

The Double Wide

FRANK FLURY

Illinois Institute of Technology

Design/Build helps the architecture student connect the beginning of an idea with its end by integrating thinking and doing, the two vital components of the process. This synthesis elevates the quality of the final product by enabling the student to understand the impact of one discipline on the other. Students learn the importance of teamwork; develop respect for craft and trades' people; manage the complex problems encountered when working simultaneously in the studio and on the building site; and better comprehend the properties of materials through direct use in construction.

Architectural practice is also concerned with collaboration--working with and for people. Architectural education, on the other hand, is often focused on the Individual.

The Rural Studio a satellite of Auburn University has a long and successful tradition of integrating social responsibility into their teaching of architectural practice.^{1,2} Their projects offer an opportunity for individuals to take on responsibility, while at the same time instilling the importance of interdependence within the wider community.

During the 2004-2005 academic year, Flury was on a leave of absence from IIT to teach as a Visiting Assistant Professor for the second year program at Rural Studio. With the support of second year Instructor Emily McGlohn, Flury directed two teams of 15 students.^{3,4} The team designed and built a three bedroom house in Mason Bend, a small trailer home community in Hale County, Alabama, which originated as a settlement for cotton laborers.

This tightly-knit, stable community includes about 100 people, all rooted in 4 extended

families. Our client, the Harris family, owns a 5-acre lot with an amalgamation of three trailers still functioning long past their expected lives.



Figure 1. Fall studio 2004. Photo by: Flury.



Figure 2. Spring studio 2005. Photo by: Flury

The team spent more than a month analyzing and measuring the site as well as talking to the client. Their extensive study of Antebellum houses and barns with Dick Hudgens, History Instructor at the Newbern Campus, helped

students understand the logical, low-tech attributes common among these vernacular structures, such as natural airflow through the hallways and the transoms above the doors. Looking at southern typologies and building elements such as porches and wide overhangs for sun protection became a driving element in thinking about the design of a contemporary rural house.

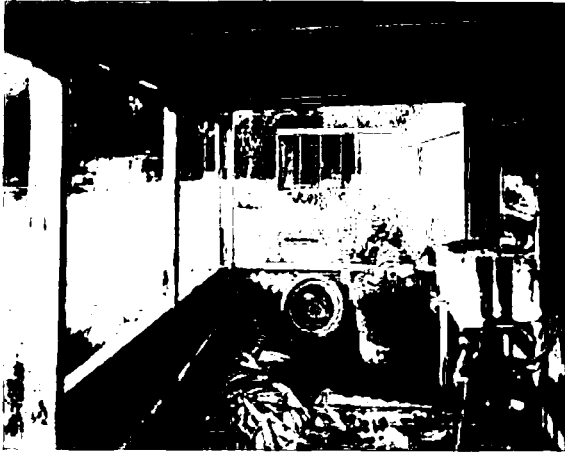


Figure 3. Context. Photo by: Tim Hursley

The context of Mason Bend (fig 3) and the design and construction of trailer homes were also key factors in the design process. The students found the floor plans of the trailers to be efficient and well designed, but the actual product to be poorly built. Since many of the residents lived in old, well used trailers, the students could study where and how the trailers failed.

This led to an investigation of prefabrication and modular systems which drove the idea of creating a new rural prototype for inexpensive, high quality houses.

So how do you design and build a house in just one year with two teams of second year architecture students?

The first team started by interviewing the Harris family, and soon figured out that, as matriarch of the family, everything revolves around Willie Bell--she makes the final decisions. Willie Bell Harris (fig 4) is the mother of 6 grown children. At the age of 16, with two children in tow, her home exploded due to a gas leak. When her settlement finally came through in the mid eighties, she bought

a used trailer. This is the home, where she raised her children and where she lived until she received this new home.



Figure 4. Willie Bell and students. Photo by: Flury

In talking with Willie Bell, the students found that she likes to see the street, but she also relishes privacy. She spends most of her time in the kitchen, but she also aids in the supervision of her grandchildren.

