MASS MoCA: Industrial > Cultural Production

PHOEBE CRISMAN University of Virginia

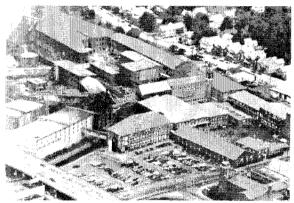


Fig.1 aerial view of MASS MoCA

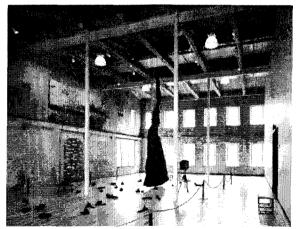


Fig.2 gallery at building 4

America, you have it better than our old continent; you have no ruined castles and no primordial stones. Your soul, your inner life remains untroubled by useless memory and wasted strife. —Johann Wolfgang Goethe

The nineteenth and twentieth-century construction of private places for industrial production, and their re-conceptualization as public sites of culture is a relatively recent social and spatial practice. Much has been written about the privatization of public space, but little scholarly work has studied the opposite phenomenon. Numerous New England towns, often founded, planned, and economically dominated by private textile manufacturing companies, have been formally and programmatically transformed into tourist sites such as National or State Parks, commemorative Historic Sites, and public-supported Museum complexes. The formerly derelict, thirteen-acre Arnold Print Works in North Adams, Massachusetts is an example of a site that has undergone this process (figs.1+2). The twenty-six building site, listed on the National Historic Register, has been recently re-imagined and physically reconfigured into the Massachusetts Museum of Contemporary Art, or MASS MoCA-a place of interrelated art production, exhibition, and performance. This essay examines the difficulty of preserving the specifics of place embodied within a historically significant industrial site, while shifting the buildings and landscape to new cultural uses. My direct involvement as MASS MoCA project manager and design architect with Bruner/Cott & Associates¹ affords an insider's view of the design intentions and physical strategies employed in the transformation with the added benefit of a critical distance afforded by the passage of time. During the typically rushed professional design process, underlying theoretical positions are rarely directly examined. Conflicts between client and architect, or within the design team itself usually rest on unspoken philosophical differences embodied in stylistic or functional considerations. Ultimately this essay is a case study into the complex issues that provoked and grounded the design process: ruin and weathering, openness to interpretation, "symbolic persistence," collective memory and architectural palimpsest. It also investigates forces underlying the popular demand for commemorative public sites within such lost landscapes of labor.

A survey of cultural sites located in New England mills reveals two major categories of reuse. In the first case, the original function of the building is maintained as a museum, with displays of industrial machinery, demonstrations of manufacturing processes, and historical interpretations. The building is removed from the productive life of the city and serves a didactic purpose. The Old Slater Mill in Pawtucket, Rhode Island, is an example of this condition: designated a National Historic Landmark in 1966, it still functions as a water-powered textile mill for the benefit of school groups and tourists. The Lowell National Historic Park in Lowell, Massachusetts, maintains "working" looms and commemorates the history of America's Industrial Revolution in physical form.² A second type of conversion retains the historical buildings and landscapes, but converts them to another use in either the public or private sector. The Amoskeag Mills in Manchester, New Hampshire, were the world's largest textile producers in the early twentieth-century, with eight million square feet of floor space inhabited by over 17,000 workers.³ These immense textile mills lost their original function in 1935, began a slow and unplanned process of programmatic reuse and physical transformation, and now contain the Manchester Historic Association Millyard Museum, the University of New Hampshire-Manchester, and various commercial uses. Since the city of Manchester owed its existence to these mills for much of its' modern history, the economic and physical impact of their closure was profound.

