PRIORITIZING ACCOUNTABILITY IN ARCHITECTURAL EDUCATION: TWO CASE STUDIES FROM DESIGNBUILDBLUFF

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ABSTRACT

The common perception of the architecture industry remains dominated by the ideology of "architect as auteur." It is reinforced by ubiquitous, striking visual representations that most often define global practice. Memorialized in glossy photographs and renderings, the heavyweights of our built environment stand out as monuments, as if defying time. While much of the professional and academic institutions of architecture continue the longstanding pursuit of the monument, the tradition of Public Interest Design (PID) celebrates a messier process, namely the embrace of a mosaic. PID elevates not objects in space but people occupying space, the relationships they create, and the way they create them. Public interest stands above the monumental space producing architecture of temporality, event, contingency, chance, and dynamic movement.

DesignBuildBLUFF, the University of Utah's graduate Design/Build program, seems to have planted itself squarely in between what we call the mosaic and the monument. It is housed in the School of Architecture, offering the opportunity for first-year Masters in Architecture students to spend a year working with a client to design and build a project. After the first semester designing and developing construction documents, the class moves more than 300 miles south to Bluff, Utah where they spend a second semester building the project as a team. The program was founded in 2000 by Hank Louis as an elective for students to get hands-on experience building their own designs in a place where building codes are much less restrictive (Navajo Nation). Formally integrated into the university's academic structure in 2013, the typical outcome of each program year is a newly built home for a family in need, designed and constructed by the students themselves.

The Little Water House (2013) highlights the concept of aging in place. Lone Tree (2017) in partnership with Dennehotso Chapter has become the first recognized sweat equity project in Navajo Nation. Cedar Hall (2016) and Fire Mesa (2018) both serve as community spaces in the town of Bluff, Utah. Together, these projects synthesize a new path forward in the practice of Public Interest Design/Build. As four recent graduates of the program, we reflect on our experiences in two completed projects, consider the conflicting goals and limitations that drove our work, and offer strategies toward a better practice of Public Interest Design/Build.

PUBLIC INTEREST DESIGN/BUILD

DesignBuildBLUFF is a self-styled Public Interest Design/Build (PIDB) program, integrating the pedagogical approaches of both Design/Build and PID. Students in a Design/Build program are responsible for designing and constructing a project. The process of building gives designers a visceral, tactile understanding of their creation. It provides an opportunity to iterate and adapt their designs as problems arise, and leads to a more informed designer. With the increasing digitization of the design process, there is knowledge to be gained from dealing with the physical constraints of the construction process. Design/Build forces students to be accountable to physical reality, and to work within the constraints of project completion on time and within budget.

Many contemporary academic Design/Build programs have a service component—projects built for non-profits or for disadvantaged clients who would otherwise be unable to afford design services. However, not all of these projects should be considered PID endeavors. We believe that adherence to the five tenets of PID, as

defined by Abendroth and Bell, are appropriate criteria for designating work as PID:

1. Advocate with those who have a limited voice in public life.

2. Build structures for inclusion that engage stakeholders and allow communities to make decisions.

3. Promote social equality through discourse that reflects a range of values and social identities.

4. Generate ideas that grow from place and build local capacity.

5. Design to help conserve resources and minimize waste.[1]

Whereas Design/Build forces designers to be accountable to the physical constraints of reality, PID asks designers to be accountable to the social context within which they work. It shifts the designer's role from that of a lone author to that of a facilitator. By adhering to these tenets, a designer will avoid imposing his or her will onto a community. Designers must grapple with their social positions in relation to their clients and other community stakeholders, assess the position of stakeholders in relation to each other, and act in a way that is equitable in the face of structural power imbalances. It is entirely possible for an altruistic, service-based Design/Build project to presuppose a built solution to a community's problem without doing any community engagement work. It is also entirely possible that a successful PID project might conclude that the solution to a community problem is not a built solution, but rather a social or programmatic solution.

So much of architectural education is focused on the production of monuments, singular breathtaking works. The monument is most frequently celebrated by stylized documentation, removed from time, captured in a triumphant moment. And while the monument has its rightful place, we believe the PID process trains architects to be mosaic makers, to see their projects as nodes within an existing sociocultural and physical mesh, and that it is this greater context that can elevate even the most humble projects into great works.

The beauty and power of a successful mosaic is activated through use, and is best observed temporally.

