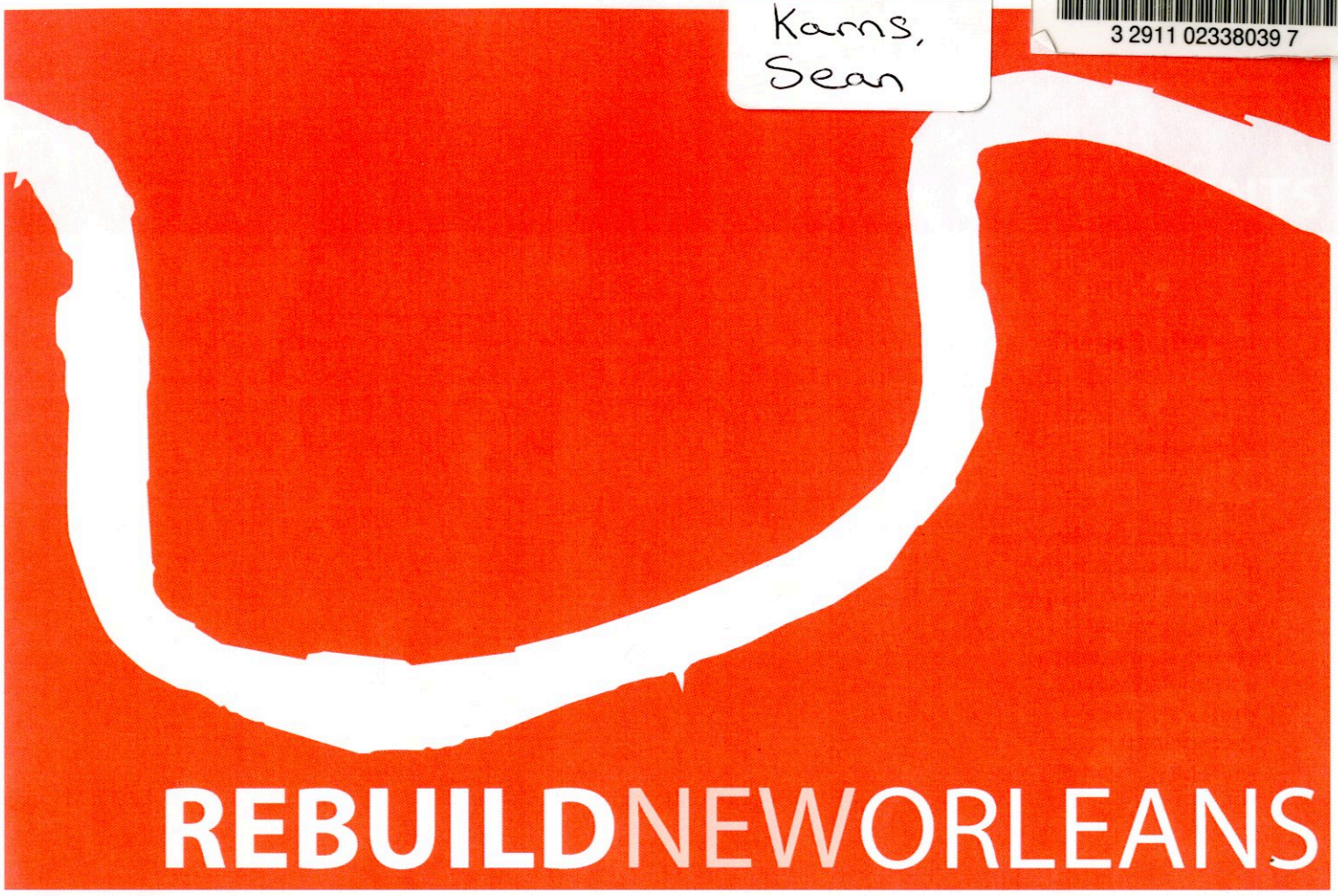
Spring 2006

Rebuild New Orleans

Sean Karns



Sean Karns

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THESIS STATEMENT

The development of a city depends on it's ability to rebuild. In many cases planners have been unaware of future threats to their city that may occur. Often times in order to rebuild one must rethink and replan in order to fully utilize while learning and taking away valuable lessons from the past. In the case of a natural disaster, such lessons usually stem from precautions that could have been made to pro actively resolve the situation.