Similar to the Amoskeag Mills' influence in Manchester, the Arnold Print Works became the single largest employer in North Adams, Massachusetts. Sited in 1860 at the confluence of two branches of the Hoosic River, the extensive collection of red brick and heavy timber mill buildings was erected over a forty-year period to house specific activities of the mechanized fabric printing process (fig.3). The physical presence of the Arnold complex is substantial, given that the thirteen-acre site constitutes nearly one-third of downtown North Adams. The Arnold Print Works were sold in 1942 to the Sprague Electric Company, which occupied the mill buildings with thousands of workers producing state-of-the-art electronic components. It was not necessary to significantly change the architecture to support the new industrial processes within. Sprague was the region's largest employer during the 1970s, when over 4,000 people worked for the company in a town of just 18,000. When the company vacated the North Adams site in 1985, the town's economic base disappeared. In addition, the physical presence of the abandoned mill loomed large in the town. Unemployment in North Adams had reached fourteen percent at the time of MASS MoCA's conceptualization in the late 1980s by Thomas Krens, then Director of the Williams College Museum of Art.

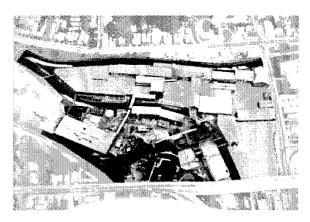


Fig.3 aerial of North Adams + MASS MoCA

From initial idea to project completion, the thirteenyear process is too long and complicated to relay here. It is important to note, however, that the project was funded by a combination of public and private sources from the State of Massachusetts and the non-profit MASS MoCA Foundation. As such, the project was conceived as a catalyst to revitalize the economically depressed town of North Adams, to preserve an historic nineteenth-century mill complex, and to create a new laboratory for contemporary visual and performing art. Since the project opened in 1999, it has had a positive economic impact locally and has become a significant social and recreational center within the largely working-class town.⁴ Free Internet access, computer classes, and job training are provided for the community, in addition to films, dances, and other cultural events. Local involvement is reflected in MASS MoCA's membership-fifty percent of which is comprised of local residents. The diverse range of community

activities harkens back to Sprague Electric's heyday, when the mill "had its own radio station, orchestra, vocational school, research library, day-care center, clinic, cooperative grocery store, sports teams, and even a gun club with a shooting range on the premises."⁵ Rather than concentrating on the economic and social aspects, however, this analysis focuses on the relationship between project intentions and their physical manifestation.

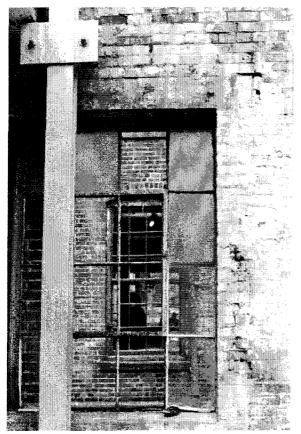


Fig.4 temporal and spatial layers

RUIN + WEATHERING

For fourteen years the mill sat vacant and neglected. Natural forces of water and weathering and human acts of vandalism and theft slowly transformed the thirteen-acre site into a massive, powerful ruin (fig.4). In the essay "Causality: Ruin Time and Ruins," Florence Hetzler defines a ruin as "the disjunctive product of the intrusion of nature upon an edifice without loss of the unity produced by the human builders. Ruin time, proposed as the principal cause of ruin, serves also to unify the ruin. In a ruin the edifice, the human-made part, and nature are one and inseparable; an edifice separated from its natural setting is no longer part of a ruin since it has lost its time, space and place. A ruin has a signification different from something merely human-made. It is like no other work of art and its time is unlike any other time."⁶ The Arnold Print Works displayed these characteristics prior to the transformational process, and portions still do. The Print Works, however, were ruined not just by nature and the long passage of time, but by economic circumstances and social consequences. These "premature ruins"⁷ represent the passing of an industrial age and the town's previous way of life. The architects and museum director Joseph Thompson were intrigued by the simultaneous sense of absence and presence—of programmatic transience and physical persistence on the site. The design dilemma was the conflicting desire for both a new engaged cultural program and the maintenance of a ruin in the process of decay and temporal change. Or more precisely—how is it possible to change a place without denying its past life and inhibiting its future destiny?