In a place most people consider the paradigm of hot and humid, Willie Bell paradoxically talks about being cold. Another key design factor was minimizing the need for electricity, which accounts for almost half of the Harris' monthly income. Based on Willie Bell's input, the students spent a year in Mason bend designing and building the "DOUBLE WIDE", a contemporary fusion of a shotgun house and a dog trot. The house is nestled on the east part of the site near a stand of trees, which offer protection from the strong west sun. (fig 5)

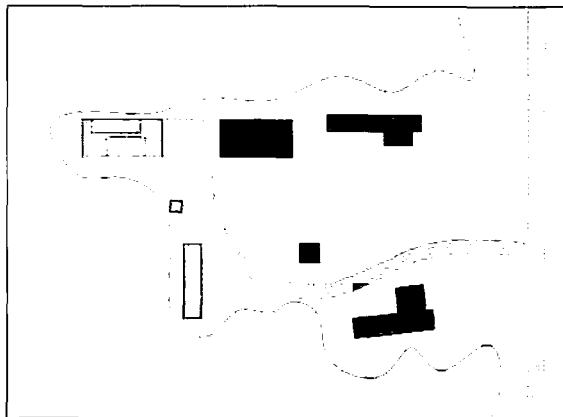


Figure 5. Site plan.

Conceptually, the plan is derived from two shifted trailers separated by a hallway. (fig 6) The shift creates screened porches on both ends of the house responding both to Alabama's climate and Willie Bell's limited budget. Along with thoughtful positioning of the openings and a transom over interior doors, the house enjoys a surprising breeze. (figs 7-8)



Figure 6. Floor plan.

In addition, the students created a screen out of 2x6 cedar boards to protect the building from solar gain. The gap between the interior skin and outer screen creates a chimney effect to protect the interior space from overheating. In winter, a used wood stove, positioned in the heart of the building, is the only heating

source; but the highly insulated skin helps raise the energy efficiency.



Figure 7. Interior. Photo by: Tim Hursley

The students learned how to create an architectural solution for a real client with their own hands and a limited budget--a life-altering experience for everyone.

After living for decades in difficult conditions, Willie Bell and her family finally have their new house, they moved in last December.

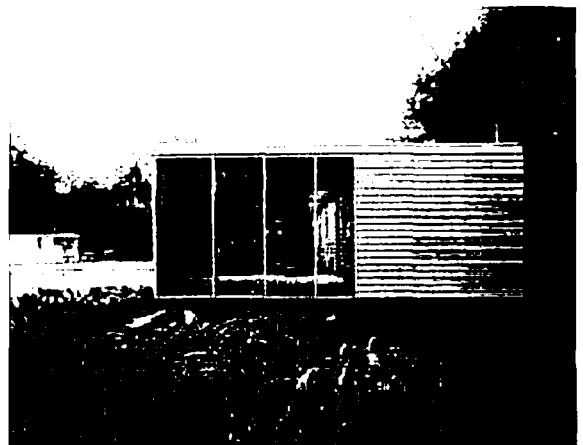


Figure 8. Layers. Photo by: Tim Hursley

Credits:

1. Auburn University Campus: Rural Studio College of Architecture, Design and Construction, School of Architecture, 202 Dudley Commons, Auburn University, AL, 36849

2. Newbern Campus: Rural Studio, P.O. Box 278, Newbern, AL, 36765

3. fall 2004 rural studio: Instructors: Frank Flury and Emily McGlohn; Construction Supervisor: Johnny Parker,; students: Brent Amos, Uel Bassett, Kait Caldwell, Laura Clark, Drew Cashowl, Betsy Farrell, Jason Holland, Nadene Mairesse, Rand Pinson, Sarah Tilloston, Nicholas Thomas, Jennie West, Tylor Young

4. spring 2005 rural studio: Instructors: Frank Flury and Emily McGlohn; Construction Supervisor: Johnny Parker; Students: Daniel Ash, Lu Bai, Rebecca Broome, Sean Carter, Courtney Cashburn, Ryan Coleman, Joey Fante, Melissa Graveline, Abigail Grubb, Jennifer Hale, Rosannah Harding, Trey Howell, Drew Merckle, Kendall Pitts, Mackenzie Stagg, Joey Tudisco

Contact:

Frank Flury
Assistant Professor
College of Architecture
Illinois Institute of Technology,
S. R. Crown Hall
3360 S State Street
Chicago, IL, 60616, USA
Fax: 312.567.5820 Mail: Flury@iit.edu