Beginning from the End: Deconstructing Context in Design-Build Studios

Now, why do I insist so much on the conviction that buildings are neither the outcome of a process nor the materialization of a drawing? In other words, why do I insist on the idea that buildings are not the exclusive property of the architect? Mainly because I believe the presence of the architect quickly disappears and that, once completed, buildings take on a life of their own.
– Rafael Moneo from "The Solitude of Buildings"

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In his talk to the Harvard Graduate School of Design, Rafael Moneo described a significant shift in his thinking regarding the function of architecture as an undertaking that produces something that cannot fully be predicted, controlled, or protected from the realities it must bear. Architecture, he argued, must be more than a symbolic monument to our thinking or a vessel in which life is contained, but be itself a living thing that must not only endure but also engage and actively participate within the context in which it is situated.

For me, the act of teaching architecture is centered primarily on this concern: how can educators prepare students to work with unforeseen and unpredictable conditions, and yet produce meaningful work that contributes to our world in real and tangible ways? The simple answer is we must, and in the best way we know how.

Design-Build studios have over the past half-century emerged, almost viscerally, in response to this question of how we can teach students to be accountable and actively engaged with an unpredictable and uncontrollable context through the design profession. These unique situations are immersed within a context of vulnerability, unpredictability and accountability unlike almost any traditional studio setting. The seduction of these studios has undoubtedly been framed by the consequential results of a built project that stands to reflect the learning process undertaken by the students and the complex realities (budget, time line, client, regulatory needs, etc.) that confronted the studio intention.

However, as Moneo implies, the lessons imbedded in what we build in studios like this cannot be fully appreciated at the time of the completion of our work – it can only be measured once we have left it, and it has had the chance to take on a life of its own. Certainly we must take an accounting of the many rich lessons the students (and instructors) have gained from this experience, however, this can only

be accomplished when we learn from how what we build survives and impacts the cultural and physical landscapes of the sites and communities we work in. Arguably it is only through this lens that we may fully view, and thus understand, what it is that we have done in the world.

CULTIVATING OPPORTUNITY

Since the mid 20th century, the industrialized agricultural industry has transformed not only the landscape but also the communities that have tended to the lands they cultivate. Through the steady and increasing pressure to farm more land, faster, with larger equipment and less people, farming communities have experienced a dramatic depopulation and re-skilling to accommodate these changing pressures. Because of this, a large number of infrastructural and community buildings that were built at the forming of these towns in the late 19th century have become inadequate, inflexible, and unable to keep up with the evolving needs. As a result numerous abandoned century-old buildings pepper these rural communities have been left in the wake of this massive change.

In 2007 I began to work with a rural farming community of Clearwater, Manitoba, a town of 68 farmers, to develop a design studio with the University of Manitoba that attempts to draw from the context, culture, and material realities that have survived this town's history. In 1952 Clearwater had reached its peak population of 150 residents, but since then large-scale agricultural practices have reduced the size of this community by half. Despite these significant changes this unique community has sought to find ways to promote sustainable community growth through alternative (non-industrial) agricultural practices and educational outreach to rural and urban citizens. From this the Harvest Moon Society was established in 2000 to take-on this idea through direct community involvement, farmer-to-consumer initiatives, and an annual music and rural farming festival that has now grown to draw 1,500 people annually to this small community.

Because of the open-minded thinking of these people, the proposal to develop an architecture studio based on this community's particular context was bravely supported despite an unclear direction, outcome, or promise of what it would ultimately contribute to the communities' efforts in supporting their vision of growth.

BEGINNING FROM THE END

In a show of good faith, the community of Clearwater offered the Crystal River schoolhouse (Circa 1891) to be the subject of the architecture studio. This building, despite its rich history of educating and serving the community for a half century, had been abandoned and was slated to be burned and then buried to make way for more farming land.

Despite its outward appearance, this one-room schoolhouse possessed a great deal of valuable old-growth lumber from the original harvesting of the Canadian forests over a century earlier. Since the building was unsalvageable in its existing form, my students decided to unbuild the building in order to discover what it might offer in its constituent parts. Drawing from the traditions that helped create such a structure the community was invited to help raze this building that had been originally built by the same families a few generations and a century earlier. Working closely with the farmers, the students discussed, debated, and listened to them offer advice and guidance on how to safely take this building down.

Being comprised of both upper level undergraduate students and masters level students, this vertical studio was composed of students with a range of skill levels. However like most contemporary architecture students, most had little or no

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hands-on experience using construction tools or had experience on a construction site before. Working piece by piece, the students carefully learned how to recover as much of the original building material as possible, honing their skills by using the tools to encourage the materials apart rather than to force them, which would often result in splintered pieces and frustrated efforts.

