In 1993 Auburn University’s Rural Studio brought the idea of students designing and building architecture in the public realm to national attention. Central to this activity was the idea that students would be exposed to many explicit lessons about design and construction and, more importantly, to perhaps less tangible lessons about other ways of being professional architects. Samuel Mockbee invited students of architecture to imagine a different kind of future for themselves and their profession thus: “It is my hope that the experience will help the student of architecture to be more sensitive to the power and promise of what they do, to be more concerned with the good effects of architecture than with ‘good intentions.’” Rural Studio, under Mockbee’s direction, demonstrated that one can take into account social and community considerations as a way of tempering one’s personal design pre-conceptions to make an architecture that reflects its roots in a particular place (ethics), while also still being a reflection of the architect’s design impulses (aesthetics). In the stories that follow, we describe moments when the uncertainties of working in communities catalyzed a change in design direction toward a different kind of outcome rather than when we relied exclusively on our own pre-conceptions.

We first met Samuel “Sambo” Mockbee at a social gathering in rural Webster County, Mississippi in 1993, shortly after we relocated there to work at Mississippi State University (MSU). This meeting roughly coincided with the construction of the Bryant House in Mason’s Bend, the project that put Rural Studio on the national map. His generous and gregarious manner was a revelation to us after moving to Mississippi directly from the distinctly different world of Cambridge, Massachusetts, where we were privileged to work for a variety of firms, both large and small, sincerely interested in doing good work with a high level of design quality. If we had stayed in Massachusetts, we might still be engaged, as most architects are, in that world of the luxury economy.
But our desire to try something different following graduate school took us south to a new place with a different culture of building and a different social dynamic. The complex social dynamics of race and class, entrenched tradition, and the vernacular do-it-yourself attitude caused us to rethink things we once believed to be true. As educators, inspired by Sambo’s willingness to operate outside of traditional architectural pedagogy, we started engaging students with the real world, through community-based projects in Mississippi.

Around the same time (1996), Ernest Boyer and Lee Mitgang published *Building Community: A New Future for Architecture Education and Practice*, promoting the notion that

schools of architecture should embrace, as their primary objectives, the education of future practitioners trained and dedicated to promoting the value of beauty in our society; the rebirth and preservation of our cities; the need to build for human needs and happiness; and the creation of a healthier, more environmentally sustainable architecture that respects precious resources.²

The Boyer report transformed our pedagogy in our work through MSU’s Small Town Center, where we developed projects with communities that resulted in their eventual design and construction by students. It was tremendously challenging, rewarding, and fun. Here are some lessons learned while at MSU and later, at the University of Kansas.

**Okolona Corner Park, Okolona, Mississippi (1999)**

Okolona is a small town of approximately 3,000 people in northeast Mississippi. In the late 1990s the town was suffering from racial discord centered on the public school system. Seeking to do something about it, a bi-racial group of concerned citizens proposed the idea of building a small park straddling the dividing line between the white and black sides of town as a physical symbol of unified community cooperation. Patsy Gregory, the director of the Okolona Chamber of Commerce, was tasked with raising construction funds and coordinating the project with our help. To do the project, we decided to co-teach one large studio of 32 third-year undergraduate students. We began the work by having the students engage in a community-based photography project to understand the context. But an interesting thing happened as students wandered around town with cameras, generating discussion, suspicion, and interest.

Conversations with Okolona residents yielded a much deeper undercurrent of distrust and unrest than was visible on the surface. Race relations were a recurring theme: if the student was white and talking with a white person, the resident might complain about the black folk. If the student was black and talking to a black person, the resident might complain about the white folk. The one Taiwanese student in the class heard racist talk from both sides. These observations were discussed openly in class and began to negatively affect studio morale: “Why are we here?”
asked one student, “These people don’t want us here.” It was an alarming moment in the studio, and we could see the whole thing start to unravel before our eyes. When we shared this concern with Gregory, she did not seem surprised, and said she would work on it. So a few evenings later, she arranged a community meeting with some genuinely good-hearted people of both races, who acknowledged that their community, like all communities, had some issues that needed fixing, and that is why they were building the park as a gesture of reconciliation. It was amazing to sit across from the students and see the looks on their faces change from frowns to smiles as the evening progressed. This single evening of forthright and deeply personal sharing righted the ship and gave us all renewed enthusiasm to continue the work. It was a crucial moment in the life of the project that taught us the importance of honest speaking and honest listening.  

