

# Design Build: Collaborative Labor Creating Community

The call for papers addresses design/build with two distinct approaches: the local/technical and the global/social. Unfortunately, this bifurcation excludes design/build approaches that focus on the social development or redevelopment of the local, a process embedded within the psyche of the place. Southern Illinois, as Foucault would argue, is a “technical” construct - as in the “joinings of knowledge and power”, occurring within the local/social with deep global roots.<sup>1</sup> In Cairo Illinois, a local/social design/build has been underway for the past year. The project looks to be a catalyst for not only the building of architecture but the re-energizing of a once flourishing community that finds itself mired in decay and affected by the global condition. This design/build project has the potential to critically expand the meanings of creating architecture, community and curriculum by asking the question: how does design/build operate in a social capacity?

## PLACE

The town of Cairo (“CARE – o”), Illinois is situated in the center of the country at the confluence of the Ohio and Mississippi rivers. [Figures 1 and 2] It currently sits as a shell of its former self with few buildings and services remaining. However, this would-be ghost town is still home to over 2,800 citizens and remains a valuable component of one of the country’s most important transportation routes. The importance of its waterway location was recognized early and is so strategic that in 1869 construction began on a series of levees to protect and develop the area. People settled in this town and the surrounding southern Illinois communities from all over the world seeking opportunity. Southern Illinois’ historic presence is evident in the Cahokia Mounds [UNESCO World Heritage Site] and Fort Massac and throughout its numerous small towns laced with history and historic buildings. As an integral part of this fabric, Cairo has been, and continues to be, the conduit where water, people, cultures, goods and money converge at a small swath of low lying land at the southernmost point in Illinois.

Cairo is a place of convergence. It was a town founded on the flow of

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commerce in support of a growing nation; this focus created a thriving city for a multiplicity of people. This flow, however, has seen significant disruption: environmentally through periodic flooding and drought conditions and historically as an outpost of freedom amongst the surrounding slave states. Cairo has had moments of significant power as a point of flow of commerce, human commodity escaping slavery, and as the location for one of the largest staging grounds for the Union army throughout the five year span of the American civil war.<sup>2</sup> Such valuable, yet conflicted, real-estate has come at an ongoing high cost to the community. In May of 2011, the town had to be totally evacuated as river crests for both the Ohio and Mississippi reached historic levels. The town might have been lost forever if the Army Core of Engineers had not taken the drastic step of demolishing the Birds Point Levee to the south of Cairo, a decision that was hotly contested by many in public and private sectors.<sup>3</sup> However, it would be overly simplistic to blame Cairo's decline solely on water. Both nature and man have taken turns working to destroy this once thriving city: the creation of new transportation routes, technological changes, reduction in industrial jobs, reduction in large scale coal/timber mining, racial divisions, civic corruption, and economic downturns have all worked in concert to create the palimpsest that now exists. [Figure 3]

As the remaining citizens struggle to survive within a disappearing town, one that once held so much promise, they are sustained in large measure by social systems of welfare and by those who refuse to abandon the historic place. One important constant in the city is the Delta Center. "The Delta Center is a non-profit mental health center, substance abuse counseling facility, and also provides various community services to Alexander and Pulaski County, Illinois".<sup>4</sup> The Delta center is a key entity working to stem Cairo's decline and provides a communal backbone for the surrounding area and its people. In 2012, the Delta Center successfully assembled a grant bid to host a United States Department of Labor 'YouthBuild' [YB] program; this proposal was accomplished with the cooperation of multiple community partners including the School of Architecture [SOA] at Southern Illinois University and Shawnee Community College [SCC]. The YouthBuild grant is the vision of retired architecture professor Robert Swenson,

Figure 1: *Map of the US river system*, <http://www.blessedhopeacademy.com/Geography/geography101.htm>

Figure 2: *Photograph of the tip of Cairo at the Confluence Ned Trovillion* by Robert Swensno, retired SIU architecture professor

one of the first Yale design-build students and native of Southern Illinois. YouthBuild, the newest among many community outreach programs for the Delta Center, has a specific focus on breaking the cycle of poverty and crime by addressing educational and occupational needs of youth within the community.