In the wake of hurricanes Katrina and Rita and the flood that ensued, the architectural and planning community have been called upon to lend their expertise in the rebirth of the affected areas. Currently FEMA has ordered 100,000 mobile homes and recreational vehicles to house an estimated 300,000 evacuees. Although this may provide adequate temporary housing, the question still remains on how to reinvigorate the community, an outcome not generally equated with today's prefabricated mobile homes. The real answer lies in the development of a system able to not only adapt to its site and climate, but also to its occupants.

Many factors play a part in the social stigma mobile homes carry with them. For one, the communities attributed to such housing are far from breeding grounds of good social bonding. This stems primarily from the lack of pride owners take in their homes, due largely to their poor build quality, lack of light, ventilation, appreciation in value and most importantly the lack of ability to personalize one's own space. Through a combination of prefabrication and mass-customization manufacturing techniques, the goal is to ultimately allow the end-user full control over their living space. This can be achieved via interchangable parts, for example to allow a second bedroom to be broken down into a living space. Or go as far as to add square footage onto the house by way of a modularized system of parts, allowing for an almost infinite array of possibilities. In giving the end-user the ability to not only control his/her environment, but also increase the value of his/her home, a better housing environment and community can be forged.

On a larger scale, the issues of urban design must also be addressed in order to achieve a successful revitalization. The infrastructure of New Orleans, due to it's topographical character (wherein a majority of the city resides at 5 to 10 feet below sea level), begs the question of whether to rebuild or re-imagine the city in an entirely different light. Based on cities that have perished due to natural disaster in the past, it is quite apparent that zoning and land rights must remain in tact. However, a severe change must occur in terms of the way the rebuilt city responds to its topography. This must be approached as a means to stave off future disasters from having such a profound affect on the area. Whether or not the levee system that controls the surrounding water is made stronger, the rebuilt portions of the city must make a stand against such future hindrances. This traces back to the initial question of the housing prototype, as it is here that a stance on the topography of the region can be made. To abandon the area all together would be to throw away hundreds of years of culture and heritage, but to redesign to take into account the natural character of the area, a new life can be brought back to the area through the means of urban and architectural design.