In another telling incident, we built a stage in the park for public performances. Literally five minutes after screwing the last piece of decking down, a pickup truck full of musicians pulled in and started unloading amps and instruments. They set up on the stage and began playing while work continued in the background. One fellow, Daddy I, a professional bluesman, was in town from Minneapolis for the first time in ten years to attend his grandmother’s funeral. He found this chance to connect with old friends by playing in the uncompleted park.

Before the evening was over, some of our students had joined them on stage and helped create music for all to work by. It was the emotional high point of the project as we realized that the project might actually do what was intended.

The architecture and detailing of the project was born of its material circumstances, abstracted out of the initial set of context photos with which the students began the project. The wisteria arbor is constructed of #8 rebar, flexed into groin

![FIGURE 3.1 Daddy I and friend playing on the newly completed stage, Okolona Corner Park, Okolona, Mississippi, 1999](image)

(Source: Nils Gore)
vaults, and detailed in a way that does not depend on extreme precision. Its language of extreme overlaps fits the wild exuberance of the wisteria vines.

The retaining wall is made of ordinary parking bumper curbs, and the benches are made of red cedar 2x4s and concrete blocks. All of the elements are made of ordinary materials inventively and intelligently detailed that somehow evoke the nature of vernacular construction in this small, rural, Southern town.

In 2001 we moved to Lawrence, Kansas to teach at the University of Kansas (KU), a school with a well-established reputation for designbuild work through the pioneering efforts of Dan Rockhill and Studio 804. Since we came to Kansas, we have completed a number of community-based designbuild projects, with lessons learned that are relevant in this context.


Like many people, we were riveted by the unfolding disaster in the aftermath of Hurricane Katrina. Shortly afterwards, our faculty agreed that we should participate in the rebuilding effort by engaging our students in ways that could also support their education. During the fall 2005 semester, Nils, in collaboration with our colleague Rob Corser, agreed to offer New Orleans-based studios. Without any real connection to affected people in New Orleans, we relied on what we could anticipate might be the needs of communities and people there. We imagined developing a community center that focused on citizen education about house maintenance and improvement, along with a tool lending library and classes that would help empower neighborhood residents. We started initial fundraising efforts along those lines with the hope of attracting partners in the building materials industry.
Rob Corser and Nils took their first post-Katrina trip to New Orleans in early January 2006 to meet potential community partners. At this time New Orleans was still pretty empty. Much of the city was still without water, gas, telephone, and electric services. Many stores operated on a cash-only basis. The worst-flooded areas of the city were still uninhabited, with small handfuls of people trickling back in. Dan Etheridge, of the Tulane City Center, and Rachel Breunlin, of the Neighborhood Story Project, hosted a dinner at their house with other local folks to help us make plans, and arranged a neighborhood walkabout in the Seventh Ward, which would be our focus area. We shared our ideas about a rebuilding-focused community center, which seemed to the others like a good idea, and we all agreed to proceed with that. We made plans to bring our students down in early February and offered to construct something to bring down with us—as a gift, a token of commitment—when we came back with our students. They suggested that some flat-pack notice boards would be useful, since the communications infrastructure was still largely non-existent.

When we returned, we showed up in the early evening at a church in the Seventh Ward and assembled the first notice board, then went inside for our first engagement meeting with the community. The meeting was facilitated by Rachel Breunlin and Helen Regis, a Seventh Ward resident and anthropology professor at Louisiana State University. They began the meeting by asking everyone to participate in a story circle, where you systematically work around the room and hear everyone’s story about why they are there, where they came from, and where they hope the project goes.

