited by Peter MacKeith (Helsinki, Finland: Rakennusstieto Oy, 2005) 314.


21 A thought derived from the Ancient Greek philosopher Thales and attributed to him when Aristotle wrote, "Some declare that the soul is mixed in the whole, and perhaps that is why Thales thought all things are full of gods." Aristotle on Thales, from *Readings in Ancient Greek Philosophy from Thales to Aristotle*, edited by S. Marc Cohen, Patricia Curd, C. D. C. Reeve (Indianapolis, IN: Hackett Publishing, 1995) 9.


23 For this particular variant of Heraclitus' fragment see Guy Davenport's short story, "Herakleitos" from *Tatlin* (New York, NY: Charles Scribner's Sons, 1974) 113. Another version of this fragment has been translated by Davenport in a fuller version, "History is a child building a sand-castle by the sea, and that child is the whole majesty of man's power in the world." See Guy Davenport, *Herakleitos and Diogenes* (San Francisco: Grey Fox Press, 1979) 15. 'Time' is translated variously as *history*, *eternity*, and *lifetime*. See Brooks Haxton, *Figments* (New York: Viking, 2001) 51. Also, see Charles H. Kahn, *The Art and Thought of Heraclitus* (Cambridge, UK: Cambridge University Press, 1987) 71, 227-229. Davenport's translations come closest to this essay's main points.

24 David Leatherbarrow, transcribed from his lecture, "Making, Invention, and Involvement (in the World)," from the 26th National Conference on the Beginning Design Student.

25 Juhani Pallasmaa, "Melancholy and Time," from *Encounters*, edited by Peter MacKeith (Helsinki, Finland: Rakennusstieto Oy, 2005) 310. I am also reminded of an essay by Karsten Harries, "Building and the Terror of Time," where he points to the nature of time in architecture in the final passage of the essay. In describing the painting, *The Tower of Babel*, by Pieter Bruegel the Elder from 1563, Harries compares the colossal construction of the Tower, which he analogizes to architecture's heroic struggle against entropy, to the ramshackle dwellings in the town that clings to the Tower. Each dwelling appearing inhabited, constant, and purposeful—representing the ordinary life we endeavor to maintain. As Harries concludes, "Here we have, not monuments, but buildings that speak of a very different, less antagonistic relationship to time. They hint at possibilities of dwelling born of a trust deeper than pride. Such trust demands determinations of beauty and building that do not place them in essential opposition to time."