SITE ANALYSIS


NEWORLEANSLA


BEFORE
AFTER
SITE
BEFORE
AFTER
SITE
FLOOD DAMAGE

Sean Karns . REBUILDNEWORLEANS . Profs. Elizabeth Kamell & Joel Stipano


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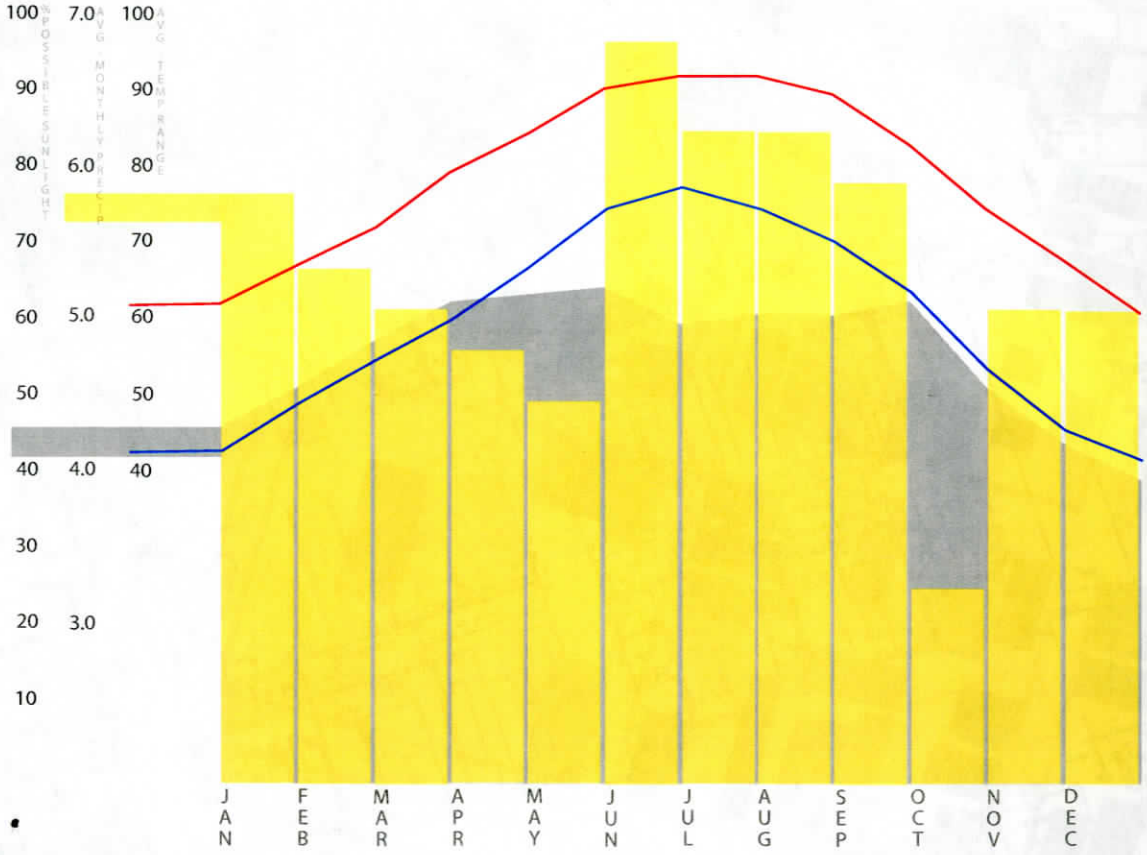
NEW ORLEANS: CLIMATE