It is an exercise based in African American church traditions, which “suggest that life is guided by songs and stories that unfold over generations within the African American culture.” The three-hour story circle was a transformative
experience for all of us on the design team. People spoke of their relationship to the neighborhood; to the cultural traditions embedded there; and of their hopes, dreams, and fears moving forward. Two persistent themes emerged in this meeting: a focus on youth and children and a focus on cultural arts. It turns out they were not as preoccupied with rebuilding neighborhoods as they were in maintaining and strengthening their local culture as a way of resisting a potentially forthcoming tide of gentrification. A third theme emerged as well, through a challenge from Willie Birch, a Seventh Ward community leader and visual artist, when he asked us to explore the “African roots of Creole architecture” in the things that we would design and build.

After this meeting, it was abundantly clear that our pre-conceptions were not particularly relevant, and our task became one of responding to the community in a gracious and respectful manner; of embracing their wants, needs, and aspirations.

FIGURE 3.4 Clockwise from upper left: Notice Boards, Tool Shed, Outdoor Classroom, and Mobile Stage. *Rebuilding the Seventh Ward, New Orleans, Louisiana, 2006–2007*

*Source: Nils Gore*
This unexpected turn became the inspiration for our task ahead and led to far more meaningful and interesting work than if we had stuck with our original pre-conceptions.

We ended up building six projects in the Seventh Ward: a set of notice boards, a tool shed, two shade structures, a mobile stage, and an outdoor classroom. In all of these projects, promoting community participation and cultural life was a central emphasis in their design, execution, and, most importantly, their use after we left.

Dotte Agency, Kansas City, Kansas (2013–present)

Kansas City is a metropolitan region straddling the state line between Kansas and Missouri. It has two historically primary cities—Kansas City, Missouri (KCMO) and Kansas City, Kansas (KCK)—and a ring of suburban municipalities.

Today, the historic center of KCK is an ethnic stew of white descendants of Eastern European immigrants, African American descendants of transplanted southerners, native descendants of Hispanic immigrants from Mexico and Latin America, recent Hispanic immigrants, and a recent influx of immigrants from Nepal, Burma, and other East Asian countries. Our focus in KCK has to do with the intersection between the built environment and public health, to combat KCK’s low rankings on indicators of public health, walkability, and access to healthy food. We began working there on a hunch that our skillsets might be of use in that place when, in 2012, Shannon attended a gathering of academic researchers promoting trans-disciplinary collaboration. She saw a researcher from the KU Work Group for Community Health, Vickie Collie-Akers, present a project in KCK called the Latino Health for All Coalition, funded by the US Centers for Disease Control (CDC). As Collie-Akers presented, Shannon observed that the data driving the research was organized by zip code, rather than some other spatial or social subdivision (geographical, topographical, historic, ethnic), and she speculated that if they organized the data differently, they might be able to draw other understandings from their work. Shannon discussed the idea with Collie-Akers after the session and was invited, along with Nils and Matt Kleinmann, a PhD student, to further explore possible collaborations.

Through the aid of Collie-Akers and others in her work group, we were able to connect with some of the core civic and non-profit leaders that have long been immersed in this community. How we should proceed, as architects, was uncertain. There was no clear program given, only stories of experiences, feelings about how to best approach different groups, and general observations about needs and next steps. The best advice, from one of the community organizers, was to put your boots on the ground and figure this out on your own terms. By building relationships, showing up and listening, re-presenting what we heard in maps, images, and stories, we slowly gained the respect and interest of some. As we made our work public through events and engaging residents in the process, we
found that more opportunities came our way: invitations to co-write grants; to help facilitate directions in alternative transportation and nutrition; to participate in events to share our findings; and to develop a vacant storefront, contributed by Community Housing of Wyandotte County, as a community design hub. We accepted.

