# A Pattern Assemblage: Art, Craft, and Conservation

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# A PATTERN ASSEMBLAGE: ART, CRAFT, AND CONSERVATION

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Figure 1. *Northland Pattern Wall: City of Past and Future Craft* at the Northland Workforce Training Center in Buffalo, New York, 2018. (Photograph by David Schalliol)

The *Northland Pattern Wall: City of Past and Future Craft* is an assemblage artwork created by artist and architecture professor Dennis Maher with coinstructors and students of the Society for the Advancement of Construction-Related Arts (SACRA) program. SACRA is an arts-based vocational training program providing construction skills training to individuals in need. It is based at Assembly House 150, an artist-led experiential learning center in Buffalo, New York. This article employs qualitative methods inspired by the hermeneutic spiral to examine the *Northland Pattern Wall*, SACRA, and Assembly House 150. This article highlights takeaways for heritage conservation, as well as allied professions, about the relevance of building trades and creative practices that help to shape and conserve the built environment. The story behind the Northland Pattern Wall is used as an opportunity to reflect on the potential to build stronger alliances between professionals, tradespersons, and artists in designing creatively out of the patterns of the past to build a more sustainable and equitable future city.

With an expression of intensity that later broke into a grin, Eden Marek, a graduate research assistant from Cornell University's Department of City and Regional Planning carefully commanded a drone into the air. She was documenting *Northland Pattern Wall: City of Past and Future Craft*, a large 40'×17' assemblage artwork. Drone footage glides along a vertical city topography constructed out of salvaged wood, tools, and other found objects such as door components, eave brackets, and bits of inlaid flooring. The scale of this imagined city is varied and its details intricate. There are whole city blocks and street systems; a belt and pulley system appears as either a rail corridor or beltline highway for a miniature metropolis. The "craft" in the title of the artwork refers to the skilled labor that continually builds and rebuilds the city by hand; the assemblage artwork places in the foreground the labor, tools, materials, skills, and creativity employed in the construction of place and care of the built environment (figs. 1, 2). The artwork is crafted out of salvaged materials from the real city where it is located—Buffalo, New York. Reclaimed pattern molds line the top of the artwork; these were used in the making of tools and machines for sheet-metal work.

The *Northland Pattern Wall* was designed and constructed by students and instructors in the Society for the Advancement of Construction-Related Arts (SACRA), a vocational program of Assembly House 150 (Assembly House). Assembly House's mission is to "create inspiring, wondrous environments for all to experience the art of building." As an artist-led experiential learning center, Assembly House aims to "transform lives and the built environment through art, design and construction."[1] Dennis Maher, a Buffalo-based artist and clinical assistant professor at the University at Buffalo, founded the nonprofit and the educational program.

The lifeworks of Maher and the nonprofit organization that he built span a nested hierarchy of city patterns. Maher teaches his students attention to the detailed patterns within the interior and on the exteriors of buildings, from the joinery in furniture to the architectural patterns represented in porches. The city patterns central to his classes and to his artwork extend outward to a bird's-eye view of building types, street patterns, and urban forms. In Maher's solo artistic works, he playfully sculpts with these materials, and his reverence for the elements and repeating patterns that comprise cities is apparent in the *Northland Pattern Wall*.

The *Northland Pattern Wall* is prominently located in the central lobby of the Northland Workforce Training Center (NWTC), a 100,000-square-foot state-of-the-art facility that opened in 2018 to create educational and employment opportunities in advanced manufacturing and the clean energy sector.[2] This training center is housed in an adaptively reused 1910 Niagara Machine & Tool Works factory building, originally designed by Green & Wicks and adapted by the preservation architecture firm Barbara A. Campagna/Architecture + Planning, PLLCT in collaboration with the prime architecture firm Watts Architecture & Engineering. The funds to establish the NWTC were carved out of Governor Andrew Cuomo's "Buffalo Billion," described as "an historic $1 billion investment . . . to create thousands of jobs and spur billions [of dollars] in new investment and economic activity."[3] This training center is phase 1 of the "Northland Corridor Redevelopment Project," which is meant to reverse, or at least begin to partially remedy, Buffalo's decades-old trends of population loss and poverty exacerbated by racial and economic segregation in the metropolitan area. Given both macroeconomic forces affecting the city's manufacturing base and trends of suburbanization of development and opportunity, Buffalo has struggled with unemployment in its center and especially in its central eastside neighborhoods.

The focus of this article is not the *Northland Pattern Wall*'s connection to the NWTC or the award-winning adaptive reuse project, recently featured in photographer Michael Arnaud's *Cool Is Everywhere: New and Adaptive Design across America*.[4] Rather, this paper considers how the assemblage artwork is connected to an altogether different workforce training center, the nonprofit Assembly House and the SACRA program.

Under Assembly House's partially deconstructed vault of an adaptively reused church, students of the SACRA program learn and practice construction-related skills, including fine woodworking and carpentry (fig. 3). SACRA is a vocational training program that provides construction skills training, work readiness, and job placement support to individuals in need. Students struggling with unemployment or underemployment are paid to participate in the job training program. The SACRA curriculum exposes students to a variety of essential skills including precision measurement, shop safety, and tool usage, and it offers workshops in basic framing, cabinetmaking, plaster repair, and stained glass. Students are trained with the creative practices evident in the artwork that fills Assembly House and practice their fledgling skills in Buffalo's neighborhoods. The aim of this outward-facing work is to excite an awareness of building trades' relationship to city building that can inform students' career opportunities as well as give them a sense of agency in their communities.