The 4,800 tons of construction debris removed from the site provides a sense of the extensive transformational process that included the removal of internal walls and floors and the complete demolition of one severely damaged building (Fig.5). Twenty of the twenty-seven structures remain in varying states of stabilized ruin-providing a direct connection with the previous condition of the place and awaiting inhabitation as MASS MoCA expands. Undoubtedly, some of these buildings will be ruined beyond repair, slowly overwhelmed by natural forces. Thus, the architects attempt to embody history that is in the process of disappearing, and along with it the loss of a way of life. Layers of peeling paint-demarking the location of previous administrative offices in institutional green or bathrooms in pink and blue—record past inhabitation (fig.6). As at Pompeii, time arrested suggests a strange immortality.8 Unlike the preservation of Pompeii, however, new layers continue to accumulate as contemporary needs evolve.

OPENNESS TO INTERPRETATION

The primary conceptual and physical design challenge was how to convert the architectural remains of the Arnold Print Works to support a new cultural

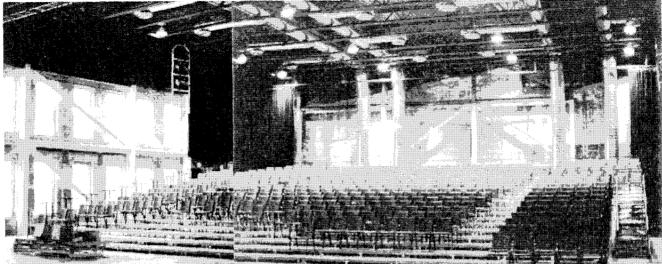


Fig.5 performance space with new steel structure inserted into the existing brick enclosure

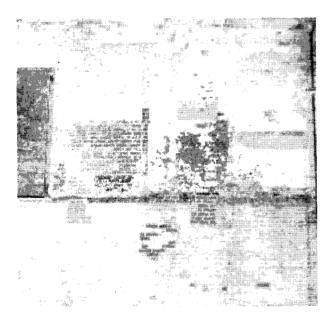


Fig.6 brick wall as palimpsest

use, while simultaneously preserving their historic integrity and promoting a sense of contemporaneity. Embedded within this problem is the necessity for openness—a condition that allows a place or an artifact to be available for interpretation. Openness is both a material and programmatic condition. We are all familiar with buildings or places that have become closed to interpretation, either due to overzealous physical restoration or the return to a frozen "themed" moment in time. For example, Colonial Williamsburg transports us back to an idealized eighteenth-century. Williamsburg possesses both forms of closedness: its purified architecture and staged period inhabitants bear no trace of the intervening time since the town's formative years between 1699 and 1780, and its restoration begun in 1926. Isolated from the passage of time, Williamsburg's presence in the world is denied. Arguing against this type of building fabric-centered approach, preservationist Randall Mason insists "historic preservation theories and tools need to reflect the notion that culture is an ongoing process, at once evolutionary and inventive-not a static set of practices and things."9 The preservation strateav employed at MASS MoCA embraced the idea that as culture changes, so too does architecture and the significance invested in those artifacts. Although the buildings were originally constructed and functioned as the Arnold Print Works, current North Adams residents have known the complex as Sprague Electric since 1942. Except for the oldest residents, their desire to physically preserve that place is guided by memories of life associated with the Sprague factory. Restoring the architecture to an ideal moment in the early twentieth-century heyday of the Arnold Print Works would not address the layers of significance and collective memory attached to the place in its various incarnations, including recent events and experiences generated at MASS MoCA.

