

Rose Lee's House

La casa de Rose Lee

Footwash, Hale County, Alabama

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Abstract

Rose Lee's House has been designed and built for a family in a small, black community in West Alabama. It is the result of two semester's work by the Second Year students at the Rural Studio, a design-build architecture program studio run by Auburn University. In 2008-2009 Rose's house focused on an experimentation of the *Expandable House*. This house expands and grows by necessity over time; it is based on the traditional local farmhouse strategy and its design is driven by the client's priorities and lifestyle. Rose's house has not only been designed but also fully built by groups of students who did absolutely everything: from the foundations and finishes to the electrical and plumbing installations.

Keywords: community projects, *expandable house*, courtyard house.

Resumen

La Casa de Rose Lee ha sido diseñada y construida para una familia de una pequeña comunidad negra del oeste de Alabama. Esta casa surge luego de dos semestres de trabajo de los estudiantes de segundo grado de *Rural Studio*, programa de diseño y construcción arquitectónica, dirigido por la Universidad de Auburn. Entre 2008 y 2009 la casa de Rose se centró en la experimentación sobre casas expandibles. Esta casa se expande y crece por la necesidad a lo largo del tiempo. Es una construcción basada en la tradicional estrategia local de la casa finca y su diseño está determinado por las prioridades, las necesidades y la forma de vida de los clientes. La casa de Rose no sólo ha sido diseñada, sino también construida por grupos de estudiantes que edificaron absolutamente todo: desde los cimientos hasta las instalaciones eléctricas potable hidráulicas.

Palabras clave: proyectos comunitarios, casas expandibles, casas con patio.

ROSE LEE'S HOUSE

Location: Footwash, Hale County, Alabama,
United States of America

Year of project design: 2008-2009

Architect: Rural Studio, Auburn University

Designers and Builders: Rural Studio's 2nd year,
sophomore students 2008-2009

Teachers: Visiting Assistant Professor Elena
Barthel, Instructor John Marusich

Text: Elena Barthel

Photographs: Elena Barthel and Timothy Hursley©

Figure 1. Rose's House front porch. Photograph: ©Timothy Hursley.



Rural Studio

Rose Lee's House is the result of two semester's work by the Second Year Studio, at the Rural Studio, in West Alabama.

The Rural Studio is a Design and Build program, part of the five-year Bachelor of Architecture degree at Auburn University in Alabama. Located in Newbern, a small village one hundred miles north-west of Montgomery, the Rural Studio is currently the most heralded program of its type in the world. Established in 1993 by Samuel Mockbee, a well known southern artist from Mississippi, the Rural Studio has been directed by Andrew Freear since 2002; a Yorkshireman who trained as an architect in the United Kingdom.

Each year at the Rural Studio a group of thirty second-year students design and build a charity house for the nearby community. At the same time, in the same area, fifth-year students run large community projects, working on both public buildings and open spaces. Also, a small group of Outreach students, from all over the world, investigate affordable housing prototypes, and each year design and build a new evolution of the '20 K House': a home for everyone.

In the last seventeen years, the Rural Studio has designed and built over one hundred projects in a twenty-five miles radius of Hale, Marengo and Perry counties: becoming a public service for the large communities. Its architecture, which is characterized by being experimental and sustainable, is renowned worldwide.

The Expandable House

The purpose of the Rural Studio Second Year Studio is to investigate contemporary forms of rural dwelling. In 2008-2009 Rose's House focused on an experimentation of the *Expandable House*.

This house expands and grows by necessity over time; it is based on the traditional local farmhouse strategy and its design is driven by the client's priorities and lifestyle. The *Expandable House* responds to the transient nature, and demographic of the contemporary family. The goal is to propose a design and building strategy capable of providing a flexible home, open to change and future expansions.

Rose's House is the first Rural Studio attempt to design and build an *Expandable House*. For this experiment the courtyard typology was chosen with all its 'U' and 'L' shape variations, to connect and guide the future alterations of the *Expandable House*.

The courtyard brings natural light, weather, and landscape into the centre of the dwelling, along with privacy, and intimacy. During the hot, West Alabama months it becomes the 'outdoor living room'. By experimenting with the *Expandable Courtyard House*, one of the main heritages of the Modern Movement is reintroduced into the housing

debate. The opportunity is also offered to test a low-rise model (for the development of rural villages and their densification) as an alternative to the contemporary 'Sprawl logic'.

The site

Rose Lee's House has been designed and built for a family in Footwash, a small, black community, situated ten miles south of Rural Studio's headquarters. The Footwash settlement is surrounded by dense woodlands, developed around two dead-end roads, and a small grocery store.



Figure 2. Rose's property site map. Collage.



Figure 3. Footwash Grocery Store. Photograph: ©Timothy Hursley.



Figure 4. Rose's previous home. Photograph: Elena Barthel.



Figure 5. Rose standing in the previous house front yard. Photograph: Elena Barthel.



Figure 6. Rose sitting in her previous living room. Photograph: ©Timothy Hursley.