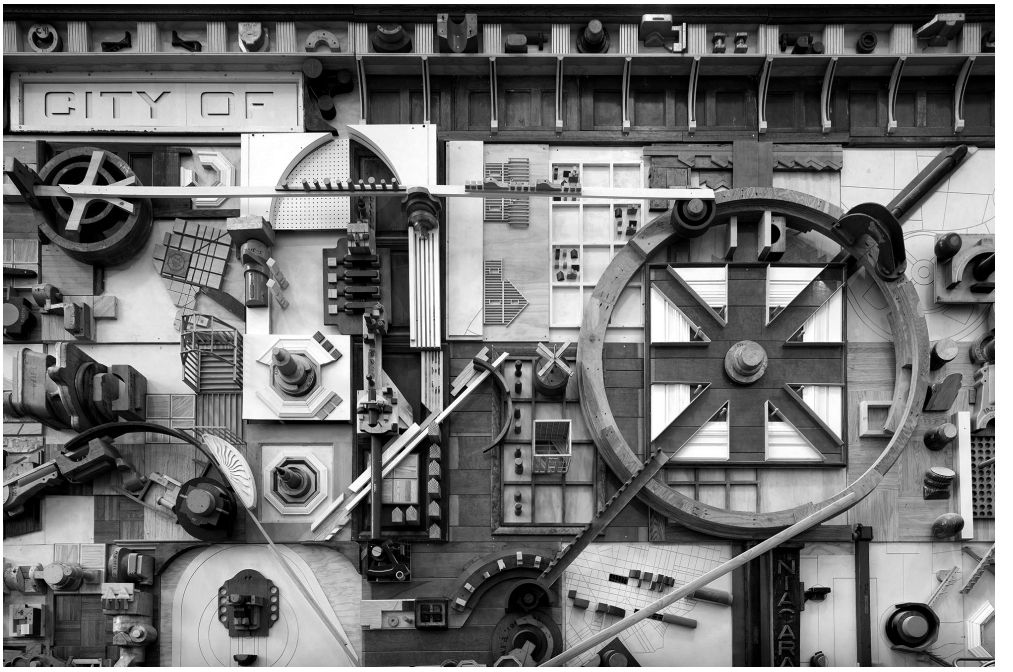


Figure 2. Still from drone footage showing detail from *Northland Pattern Wall*, October 26, 2018. (Photograph by Eden Marek.)

Students in the SACRA program constructed pieces of the *Northland Pattern Wall* through skill-building exercises led by Dennis Maher, Quincy Koczka, and other SACRA instructors. According to Maher, these the exercises, which mostly related to woodworking, emphasized detail work, and complemented a broader set of carpentry skills students practiced in assisting the nonprofit People United for Sustainable Housing Buffalo (PUSH Buffalo) on a community-based project in the West Side neighborhood.[5] Lessons represented in the *Northland Pattern Wall* include the following:

1. Communication of basic math skills, including use of fractions, scale and reading a tape measure. These exercises used repetition to build competency in measuring, drawing, and cutting with precision.
2. Translations from 2D to 3D. Maps of the city were interpreted to build 3D forms of buildings.
3. Basic joinery, including miter cuts, box joints, finger joints, and spline joints.
4. Principles of stick-frame construction through model building.
5. Basic millwork, including identification and copying of molding profiles.
6. Creation of inlay floor through the use of pattern.
7. Use of chisels for carving and shaping.
8. Principles of design composition.[6]

Figure 3. Cornell University students visiting Assembly House 150, March 8, 2019. (Photograph by Bill Staffeld / Cornell AAP)

Maher also describes how the SACRA program included presentations "related to the development of Buffalo over time," which then led to additional class projects that addressed "urban form and transformation."[7] Thus the *Northland Pattern Wall* represents an imaginary city, produced quite tangibly from the skills students have learned in the SACRA program. The artwork might also be interpreted as a road map to students' futures. Cast in another light, it expresses how attention to the patterns of the past and present can be useful in designing city futures. Assembly House, where the *Northland Pattern Wall* was created, is itself a kind of bricolage model city where its inhabitants experiment with the craft of repairing and constructing the city patterns and urban fabric beyond Assembly House's sanctuary.

In this article, I draw inspiration from the idea of assemblage art, which is the collage or creative assembly of found objects and discarded materials transformed into a larger composition. Mirroring the extensive view of city patterns as represented in Maher's artwork and initiatives at Assembly House, I discuss their relevance to heritage conservation. Next, I describe the methods that underpin this article. In the resulting analysis, I examine the artistic and pedagogical practices employed at Assembly House. Analyses of the *Northland Pattern Wall* and other activities at Assembly House are used to reflect on the ways in which building trades, artistic practices, and the profession of heritage conservation, as well as architecture and planning, can be combined in creative and timely ways to construct a future city that is more vibrant and equitable.


Figure 4. Assembly House 150, the home of SACRA, March 8, 2019.
(Photograph by Bill Staffeld / Cornell AAP)

## City Patterns

*Northland Pattern Wall*, SACRA, and Assembly House emerged out of the particular conditions of Buffalo, a legacy city experiencing many urban challenges. Like in many US cities, both federal and local government policies and private sector investment patterns have led to a toxic mix of racial and economic segregation, of sustained job losses and poverty following postindustrial restructuring. Decades of redlining, suburbanization, and public initiatives related to urban renewal and demolition that have only deepened racial inequality. Buffalo has the oldest building stock of any major metropolitan area in the United States, which is indicative of the rich architectural assets that it seeks to preserve, as well as population loss and lack of investment.[8] Buffalo is also a city that aspires to be sustainable and equitable, has a strong network of grassroots organizations, and is enlivened through public arts programs and creative place-making initiatives.[9]

The *Northland Pattern Wall* is useful in considering the "big picture" of relations between profession and craft, heritage conservation and community development, and artistic practice and design. The story of its creation is specific and rooted to the context of Buffalo, but it also offers a valuable opportunity to think about an ever-expanding set of city patterns relevant beyond this legacy city.