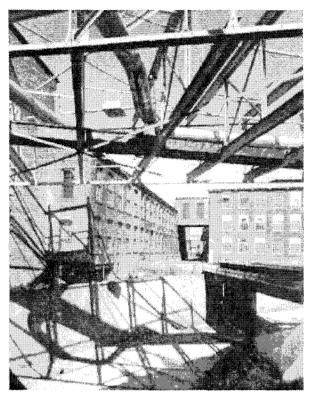


Fig.7 the abandoned Sprague Electric site

PROGRAMMATIC OPENNESS

When first encountered by the architects, the site was abandoned and like many immense places of past industrial activity it possessed a powerful aura resulting from its vacant condition and resulting programmatic openness (fig.7). Alberto Ferlenga has written about the liberation created in such buildings. "The progressive or traumatic depletion of a building is accompanied by a dual process of liberation: from the temporal conventions that linked it to a given epoch, and from the functional conventions that linked it to a given use. As it is exhausted the building puts its forms, parts, meanings back in circulation, laying the groundwork for a possible rebirth, as long as conservationists are not allowed, with their taxidermic practices, to stifle the life of forms and the force of spaces."¹⁰ We had a strange desire to leave the exquisite ruin alone for the pleasure of occasional explorers. The realities of rotted floors, falling bricks, broken windows, and ruptured plumbing lines meant that the buildings were legally uninhabitable and practically unsuitable for the making and exhibiting of art. The first strategy was to maintain the layered and ambiguous spatial quality found on the site to encourage the

physical exploration and psychological release that we found so compelling. By occupying just seven buildings and stabilizing the remaining twenty for future inhabitation, the site is not consumed by use but still left open for discovery. Visitors may roam about the thirteen-acre site at will and encounter buildings and spaces in various states of decay, inhabitation and transformation. Alberto Pérez-Gómez eloquently articulates the existential connections possible in such spaces in-between. "Openness is key, but this is the nature of the works of imagination, open enough to invite participation, but engaging a critical view on the hegemony of technology and its systems of domination. There are alternatives to the voyeuristic conceptions of experience that are best exemplified in a place like Walt Disney World."11 Great effort was made to avoid "themeing" MASS MoCA as a guasi-industrial "experience." Some authentic industrial things were kept, others were removed as necessitated by museum uses, and new interventions were clearly distinguished as such through their design. The programmatic and experiential intentions worked in conjunction with a highly specific strategy to maintain material openness.

MATERIAL OPENNESS

John Ruskin considered historical authenticity and interpretive openness in The Lamp of Memory, when he described architectural restoration as "the most total destruction which buildings can suffer."¹² The productive changes induced by physical weathering are lost when the "golden stain of time" is washed away. Marks of time are often understood in both restorations and new modern architecture as a debasement of the initial state of architectural perfection.¹³ The past is erased and the future is precluded to the detriment of both. Opposed to this modern "white wall" approach, the designers of MASS MoCA retained the signs of physical weathering and traces left behind by previous inhabitants (fig.8). This strategy was an attempt to achieve two things: to allow the past history and use of the building to read beneath the present museum as a subtext, and to encourage the ever-changing building to move into the future. Architectural imperfection suggests an ongoing process of enrichment and accretion. At a certain point, however, weathering becomes ruin-a condition that much of the Arnold Print Works reached prior to MASS MoCA's creation.

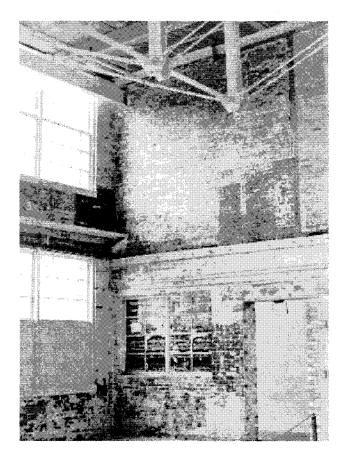


Fig.8 building 4 with layered surfaces + new trusses

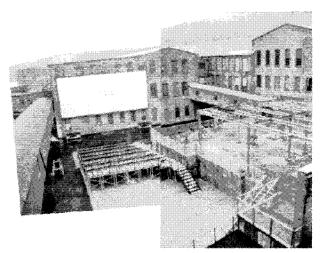


Fig.9 outdoor cinema in courtyard C

TRANSFORMATION

Perhaps the most distinctive feature of the industrial site is the seemingly haphazard assembly of buildings, connecting bridges, and resulting outdoor courtyard spaces. Both Arnold Print Works and Sprague Electric added new buildings to the intricate assemblage as their production requirements changed, and in so doing, inadvertently recorded the passage of time in architectural form. These courtyard spaces are retained and used in quite different ways than originally intended. A former truck-filled, loading area becomes an outdoor cinema through the addition of an immense projection screen (fig.9). Sometimes art and architecture work together to give new meaning to a space with no material change, such as the narrow light and air shaft that is now filled with the voices of past workers recalling their experiences in that place long ago. The simple addition of recorded sound is radically transformative.