> When the maker's (or fixer's) activity is immediately situated within a community of use, it can be enlivened by this kind of direct perception. Then the social character of his work isn't separate from its internal or "engineering" standards; the work is improved through relationships with others. It may even be the case that what those standards are, what perfection consists of, is something that comes to light only through these iterated exchanges with others who use the product, as well as other craftsmen in the same trade. Through work that had this social character, some shared conception of the good is lit up, and becomes concrete.[2]

We believe that integrating Design/Build into a PID process is uniquely powerful. As Crawford elucidates, a maker's work is enhanced by iterative exchange with a community of users. Design/Build work benefits from embracing its social context, and simultaneously, PID work is enhanced by being grounded in the tangible. The relationships developed in a community-engaged design process are deepened through the physical process of making, as our case studies demonstrate. DesignBuildBLUFF (DBB) is doing the difficult work of training mosaic makers, and while it has achieved a good deal of success, it faces challenges in fully embracing a PID process.

CASE STUDIES

Unlike most academic Design/Build programs, DBB's positioning between Design/Build and PID pedagogies affords students the unique opportunity to create and improve spaces in relationship with a community of users. The program's most recent projects (Lone Tree and Fire Mesa) illustrate that while Design/Build pedagogy is both complicated and improved by a more holistic PID framework, the strict practicalities of an academic setting can restrict students' ability to engage meaningfully in those wider frameworks.

Figure 1: Lone Tree, completed by DesignBuildBLUFF students in the Spring of 2017.
Courtesy: DesignBuildBLUFF.

Lone Tree

In 2017, a grassroots tribal organization called Dennehotso Sweat Equity Project (DSEP) solicited DBB to design and build a prototype house that would address the dire need for culturally appropriate, affordable housing within the Dennehotso Chapter of Navajo Nation. The project was introduced as an opportunity to create an impact through capacity building and sweat equity, with the potential for the resulting house to become a prototype for future affordable housing development in the region (Figure 1). If the design was suitable and within the given budget, the DSEP project director hoped to build at least eight more houses the following year.

The inner workings of DSEP remained fairly concealed from students. Little was known about the political climate, level of community buy-in, source of funding, or long-term viability of the program. These elements are understandably complex, and given the restricted parameters of a two-semester course (a recurring theme), students were kept at a distance from this level of engagement. Instead, we were directed to focus on a goal within reach: a single home designed for flexibility of use and ease of construction, with special attention paid to cultural appropriateness and opportunities for expansion.

As part of the design semester curriculum, an ancillary lecture course provided the conceptual framework and tools with which to assess and evaluate our design decisions in a holistic way. The syllabus explored sources such as Public Interest Design Guidebook[3] and the online SEED Evaluator,[4] and exposed the downfalls of service-oriented design approaches that had come before us, the dangers of the white savior complex, the importance of community engagement, and the value of recognizing privilege.

In the safe confines of the studio, we considered infrastructural strategies of increasing economic accessibility, reducing environmental footprint, enabling job training, and instilling social support networks. Those elements within our reach, like incorporating natural materials or designing for

expansion, were addressed with some success. However, the infrastructural components remained aspirational under the semester's constraints, and we felt ourselves sliding into the now-familiar traps of service projects that came before us.

The client's budget restrictions could have been viewed as the project's greatest PID opportunity. Historically, DBB's annual project budget is $50K ($25K in cash funds, and approximately $25K from in-kind donations including building materials, appliances, and fixtures), while DSEP had budgeted only $15K per house (Figure 2). This money could have been spent a multitude of ways to further the long-term goals of the client: proving (or disproving) the concept of a $15K house, constructing three houses instead of one, or investing funds into expanding the DSEP infrastructure by purchasing tools, covering overhead, or creating and funding necessary positions. All were valid ideas until the realities of the academic calendar set in. Halfway through the build, the team received word that the director of DSEP had been laid off, and the program beyond this house had been put on hold indefinitely.

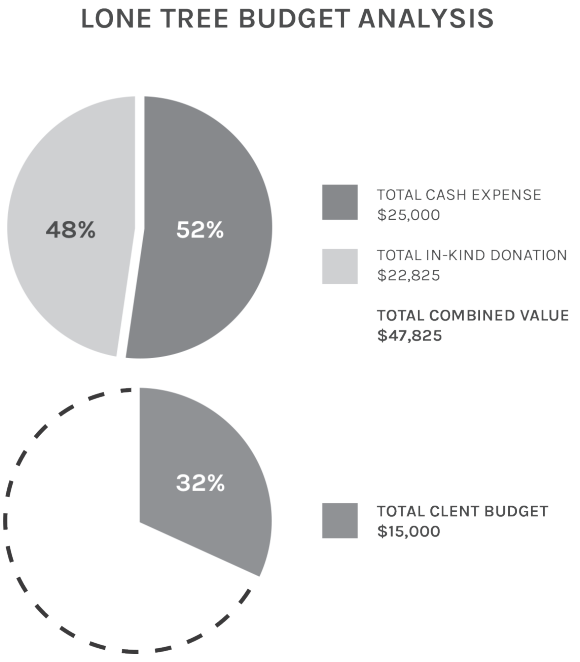

Figure 2: With nearly $50,000 available through cash and donations, DBB students built a prototype that cost more than three times the budget defined by the Dennehotso Sweat Equity Program for future homes.
Courtesy: Authors.