In the United States, historic preservation programs regularly move from concern for even the smallest elements of buildings to wider city patterns—from sanctioning the appropriate methods of repairing a window to regulating the aesthetics of infill construction in

historic districts. Skilled craftspeople are required to conserve what remains or design and build anew with appropriate patterns and building methods. Conservation efforts ideally engage and draw from traditional crafts, which are necessary to extend the life and aesthetic value of older buildings. Thus, heritage conservation is involved with the application of deep knowledge about the history, meaning, maintenance, and regulation of patterns in the built environment.[10]

Kevin Lynch once proposed the idea of "temporal collage," as an antidote to what he perceived as the shortcomings of historic preservation—namely, that it is a profession so focused on the restoration of landmarks that it has done little to inspire the public's imagination. Lynch suggests that designers should work like artists on the city as a form of bricolage to create a sense of time and place in urban spaces through the artful conservation of fragments from the past.[11] In this way, designers and planners would enrich the city with the juxtaposition of conserved architectural and environmental patterns.[12]

James Marston Fitch describes historic preservation as "curatorial management of the built world," and in his choice of words there is suggested an analogue to the methods of conserving and displaying artwork in a museum.[13] In this paradigm, heritage conservation manages urban change through the selection of landmarks for designation, appropriate treatment, and interpretation of histories embodied in historic buildings and sites. Many professionals in heritage conservation see themselves as stewards of the select landmarks that have achieved "historical significance" and exhibit "historic integrity." However, this view of the scope of professional practice is changing, and as it does, the understanding of the city patterns relevant to heritage conservation is expanding.

The United Nations Educational, Scientific, and Cultural Organization's Historic Urban Landscape approach moves away from rigid definitions of "historic" and "nonhistoric" and seeks to broaden the mission of conservation to include whole urban districts.[14] Thus, heritage professionals are to concern themselves with a wider swath of existing building stock in urban centers. Similarly, the National Trust for Historic Preservation has been pressing for city policies that promote building reuse well beyond designated historic landmarks or traditional urban fabric.[15] This is evident in The Atlas of ReUrbanism, which explores the association between social indicators and reuse of existing building stock.[16] This represents a conceptual leap from preservationists' lists and maps of historically significant landmarks and districts to an atlas of spatial patterns of urban development and morphology, and their relationship to social indicators across whole metropolitan regions. Preservationist scholars are now expanding this sphere of concern further, with urgent calls to address climate change and to find methods of economic and social recovery as a global pandemic deepens inequities along racial and economic fracture lines.[17]

Circular city initiatives represent yet another articulation of city patterns with implications for heritage. Primarily in European and Chinese cities, these initiatives involve interventions based on the concept of the "circular economy," which is defined as the transformation of linear systems of production and consumption to require "the minimum overall natural resource extraction and environmental impact by extending the use of materials and reducing the consumption and waste of materials and energy."[18] In regard

to the built environment, this could include prolonging the life span of buildings through repair and other preservation methods, salvaging and reusing material from deconstruction of buildings in new construction, and retrofitting buildings to reduce energy conservation, among other tactics that minimize waste.[19]

As heritage conservation attempts to respond to these ever-widening set of "city patterns"—patterns of greenhouse gas emissions, resource extraction and waste, job loss, racial segregation—deeper alliances are required. It is at Assembly House and as expressed in the *Northland Pattern Wall* that I observed a palette of creative experiments that draw attention to how the professions of care for the built environment might be reassembled to serve the changing needs of the built environment and of communities. I found expression of a set of city patterns and ideas for new alliances that could be transformative that are based on attention to constructing the "city of past and future craft."[20]

## An Engaged and Rhizomatic Methodology

The following observations about the relevance of the *Northland Pattern Wall* and the SACRA program to wider city patterns are informed by a series of collaborations with Maher and Assembly House. This research project was supported through grants and the opportunity to participate in the Faculty Fellowship for Engaged Scholarship mentorship program offered by the Cornell University Office of Engagement Initiatives. These institutional supports were aimed at linking university-based teaching and research with action in communities. With this support, between 2017 and 2020, I was able to begin building a *rhizomatic* set of research collaborations with nonprofit community leaders, educators, and artists. "Rhizomatic" metaphorically references the botanical rhizome, which is a subterranean stem that forms a fast-growing horizontal structure of lateral shoots and adventitious roots that covers ground quickly.

Initial research collaborations with Maher and Assembly House came out of the Equity Preservation Workshop, which I taught in 2017. This community-engaged course brought together graduate and undergraduate students with national and local nonprofit partners including the National Trust for Historic Preservation, the Preservation Rightsizing Network, and Preservation Buffalo Niagara to examine the state of preservation and building reuse in Buffalo. Some of the findings that came out of the Equity Preservation Workshop highlighted the SACRA program, which students identified as an important contributor to a whole spectrum of preservation and building reuse activities in Buffalo.[21] In 2018, I was invited to critique student work at Assembly House, and I began to gather additional observations and documentation about the SACRA program. In 2019, students in my Just Places? Community Preservation, Art, and Equity course were tasked with recommending methods to assess the social impacts of the SACRA program. The following year, students in Art, Preservation, and the Just City again explored creative place making and artistic practices related to social justice and building reuse, including the work of Maher and Assembly House.