We named ourselves Dotte Agency (from Wyandotte, a nickname of the county)—anyone that wanted to serve the Dotte could join us. Since we are merely individual academics and not a sanctioned, funded research center of the university, we would need to secure volunteers, acquire recycled and creative low-cost materials, and barter time to keep the place active. We wanted to integrate ourselves into the community, careful not to be the big institutional element but rather creative partners. We developed a 20 keys concept—whereby if someone had a compelling idea for how this space could be used, they would be given a key. Our partners are still emerging, but so far we have a partner that runs the Farmers’ Market across the street (he opens it to provide a restroom for his customers and vendors); an artist next door wants to exhibit her ceramic lights in the space; the Free Wheels for Kids organization and other bicycle advocates who do not have a home base; and one of our leading community partners uses it regularly. The space displays drawings, models, mockups, and the leftovers of community organizing flyers and past conversations. Each person that uses the space leaves something behind, resulting in a rich compilation of stories and evidence of many simultaneous conversations. The process is unfolding with no clear, definable direction, but through the work, we are discovering what it is. It is about the making, the conversations, the intersections between different Dotte players and a trans-disciplinary set of students and faculty hungry to work outside of the siloes we traditionally dwell in. We believe we are all hungry for something unexpected and possible.

Parks improvement is an obvious place for us to be involved in the KCK landscape. Parks are spatial, they are environmental, and they have physical components. Jersey Creek park is a large, 1.8 mile-long, linear park organized around a concrete-lined storm water drainage ditch installed by the US Army Corps of Engineers in the mid 1970s. Since then no significant investment has been made to maintain or revitalize the park. Today it shows its age; it feels disused. In talking to local residents, many feel unsafe in the park and see no good reason to go there, even though it is close to many residents, connects disparate neighborhoods, and has the potential to offer many recreational opportunities. Working with the coordinators of the Latino Health for All group, Nils’s designbuild studio worked to develop physical prototypes of some to-be-determined park element. We discussed typical park elements, like benches, bike racks, and play equipment, as well as things like signs, water fountains, and lighting.

In early 2015 we held a series of community engagement events organized by KCK resident and activist Broderick Crawford in the New Bethel Church, a neighboring congregation. Crawford invited a broad cross-section of people to the meetings, and at each meeting we sat around large aerial photos, inviting people
to share observations, fears, memories, and local knowledge about the park and its environs. We learned where both problems and opportunities lie, and we started to get a sense of what would make for a better park.

The funding for the park improvements was to come from the CDC through its awards program for Chronic Disease Prevention and Health Promotion. It was necessary to filter what we learned from the residents through the funding criteria of the CDC, which is intended to “prevent obesity, diabetes, heart disease, and stroke and reduce health disparities through community and health system interventions.” We determined that we should focus on things that promoted direct physical activity. For instance, a light might make the park safer and promote park use, but is not something which directly affects physical activity. A bench, though desirable, is something that the funding rules disallow in favor of elements that promote activity, like a fitness station.

We learned from the neighbors that a small “spray park” (a park with active water play through fountains and misters) was one of the more popular spots, particularly for younger children. It sits next to a baseball field and directly across the street from a senior housing complex. It has the right mix of users and constituencies and seemed like a desirable place to test our prototypical element. But we still did not know exactly what to designbuild. We had a mind-bending exercise in the studio where each student was asked to develop a hybrid element that would do more than one thing: seating, messaging, biking, lighting, provide water, promote exercise. Students drew slips of paper out of a hat and were asked to mash them up in a singular design response.

Many, if not most, were unrealistic, because of budget, resources, physics, time, tooling, etc. In the end we developed a fitness station that was a hybrid bench/bike rack/exercise device.
The tectonic strategy was to use a continuous pipe that through a series of bends morphed its way from one end of the object to the other. We made a full-scale, proof-of-concept proto-prototype to share with the community, then followed up with a full prototype that was shared, to solicit feedback, at a community health fair organized by Broderick.

