

# Partner – Translate – Impact: A Method for Public Interest Design in Architectural Education

Global financial systems, increased human mobility, and climate change are contemporary forces creating historic disparities between rich and poor, increased rural-to-urban migration, and frequent natural disasters. These conditions demand that architecture rethink its relationship with natural and built environments and the people who occupy them.

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Public Interest Design shifts architectural agency away from what Awan et al. describe as a closed professional loop based on exclusive knowledge used in service to an exclusive group of clients<sup>1</sup> and toward engagement with a broad range of partners and issues. This shift requires a change in the relationship between architecture and the public from one of hierarchy to one of partnership. Design in this framework is not about delivering professional knowledge or products to a passive public but rather about working with them to create change and agency.

If architecture is to become an engaged shaper of global space in partnership with a broad constituency, architectural education must acknowledge Dana Cuff's statement in *Architecture: The Story of Practice* that "the production of places is a social process" and "design itself is a social process."<sup>2</sup> As Cuff discusses, architectural schools are "where the bulk of professional ideology is developed" and are therefore the places where values can be shifted away from emphasis on individual "personality, talent, creativity, and convictions" in favor of "relations of authority, economics, power, group decision-making."<sup>3</sup> Doing so "could point the way for the profession's next evolutionary phase," calling "attention from the (academic and professional) institutions to the social art of design."<sup>4</sup>

Shifting design pedagogy away from individualized object production toward engagement of contemporary issues and "wicked problems" that lack clear definition, shift over time, and increase in complexity<sup>5</sup> does not mean abandoning studio experimentation and testing methods. Instead, it requires that we reframe these to focus less on building form and performance as outcomes in themselves and instead include them in broader social, economic, and ecological contexts that define issues and problems while seeking solutions. Architectural applications in education and practice can thus move away from buildings alone and toward socio-spatial infrastructures and strategies, redefining what Teddy Cruz calls "the operational processes of architecture itself as well as the role of architects in the context of the shifting boundaries of the contemporary city."<sup>6</sup>

The Bridge Studio at Iowa State University introduces students to this kind of architectural work through a Partner–Translate–Impact method. In the Partner phase, students develop trust and build reciprocal exchange of knowledge with community partners by listening and interpreting values and needs. Students then define projects that engage these values and needs, Translating them into design proposals that are reviewed and revised through on-going Partnership. Impact occurs throughout the process as the reciprocal design process gives voice and value to the community and expands students’ understanding of their roles. While some projects have Impact through actual construction, other types of Impact include policy decisions, frameworks for on-going discussion, and most importantly building relationships between community groups who go on to realize social and spatial changes.

Bryan Bell refers to this broader scope of practice as “pre-form” and “post-form” design, extending the creation of built form in time to include pre-design analysis and engagement with communities, the development of designed form in partnership with local people rather than separate from them, and continued analysis of project success on multiple levels. While typical designers “come late to a project and leave early” and their primary role consists of creating form in response to a problem defined by a client, Bell’s “design activists” and “community designers” seek situations in which they can “help to define problems and locate opportunities where design has the potential to change the lives of individual people and communities,” thus expanding architecture’s role to include identifying and articulating problems as well as solving them.<sup>7</sup>

Bell’s method creates a continuum of engagement with not only the built environment but also the people and systems that occupy and shape it, providing an informed context in which students can participate with impact. The continued engagement of the Bridge Studio with the Time Check neighborhood in Cedar Rapids, Iowa since the city was devastated by floods in 2008 has created opportunities for design students to develop their understanding of Public Interest Design methods during an academic semester while engaging in a broader effort to assist in creating a new future for this place and its residents.

## **PARTNER**

The Bridge Studio is an interdisciplinary studio open to upper level undergraduate and graduate students in architecture, landscape architecture, interior design, and planning. Most students have experience with traditional studio methods including testing organizational and formal options, material evaluation, and spatial organization but few have worked with “real” communities and people.