In addition to these engaged teaching and research methods, I interviewed Maher about the *Northland Pattern Wall* and studied the production and elements of the artwork, paying particular attention to its design and construction. I was intrigued by assemblage

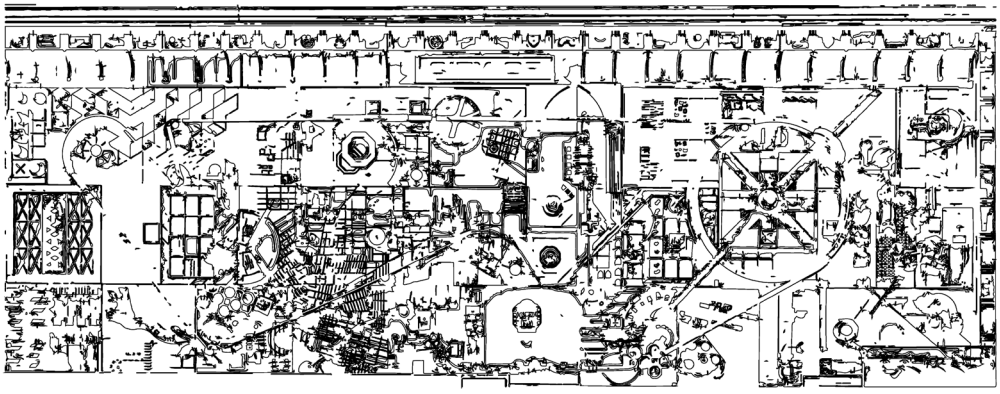

Figure 5. Outline of *Northland Pattern Wall*, as built. (Created by Dennis Maher, 2019)

as an art form and also Maher's writings about "assembled city fragments."[22] In consideration of the location of Assembly House in an adaptively reused church, I was inspired to think about applying hermeneutic methods, especially given its history in the interpretation of religious texts. I was interested in how these methods had been incorporated into philosophy and the interpretation of architecture and art.[23] Although I do not claim a deep application of hermeneutic methods, I did systematically grapple with understanding the elements and patterns built into the *Northland Pattern Wall*. I drew from these patterns as if text in the sense that I searched for both practical and also symbolic or metaphorical meanings that might be drawn from them and then applied these insights and hypotheses to a broader exploration of heritage conservation, creative place-making, and notions of care and stewardship of the built environment. In that sense, I used the patterns embedded in the *Northland Pattern Wall* to move, as if in a hermeneutic circle, from elements of the assemblage artwork outward to the idea of cities and their building stocks as assemblages comprised of found objects and broader patterns. I aspired to draw connections to lessons about the care of the material and social aspects of communities and relations between allied design, planning, and conservation professions, building trades, and art.

## Assembling Stories from the *Northland Pattern Wall*

Maher never intended the *Northland Pattern Wall* to be a text that could be read with fixed meanings. While the assemblage artwork is composed of panels that could theoretically allow for reading from left to right, like the panels of a graphic novel, this kind of sequential and literal reading of the artwork seems too reductive. In an interview, Maher expressed discomfort with the idea of delimiting specific meanings for any individual panel or element of the artwork. As assemblage art (see figs. 5, 6), the pattern wall is meant to be taken as a whole; however, its details can be examined in relation to that whole and to the story of its creation.

The impetus to create the pattern wall came out of a request from the Buffalo Urban Development Corporation, which was interested in the construction of a decorative, acoustic

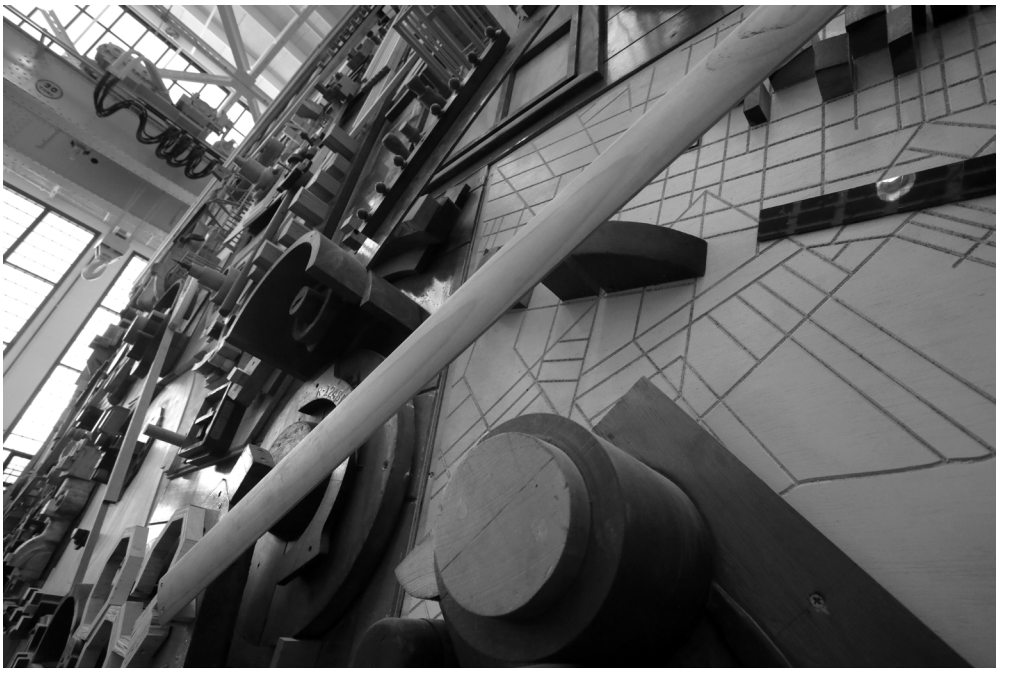

Figure 6. Photo of detail from the *Northland Pattern Wall*, March 8, 2019. (Photograph by Bill Staffeld / Cornell AAP)

wall for the Northland Workforce Training Center. The idea was to make use of recovered pattern molds, which had been manufactured by the Niagara Machine & Tool Works factory at the very site of the training center. The artwork was to be designed as an insulating element to prevent noise from drifting from one area of the training center to another. In the assemblage artwork, the pattern molds were placed along the top, appearing as metopes of a carefully ordered entablature. These and other classical elements in the *Northland Pattern Wall* reference the interiors and exteriors of the Victorian and neoclassical buildings that are integral to Buffalo's urban fabric.