In YouthBuild programs, low-income young people ages 16 to 24 work full-time for 6 to 24 months toward their GEDs or high school diplomas while learning job skills by building affordable housing in their communities. Emphasis is placed on leadership development, community service, and the creation of a positive mini-community of adults and youth committed to each other's success.<sup>5</sup>

There are currently 273 YB Programs in 46 states.<sup>6</sup> The SOA contacted each of the programs to better understand the typical partners utilized by YB providers. Of the 110 programs that responded, only one had ever partnered with architecture students. Based on the responses, many YB programs may now attempt to do so. In fact the typical discussion in response to our research query was "what a great idea, we are going to see if we can build such a relationship".<sup>7</sup>



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The positive feedback received from these other programs provided encouragement that forming this relationship between youths from different educational backgrounds had the potential to create some positive learning synergies. However, as Richard Sennett has identified, forming relationships between individuals is difficult because it necessarily evokes what are "...the uncertain boundaries between people".<sup>8</sup> Bridging these boundaries was the important first step.

In September of 2012, the Cairo YouthBuild partners met to formulate a plan for the three-year grant cycle. During this period, the program aimed to assist low-income youth (called cohorts) through the GED process in pursuit of a high school equivalency diploma and through construction trade skills training via the renovation and building of single family homes for the citizens of Cairo. In this framework, the Delta Center maintains program oversight and cohort scheduling

Figure 3: *Image of Downtown Cairo* by Laura Morthland, Fall 2013

and serves as the client and the administrator of the construction, while SCC has the primary responsibility of overseeing GED training and testing. The SOA is responsible for design and construction documents and participating in the renovation/construction of the residences alongside the YB students.<sup>9</sup>

#### **DESIGN/BUILD AND THE COMMUNITY**

In 2012, the faculty in the SOA active in the grant founded the Design|Build Research Collaborative [DBRC]. Its founding was in response to a perceived need to eventually provide a unifying home for a variety of community based work that multiple faculty had or were currently undertaking due to flooding, tornadoes, and lack of funds for community needs. The DBRC mission has two distinct aspects:

1) The advancement of learning in the pursuit of public welfare and, 2) the enrichment of cultural and aesthetic heritage. Public welfare in the built environment is the ultimate responsibility of the designer and architect. Understanding how we (students and professionals) can positively impact the public sphere via issues such as: housing, community/civic systems, homelessness, productivity, transportation and joblessness, is the core of our mission. As designers and architects we are deeply involved with how our built world reflects and impacts the value systems of the cultures which inhabit it. The study of built solutions in the evolution of regional heritage is also of prime importance in our current work. We are focused on the regional communities of Southern Illinois and the Mississippi River Delta.<sup>10</sup>

Participating in the public welfare, typically involves the act of being social and this word generates a multiplicity of meanings. Its origins reside in Middle English, from Latin *socialis*, from *socius* companion, ally, associate; akin to Old English *secg man*, companion, Latin *sequi* to follow and its first known use was in the 14th century.<sup>11</sup> This origin suggests a very deep connection between people and not the relationships that the word social can imply today – the 140 characters or less social media structure, as was clearly prefigured by Marshall McLuhan, who anticipated our changing human relationships. “The Medium is the Message” one of Marshall McLuhan most quoted statements was referring to the deeper issues of an “entire circumstance or situation that makes something else burgeon forth or appear.”<sup>12</sup> In Cairo, YB is hoping to engage beyond social chatter to create the deeper meaning of social. The YB collaboration with the SOA students are exploring the origins of social by physically working side-by-side while renovating a 100 year old home; hopefully beginning to affect the power and trajectory of the place toward decline.

It has traditionally been within the understanding of social that students initially learn what it means to create something outside of themselves by focusing on another’s need – i.e. creating architecture. Richard Sennett asserts “entering into others’ lives,” requires therefore an act of imagination.”<sup>13</sup> As we navigate into the second year of the program, our reflections have become focused on the social interactions of design/build as we struggle to complete the first renovation. Imagination is one of the key components of design education and challenges the designer to engage in another’s needs, understanding the issues beyond one’s own knowledge, and transferring that more complex understanding into built form. Imagination is applied within studio explorations, but is typically detached from the built realities of the project. At times, these academic explorations interact with the community. They can engage students

in the pursuit of improving public welfare. Less frequently, architecture students work side-by-side with the 'public' in pursuit of its own welfare. Rarely, however, do design students team with other student groups (with a significantly different objective) to work on common projects. This social interaction with students of similar age toward a common goal of renovating/building a home allows imagination to be tested and redefined as multiple layers of understanding about architecture, curriculum, and place unfold within the social interactions. Imagination is one of the typical strategies for the architect's education, but another strategy is less frequently found within the curriculum: actually physically learning from 'the other requires the same.' Such a relationship engages the notion of architecture as deeply social, but it also forms the question; is the architecture or is the interpersonal connection forged from "... entering into others' lives..." the project?<sup>14</sup>