The Bridge Studio presents community outreach projects not as opportunities for students to “gift” their professional abilities to communities in need but rather as opportunities for communities and design students to learn from each other, creating projects that have greater impact than either party would have on its own. This is critical to the reframing of design practice through Public Interest Design, shifting the relationship between community and architect from one of hierarchy to one of equity and reciprocity.

To do this, students in the Bridge Studio talk to local people and observe use patterns in order to understand relationships between what sociologist Robert Gutman describes as material and nonmaterial cultures. Material culture is physical, touchable, measurable, visible; our houses, cars, clothing are elements of material culture. Nonmaterial culture impacts us but lacks physical properties; it



1

consists of “values, beliefs, norms, traditions” and defines how material culture is used and valued.<sup>8</sup> Our students typically learn to work with material components but this also implies interaction with the nonmaterial culture that defines how things we design are used, valued, and understood. While they may have heard this idea in history and environmental behavior courses, they frequently have not directly applied it in studio. Partnering with a community and translating ideas developed through this partnership into design helps students experience how nonmaterial culture informs the production of material form and how architects can proactively contribute to creating a built environment that includes and values all of its inhabitants.

This process also contributes to empowerment of our community partners. Roberta Feldman in *Good Deeds Good Design* describes this facilitating of effective, informed decision-making by “people who have traditionally had minimal say” as a key component of effective Public Interest Design and the educational efforts that embrace it.<sup>9</sup>

Since 2011 the Bridge Studio has been working directly with groups in the Time Check neighborhood, a working class area that lost fifty percent of its building fabric and its population since the 2008 flood. Our work gives voice to those affected by disaster, helping them feel a renewed sense of ownership after events beyond their control, facilitating not only spatial production but also opportunities for equity during recovery.

#### **PARTNER: VISIONING TIME CHECK**

In 2012, the Bridge Studio worked with the Northwest Neighborhood Association to develop an overall vision for the Time Check neighborhood, reframing losses and challenges as opportunities. Students interviewed residents, met with community organizations, and observed spatial practices in the neighborhood (Figure 1).

During interviews, many residents repeatedly mentioned a desire for “houses with white picket fences” along Ellis Boulevard, the central street in the neighborhood. Students were confused because none of the yards had fences at all, let alone white pickets. They also heard multiple references to the A&W Drive-In Restaurant as a highlight of neighborhood life during its most vibrant “cruising” days in the 1960s and 1970s. This puzzled students since this behavior stopped long before the flood damaged the building.

It eventually became clear that residents wanted to reestablish a sense of neighborhood connectivity that they associated with the past, often the childhood or early adulthood of residents now in their fifties and sixties. This was a critical learning moment for the students; while they were associating the specific material culture being described with spatial and material aspects of design, the residents were using material culture to describe the nonmaterial culture that they wanted their neighborhood to have.

Through this process, students learned to not always focus on design questions like, “What would you like to have located on this site?” or “What do you want this street to look like?” but instead focus on what people imagined the life of the place to be like by asking questions like, “How do you define your neighborhood?” and “What is your favorite neighborhood memory?” The students also learned that their professional vocabularies were exclusive and while others may use similar words they do not necessarily mean the same thing. Most importantly, students learned that local residents had valuable knowledge about not

Figure 1: Students discussing neighborhood patterns with Time Check residents. Photo by author.

only the history but also the spatial inhabitation of the Time Check neighborhood that, as outside professionals, they would never have been able to access on their own. As one of the students said in a post-project reflection, “As designers, we often forget that we all see things differently and we all have something to learn from one another.”

### **PARTNER: POP-UP! TIME CHECK**

In spring 2013 the Bridge Studio created a temporary community event called Pop-Up! Time Check to re-inhabit a key neighborhood location for one day and demonstrate its revitalization. The intersection of K Avenue and Ellis Boulevard, the A&W Restaurant located at this intersection, and the importance of children and young people came up repeatedly in discussions. This gave students a sense of how physical infrastructure of streets and buildings related to neighborhood social infrastructure and confirmed the area’s history as a multi-generational working class neighborhood as well as a more recent shift toward a younger, more diverse population.