In preparing SACRA students at Assembly House to make the assemblage artwork, Maher provided them with historical context, describing the history and geography of Buffalo's development over time. Then a two-dimensional drawing of the city was used to extrapolate the map into three dimensions in wood. He explains:

> Basically there were a variety of pieces that were cut, and we were piecing together parts of the city of Buffalo. There was a lot of attention paid to alignment of streets and the legibility of certain key infrastructure nodes. Simultaneously, there were other individuals in the program who were working on [other] discrete objects. . . . There were a couple of people who were working on inlay patterns and molding components.[24]

One student was fascinated by agrarian buildings and incorporated those into the artwork. Another began to create a piece representing surveyor and city planner Joseph

Figure 7. *Northland Pattern Wall* under construction at Assembly House, 2018. (Photograph by Dennis Maher)

Ellicott's design for Buffalo and Niagara Square. Various city elements and vignettes began to appear. These elements were placed into four-by-four-foot panels that were laid out on the floor at Assembly House (fig. 7). The panels were constantly being swapped around. Maher elaborates on how the addition of the pattern molds added further complexity and connection to place:

> So I remember someone saying, "Oh, these patterns, this group is kind of like the grain silos. And you know, if you put these together like this, it kind of looks like the history museum. And wait a minute . . . that's kind of like the electrical tower, you know," and it's not like they're placed anywhere in the overall [artwork] that actually makes that obvious or apparent. But the evocation was there in the minds of the people who were putting it together. Which I thought was really interesting, because those were kind of slippage[s] between these machine part molds and these components of the city.[25]

The commissioning agency and architects for the Northland Workforce Training Center provided feedback to SACRA students, including their interest in including the Belt Line Railroad corridor that wraps around Buffalo and runs near the NWTC. He describes this feature in this way:

> a band, among cogs within some kind of mechanistic, gear-oriented system . . . wrapping around and coming back around and moving this way . . . almost like the circle surrounding Niagara Square. . . . I thought there was this interesting resonance between, the evocation of the Belt Line . . . and a kind of more mechanistic, instrumental, component to things that maybe seemed to animate the map.[26]

Thus the artwork materialized into an enormous map set into conceptual motion, conjuring the inner workings of a machine superimposed on an imaginary city produced from the students' personal connections to real places. The artwork speaks to patterns in place, time, and industry in Buffalo specifically but also in cities more generally. What fueled this machine was imagination as well as the construction skills taught in the SACRA program. Students' skills were sharpened through dialogue between the production of the pattern wall's elements using techniques of woodworking and carpentry and the geographic context of Buffalo. The assemblage artwork drew from two hemispheres of a collective mind—one acting to apply precision craft skills and the other ignited with imagination.

### The Crafting of Pedagogy

Maher describes his desire to "instill a gentle awareness and appreciation" for learning how things are made and "to help people get excited and inspired by that and wanting to participate in making things well."[27] The *Northland Pattern Wall* expresses the outcomes of those goals, as well as the technical skills required in their execution. However, the pattern wall is not simply an outcome and end; it represents a pedagogical process. This process is illuminated in Maher's recounting of how the pattern molds were placed in the artwork. To incorporate them, students had to take the pattern molds apart. This requirement to deconstruct is integral to Maher's methods of teaching construction and design skills. In this process of disassembly, Maher encouraged students to marvel at the kind of skill, technical knowledge, and artistry that it took to create these molds, as they were produced by hand for precision equipment. He describes this process of appreciating the molds in relation to teaching craft and in relation to making art:

> So, when we look at things like joinery, details, dovetails, and various inlays . . . it starts to be craft. When one thinks about how one piece meets another piece and what it takes to connect several pieces together, . . . one has to kind of be careful and deliberate and intentional and respect the material and respect the tools . . . that's the artfulness, right? It's like that affinity for the materials, for the tools, for the bringing together of different pieces, for composing those pieces in relationship to other pieces, for thinking about the connections of how something is joined to something else.[28]

Maher's pedagogical methods in directing the SACRA program can be traced to the influence of Tim Rollins and the Kids of Survival. In the 1980s, Rollins was recruited as a young educator to a public school in the Bronx, where he developed a collaborative strategy with his

Figure 8. Interior of Assembly House, October 26, 2018. (Photograph by Eden Marek)

students to use art to advance their skills in reading and writing.[29] Maher's use of the arts in teaching SACRA students the craft of woodworking and carpentry has parallels. At Assembly House, instructors try out various means of creative engagement to advance foundational skills, such as measurement and math, that are essential for students to succeed. Maher's artistic practices have also been compared to that of Sir John Soane (1753–1837), an accomplished British architect who collected antiquities and arranged them into astonishing compositions of assembled objects and employed intricate miniatures and models in his pedagogical methods.[30] These connections between artistic pedagogy and practical profession can be witnessed in the ever-evolving interior spaces of Assembly House. Maher describes Assembly House as a kind of city-within-a-building; it is filled with scale models of buildings, components of buildings, and artwork produced by students in the SACRA program learning construction skills alongside university students who are learning architectural skills. Coinstructors and students continually change and produce this landscape through their attention to the processes, practicalities, and artistry of making (fig. 8).

## Making Craft's Labor Visible

With pattern molds, hand tools, and building materials assembled and affixed to the pattern wall, the processes of craft are foregrounded. The act of *making* the *Northland Pattern Wall* had students of the SACRA program literally placing the tools produced and used by

craftspeople of the past into an artwork that would hang by generations of students learning advanced manufacturing skills at the Northland Workforce Training Center into the future.