## **GLOBALIZATION AND LOCALIZATION**

Marshall McLuhan is seen by many as the visionary of a new way of connecting the world. His impact on the warp and weft of architectural education may be considered as disruptions to localization influenced by technology and the global village. He developed these ideas partially while at Saint Louis University (the first large city north of Cairo on the Mississippi river) while there from 1937-1944.<sup>15</sup> During these years, the challenges to the country were most apparent and their influence along this waterway was most acute as world wars, television and the great depression were all converging. These circumstances called for something new as prefigured by Marshall McLuhan. By the end of the 1920's the beginning of the great depression was already being dramatically felt in Southern Illinois. It was one the earliest regions in the country most affected by these disruptions and was the location for one of the earliest Civilian Conservation Corps work programs (1934), that constructed Giant City Lodge among other build projects in southern Illinois.<sup>16</sup> Labor and physical work met local needs and brought hope and income to the regional community. Communal construction has a deeply embedded understanding for the people of southern Illinois and is still discussed in family history and oral tradition. This is the antithesis of what Marshall McLuhan saw emerging in our world, as short bursts of superficial communication. While Cairo flourished briefly after WWII, the seeds of its decline had rooted as early as the late 1920's – the peak of its population.<sup>17</sup> Most would agree Cairo is now at its lowest point with only key historic buildings - the Customs House, Post Office, Library, and few historic homes - referring to the thriving river town that once existed. While modern globalization is assisting many around the world, what was a place of many nationalities coming together to form a new vision slowly began a decent that is now almost complete.

Currently the most obvious sign of change in Cairo is the mass demolition of the town. While the SOA and YB students were on the job site they could literally see and hear the remaining large brick civic and commercial structures and historic homes being demolished. The YB and SOA's initial acts of renovation together literally and metaphorically were rebuilding the foundation for a home while also disrupting the visually apparent future for this city. If the increase in vehicular and pedestrian traffic on the residential side street was any indicator, the people of the beleaguered town were surprised and intrigued (if not encouraged) by this dichotomy. What has been the norm - everyone leaving to seek employment due to job loss from globalization - was being challenged by a 'community' of students.<sup>18</sup>

## FIRST BUILD

SOA students were travelling from the more stable campus town one hour to the north of Cairo each day to participate in the renovation, only a few had ever visited Cairo. For anyone, a first visit to Cairo is a thought-provoking experience and, for most, probably quite depressing; it was no different for the SOA students. First exposure to this city creates mostly silent questions and a great unease, but the act of construction provided the bridge to overcome these complex thoughts. Most of the YB students were residents of Cairo and had limited experience outside of their town, but, through informal conversations, it became apparent that many knew that they are/were trapped within its decline. Their only glimpses of the outside world are typically through McLuhennian technological bursts of communication.

The Youth Build students had been working on the job site for many weeks forming their community, so the SOA students' presence created a new opportunity. All of the students took direction from the Youth Build construction manager, who maintained the pace, work flow and order on the site. On the construction site, these two populations merged and were a part of the daily routine of constructing and learning; casual conversations allowed a small glimpse into each others' worlds. [Figures 4 and 5] Formally recording their learning by hand (SOA students) and with technology (SOA and YB) was an official part of the process, however limited to specific times due to the dangerous nature of a construction site. So, one of the most important personal bonding times was the lunch hour in a local gym where pick-up basketball and shared dancing skills transformed the presumptions and expectations of both groups.



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Figure 4: Photo of SOA and YouthBuild students working on the jobsite by Shannon Sanders McDonald

The SOA students were fresh and excited to actually build rather than to just exist in the world of imagination; the YB students needed the fresh excitement and energy toward many tedious physical tasks to re-spark their interest. The challenge for the YB students, working alongside the SOA students, is in creating



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a new vision for themselves. They are learning to create positive feelings for themselves within the context of such a challenge, both physical and mental, an emotional experience they have rarely felt within the world of education or work. They watched as SOA students embraced all forms of work, not satisfied until the task was complete, often working through breaks and staying longer on the job site. Two SOA students even volunteered extra time to work on the job site for the remaining weeks of the summer while also tutoring some students in math.

The challenge for the SOA students was entering into an understanding of Cairo as a place; a place of rich history, a place of desperate need, and a place of residence for the YB students who worked alongside them. Many YB students have deep roots to its illustrious history; yet they are tragically trapped physically (no driver's licenses or cars) and emotionally (no hope for the future, no awareness of personal opportunity – as all who can leave do) in its overwhelming empty presence. Each day the SOA students were able to go back to their familiar, and arguably less emotionally charged places, while the YB students had no respite from their lives in Cairo.