In nine days these students and farmers dismantled the schoolhouse and had sorted, stacked, and de-nailed 70% of the old growth lumber. Working alongside the community members these students learned of the history of the building through the stories that were shared, helping to transform the materials and building into a living participant and member of the community rather than a collection of inanimate construction artifacts. The stockpile of reclaimed material stood as a tangible measure of what they had learned, having previously had little experience with using construction tools, the techniques they learned procured increasingly usable wood from their efforts.

Following the deconstruction the students continued to work alongside the members of the community through a design phase which invited the students to engage with the members of the community in a very different way. While the students were learning from the farmers during deconstruction, benefitting from their "know how" and great aptitude for problem solving, the students helped to guide the community members through the design phase, discussing the history and challenges of their community and the potential ways that these might lead to meaningful design projects.

After several months of designing and consultation with the community, the students embarked on the build phase of the projects. Returning now in the spring,

Figure 1: Students examining the remains of the Crystal River Schoolhouse after the second day of deconstruction. Taking time to reflect on the work from each day helps students to situate their experience within the time line of the project. Often there is so much happening on a job site that they miss a number of "moments" they can only find at times like this. (2007)

the students worked alongside many of the same community members who helped them to unbuild the schoolhouse to now build new work from that same material. The students at this stage were able to demonstrate greater confidence and skills during their second construction experience, and with their established rapport with the members from this community, they were able to transition smoothly into this final phase of the project.

This initial Unbuild/Design-Build project resulted in the creation of three projects of moderate size, a bridge and lookout-platform on an eco-trail in the community, and a folding wall in the community-learning centre in Clearwater. These projects, although modest demonstrated to the community members as well as the students the viability of the old-growth lumber that had once served this community could once again do so, but now in a new way. After witnessing the rich range of lessons that were had in this initial endeavor, I returned to Clearwater to continue to build on the Unbuild/Design-Build studio model the following year.

What follows are a number of key lessons and observations that have emerged out of the past seven years of operating this studio program. The aim here is to offer a perspective on how our sustained engagement with this community has helped to develop a site and culturally specific approach to Design-Build teaching with and alongside the people we have partnered with.

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Figure 2: Construction of the "Honey House" eco-cabin on the farmland of Greg and Carissa DeJong. This cabin was built using 60% of old growth lumber reclaimed from a previous deconstruction workshop offered to community members from Clearwater. (2014)

DESIGN STUDIO VS. CONSTRUCTION EDUCATION
Design-Build studios have always faced an implicit challenge when attempting to offer a complete design and build experience for students. There are numerous approaches used to organize and run these studio programs that result in a wide range of outcomes for the student experience.

Big Works – Small Roles

One of the most common approaches to running a Design-Build program involves the focused efforts of individual students to take part in the construction of a particular design; often this is a previously conceived design produced by a single student, a group of students, or the instructor. The main advantage of this model is the scale of work that is possible within a limited time frame, allowing a studio project to have a measurable impact on a site or community.

Although a student's efforts will certainly contribute to the construction of a design, their exposure to the process that led to the design intent is often not a part of their experience. Because the design is fixed and not derived from each student individually, there is a divide between the act of design and the act of construction. What often ends up missing from a student's experience is an intimate understanding of how design intent might be measured against the consequential realities of construction.

This presents a split with what a student might expect from a course like this, and what an instructor is able to offer. If the design phase is not personal the implicit lessons and relationship between the act of designing and the act of constructing remain separate and isolated events unable to influence and inform each other. This reflects the same experience that builders face when working with drawings and designs they themselves did not produce. It also is the reverse model of the problem of the studio where the work of designing has a distant relationship with the construction it calls for. While rewarding in a number of substantial ways, this experience often results in a course teaching students how to build rather than to discover how design might learn from the building and visa versa.

Small Works – Big Roles

Another model of the Design-Build studio exists in which students produce smaller scale individual projects that are connected thematically in the context of the studio but remain isolated as independent works. While this allows for a much more integrated design and building experience for the students, the resulting projects are often limited to how they may impact a site or community due to the constraints of the scale of the works. As a result, the design focus of these studios is often in reference to the tradition of a folly rather than targeting a specific community scale need.

A quality that this type of project offers is that it often results in unexpected works, bringing a sense of wonder and speculation to the community. In itself, this can be an important contribution to a place, as it is not often that projects in our built environment serve a purpose other than a utilitarian need, and architecture in its fullest form should indeed inspire the unexpected as well as serve the foreseen.

Shin Egashira at the Architecture Association has run design/ build studios in which students carry out individual projects that create a sense of play, wonder, and careful study of the culture of a place1. In his students' work many projects are speculative, imaginative, but always based on 'drawing out' of the sense of place through their constructions. These works are often small and built by individual students who are attempting to link their conceptual framework in the design and how a sense of craft can enhance their ideas through what is made.