Maher recounted how a man who produced some of the pattern molds visited the artwork: "He was talking about the experience of making them, but also recognizing the benefit of this kind of current, reformulation of the pieces." The *Northland Pattern Wall* is a demonstration of how to evoke people's memories of their own participation in that history of making. The assemblage artwork honors the generations who have had a hand in producing the built environment; it makes this labor visible in city memory. Maher has used other means of elevating an awareness and appreciation for the building trades. A 2013 exhibition catalog describes a series of assemblage artworks Maher coproduced:

> Maher invited eight trades—people representing distinct professions—plumbing, painting, electrical, masonry, windows/doors, roofing, flooring, and weatherization—to take a private tour of his residence and talk with him about the making of his own house and their work in the construction and renovation industries. He then asked each tradesperson to construct a small house model using only the materials of his or her respective occupation. Each of the house models was then incorporated by Maher into a larger construction that consists of distinct but connected room-like spaces. Entitled House of Collective Repair, the construction uses many familiar elements of houses, but reimagines them in new combinations and orientations.[31]

The *Northland Pattern Wall* repeats many of these artistic methods. The artwork puts making and makers first, engaging trainees in the production of this artwork and using modular coproduction methods that are later assembled into a whole. Both the *Northland Pattern Wall* and *House of Collective Repair* enact collectively constructed meanings about building trades. Maher's work seems to challenge with rhetorical questions. These installations ask not only "Who builds the city?" but also "What happens if we revalue and place front and center the tradespeople, craftspeople, and builders who continuously build and rebuild the city?" and "If we engage with the craft of city building in more intentional and creative ways, building skills and well-being along the way, what might we gain collectively?" The profession of heritage conservation and its associated trades might consider similar artistic and interpretive methods that reveal its own history in the remaking of places through maintenance, repair, and rehabilitation.

In this way, *Northland Pattern Wall* can spur conversations about the relationship between the trades, craft, and professions involved in the making and conservation of the city. Although Maher maintains that his university courses focused on Victorian pattern books are wholly separate explorations from SACRA or the *Northland Pattern Wall*, I see them as integrally related. Maher uses Victorian pattern books to talk with architecture students about the relationships between the development of the profession of architecture, building trades, and craft, and their roles in developing the patterns of urban life that remain integral to a sense of place in the contemporary city.[32] These are referenced in

Figure 9. Red chair at Fargo House, Buffalo, New York, November 2, 2019. (Photograph by Hannah Wilson)

the architectural patterns of the pattern wall, such as the wooden pattern molds that form classical elements in the composition and that were originally used to make metalworking tools and machines. Some of these tools were used to manufacture cornices, among many other applications.

### The Repurposed and Circular City

In *Socially Engaged Art and the Neoliberal City*, Olsen writes that "the imaginative labour required to transform a chair into a throne is significantly less demanding than the physical and cognitive labour of the carpenter who carves a throne out of oak."[33] On the same page she explains, "Socially engaged art may expand our view of materiality and explicitly link our material environment with the production of urban imaginaries."[34] Both of these passages invoke ideas integral to the *Northland Pattern Wall*, as the artwork moves from the smallest element of the material past, such as a building component or the tool used to create it, to the most expansive, collective view or "urban imaginary" of the city. The socially engaged practices Maher applies venerate craft in the making of objects ranging from furniture to whole cities, and his creative practices elevate the value of reuse in making them. The creative reuse of an object or material is an act of reverence for the embodied human effort that it took to produce it. The found objects in the *Northland Pattern Wall* and in Maher's other artworks are not simply "found" and placed (fig. 9). There is an artistic process to the creation of assemblages that pay tribute to the whole spectrum of production, rediscovery, repurposing, and revisioning of the material world.

Maher seeks out salvaged items that are of little economic value and then creatively revalorizes these items in artwork that financially supports the education of students in the SACRA program. Repurposed materials are also didactic tools to engage participants—

Figure 10. New Normal Porch, Buffalo, New York. Dennis Maher and SACRA, 2019. (Photograph by David Schalliol)

whether students, coinstructors, or members of the public—with ideas of continual reuse of the resources that are on hand in the built environment. The work of SACRA makes it easier to imagine how job training and education could be aligned with efforts to (re)build a sustainable, circular economy. One can glimpse the possibility of economic recovery efforts from the devastating effects of the pandemic through public and nonprofit programs that involve the recovery and reuse of building materials in addition to adaptive reuse in situ as integral strategies to reinvestment in communities, which could also divert waste from landfills and conserve embodied energy. Thus creative practices that elevate material reuse and the value of craft have the potential to demonstrate the pragmatic virtues of circularity, which have only recently been promoted as integral to the sustainable design and planning of cities.[35]

### Where Creativity and Equity Preservation Meet

SACRA's accomplishments are many, and some have been trumpeted in Buffalo's local press. Perhaps most poignant about these stories are the vignettes that show how social equity and creativity artfully coincide. As previously mentioned, SACRA students practice construction skills while contributing to Buffalo neighborhoods and the social good that goes beyond their individual skill building and growth. One example is a porch (fig. 10) constructed by students in the SACRA program for PUSH Buffalo. That nonprofit organization has led a dizzying array of community development efforts, from weatherization of affordable housing, to the transformation of a vacant school building into senior housing, to the purchase

of land to maintain long-term affordability, to the creation of rain gardens made with plants cultivated in a PUSH Buffalo greenhouse. In the "New Normal Porch" project, SACRA students used salvaged building materials to design and construct a new outdoor space for a residential building owned by PUSH Buffalo. This architectural feature was aimed not only at adding value to the home but to enhancing the social life of the neighborhood.

Not every preservationist would see this as a wholly successful example of conservation. New vinyl windows were installed in the building, a preference of PUSH Buffalo, and the porch draws from but does not replicate the past. These elements place the project outside of the accepted methods of heritage conservation. The issue of vinyl windows could someday be taken up by SACRA alumni, who might restore old windows with newly acquired skills or start a new business that produces wood windows that meet energy efficiency goals. The "New Normal Porch" project also highlights the imperative for heritage conservation to develop a larger array of strategies for serving the needs of low-income communities and forming stronger alliances with community development organizations.