Even though all the students were working toward a positive, agreed upon goal, some students were resistant to leaving the familiar in favor of change. Developing new work habits to help in successfully finding jobs for some of the YB students was a challenge. They frequently were frustrated by the willingness of the SOA students to work so hard, even on tedious tasks, only for pleasure in a job complete; the YB students found many opportunities and excuses not to participate fully. Arriving late to work or breaking the rules of the construction site were just the simple ways the YB students alleviated the stress of being

Figure 5: Photo of SOA and YouthBuild students working on the jobsite by Shannon Sanders McDonald

challenged by others who enjoyed work as its own reward.

In the beginning, the YB students socially regressed while the SOA students expressed more maturity through diligence. Eventually this smoothed out as a new community was being formed based upon hard work and personal concern. Our four week joint construction period was too short, but the knowledge that all had something to contribute to the other during the act of building was solidified as fears were overcome. One example of this was the willingness to work on the 12:12 roof by common acceptance of each others' similar fears. Sharing solutions and strategies for overcoming fear through the use of safety equipment and concern for each other formed the social bonds.

While many SIU students were happy to take the lead and learn about the many tasks presented to them, they also encouraged the YB students to understand the intrinsic value of work that has been so rewarding to them within the design studios through the act of imagination and collaboration.

Both the difficulties and possibilities of making things well apply to making human relationships. Material challenges like working with resistance or managing ambiguity are instructive in understanding the resistances people harbor to one another or the uncertain boundaries between people".<sup>19</sup>

The American philosopher, John Dewey embraced the "growing life... it is enriched by the state of disparity and resistance... there is an overcoming of factors of opposition and conflict and leads to a higher powered and more significant life". Dewey was a philosopher of experience; he stated, "Only when an organism shares in the ordered relations of his environment does it secure the stability essential to living ... the future is not ominous by a promise; it surrounds the present as a halo."<sup>20</sup>

#### ARCHITECTURE VERSUS THE ACT OF CONSTRUCTING

Learning a trade is a different process from academic learning, however in the profession of architecture the two approaches converge to create the actual building. The SOA students had limited experience in construction, most only in the required ARC242 class, while the YB students had been working for months with a construction manager. The SOA students first explore basic wood frame construction in a mini-build during class ARC242, by creating construction documents and then building full scale house corners in our school courtyard. Their act of imagination in creating the documents is tested with actual construction that also requires imagination to solve the inevitable construction challenges. For the YB grant, the SOA students had initially focused on the creation of the documents and interactions with the client about design within the process of imagination. It was during the act of constructing that the imagination documented in the drawings and the real practice of people involved in labor converged. It is here where another meaning of the word social emerged through an understanding of what the act of building requires; so many different people and skills and a great deal of physical labor working together as a community to bring imagination on the page to reality. This meaning of social: "of or relating to human society, the interaction of the individual and the group, or the welfare of human beings as members of society" (i.e. social institutions) emerged.<sup>21</sup> The YB students relished learning how the architectural drawings related to the physical building as taught to them by the SOA architecture students, allowing them to enter into the world of architectural imagination,

#### ENDNOTES

1. Paul Rabinow, ed., *The Foucault Reader* (New York: Vintage books, Random House, 2010), 17.
2. Phil Greer and Claudette Roulo, eds., *The Cairo Project: A Report by the Students of the School of Journalism at Southern Illinois University Carbondale* (Carbondale: School of Journalism, SIUC 2007).
3. Chris Bury and Emily Friedman, *Army core Breaks Open Missouri Levee to Save Town*, May 03, 2011, accessed 17 September, 2013. <http://abcnews.go.com/US/army-corps-breaks-missouri-levee-save-cairo-illinois/story?id=13515937>.  
  
Miriam Moynihan, *Judge says southern Illinois levee can be blown up*, April 29, 2011, accessed 17 September, 2013. <http://www.reuters.com/article/2011/04/29/us-weather-floods-missouri-idUSTRE73S3GH20110429>.
4. Delta Center, *About the Delta Center*, accessed 12 September, 2013. <http://www.deltacenter.org/>.
5. YouthBuild USA, 'Mission and Philosophy,' YouthBuild.org, accessed 27 August, 2013. <https://youthbuild.org/mission-and-philosophy-0>.
6. YouthBuild USA, 'YouthBuild programs,' YouthBuild.org, accessed 27 August 2013 <https://youthbuild.org/youthbuild-programs>.
7. Student documented interpersonal conversation during research process on YouthBuild programs, May, 2013.
8. Richard Sennett, *The Craftsman* (New Haven, London: Yale University Press, 2008), 289.
9. The document development process occurs in an independent study course ARC350 while the SIU student's construction experience and research efforts happen in the summer independent study course ARC434; students do not need to participate in both classes.
10. Southern Illinois University School of Architecture DBRC website: <http://siucdbrc.wordpress.com/>

while the SOA and YB students explored the imagination within construction solutions. On the final day together the YB students proudly took the SOA students to see all the materials that they had chosen for the home to discuss the issues of design and imagination, the bond of respect of the others opinion had now been formed. Working through our ability to connect on a human scale, both in physical and mental work, to see what each group of students had to teach the other was the greatest outcome of our first build for the DBRC.