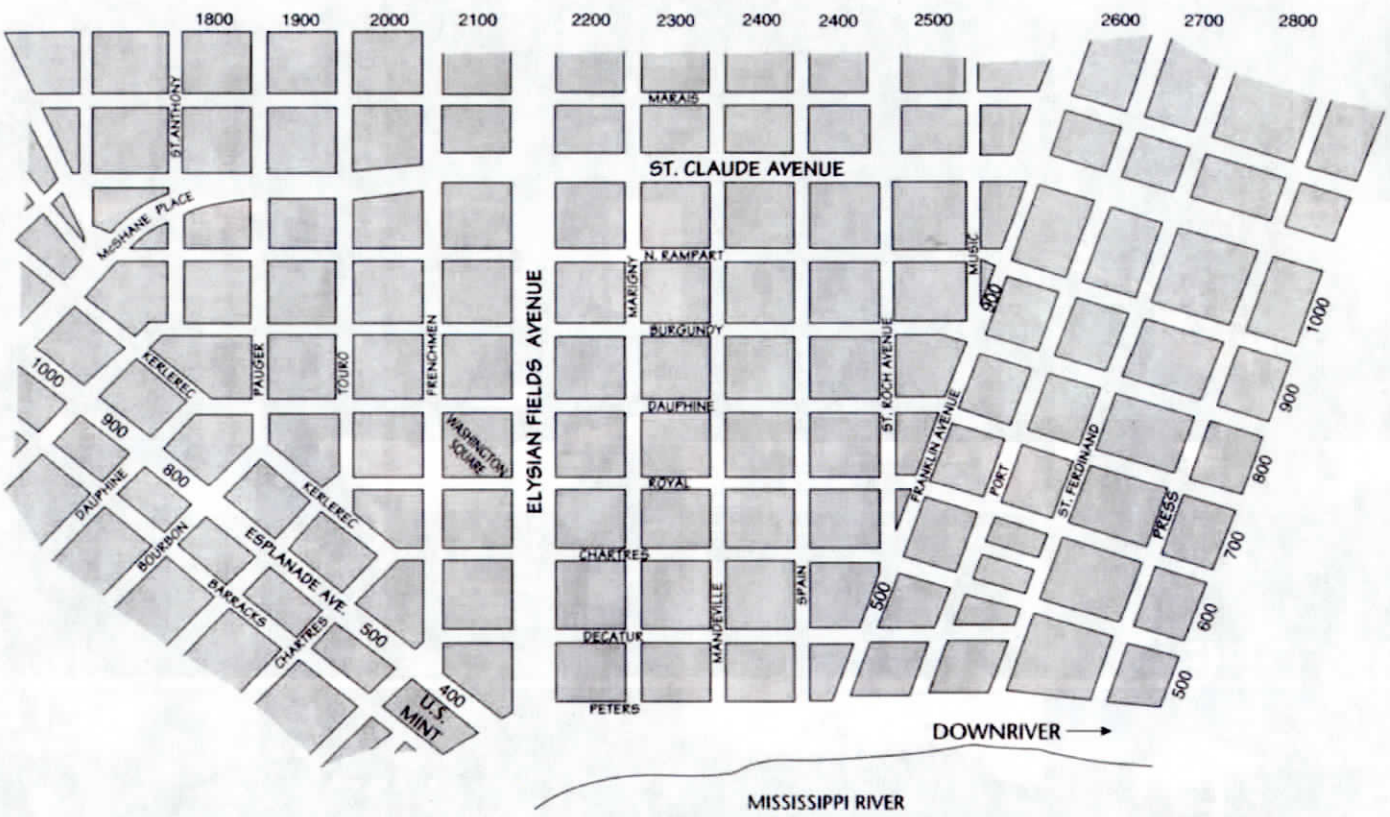
New Orleans Temperature	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Avg. Temperature	51.3	54.3	61.6	68.5	74.8	80.0	81.9	81.5	78.1	69.1	61.1	54.5	68.1
Avg. Max Temperature	60.8	64.1	71.6	78.5	84.4	89.2	90.6	90.2	86.6	79.4	71.1	64.3	77.6
Avg. Min Temperature	41.8	44.4	51.6	58.4	65.2	70.8	73.1	72.8	69.5	58.7	51.0	44.8	58.5
Days with Max Temp of 90 F or Higher	0.0	0.0	0.0	< 0.5	4.0	16.0	21.0	20.0	9.0	1.0	0.0	0.0	72.0
Days with Min Temp Below Freezing	5.0	3.0	1.0	< 0.5	0.0	0.0	0.0	0.0	0.0	0.0	1.0	3.0	12.0

New Orleans Heating and Cooling	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Heating Degree Days	450	316	162	28.0	0.0	0.0	0.0	0.0	0.0	30.0	178	349	1513
Cooling Degree Days	25.0	17.0	56.0	133	304	450	524	512	393	157	61.0	23.0	2655

New Orleans Precipitation	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Precipitation (inches)	5.0	6.0	4.9	4.5	4.6	5.8	6.1	6.2	5.5	3.0	4.4	5.8	61.9
Days with Precipitation 0.01 inch or More	10.0	9.0	9.0	7.0	8.0	11.0	14.0	13.0	10.0	6.0	7.0	10.0	115
Monthly Snowfall (inches)	0.0	0.1	< 0.05	< 0.05	< 0.05	0.0	0.0	0.0	0.0	0.0	< 0.05	0.1	0.2

Other New Orleans Weather Indicators	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Average Wind Speed	9.3	9.8	9.9	9.4	8.1	6.8	6.1	5.9	7.3	7.6	8.7	9.0	8.2
Clear Days	7.0	8.0	8.0	8.0	9.0	8.0	5.0	7.0	10.0	14.0	10.0	8.0	101
Partly Cloudy Days	7.0	6.0	8.0	10.0	11.0	13.0	15.0	14.0	11.0	8.0	8.0	7.0	118
Cloudy Days	17.0	14.0	15.0	12.0	11.0	9.0	12.0	10.0	10.0	9.0	12.0	16.0	146
Percent of Possible Sunshine	46.0	50.0	56.0	62.0	62.0	63.0	58.0	61.0	61.0	64.0	54.0	48.0	57.0
Avg. Relative Humidity	67.5	75.5	74.5	75.0	74.5	75.5	77.0	79.0	77.5	76.5	73.0	74.0	77.0

FAUBORG MARIGNY



Faubourg Marigny or simply Marigny is a neighborhood in the downtown section of New Orleans, Louisiana, just down river from the famous French Quarter.