Heritage conservation is experienced in finding creative solutions to conserving the landmarks of the past; however, its role as a profession that benefits low-income communities is limited. This is an area of potential new growth and commitment for the profession. While historic landmarks are likely to remain important to heritage conservation, these officially designated historic resources are not truly representative of diverse histories, and they are often disconnected from the needs of low-income and vulnerable communities. University-based professional programs in preservation, planning, and architecture could learn much from Assembly House and the SACRA program in terms of prioritizing the individuals and neighborhoods most in need and developing creative methods of engaging with them.

## Conclusions

This article explores the creative practices at Assembly House and in the SACRA program, as represented in the assemblage artwork the *Northland Pattern Wall: City of Past and Future Craft*. In the article, I discuss the idea of patterns and assemblages as they relate to the conservation of cities and the profession, trades, and artistic practices that can comprise it. I recount the rhizomatic and engaged methods through which preservation and city planning students learned about Assembly House, the SACRA program, and the other creative practices of its leadership. I analyze the *Northland Pattern Wall* as an opportunity to reflect on pedagogical methods and the future of craft and the professions as they relate to ideas for conserving, remembering, and evolving the future city.

Just as the health-care system requires more than simply doctors, but also nurses and technicians, care and treatment of the built environment requires a network of actors beyond the heritage professional. Ideally, the cadre of actors working in concert with the professional should be a visible part of a larger goal of stewardship and care. And yet building trades, facilities maintenance, the manufacture of building materials and components, among many other actions and actors that play an important role in the care and maintenance of cities are invisible and largely considered subordinate to the professional practices of architecture,

planning, and heritage conservation. Thus, heritage conservation remains largely siloed and sometimes disconnected from the larger network of labor, skilled craft, and professions that also shape the built environment. Additionally, heritage conservation remains a pawn in relation to the corporate entities and investors who direct massive amounts of construction, maintenance, and demolition of cities on national and global scales.

The profession of heritage conservation may need to retool to address larger city patterns. These larger patterns of concern include tending to "city fragments," the windows, porches, whole buildings, and landscapes that make a city feel alive and vital, instilling a sense of place and historical consciousness. However, it could also mean helping to address the larger patterns of segregation and regional inequities that call for new job opportunities and redressing institutional segregation through public policy and private investment. Additionally, it means addressing patterns of construction, demolition, and maintenance in communities that lead to either a more or a less equitable and sustainable city.

Reflecting on the *Northland Pattern Wall*, Assembly House, and SACRA afford the opportunity to consider how the professions might be reassembled in the interest of the future city, building on the patterns of the past and these experiments in the present. The pattern wall speaks to new configurations and relationships between allied and even distant disciplines; they might work together in new ways to conserve cities and preserve community in the face of contemporary economic, environmental, and social crises. One can make out in the patterns of the imagined city a set of professions that are more deeply committed to finding new treatments and collaborations that can rise to the challenge of caring for whole communities and prioritizing those communities most in need. In this way, working creatively to respond to and shape the patterns of the past might not actually replicate them but deconstruct and break from their molds. A new assemblage might be created that takes in a more inclusive whole.

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## References

1. Dennis Maher, email to author, July 20, 2020; Assembly House 150, "Who We Are," July 10, 2020, https://www.assemblyhouse150.org/who-we-are.
2. See Northland Workforce Training Center, 2020, https://northlandwtc.org.
3. New York State, "About Buffalo Billion," accessed July 3, 2020, https://buffalobillion.ny.gov/about-buffalo-billion.
4. Michel Arnaud, *Cool Is Everywhere: New and Adaptive Design across America*. (New York: Abrams, 2020).