To develop and realize their pop-up projects, students identified and partnered with local organizations. Sarah Bruketta and Han Kwon wanted to explore how art and children could renew residents’ sense of ownership for their changed neighborhood. They partnered with the art teacher at Harrison Elementary School to involve local children in the project. Students drew on paper templates in response to the question, “What do you like about your neighborhood?” and the drawings were folded into “lanterns” to hang on a wooden trellis.

The project was successful in ways that were unexpected by the students. While the students were concerned about the design and construction of the trellis, the multiple ways in which it engaged the children and adults of the community was the true impact (Figure 2). Working with Harrison Elementary helped local children feel that they were important to their neighborhood and this in turn engaged parents and family members. The children involved reminded their parents every day how important it was to go and see their art on the day of the event. At the installation, children pointed out their works to each other and to their parents, encouraging siblings and parents to create their own lanterns while posing proudly for photos. For the design students, their usual sense of professional detachment was completely erased. As one of the students wrote in a post-event reflection:

This reaction to our Pop Up was the best we could have ever hoped for because the focus was not so much about us as it was about the children. The project made the young kids feel proud of themselves and, in turn, gave their parents something to be proud of as well – by coming out on Saturday, they became a community again.

### **TRANSLATE**

The power of architecture lies in its ability to transform ideas developed through partnership into material reality. In his essay “Infrastructural Urbanism,” Stan Allen positions architecture as involved not only with semiotics and meaning but as a discipline that engages these areas through its “powerful instrumentality – its capacity not only to critique, but also to actually transform reality” by working “simultaneously with abstract images and material realities, in complex interplay. It is a *material* practice.”<sup>10</sup> The materiality of architecture is both a traditional and progressive component of Public Interest Design through which the architect

acts as an agent “who effects change through the *empowerment* of others, allowing them to engage in their spatial environments in ways previously unknown or unavailable to them, opening up new freedoms and potentials as a result of reconfigured social space,” giving them agency in their own contexts.<sup>11</sup>



2

Partnership between architect and community sets up the architect’s most important role in addressing contemporary issues within community. While community members can articulate their nonmaterial values as well as material values that currently represent them, synthesizing conflicting objectives and visualizing a range of potential tactics for implementation is what architects are trained to do. Understanding the relationship between material and nonmaterial culture is thus critical for students and practitioners of Public Interest Design because it not only aids designers in understanding the values of their community partners but also in interpreting these values in ways that go beyond literal reproduction of existing material culture. The architect acts not simply as an advocate for local people, using her pencil to draw their wishes, but as a partner with important abilities in visualizing a range of new possibilities and synthesizing conflicting goals and values. As Michel de Certeau puts it, “(T)o plan a city is both to *think the very plurality* of the real and to make that way of thinking the plural *effective*; it is to know how to articulate it and be able to do it.”<sup>12</sup>

While public interest designers continue to use measurement and geometry to create drawings, they no longer equate this with neutrality but instead acknowledge the specific social constructions of these tools, allowing “every line on an architectural drawing (to) be sensed as the anticipation of a future social relationship, and not merely as a harbinger of aesthetics or as an instruction to a contractor.”<sup>13</sup> The architect becomes a moving player, shuttling between the existing power structure on the one hand and the marginal and disempowered on the other, creating new relationships out of existing oppositions.

#### TRANSLATE: VISIONING TIME CHECK

The partnering process in the 2012 Bridge Studio identified key priorities that students used to create design visions for the neighborhood. These included:

1. Provision of new housing to serve many kinds of potential residents

Figure 2: Partner – Translate – Impact (l to r) of the Pop-Up! project by Sarah Bruketta and Han Kwon.

and particularly encourage young individuals and families to move to the neighborhood.

2. Reconstruction of key commercial nodes, particularly the one at K and Ellis, with businesses serving the local neighborhood.