The 1/4 square miles compound is characterized by a large open area, 'downtown', which plays host to the annual Footwash Black Music Festival, and a group of small wooden houses, the 'suburb', with street-facing front porches. Rose Lee's property is a long, thin plot in the middle of the 'suburb', oriented north-south.

The survey and understanding of the site's large-scale context gave the Studio a very important basis on which to move forward.

The client

Rose Lee is a sixty-six year old woman living with her two sons, both in their mid-twenties. They are a typical West Alabama family, supported by the Federal subsidy, with very poor living conditions and no running water.

Forty percent of the population in Hale County still live below the poverty line, dependent on a local economy that relies on the fragile dairy and catfish farming sectors, as well as the logging industry, which has recently been further prostrated by the newspaper crises. The client's lack of resources, the family life-style and Rose Lee's sociable personality deeply influenced the design of the house.

Rose Lee's House

Rose Lee's House is an 'L' shaped courtyard house, with a long horizontal porch facing the street, and a square patio facing the back yard. The porch is dedicated to Rose's social life, in the spirit of the traditional southern front porch, while the courtyard, enclosed by a semi-transparent cedar wall provides the family with privacy. It has a 180° open-view towards Footwash's 'Main Street', with a bold, overhanging roof, delicately held by light metal supports. At the same time, a variety of openings in the courtyard's wall allow special apertures through which Rose can see her neighbours: her mum, nephews and the dog sleeping in the back yard.

The position of the two very different outdoor spaces help the house environmentally; the south-facing porch, shades the building during the summer, and the north-facing courtyard, gives a mild, outside living room in winter. The 'day' part of the house sits between the front porch and the courtyard, both accessible through large sliding doors.

The 1200 square feet dwelling has been designed with a core volume called 'The Machine', which has a perpendicular 'Expansion Wing' on the west side of the site. 'The Machine' houses the main family areas: the master bedroom, a large living-dining room, the kitchen and ba-

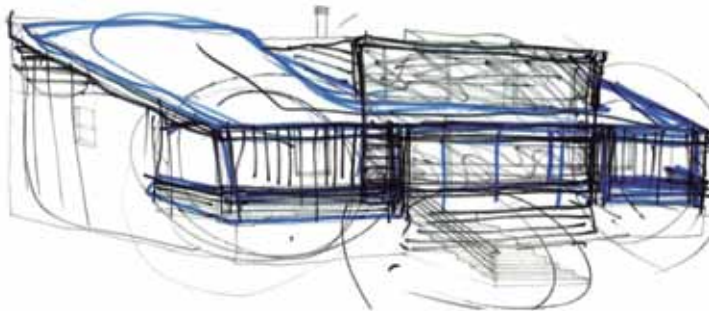


Figure 7. Sketch of the house during the design process.

throom. The 'Expansion Wing' provides two more bedrooms for Rose's sons. In the future, the house could accommodate a young couple with one child, to take care of Rose Lee during her golden years.

Taking into consideration Rose's family's lack of economic resources, both kitchen and bathroom have natural light and ventilation. The openings in both living room and bedroom provide cross ventilation, and a clerestory in the front elevation allows sunlight to heat the house during the winter. A salvaged fireplace provides the house with an energy source, which is also designed with an environmental bent.

The design and build process

Rose's house has been designed and fully built by two groups of seventeen students aged between nineteen and twenty-three. The students built absolutely everything: from the foundations and finishes to the electrical and plumbing installations.

The students were introduced to the project and encouraged to learn by observing, designing and building through the two semesters, working as one large team.

The first group who spent the fall at the Rural Studio, designed and built the 'The Machine'. The second group, who joined the project in the spring, completed the house with the 'Expansion Wing' and the courtyard.

The first group's design work focused on the typology, the site location, and the form of the building, while the second group worked on details, finishes and materials choices.

Both groups shared the same strategy for building Rose Lee's new home; they undertook the project in phases that allowed the family to reside in their existing home until the new one was completed.



Figure 8. Rose's House front. Photograph: ©Timothy Hursley.

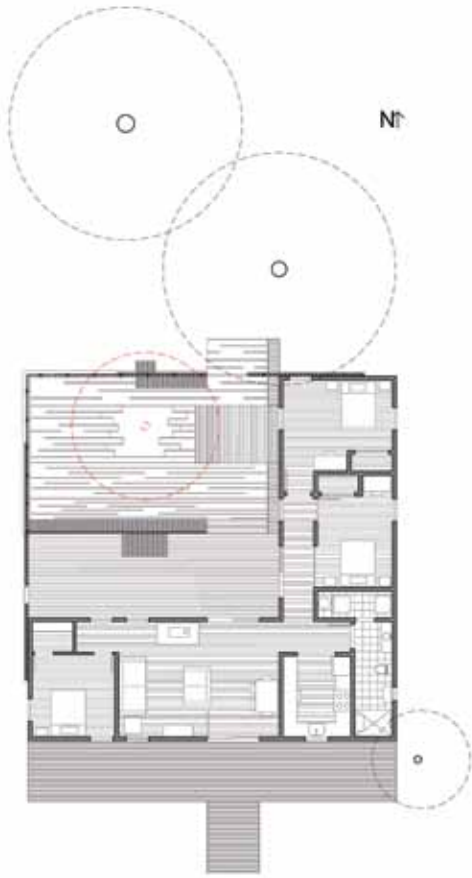


Figure 9. Rose's Expandable Courtyard House plan.