The neigborhood fronts the Mississippi River at the small end of its roughly triangular shape. The upriver boundary with the French Quarter is Esplanade Avenue. The back boundary is Claiborne Avenue. The lower boundary, with the Bywater neighborhood, is Franklin Avenue.

Marigny was laid out in the first decade of the 19th century by an eccentric Creole millionaire, developer Bernard Xavier Philippe de Marigny de Mandeville on land that had been his family plantation just down river from the old city limits of New Orleans. The portion of Marigny closer to the river was built up first; the area on the side of St. Claude Avenue (formerly "Goodchildren Street") away from the river was sometimes called "New Marigny". In the early 19th century, New Marigny was where white Creole gentlemen set up households for their colored mistresses (and their offspring) in the tradition of "plaçage".

In the 19th century Marigny was the old Third Municipality of New Orleans.

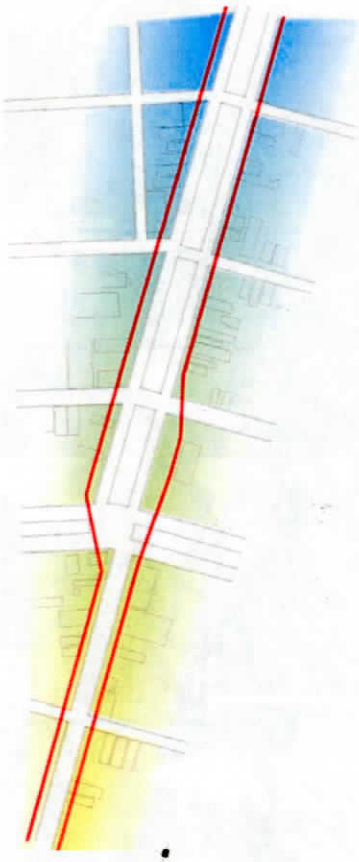
Wide Elysian Fields Avenue, named after the Champs Elysées in Paris, was designed to be the main street of the Faubourg Marigny. It was the first street in New Orleans to extend all the way from the riverfront straight to Lake Pontchartrain 5 miles away. In 1830-31 the Pontchartrain Railway was built with tracks down the center of Elysian Fields. The area at the other end of the rail line developed into Milneburg. Marigny's town square, Washington Square, fronts Elysian Fields.

The neighborhood declined badly in the mid 20th century, and the area around Washington Square was nicknamed "Little Angola" (after the prison in Angola, Louisiana) for the dangerous criminals there. It came back strongly in the late 20th century. Profiteering around the 1984 World's Fair drove many long term residents from the French Quarter into Marigny. Frenchmen Street developed one of the city's premier collections of live music venues and restaurants, and is a popular destination with music lovers from other parts of the city and knowledgeable out of town visitors in the early 21st century.

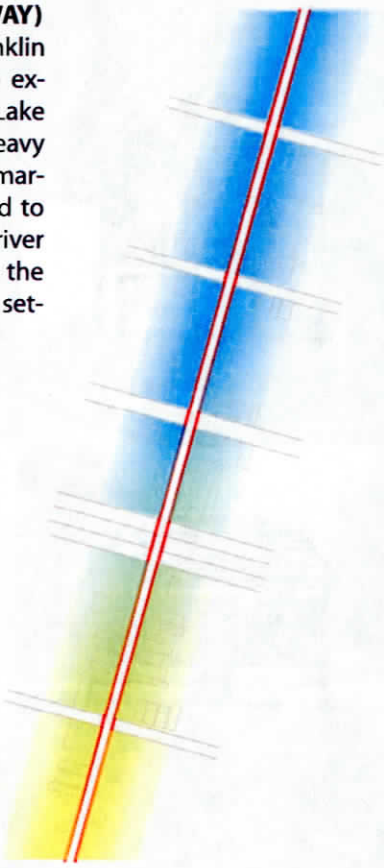

BEFORE
AFTER
BEFORE
TER
Sean Karns
REBUILDNEWORLEANS
Profs. Elizabeth Kamell & Joel Stipano