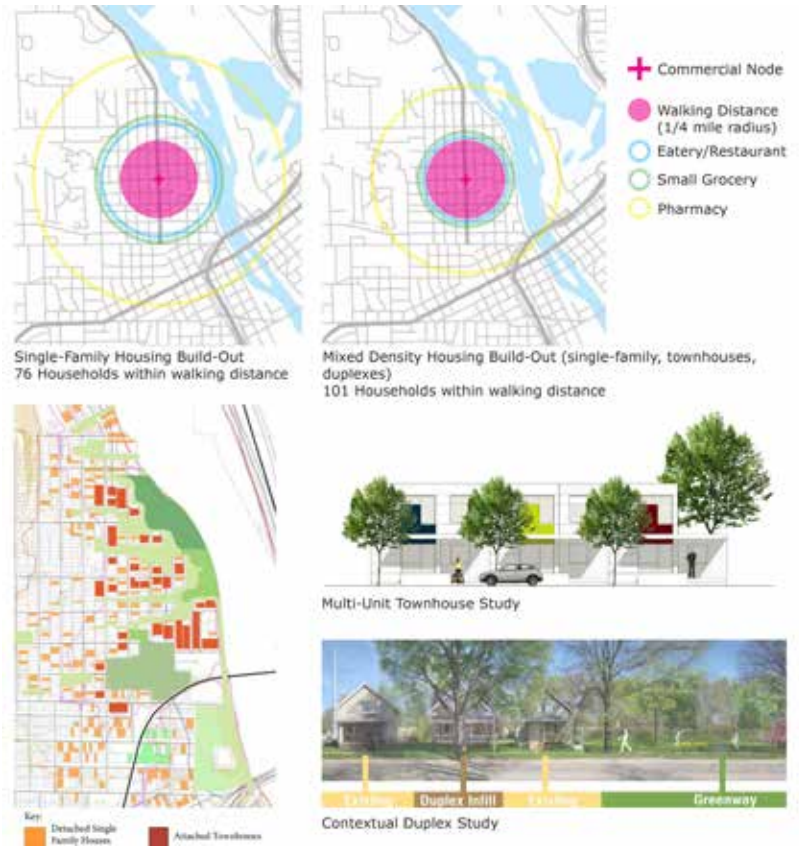
Residents expressed the desire to rebuild the neighborhood as it had been before, with single-family homes built up to the edge of the proposed flood protection levee and businesses rebuilt in dense nodes with fewer parking lots directly at the street. They also wanted to attract different kinds of people and acknowledged that single-family homes might not be appropriate for everyone. Interviews revealed a range of desired businesses and services including grocery, pharmacy, coffee shops, and restaurants in an area now only served by gas station convenience stores. Residents also expressed a desire for a walkable neighborhood where people would meet in chance encounters and streets would be vibrant with multiple types of transportation.

Rather than dividing into groups working separately on housing and commercial development, four students studied these as interconnected issues in order to create an integrated proposal supporting residents' nonmaterial values. They first studied the densities necessary to support different types of businesses, revealing that if housing was built back in its pre-flood density, businesses of the types desired could only be supported by automobile travel. At a higher density with a greater mix of housing types, however, most of the business types could be supported by walking and bicycling, achieving the desires of the neighborhood for diversity, commercial activity, and vibrant walkable street life. The students then studied not only how multi-modal streets and high-density commercial nodes could be created but also how housing of mixed densities could be integrated into the neighborhood while maintaining the historic character so important to the residents (Figure 3).

#### **TRANSLATE: ELLIS BOULEVARD URBAN FARM**

The Ellis Boulevard Urban Farm similarly demonstrates how designers can work with local organizations and governments to create projects that not only serve their intended functions but also create a sense of place and community. This project, developed in partnership with local non-profit Matthew 25, transformed two acres of empty land in the Time Check neighborhood into an urban farm that provides healthy food, education, and a new community center.

Working with the City of Cedar Rapids, the project created a new zoning amendment allowing agricultural uses within city boundaries. While Matthew 25 was concerned with the productivity of the farm and its ability to become a neighborhood center, the City was concerned about its maintenance and visual attractiveness. Local residents initially expressed mixed support for the project with some wanting only houses to occupy the now-vacant lots and others supporting new, forward-looking uses. The students had to reconcile this mixed array of project goals, create conceptual clarity and synthesizing information types as they would in a building design project. Working with Iowa Valley Resource Conservation and Development, they used graduated planting intensities and two empty garages to create a concentric diagram for the farm (Figure 4). High maintenance crops like lettuce that would go through multiple plantings and harvests during a growing season were planted closer to the community center where the garages were recycled into storage



3

and office space around an open-air pavilion for education programs and vegetable processing. An adjacent playground used fanciful structures such as trellises for beans and peas and terraces for lettuces and greens so that children could always be closely involved with the planting and harvesting of these crops, connecting play with healthy food.