In other cases, the architecture itself has undergone significant physical changes in support of the new use. These changes are sometimes unseen by visitors, though the architects went to great lengths to convey the precise action taken. For instance, the original multi-story mill buildings were stacked, single-story spaces with a tight column grid to support the short spans of heavy timber construction. Although large, the low and interrupted spaces did not provide the open floor areas and double and triple-story volumes desired for museum galleries. To create these spaces large floor areas were subtracted within the existing mill buildings, thereby uncovering and intentionally revealing layers of building construction (fig.10). Rather than replacing the heavy timber frame in multi-story gallery areas, kingpin trusses were created by using steel cables and plates to structurally transform the existing timber beams and truncated columns (fig.11). At a detail level, the column's history is accentuated by the exposed cut that reveals the untreated wood within, in contrast to the original, industrial-era paint retained on it's surface. In this way, layers of constructed time coexist in the buildings-with echoes of industrial production harmonizing with ongoing cultural production. Judging by their comments, many visitors to MASS MoCA understand the architects' intentions. One visitor wrote, "It is an old habit to think of a museum as the silent, blank walls that allow painting and sculpture to be heard in their full voice, undisturbed by anything but the sounds of visitors walking by. MASS MoCA turns that old habit inside out. You cannot walk through it without thinking of the countless gestures, some

meant, some unmeant, that turned the blank brick of those factory buildings into the cumulative life's work of the many thousands of North Adams residents who toiled on this site for two centuries. This is a museum designed to honor the labor of artists, but one that inevitably honors the labor of the townspeople in whose midst it has been set."¹⁴

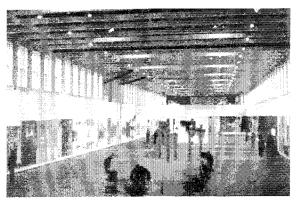


Fig.10 building 5 with floors removed

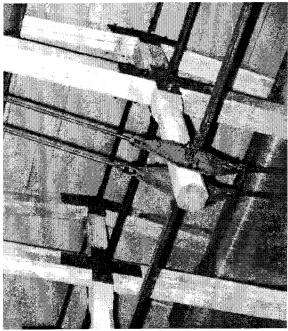


Fig.11 timber frame transformed into kingpin truss

SYMBOLIC PERSISTENCE

Although contemporary American culture is pervaded by the desire for "the new," evident in everything from the planned obsolescence of consumer goods to suburban sprawl, there is also a contra-

dictory desire for continuity, stability, and shared memory. Architecture, more than most human artifacts, records experience and evokes memories in palpable ways. Architectural historian Sandy Isenstadt has termed this phenomenon "symbolic persistence," in that "works of architecture possess the power to remain meaningful long after their creators are dead...I do not mean that any one particular meaning survives across time, but that a work of architecture retains its ability to prompt interpretation for generations beyond its creation."15 In discussing the difference between the ability of architecture either to promote interpretation or to explain, he claims "symbolic persistence resides in this interpretive imperative, in the ability of a building or structure to move us to see and hear ourselves and our place in the world."¹⁶ The physical presence of the Arnold Print Works complex plays this role for both visitors and long-time residents of North Adams-compelling them to pause and reflect-remembering a past to which they may or may not have a direct connection. Destruction of many historically significant mills was justified by the explanation that former employees did not want to be reminded of their past labors, however, interviews with former Amoskeag Mill workers by architectural photographer Randolph Lagenbach found the opposite. "Industrial laborers are no more likely to see their own backgrounds as having been degraded than are any other societal groups. Identification of the mills with a degrading existence just does not fit their perception of their own past, irrespective of any particular hardship."17