HOUSING TYPE STUDY: MARIGNY SECTION

SETBACK/ZONING STUDY: MARIGNY SECTION

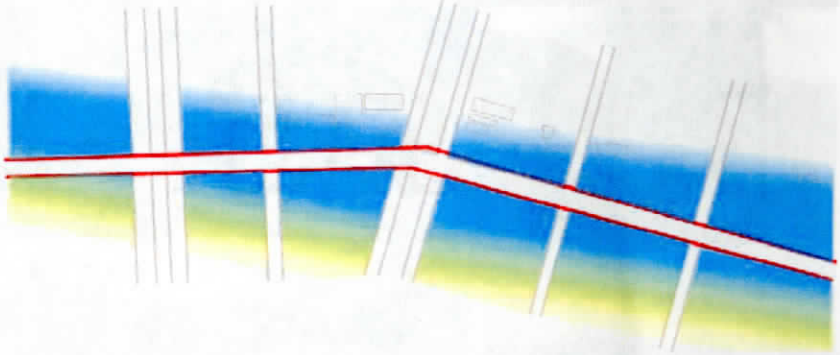


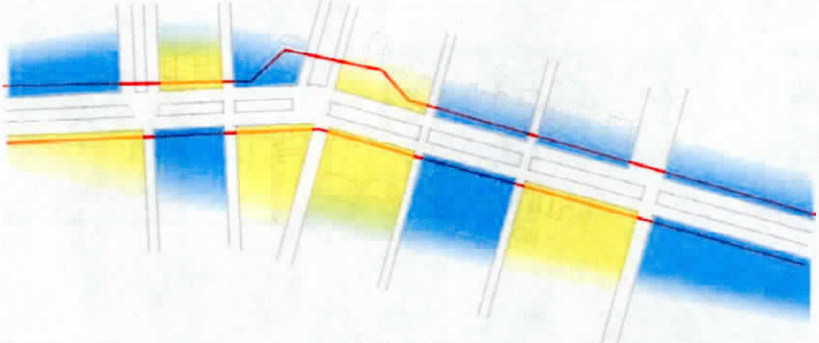
FRANKLIN AVENUE(TWO WAY)
The north-south axis of Franklin Ave. was the first street to extend from the river up to Lake Ponchartrain. It shows heavy use and moves from primarily residential at the lake end to primarily commercial at the river end. Due to it's high usage, the buildings fronting on it are setback ~10-15'



PORT STREET(ONE WAY)
The north-south secondary axis of Port St. is almost entirely fronted by residences. Across St. Claude Ave. and towards the river some mixed-use commercial sites spring up, but all in all the street is primarily residential. Due to it's low usage, the buildings on it have little to no setback from the street.

MARAIS STREET(TWO WAY)
Being a primarily residential street, Marais is low usage. The blocks that also front on St. Claude Ave. also contain some commercial establishments, but very few in relation. Due to it's low usage, the buildings on it have little to no setback from the street.

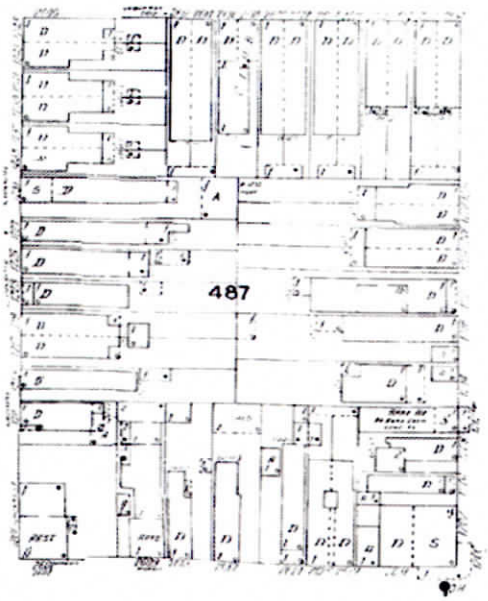




ST. CLAUDE AVENUE(TWO WAY)
Running from the famous French Quarter all the way east to the Chalmette Historical Park, St. Claude is a major by-way for east-west movement through the city. It's zoning is an amalgam of residences and commercial establishments. Due to it's high usage, the buildings fronting on it are setback ~10-15'