The students also developed a modular set of components to create benches, lighting, and signage that were functional and educational and could be located as needed throughout the farm (Figure 4). Throughout this project, the students had to juggle sometimes-competing requirements from the City, Matthew 25, and local residents. This helped them see how their abilities as designers helped

Figure 3: Top: Studies of housing density impact on business types. Study by Megan Schneider. Bottom: Neighborhood map locating range of housing density, images of housing models. Drawings by Erin Broadrick, Adam Ninnemann, and Megan Schneider.

Figure 4: Urban Farm planting intensity diagram, pavilion, and composite planter/bench. Drawings by Jamie Cunningham and Michael Thole.

4



reconcile these interests into a cohesive whole, revealing a key role for architects in working between social groups within a project.

## **IMPACT**

Bridge Studio impacts have been many and varied. Most immediately, by working over time at multiple scales in the same community, the studio has not only gained place-based knowledge but also built relationships with multiple partners creating a new future for Time Check. These relationships inform our design work and empower local people to participate in shaping their neighborhood. Following the 2008 flood, residents were uncertain about the future and were unable to consider alternatives other than complete devastation or a return to the past. Today, they are actively involved in shaping a new future in partnership with local organizations, city government, and design professionals in addition to on-going involvement with the Bridge Studio. Students in multiple semesters of the Bridge Studio have gone on to careers in traditional practice, non-profit organizations, design-build firms, and graduate study, taking with them an understanding of how architecture can be relevant in the twenty-first century.

A number of Bridge Studio projects have directly shaped the future of Time Check. At the insistence of the Northwest Neighborhood Association, components of Visioning Time Check are being incorporated into the Ellis Boulevard Commercial Corridor proposal developed by the Metropolitan Planning Organization for the City of Cedar Rapids. This proposal creates incentives for commercial development along Ellis Boulevard and sets zoning and design standards for commercial and residential properties. It also includes signage, bike lanes and sustainable storm water management based on students' proposals. This kind of impact brings policy impacts into the scope of architectural practice, including architectural ideas about human interaction and material construction in ways that are often missing from planning policies.

The Ellis Boulevard Urban Farm has been in operation for two growing seasons (Figure 5) and student-designed components such as the food forest and the play area have been designed and built alongside crop-producing fields. Plans for pavilion construction are underway and neighborhood events take place almost weekly on the grounds of the farm. In addition, one of the students involved in the studio went on to work with Matthew 25 and the local elementary school to design an educational garden at Harrison Elementary School. Built in spring 2013, this garden has served as a center for school district educational programs on healthy, local foods.

Above all, the farm has become a source of life in a once-silent area. Volunteer groups are busy on-site nearly all year and weekly sales and Community Sponsored Agriculture share pick-ups constitute small local events. At the opening in May 2012 a young woman told us that her grandmother's house had stood on one of the farm's lots. She was sure that her grandmother, now deceased, would have been overjoyed to see the life returned to her home.

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This project has several key impacts for professional practice. The project development led to a change in zoning policy to allow permitted agricultural uses within city limits, opening up the potential for urban agriculture on an expanded and infrastructural scale. The city, in partnership with Matthew 25 and Iowa State,





Figure 5: Volunteers at the Ellis Boulevard Urban Farm. Photos by Matthew 25.