Since then, we have developed five variations on that first prototype and have installed them in the park for measured evaluation. If they are deemed successful by the evaluators, a plan to roll out more hybrid fitness stations, in other city parks, may be developed and funded over time.
Lessons Learned by Embracing Uncertainty

In each of these stories we have emphasized the start of each project to demonstrate the importance of establishing an open mind-set, as a way of overcoming the tendency to fall for one’s own pre-conceptions. The beginning of a project is perhaps the most important place to find a productive alignment with a client/user and one’s own skillset. By being open and flexible, one can find the wiggle room to realign for a good fit.

This work calls for a willingness to be adaptive to existing circumstances. Typically budgets are extremely limited, resources are tight, and the more willing we are to adapt ourselves to existing circumstances, the higher the likelihood of finding success. One needs to be willing to adaptively reuse materials, spaces, or buildings; adaptively accommodate programming on the fly; or adaptively embrace users that enter mid-stream. Generally citizen participation in these projects is voluntary and a designer must appreciate the motivations that may differ significantly from those of a professional participant in order to respect and dignify that volunteerism. Architects are accustomed to being hired for their expertise, leading them to be dismissive of those who do not share their expertise. But in many cases we do so at the projects’ peril. For citizens are experts in their own right; they are experts about their own neighborhood dynamic, about their own habits and customs, about their own likes and dislikes. We need to cultivate the intelligence of citizen experts in our work.

FIGURE 3.8 Prototype at community health fair, Jersey Creek Fitness Stations, Kansas City, Kansas. 2015
Source: Nils Gore
FIGURE 3.9 Community engagement at the Bethany Park Parade, Kansas City, Kansas, 2013
Source: Nils Gore

FIGURE 3.10 Barker neighborhood walkability event, KU Mobile Collaboratory, Lawrence, Kansas, 2014
Source: Nils Gore
We have developed tools for collaboration that may differ from those of conventional practice in order to secure full community participation and engagement and to collect quality intelligence from citizen experts. We go to community events with things that attract attention and invite participation:

- a tent at a parade where we hand out popsicles and create fun activities for children so that we can have a few moments with the parents;
- a shiny, renovated airstream trailer called the KU Mobile Collaboratory (moCOLAB) to attract interest and participation through exhibits and workshops;
- a mobile map cart that can be pushed around a neighborhood to aid in soliciting information from passersby;
- a mobile display system that can be deployed for information sharing in community meetings, churches, and outdoor events in conjunction with the moCOLAB.

The book *Spatial Agency: Other Ways of Doing Architecture* has encouraged us to believe that what we do and how we do it might be a needed educational experience for our students and a good service to our community partners and users. In that book, the authors state:

Architectural Culture—expressed through reviews, awards and publications—tends to prioritise aspects associated with the static properties of objects: the visual, the technical, and the atemporal. Hence the dominance of aesthetics, style, form and technique in the usual discussion of architecture, and with this the suppression of the more volatile aspects of buildings: the processes of their production, their occupation, their temporality, and their relations to society and nature. The definition of architecture in terms of object-buildings thus excludes just those aspects of world that cause architects discomfort, because those often unpredictable and contingent aspects are those over which they have limited power. . . . [A] loss of control is seen not as a threat to professional credibility, but as an inevitable condition that must be worked with in a positive light. Buildings and spaces are treated as part of a dynamic context of networks. The standard tools of aesthetics and making are insufficient to negotiate these networks on their own.\(^\text{10}\)

In our work we seek to draw from an expanded toolkit to deal with the contingencies of the world and strive to share these with our students and our users. The uncertainty that comes with that is something that we truly embrace in the work, and believe is an important lesson for students to draw from in these experiential learning projects. The designbuild aspect of the work further brings home the lessons learned in materially tangible ways as the built elements speak for themselves, and exist, in time, as physical evidence of the relationship between process and product.

**Notes**


9 Ibid.