Figure 10. Rose's House living room. Photograph: ©Timothy Hursley.

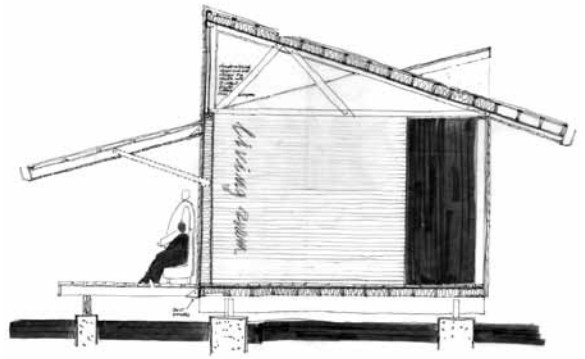


Figure 11. Section of the front porch.




Figure 12. Elevation and sections.

Structure and materials

Rose's House is a standard wooden platform frame structure with a 'pop up' roof, held up by four trusses, designed and crafted by the students, with 2"X8" nominal dimension heart pine, salvaged from a old local barn. The same recycled wood has been used to rap the walls in the living room and the expansion hallway, to give a hierarchy and a warmer texture to the communal interior spaces.

The freestanding courtyard wall, lifted by light metal supports, together with the rain screen that raps the entire building, and part of the courtyard floor, have been built with cedar wood; from a resinous West Alabama tree, traditionally used for buildings due to its water resistance.

Rose's House is also known as the 'Cedar House', which highlights the students' effort to use '0 miles' materials. It also illustrates the clear intention to reduce the house's carbon footprint and reflects the belief that architecture should support local economies.

Every detail of the house has been drawn full-scale and mocked-up to make sure each choice guarantees low maintenance and longevity, together with a coherent design for the house as a whole. 

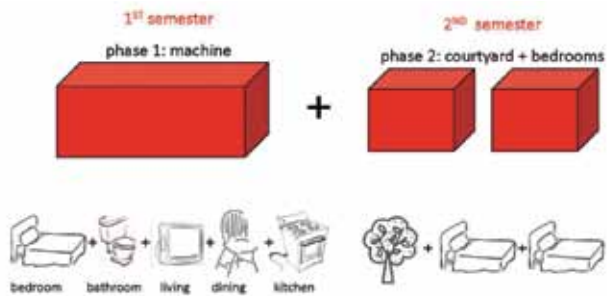
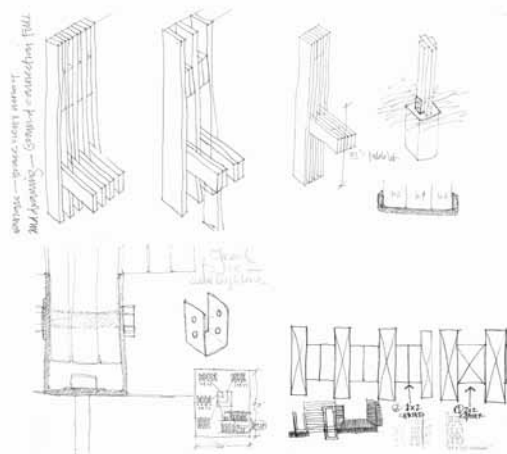


Figure 13. Diagram of the Rose's new home building process.



Figure 14. Rose's House during the building process. Photograph: ©Timothy Hursley.

Figure 15. Sketch of the courtyard wall.



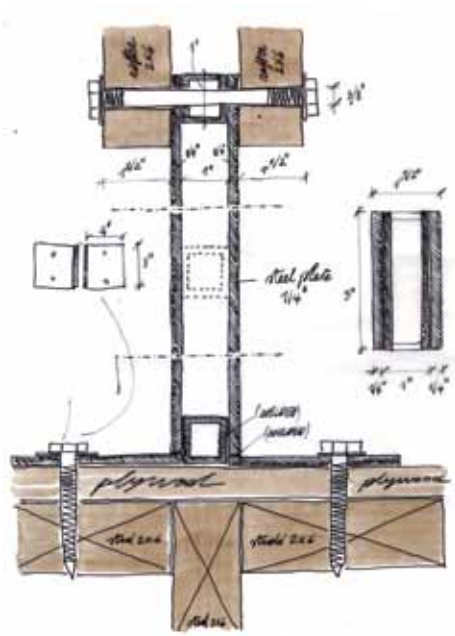


Figure 16. Full scale detail.



Figure 17. Students at work. Photograph: Elena Barthel.



Figure 18. Rose's Courtyard during the building process. Photograph: ©Timothy Hursley.