LOT/HOUSING RATIO STUDY: MARIGNY SECTION

Space in the Marigny section of New Orleans is at a premium, a majority of people have very little front or back-yard space, not to mention the lack of seperation between lots. The solution to the areas flooding needs could also solve its problems with a lack of space. If say, houses were lifted off of the ground, with little to no programmed space below, exterior space can be gained. Through strategic planning of house placement, a staggering effect could allow for more seperation between houses as well as allow more light into such tight spaces.



1025.2

AVERAGE SQUARE FOOTAGE PER LOT

6

AVERAGE NUMBER OF PEOPLE PER HOUSEHOLD IN LOUISIANA

1,912

AVERAGE HOUSE SQUARE FOOTAGE

40

AVERAGE NUMBER OF HOUSEHOLDS PER ACRE

152

AVERAGE SQUARE FOOTAGE OF EXTERIOR LOT SPACE

5

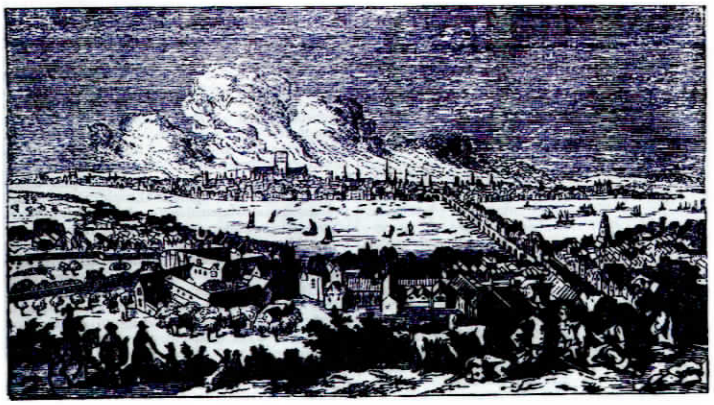
AVERAGE SPACING BETWEEN HOUSES IN FEET

PRECEDENT ANALYSIS

HISTORICAL REBUILD STUDY

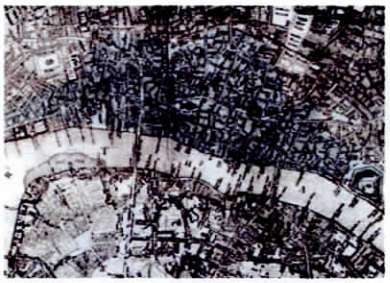
1666

LONDON
GREAT FIRE



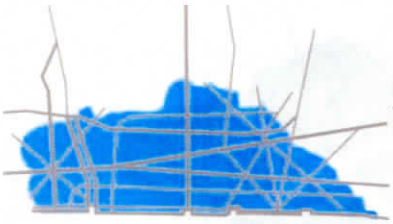
MAP OF PRE FIRE LONDON C. 1611

ORIGINAL MAP OF FIRE's EXTENTS



MAP OF REBUILT LONDON, C. 1890

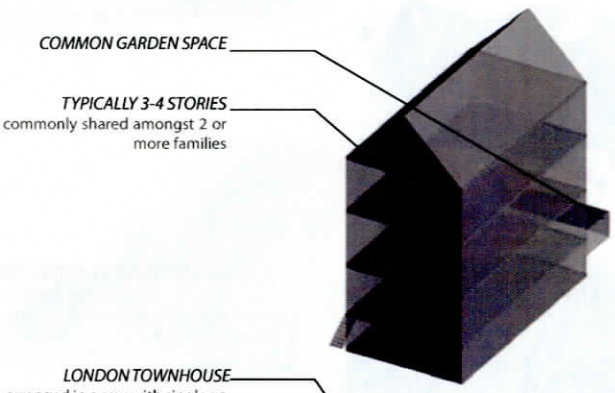
ACTUAL EXTENTS OF THE LONDON FIRE
17,200 houses were burned
87 parish churches
6 chapels
4 bridges
St. Paul's Cathedral
made ~100,000 people homeless
(1/6th the population)