Fire Mesa

Fire Mesa, the most public DBB project to date, did not have the well-defined parameters of a family home. In 2018, the Bluff Service Association (BSA), who operate the Bluff Community Center, saw a community kitchen as the first step toward transforming the Center's expansive lot into a park with recreation for all: sports and games for children from the elementary school, and walking paths and fitness equipment for the town's adults. The project brief for the design studio outlined a rentable cooking pavilion adjacent to the community center integrated into a schematic master plan for the entire site. The specifics were to be informed by conversations with BSA and community members. A series of public workshops and frequent studio discussions did not bring a consensus among the student cohort over key questions: what are we designing and who are we designing for?

Lacking clarity, four student teams proposed schematic designs, each addressing the criteria in different ways, and a design with a fifty-foot-long outdoor grill was the winner of a vote among the client, DBB faculty, and students. While it reduced the enclosed rentable kitchen space in favor of an outdoor grill, the winning proposal was the most conceptually clear, although arguably at the expense of responding to the site, program, and community input. The proposal envisioned two rammed earth walls of the kitchen, forming an L in plan and visible upon approaching the site; a grilling surface large enough for multiple families to use at once, also in rammed earth; and a canopy floating over slender columns to cover the grill and small accessory kitchen.

Fire Mesa, from the start, was monumental. It was based upon a simple floor plan and conceptual physical model (Figure 3). The incorporation of rammed earth, while aesthetically stunning, also introduced an immense technical challenge. As the selected design was developed, conversations about overall site strategy and master plan concept fell off as major changes were required to bring the initial proposal within the available budget. While attempts to glean a common

Figure 3: Scale model from the original Fire Mesa proposal, as presented to the clients, students, and faculty during the design semester.
Courtesy: Authors.

vision from community members about the project were inadequate, and challenges in coordinating the construction process were discouraging, it was finally through the most daunting period of the build that we experienced buy-in from members of the community. Offering encouragement and support, many of them donned hard hats and grabbed shovels to move the many tons of dirt it took to build more than 600 cubic feet of rammed earth.

Laboring side-by-side with our neighbors in Bluff, and welcoming many others to see the earth-building process up close, proved to be the most formative period of developing community relationships. Without staging charrettes and workshops to hone in on a collective vision as we had attempted throughout the design process, we were finally able to see a community engaging in the building process as they found value in the project. As Crawford alludes to in *Shop Class as Soul Craft,*[5] it is not until the maker and user are situated in place together that perfection can be conceived.

In retrospect, the most collaborative experience of the project—one full of uncertainty, doubt and improvisation—was entirely circumstantial. Fire Mesa was the only one of four proposed designs to include rammed earth, and it seems unlikely that the project would have attracted as much interest from locals and passersby had it not been for the noisy process which produced the striking red walls (Figure 4). This element of happenstance begs the question of replicability. If Design/Build pedagogy is destined to churn out monuments, as DBB has in the past, perhaps there is a way to inject these vital moments of collaboration and community engagement into the construction process as an alternative to putting all the pressure on the design process.

LESSONS LEARNED / LOOKING FORWARD

DBB is constrained by incentives that favor monument-making, along with the continuity of time-intensive relationships required to create productive, community-engaged processes for building "structures

Figure 4: Fire Mesa, completed by DesignBuildBLUFF students in the Spring of 2018.
Courtesy: DesignBuildBLUFF.

of inclusion." We suggest several strategies for addressing these constraints, broadly categorized as shifting a culture of appreciation, and expanding opportunities for engagement. These strategies are not only applicable to the situations in which DBB finds itself, but to the emergent field of PIDB at large.