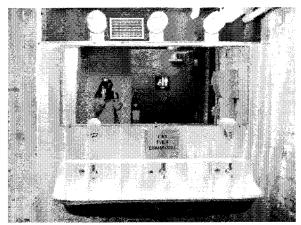


Fig.12 public restroom

REMEMBERING

This position is supported by interviews with a number of past Sprague Electric employees when questioned about MASS MoCA. They discussed the exact places within the complex where they and their family members worked, fondly reminisced about the company dinners and parties, and complained about the long hours and low pay.¹⁸ They chiefly remembered the experiences that they had shared with so many others. In American Ruins, sociologist and photographer Camilo José Vergara found related but often more pessimistic sentiments in his travels to ruined industrial areas around the United States. He frequently heard former employees talk about "how nothing is made here now" and the profound sense of loss and meaning that has resulted. Vergara observes, "a powerful longing for the city of smokestacks and paychecks lingers among those old enough to remember. People recite like an incantation the names of nearby abandoned factories and the products they used to make."19 Perhaps because most of Vegara's fieldwork was done in the severely distressed cities of Detroit and Newark, loss and hopelessness for the future was commonly expressed. Although not possible, it would be telling to compare current interviews with what past employees had to say about the Sprague Electric site after the 1985 closing and before the creation of MASS MoCA. Would they have expressed the same despair for the future and nostalgia for the past?

INDUSTRIAL SITE > CULTURAL SPACE

In either case, such sentiments do not fully explain the current proliferation of cultural sites that appropriate and commemorate places of industrial production. At least three major explanations appear in the case of the Arnold Print Works and MASS MoCA. The most pragmatic reason, and the initial inspiration for the project, is that industrial sites offer extensive and economical space. After visiting a German factory turned museum near Cologne, MASS MoCA instigator Thomas Krens was struck by the spatial benefits of industrial architecture for contemporary art display. Since the inherited museum form could no longer contain the immensity of minimalist art, gigantic industrial spaces offered optimum architectural conditions.²⁰ Krens found the Arnold complex ideal, with over 720,000 square feet of interior space and a single building as long as a football field. The willingness

of companies and communities to sell such sites cheaply is an important incentive for non-profit cultural institutions.²¹ In addition, many industrial sites are contaminated, and negatively perceived both socially and physically. Private landscapes of labor are undesirable when abandoned, while public sites of culture hold the potential to generate jobs and revenue, to upgrade a community's image and self-respect, to visually enhance the environment, and to promote social interaction in a new type of public cultural park. In speaking of MASS MoCA, the artist Robert Rauschenberg said, "what's so great about it is it was a totally useless space, expect maybe for history. And now it's filled with activity. Incredible activity."²² And yet, despite these two practical benefits, a more significant explanation may be found in the longing for a lost industrial life in an information age.

In a time of synthetic, themed places that substitute spectacle for the real, MASS MoCA serves not only as a museum but also as a cultural metaphor. Beneath its practical use lies a story-made visible-of how a place has changed from the production of textiles to electronic components to information. The persistence of collective memory and architecture, as well as the transience of culture, are recognizable here. Contemporary art and information systems are overlaid on a palimpsest of accumulated structures, memories and toils. It is perhaps this simultaneous absence and presence, the coexistence and interdependence of the concrete and the abstract that makes the factory turned museum real for both visitors and residents of North Adams. While this landscape is clearly legible as a place of former industrial production, it has not been ossified or embalmed as such. It continues to be part of the world at large—participating in the ever-changing realm of ideas and their production.

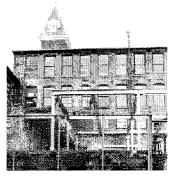


Fig.13 clocktower from courtyard C cinema

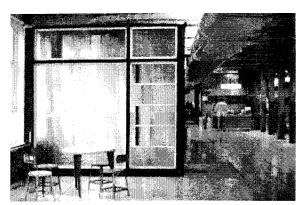


Fig.14 builidng 10 with inserted entry vestibule

NOTES

¹ The Bruner/Cott project team included: Simeon Bruner, Henry Moss, Phoebe Crisman, Maria Raber and Kim Markert.