Big Works – Big Roles

The Unbuild/Design/Build studio program described in this paper has attempted to draw from the two previous models – conveying a sense of use and need for a community while providing a comprehensive and inclusive design and building experience for each student in the studio. This approach emerges out of the tradition that Egashira has established where, at times, his students develop a collective larger work for the community that provides some more long-term use inspired by an initial speculative venture.

In these Unbuild/Design/Build studios projects begin with an immersive deconstruction phase where students spend a focused time in the community of Clearwater and take down a building that has been donated to the studio. During this time, the students work alongside several key community members and begin to discover the

rich narrative of the community. This experience shapes the students' initial impression of the community and uses this to develop their position about what they wish to bring to the studio project.

In consultation with members of the community, they collectively develop a project proposal that draws on the motivations and concerns of the students and translates them to an architectural proposal. All of the students in each of these projects are responsible for both an idea as well as a role within the larger design and build work. This means that each student is charged to develop a research project that leads to a measurable contribution within the larger proposal. This way, the students are involved with an intimate relationship between their research, a design this research contributes to within a project, and the construction of that work emerging from their own interests. Design in this case is not abstract or belonging to another person, but is connected directly to their role in the project.

For example, in 2009 eight students in this program proposed to build a patio extension for the community owned restaurant, each of them was responsible for a particular aspect of the project (foundations, floors, walls, design features, etc.) that contributed to the larger work. During the design and construction phases, those students researched, developed, and ultimately led the group in the construction on their area of the project. While this approach is challenging to develop and coordinate, the vested interest and sense of ownership of the students in their work is substantial and a highly unique experience for them.

A key reason that this type of studio has been able to be carried out in this way has been because of the simple fact of the amount of time these studios have to run. Students in the Department of Architecture at the University of Manitoba take part in a linked two-semester studio program where both the fall and winter terms share a common thematic and are able to take advantage of an eight month long project. As a result, the program can support a greater range of project phases and can allow for more time to negotiate the logistical concerns of running a Design-Build project.

EVERYTHING IN ITS OWN TIME
Since we have been working with this particular community for some time, the projects have been able to develop and grow at a rate that is comfortable and digestible by the community. This sense of "taking ones time" to do things in the "right way" is not missed on the people of Clearwater. It has often been said by community members that everything "has its own time". For them, our ability to not rush a work, allows their understanding of our intentions as well as our actions to be processed and gives them space to respond in the time that they feel is right.

Another aspect of time that has revealed itself as being important to understand the perspectives of another community is in the difference between how we, and they, perceive time. In this work we have discovered that many farming communities experience the world in a very different way than city residents. People of our urban centres speak about and act in time as though it is a progressive and accumulative condition, where what is focused on is what is new. Rural residents on the other hand tend to talk about time in reference to seasons and repeating events and give importance to the past, perhaps more than what is recent. Another way to describe notion is that urban perceptions of time tend to be linear and rural are circular.

This means that to communities like Clearwater, the actions we take today will inevitably return in some form to us. Therefore taking the proper time and care to do something in the right way will return to benefit us in perpetual ways for seasons to come. This perception of time has helped to reframe how students think about

what they are doing as something that must contribute to and be integrated in the daily life of community members, and not simply something that will be valued simply because it is new. Simply stated, they have come to realize that it takes time to prove worth, and this must be a consideration in their design and making process.

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COMMUNITY COLLABORATION NOT COMMUNITY SERVICE

Through these studios it has become clear that the relationship of the community as participants in the process and not as clients has been key to maintaining mutually beneficial partnership. Viewing community members as being "served" promotes an implicit hierarchical structure in which the visiting team of designers and builders perceive themselves as offering something of value to their clients. As such, there is an inevitable valuing of knowledge and perspective that preferences the academic vantage point. This in tern may result in the ideas and views of the community as being unintentionally framed as supplementary and supportive to the concerns and ideas of the profession, class, and students. This type of a relationship is very often perceived by the community and can affect to what degree and how they open up and engage with a project.

However our experience has shown that it is actually the perspectives of the community that help us, as designers, understand what is at stake in a project and how best to address it. Although it may seem obvious to say, but it is a common and subtle tendency for designers to privilege their own views and concerns above those for whom they are working since they are the "experts" bringing services to a people. However, people are experts in their own community. They understand much more concretely what issues are at stake in a design project and what the long-term implications of a potential design might have on an existing situation that will last long after a design project team has left.

By including community members as collaborators, as partners rather than clients, there is an implicit shift to a "democratizing of knowledge"2 where their "constructed knowledge"3, or knowledge built over time through direct experience, is valued at least as important and consequential as the academic and theoretical knowledge. This transforms the Design-Build experience to include a transcultural learning experience for both the students and the community members, where both groups are invited to contribute their views and are encouraged to internalize and integrate the knowledge of the other to establish a common ground of understanding.