Shifting a Culture of Appreciation

DBB, like most organizations of its kind, is held to the standards of their governing institution and the sources of capital that make the work possible. With these two bodies at the helm, any shift in direction must prove its value. Generally, the simplest way to communicate the value of architectural work from afar is through visual documentation, and as students we were often reminded of the weight held by staged photos of our completed project. These images become the most powerful representation of our efforts for our individual portfolios, but are also invaluable to the school. They attract prospective students, increase admissions competition, heighten quality of student output, and ultimately enable improvement via capital acquisition from tuition and donations alike. It is not a selfish endeavor, it is a necessary one. But what happens when there are no settings to stage? What happens when it is a mosaic-in-the-making, an infrastructure and not a structure? Will it be valued in the same way? Will it be enough to continue attracting new students and funders?

In the case of Lone Tree, a beautiful set of photographs now memorializes our efforts on the DBB website, accompanied by text with no mention of the infrastructure necessary to implement all of our innovative ideas. We are instead left with a laundry list of our triumphs and one optimistic nugget: "It is hoped that the plans and principles set forth by this prototype will create a lasting legacy." With great intentions, we delivered yet another monument for the catalog: a thoughtful, beautiful home completed on time and within an understood budget—a wise contingency plan, in retrospect, when the bigger picture fell away. But if the financial foundation and

the academy it serves are only structured to value the monumental—Lone Tree will always be seen solely as a success—then the program will be forever limited in its scope. Any alternative path has to start at the top, with a shift toward valuing the mosaic just as much as the monument.

Expanding Opportunities for Engagement

Alongside a value shift, DBB needs to address the breadth of opportunities it has created for its students and clients on the ground level. Considering the last three projects had the potential to be years-long engagements, the program's ability to foster successful extensive relationships with the rural and tribal communities in the months and years that surround its work should be examined.

As it currently stands, there is little room for overlap between project teams from class to class, with few opportunities to meaningfully engage with past students' successes and failures. Although this may require a deeper level of documentation in some ways, it is possible that simply facilitating an overlap between classes would help to grow this institutional memory. A record of missteps and challenges faced by previous classes, along with an inventory of successful strategies is important to building knowledge. An "on-the-ground" manual of best practices will create the desired communication between different classes.

Similarly, this knowledge transfer is advantageous in building and maintaining client relationships and the strategies for community engagement. If the program is truly moving away from one-off single family homes and toward community-centered projects, it has an obligation to cultivate relationships with organizations such as DSEP or BSA. The maintenance of these relationships is certainly not a straightforward process, but exposure to that messy process is arguably one of DBB's greatest assets as an academic program. It is through these communications that the groundwork of PID work is laid, and this is a facet of the program that students should be able to take advantage of.

That the program is within the School of Architecture, it is beholden to the curriculum requirements of an accredited graduate degree. With all the restrictions that this imposes, there are also opportunities for new roles to be created within or in collaboration with the program that can fulfill the needs of the project type. If anything, PIDB work should be an embrace of interdisciplinary collaboration, and DBB is poised to take advantage of its well-renowned partners in planning and multi-disciplinary design schools within the College of Architecture and Planning.

The "fundamental pedagogic ambition of Bluff [is] to raise technê (making) to the status of episteme (knowing) … keep[ing] in check, the academic preference that has grown throughout the twentieth century, for the conceptual over the practical."[6] DBB has expanded this ambition, consciously moving towards an emergent PIDB practice. While students have been made aware of the need for a social technê to complement the physical, it has proven an elusive goal in need of continual reinvention. However, a concerted effort to measure and evaluate these social parameters can give this conversation a shared language for determining what success looks like. It is in this vein that we hope DBB and its peers will continue to push down the PIDB path, serving as necessary conduits to a new practice: one that interrogates the role of the architect in solving the great problems of our generation, and elevates the mosaic as an equal to the monument. ▪

ENDNOTES

1. Lisa M. Abendroth and Bryan Bell, editors. *Public Interest Design Practice Guidebook: SEED Methodology, Case Studies, and Critical Issues* (Routledge Taylor & Francis Group, 2016).

2. Matthew B. Crawford, *Shop Class as Soulcraft* (Penguin Press, 2009).

3. Lisa M. Abendroth and Bryan Bell, editors. *Public Interest Design Practice Guidebook: SEED Methodology, Case Studies, and Critical Issues* (Routledge Taylor & Francis Group, 2016).

4. "SEED Evaluator 4.0." SEED Network, http://www.seednetwork.org/seed-evaluator-4-0/. (Accessed Dec. 3, 2018).

5. Matthew B. Crawford, *Shop Class as Soulcraft* (Penguin Press, 2009).

6. Jose Galarza and Shundana Yusaf. "Taking the Pulse of Bluff." *Dialectic*, 2015, pp. 73–79.