## ENDNOTES

1. Nishat Awan, Tatjana Schneider, Jeremy Till, eds., *Spatial Agency: Other Ways of Doing Architecture* (London: Routledge, 2011), 43.
2. Dana Cuff, *Architecture: The Story of Practice* (Cambridge, MA: The MIT Press, 1991), 248.
3. Ibid., 11, 45.
4. Thomas Fisher, *Ethics for Architects: 50 Dilemmas of Professional Practice* (New York: Princeton Architectural Press, 2010), 21.
5. For a discussion of “wicked problems” see Horst W.J. Rittel and Melvin M. Webber, “Dilemmas in a General Theory of Planning,” *Policy Sciences* 4:1973, 155-169.
6. Teddy Cruz, “Border Postcards: Chronicles from the Edge,” James Stirling Memorial Lecture, Canadian Centre for Architecture (Montreal, Canada), October 28, 2004, <http://www.cca.qc.ca/en/education-events/259-teddy-cruz-border-postcards-chronicles-from-the-edge>, accessed 10/26/13.
7. Bryan Bell, “Pre-Form and Post-Form Design Activism” in *Architecture from the Outside In: Selected Essays by Robert Gutman*, Robert Gutman, Dana Cuff, John Wriedt, eds., (New York: Princeton Architectural Press, 2010), 76-77.
8. Robert Gutman, “A Sociologist Looks at Housing” reprinted in Gutman, Cuff, and Wriedt, 215.
9. Roberta Feldman, “Activist Practice: The Risky Business of Democratic Design” in *Good Deeds, Good Design: Community Service through Architecture*, Bryan Bell, ed. (New York: Princeton Architectural Press, 2003), 110.
10. Stan Allen, “Infrastructural Urbanism” in *Points + Lines: Diagrams and Projects for the City* (New York: Princeton Architectural Press, 1999), 50-51.
11. Awan et. al., 32.
12. Michel de Certeau, *The Practice of Everyday Life* (Berkeley, CA: University of California Press, 1984), 94.
13. Awan et al., 30.
14. Janet S. Eyster, *Where’s the Learning in Service Learning?* (San Francisco: Jossey-Bass Publishing, 1999), 163.

is now studying the implications of larger scale urban agriculture. This work relies on design thinking to synthesize environmental, spatial, and social issues and connect systems that have typically been relegated to separate organizations.

A second Pop-Up! Time Check event is being scheduled for spring 2014 and will feature local businesses interested in occupying commercial spaces on Ellis Boulevard. The students’ temporary work is translating into proposals for businesses in food, the arts, and retail as a way of attracting developers to build permanent spaces for these activities. Many of the components of the student projects have been “adopted” by local organizations, including the art trellis that now supports beans and peas in the urban farm. Harrison Elementary School is also developing a mural based on students’ ideas about what they love about Time Check. The alternative physical education director for Cedar Rapids is working with ideas from another project team to develop modular play components that children can use to build spatial intelligence while also being physically active. The design work of Pop-Up! Time Check is thus not only the components created by the students but more importantly a social infrastructure for future transformations that the community can adapt as needed.

The most immediate impact of the Bridge Studio projects takes place during the semester itself. Refining designs with community partners solidifies partnerships and enhances design, creating usable projects that reflect nonmaterial culture. This input-design loop is similar to studio desk crits but because it occurs outside the exclusive language and master-apprentice relationship of the studio, students and community members experience relationships based on equality and partnership rather than hierarchy and exclusive knowledge. Developing project programs through engaged interaction with multiple user groups is critical to this process and can be used for a wide range of project types in education and practice including housing, health care, and museum design.

In addition to providing tools to students to shift practice toward an engaged model, the Bridge Studio expands students’ understanding of what kinds of projects constitute architectural practice. Project definition, policy development, and adaptable framework design are just some of the types of work that incorporate architectural skills and thinking beyond specific building design.

Valuing the complexity of reality and the practices of ordinary people who create this complexity is a cornerstone of Public Interest Design as these practices offer wisdom and insight into contemporary issues. Students involved in these projects demonstrate an unusual level of commitment as one student stated in a reflection, “This matters, it is about the real world we live in.” They thus “incorporate community involvement into their sense of self” and in turn have the potential to impact both their personal understanding of architecture as well as architectural practice as a whole.<sup>14</sup> incorporate architectural skills and thinking beyond specific building design.