Figure 3: During a number of visits each year, students meet with community members to discuss the progress of the studio project, recipes, and the latest gossip in town. These informal meetings are essential to establish a natural bond between the students and the community members. Often it is in discussions like these that the most influential ideas emerge through careful listening. (2012)

Transcultural approaches to developing Design-Build projects helps to avoid another common problem in Design-Build studios, managing expectations in a project. When both parties are actively engaged and equally included in the development of a project, the concerns about what a work should provide for, and what might be required to facilitate that need are discussed simultaneously, allowing both parties

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to understand what is possible and what is not. Having this shared understanding helps to resolve and avoid possible disappointments or misunderstandings of what a studio can realistically provide for, and as well what a community can be expected to accept as a built work.

One way we have attempted to facilitate this mutual understanding has been to have mediators, or representatives from the community imbedded within the studio process. Since it is difficult to bring an entire community along through the nuanced and often complex path of a design project, working with a few key members in a community helps to both maintain the continuity of the narrative of a design process, but as well helps students to get to know some of the community members through this relationship.

Figure 4: The "Liu Ming Studio" eco cabin that was built to help increase the capacity of the community to host the numerous visitors to this tiny hamlet. This project is run through a collaboration between the landowners and the not-for-profit community organization The Harvest Moon Society. (2014)

CONCLUSION: LESSONS FROM A SUSTAINED ENGAGEMENT

Many of the lessons from these studios could not have been found if it were not for the simple fact that we returned to work with the community of Clearwater regularly over a sustained period of time. The relationships that have been established with the individual members and the collective community have been cultivated out of a demonstration of wanting to not simply "help" this community but to work

"with" them. This subtle difference has only come about over time and through our discovery of how important it is to simply listen to be able to interpret and comprehend what is being said behind their stated needs and desires. Additionally because of this time we have been able to see how with each passing season our past work is being used, maintained, valued, and simply surviving the entropic gravity of time.

Situating the Design-Build model within a community acts in several ways to enhance the implicit benefits of such a studio program. Because there are personal relationships being developed throughout the process between students and the members of the community, the students are given space to work directly with them unmediated by their instructor. They also are given the opportunity to witness the impact their work has in the lives of the people they are working with directly. With these two discoveries a student's understanding of their capabilities at this early in their career is transformational. From this students tend to show an enhanced seriousness and dedication to their work and develop a profound respect for themselves and their own capabilities.

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By working with others, projects like this help to expand a student's understanding of what "community" means. The term community is no longer an abstract idea, but is a tangible and personal thing that is composed of rich, rewarding, but also challenging realities that must be addressed in design. After working on a project of this nature it has become abundantly clear that it is only because of the generosity of the people we have worked with that has allowed this project to occur. Creating opportunities for the community to be included in the entire process, from conception to construction, has invited them to "buy in" to the project. The same could also be said about the students as their inclusion as individuals in each stage of the work has invited them to invest in a personal and consequential way and to build confidence as designers and as builders. As Moneo states, learning from what we have left behind, allowing it to survive on its own without the defense of our best intentions allows us to truly learn from our actions. It is this reality that the people we build for inevitably live with and evaluate our work by. The Design-Build model helps to give access to this reality, which can only be discovered over a sustained period of (circular) time.

ENDNOTES

1. Egashira, S. (2006). Before object, after image : Koshirakura landscape 1996-2006. (P. Johnson, Ed.) London: AA Publications.

   Shin Egashira carries out Design-Build projects with an agenda "to explore a form of social and cultural stainability within the post-agricultural community of Koshirakura". His studios have, like the ones described in this paper, drawn in great part from the open and engaged spirit of the rural communities to inspire, inform, and guide much of the outcome of the studio projects.

2. *Democratizing Knowledge* is a term coined by Colin Anderson and Steph McGlochlan. Their research on the hybridization of learning between communities and academic models has argued for a greater accountability of academic discourse within community contexts. This perspective frames the debate of "appropriate" methods of work with communities to require a demonstration of inclusivity with the traditional knowledge of the citizens of a particular place and culture.

3. *Constructed Knowledge* was a term used by Paulo Freire who compared the wisdom gained through direct experience against the wisdom from codified and passive learning (as in traditional forms of classroom teaching). Freire referred to this in relation to the accumulation of inherited knowledge through what he called the "Banking Concept of Learning".

Figure 5: Community residents gather for the official opening of the "Clearwater Eco-Cabins" project. This ribbon cutting took place at the end of a multi-disciplinary construction course offered to students in a range of design disciplines and built on the work of the previous Unbuild/Design-Build studio from 2012/13. (2014)