5. Dennis Maher, e-mail communication, September 19, 2020.
6. Ibid.
7. Ibid.
8. The National Trust for Historic Preservation found that Buffalo has the oldest building stock on average among the major metropolitan areas they analyzed. Preservation Green Lab, *The Atlas of ReUrbanism: Buildings and Blocks in American Cities* (Seattle, WA: Preservation Green Lab, November 2016). Additional sources, such as the US Census Bureau, indicate that it also has the oldest *housing* stock.
9. See, for example, Partnership for the Public Good, "Arts/Culture," n.d., accessed July 10, 2020, https://ppgbuffalo.org/issues/arts-culture/; Albright-Knox Art Gallery, "Innovation Lab," n.d., https://www.albrightknox.org/community/ak-innovation-lab; Albright-Knox Art Gallery, "Public Art," n.d., https://www.albrightknox.org/community/ak-public-art. For more on art-based informal preservation in Buffalo, see Daniel Campo, "Historic Preservation in an Economic Void: Reviving Buffalo's Concrete Atlantis," *Journal of Planning History* 15, no. 4 (November 1, 2016): 314–45.
10. In this article, I use the terms "heritage conservation" and "historic preservation" synonymously.
11. Kevin Lynch, *What Time Is This Place?* (Cambridge, MA: MIT Press, 1972).
12. One might also take this idea of urban conservation and the city as assembly down a philosophical or sociological path, drawing from Deleuze and Guattari's ideas of assemblage or constellations of ideas. Whether drawing from the seminal works of contemporary architecture and planning, or from the more abstract theories of philosophy and social science, patterns and the past are integral to proposals for either designing cities or understanding society. See, for example, Solmaz Yadollahi, "Prospects of Applying Assemblage Thinking for Further Methodological Developments in Urban Conservation Planning," *Historic Environment: Policy & Practice* 8, no. 4 (October 2, 2017): 355–71, https://doi.org/10.1080/17567505.2017.1399977.
13. James Marston Fitch, *Historic Preservation: Curatorial Management of the Built World* (Charlottesville: University Press of Virginia, 1990).
14. Francesco Bandarin, Ron van Oers, and Francesco Bandarin, eds., *Reconnecting the City: The Historic Urban Landscape Approach and the Future of Urban Heritage* (Chichester, UK: John Wiley & Sons, 2015).
15. National Trust for Historic Preservation, Preservation Leadership Forum, *Untapped Potential: Strategies for Revitalization and Reuse* (summary report and series of reports specific to multiple cities), https://forum.savingplaces.org/viewdocument/untapped-potential-strategies-for?_ga=2.202468373.564127705.1577992360-589692689.1577992360, reports posted on the page dated 2017.
16. The online interface presents research on the association between urban vitality indicators, such as the number of minority- and women-owned local businesses and the characteristics of the urban fabric (measured as an index that combines median age of buildings, their age diversity, and the size of buildings and parcels) in cities across the United States. National Trust for Historic Preservation, The Atlas of ReUrbanism, 2020, https://forum.savingplaces.org/act/research-policy-lab/atlas.
17. See Erica Avrami, ed., *Preservation and Social Inclusion, Issues in Preservation Policy 2* (New York: Columbia Books on Architecture and the City, 2020); and her forthcoming book, Erica Avrami, ed., *Toward Equity and Sustainability, Issues in Preservation Policy 3* (New York: Columbia Books on Architecture and the City, 2021).
18. G. Foster and H. Kreinin, "A Review of Environmental Impact Indicators of Cultural Heritage Buildings: A Circular Economy Perspective," *Environmental Research Letters* 15, no. 4, April 15, 2020): 2, https://doi.org/10.1088/1748-9326/ab751e.
19. J. Marin and B. De Meulder, "Interpreting Circularity. Circular City Representations Concealing Transition Drivers," *Sustainability*, 10, no. 5, 2018: 1–24, https://doi.org/10.3390/su10051310; Paulo Ferrão and John Fernandez, *Sustainable Urban Metabolism* (Cambridge, MA: MIT Press, 2013); Mohit Arora et al., "Buildings and the Circular Economy: Estimating Urban Mining, Recovery and Reuse Potential of Building Components," *Resources, Conservation and Recycling* 154 (March 1, 2020): 104581, https://doi.org/10.1016/j.resconrec.2019.104581; Luigi Fusco Girard and Francesca Nocca, "Moving towards the Circular Economy / City Model: Which Tools for Operationalizing This Model?," *Sustainability* 11, no. 22, 2019: 1–48, doi 10.3390/su11226253. See also Metabolism of Cities, n.d., accessed January 2, 2020, https://metabolismofcities.org/.

20. References the subtitle of the assemblage artwork: *Northland Pattern Wall: City of Past and Future Craft*.
21. Jennifer Minner, Zachary Small, Ashley Pryce, Meyer Claire, and Olivia White, eds., *Equity Preservation Workshop Final Report* (Ithaca, NY: Cornell University, 2017), https://www.researchgate.net/publication/317581819_Equity_Preservation_Workshop_Final_Report.
22. Dennis Maher, "Assembled City Fragments," accessed July 10, 2020, https://www.assembledcityfragments.com/.
23. The "hermeneutic" method has its origins in the close reading and interpretation of literary texts. Hundreds of years after hermeneutic methods were used by the Greeks, the term was applied in philosophical debates about ontology and epistemology. When one does not know the meaning of a text, hermeneutics offers a systematic method of parsing meaning through close readings that generate a hypothesis and then reexamining that hypothesis in relation to constituent parts. The process of continual focus and reexamination of constituent elements to comprehend the whole is termed the "hermeneutic spiral." See, for example, L. M. O'Toole, *The Hermeneutic Spiral and Interpretation in Literature and the Visual Arts*, Routledge Studies in Multimodality (New York: Routledge, Taylor & Francis Group, 2018); Giuseppe Grossi and Daniela Pianezzi, "Smart Cities: Utopia or Neoliberal Ideology?," *Cities* 69 (September 2017): 79–85; Nigel Walter, "From Values to Narrative: A New Foundation for the Conservation of Historic Buildings," *International Journal of Heritage Studies* 20, no. 6 (August 18, 2014): 634–50.
24. Dennis Maher, interview by Jennifer Minner, July 28, 2019, Assembly House, Buffalo, NY.
25. Ibid.
26. Ibid
27. Ibid.
28. Ibid.
29. See, for example, the documentary *Kids of Survival* (1996), Danielle Geller and Dayna Goldfine, dirs.
30. Danielle Willkens, "Clouds and Cataracts: Optical Experiments at Sir John Soane's Museum," *Technology|Architecture + Design* 3, no. 2 (July 3, 2019): 211–20, https://doi.org/10.1080/24751448.2019.1640539.
31. A. Hersher (2013), Maher: House of Collective Repair, 3, https://static1.squarespace.com/static/51aa8d3de4b08b27fbbffc58/t/51b229e1e4b0feb8df683dbd/1370630625953/Maher_House+of+Collective+Repair_catalog.pdf.
32. Mary N. Woods, *From Craft to Profession: The Practice of Architecture in Nineteenth-Century America* (Berkeley: University of California Press, 1999).
33. Cecilie Sachs Olsen, *Socially Engaged Art and the Neoliberal City*, 1st ed. (New York: Routledge, 2019), https://doi.org/10.4324/9780429439162.
34. Ibid.
35. See, for example, Girard and Nocca, "Moving towards the Circular Economy / City Model," 6253; Walter R. Stahel, *The Circular Economy: A User's Guide* (London: Routledge, Taylor & Francis, 2019); Tina M. McCarthy and Eleni Evdokia Glekas, "Deconstructing Heritage: Enabling a Dynamic Materials Practice," *Journal of Cultural Heritage Management and Sustainable Development* 10, no. 1 (December 9, 2019): 16–28, https://doi.org/10.1108/JCHMSD-06-2019-0084; Erik Faleski, "The Potential of Deconstruction in Buffalo, New York," 2007, https://digitalcommons.ilr.cornell.edu/buffalocommons/225/.