² For a history of Lowell's nineteenth-century development, see Thomas Bender, *Toward an Urban Vision: Ideas and Institutions in Nineteenth Century America* (Baltimore: The Johns Hopkins University Press, 1975). An account of Lowell's transformation into a National Historic Park may be found in Thomas Dublin, *Lowell: The Story of An Industrial City: a Guide to Lowell National Historical Park and Lowell Heritage State Park.* (Washington, DC: US Department of the Interior, 1992).

³ See Tamara K. Hareven and Randolph Langenbach. *Amoskeag: life and work in an American factory-city* (Hanover, NH: University Press of New England, 1995).

⁴ The economic benefit is achieved by both encouraging tourism to the cultural institution, and by renting office, media, and artist space within the MASS MoCA site. According to Mark Johnson, "unemployment has been reduced from 25% to just under 5% since the museum opened." See his article, "Brownfields are Looking Greener." Planning (June 2002): 14-19. For a detailed and regularly updated description of economic regeneration intentions and statistical results, see the MASS MoCA website at <u>http://www.massmoca.org</u>.

⁵ See John Heon, "History and Change at the Marshall Street Complex," *MASS MoCA: From Mill to Museum* (North Adams: MASS MoCA Publications, 2000): 11.

⁶ Florence M. Hetzler, "Causality: Ruin Time and Ruins,"

Leonardo (vol. 21, no.1, 1988): 51.

⁷ Michael Roth, Claire Lyons, and Charles Merewether, *Irresistible Decay: Ruins Reclaimed* (Los Angeles: The Getty Research Institute for the History of Art and the Humanities, 1997): 15.

⁸ Roth, 25.

⁹ Randall Mason. "Fixing Historic Preservation: A Constructive Critique of 'significance'." *Places* (v.16, no.1): 70.

¹⁰ Alberto Ferlenga. "Separazioni/Separations." Casabella
(v.67, December 03/January 04): 175.

¹¹ Alberto Pérez-Gómez, "Spaces In-between," *Present and Futures: Architecture in Cities.* Ed. Ignasi de Solà-Morales (Barcelona: Actar, 1996): 278.

¹² John Ruskin, "The Lamp of Memory," *The Genius of John Ruskin*. Ed. John D. Rosenberg (Boston: Routledge & Kegan Paul, 1963): 134-135.

¹³ For a discussion of modern architects' attitudes toward weathering, see Mohsen Mostafavi and David Leatherbarrow, *On Weathering: The Life of Buildings in Time* (Cambridge: MIT Press, 1993): 86.

¹⁴ Verlyn Klinkenborg, "Contemporary Art in a Factory Setting," *MASS MoCA: From Mill to Museum* (North Adams: MASS MoCA Publications: 2000): 20.

¹⁵ Sandy Isenstadt, "The Interpretative Imperative: Architecture and the Perfectibility of Memory," *Harvard Design Magazine* (Fall 1997): 58.

¹⁶ Isenstadt, 62.

¹⁷ Randolph Langenbach, "Amoskeag Millyard remembered," *Historic Preservation* (July-Sept. 1975, v.27, n.3): 28.

¹⁸ Bruce Watson, "A Unique Home for Cutting Edge Art," Smithsonian Magazine (March 2000): 119.

¹⁹ Camilo José Vergara, *American Ruins* (New York: Monacelli Press, 1999): 99. For another discussion of the ways that people have reacted to enormous economic and social dislocations wrought by late twentieth century deindustrialization, see Lizabeth Cohen's essay, "What kind of world have we lost? Workers' lives and deindustrialization in the museum." *American Quarterly* (v.41, n.4, December): 670-681.

²⁰ Watson, 117.

²¹ MASS MoCA was constructed for approximately \$70 per square foot, while the Guggenheim Bilbao cost \$300 per square foot, the NYC Museum of Modern Art addition is projected at \$600, and the Getty Museum required \$1,000 per square foot (in 1999 dollars). For additional cost information, see Charles Giuliano, "MASS MoCA: The Phoenix Rises in North Adams," *Art New England* (vol.21, no.1, December 1999 / January 2000): 82.

²² The interview with Robert Rauschenberg was published by Craig Wilson, "MASS MoCA: Not your run-of-the-mill museum," USA Today (May 21,1999): 8D.