Bill Carpenter in his book, *Learning by Building*, states “a building can be made without skill, without ideas, and without inspiration, but it cannot be built without labor.”<sup>22</sup> It was through the act of labor, both in working on the design of the house and side by side on the construction site, that new visions could be imagined. The actual labor for creation rather than destruction became an obvious positive force of disruption to the current everyday experience in Cairo.

The key point of learning for the students was the transference of the knowledge contained within imaginative experience of architectural drawings along with imaginative and physical problem solving on the job site to achieve the result required. This is a social act that required community. Matthew Crawford states:

Given the intrinsic richness of manual work – cognitively, socially and in its broader psychic appeal – the question becomes why it has suffered such a devaluation as a component of education ... Paradoxically, educators who would steer students toward a cognitively rich work might do this best by rehabilitating the manual trades, based on a firmer grasp of what such work is really like.<sup>23</sup>

## CONCLUSIONS

The first, and as yet unfinished built work, a renovation of a 100 year old shotgun home in Cairo, created a good foundation for understanding the depth of our responsibility to community and the complexity that acts of construction possess with respect to design/build education and defining what it means to be social. It was only with the cooperation of a federal grant, SIU, SCC and the Delta Center that the power of place toward decline is being challenged. Working side by side with other students from the community who are also seeking to learn and improve their future embraces Foucault ‘s position that architecture “can and does produce positive effects when the liberating intentions of the architect coincide with the real practice of people in the exercise of their freedom.”<sup>24</sup> Collaborating for the first time with this new partner has presented many challenges for all parties involved; it has also provided many opportunities and learning experiences. Ultimately, the goal was to see the YB students complete their GED and learn a trade while building affordable housing improving their community. The SOA students were allowed the privilege of participating in this process while also furthering their architectural education and exploring the ideologies of building both homes and communities in their deepest social meanings. Focusing on a these two student populations, SOA and YB as a community of student learners is one of the areas of interest for the remaining focus of the grant.

## ENDNOTES CON'T

11. Definition of the word social: <http://www.merriam-webster.com/dictionary/social>.
12. Paul Benedetti and Nancy DeHart (editors), *Forward Through the Rearview Mirror: Reflections on and By Marshall McLuhan* (Cambridge, London: The MIT Press, 1997), 126.
13. Richard Sennett, *The Craftsman* (New Haven, London: Yale University Press, 2008), 92.
14. Richard Sennett, *The Craftsman* (New Haven, London: Yale University Press, 2008), 92.
15. Marshall McLuhan, *Marshall Who? CV & History*, accessed 17 September, 2013 <http://marshallmcluhan.com/biography/>.
16. Kay Rippelmeyer, *Giant City State Park and the Civilian Conservation Corps* (Carbondale: Southern Illinois Press, 2010), XV.
17. United States Census Bureau, ‘Census of Population and Housing’, [Census.gov](http://www.census.gov/prod/www/decennial.html#y1940popv1), accessed 16 September 2013 <http://www.census.gov/prod/www/decennial.html#y1940popv1>.
18. While not yet an explanation for this mass destruction, in November of 2013 a port project was announced for Cairo, its details now emerging. While, it will bring some work to the area during construction, the total permanent jobs created will be minimal, but hopefully will encourage new growth for this area.
19. Richard Sennett, *The Craftsman* (New Haven, London: Yale University Press, 2008), 289.
20. John Dewey, *Art as Experience* (New York: Penguin, 2005), 14,17.
21. Further definition of the word social: <http://www.merriam-webster.com/dictionary/social>.
22. William J. Carpenter, *Learning by Building* (New York: Van Nostrand Reinhold, 1997), 12.
23. Matthew B. Crawford, *Shop Class as Soulcraft: An Inquiry into the Value of Work* (New York: Penguin Books, 2009), p. 27, 32.
24. Paul Rabinow, ed., *The Foucault Reader* (New York: Vintage books, Random House, 2010), 246 .