FIGURES

All photographs courtesy of Michael Petrus and Phoebe Crisman unless noted otherwise.

Figures 1 and 3: MASS MoCA Archive

Figure 7: Nicholas Whitman

BIBLIOGRAPHY

Bender, Thomas. 1975. *Toward an Urban Vision: Ideas and Institutions in Nineteenth Century America.* Baltimore: The Johns Hopkins University Press.

Cohen, Lizabeth. 1989. "What kind of world have we lost? Workers' lives and deindustrialization in the museum." *American Quarterly* (v.41, n.4, December): 670-681.

Colquhoun, Alan. 1982. "Thoughts on Riegl." *Oppositions* 25: 78-83.

Desrochers, Brigette. 2000. "Ruins Revisited: Modern Conceptions of Heritage. *The Journal of Architecture* (v.5, spring): 35-45.

Dublin, Thomas. 1992. Lowell: The Story of An Industrial City: a guide to Lowell National Historical Park and Lowell Heritage State Park. Washington, DC: U.S. Dept. of the Interior.

Ferlenga, Alberto. 2004. "Separazioni/Separations." Casabella (v.67): 13-19 & 175-176.

Forster, Kurt W. 1982. "Monument / Memory and the Mortality of Architecture." *Oppositions 25:* 2-19.

Giuliano, Charles. 2000. "MASS MoCA: The Phoenix Rises in North Adams." Art New England (v.21, n.1, December/January): 82.

Hareven, Tamara K. and Randolph Langenbach. 1995. *Amoskeag: life and work in an American factory-city.* Hanover, NH: University Press of New England.

Heon, John. 2000. "History and Change at the Marshall Street Complex." *MASS MoCA: From Mill to Museum.* Jennifer Trainer, ed. North Adams: MASS MoCA Publications.

Hetzler, Florence M. 1988. "Causality: Ruin Time and Ruins." *Leonardo* (v.21, n.1): 51-55.

Isenstadt, Sandy. 1997. "The Interpretative Imperative: Architecture and the Perfectibility of Memory." *Harvard Design Magazine* (Fall 1997): 58-62.

Kimball, Roger. 2001. "The museum as fun house." The New Criterion (v.19, n.6, February): 5-11.

Klinkenborg, Verlyn. 2000. "Contemporary Art in a Factory Setting." MASS MoCA: From Mill to Museum. Jennifer Trainer, ed. North Adams: MASS MoCA Publications.

Langenbach, Randolph. 1975. "Amoskeag Millyard remembered." *Historic Preservation* (v.27, n.3): 26-29.

Lowenthal, David. 1985. The Past is a Foreign Country. Cambridge: Cambridge University Press.

Lynch, Kevin. 1972. *What Time is This Place?* Cambridge: MIT Press.

Mason, Randall. 200_. "Fixing Historic Preservation: A Constructive Critique of 'significance'." *Places* (v.16, n.1): 64-71.

Mostafavi, Mohsen, and David Leatherbarrow. 1993. *On Weathering: The Life of Buildings in Time.* Cambridge: MIT Press.

Pérez-Gómez, Alberto. 1996. "Spaces In-between." *Present and Futures: Architecture in Cities*. Ignasi de Solà-Morales, ed. Barcelona: Actar: 274-279.

Riegl, Alois. 1982. "The Modern Cult of Monuments: Its Character and Its Origin." *Oppositions 25.* (originally published in 1903): 21-51.

Roth, Michael, Claire Lyons, and Charles Merewether. 1997. *Irresistible Decay: Ruins Reclaimed.* Los Angeles: The Getty Research Institute for the History of Art and the Humanities. Ruskin, John. 1963. "The Lamp of Memory." The Genius of John Ruskin. John D. Rosenberg & Paul Kegan. Boston: Routledge.

Vergara, Camilo José. 1999. American Ruins. New York: Monacelli Press.

Watson, Bruce. 2000. "A Unique Home for Cutting Edge Art." Smithsonian Magazine (March): 114-125.

Wilson, Craig. May 21,1999. "MASS MoCA: Not your run-of-the-mill museum." USA Today: 8D.