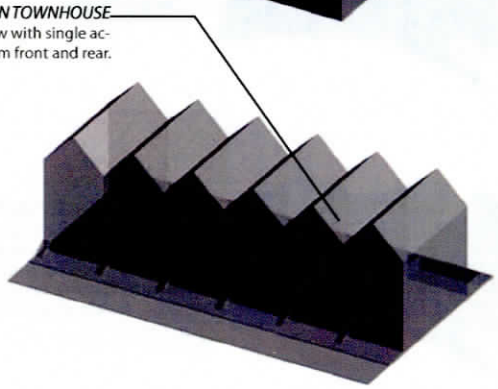


INITIAL PLAN FOR RECONSTRUCTION
design by Christopher Wren
intended to create an entirely new plan for the city major points to be marked by grand piazzas did not succeed due to issues with land rights

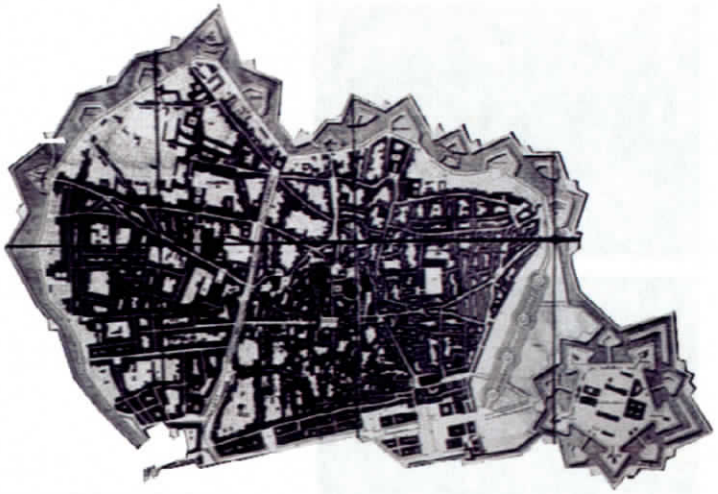
INITIAL PLAN FOR RECONSTRUCTION
design by Robert Hook
called for the destroyed land to be subdivided into a cartesian grid and land be redistributed to those devastated. At the major crossings in the grid, large monuments were to be placed, and marked by grand plazas.

REALIZED PLAN FOR RECONSTRUCTION
design by John Rocque
major avenues were widened restrictions were placed on rebuilt buildings wall thickness and material subject to approval building height depending on importance of street

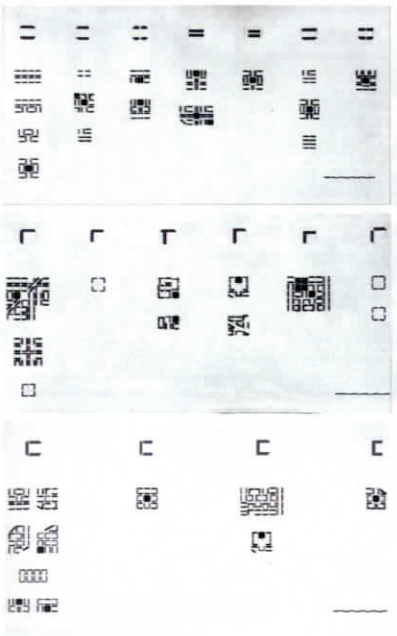




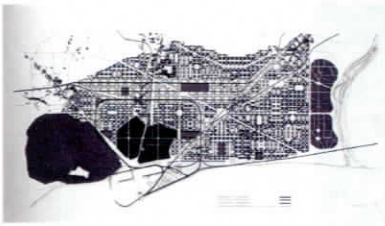
BARCELONA
L'EIXAMPLE



ORIGINAL MEDIEVAL PLAN



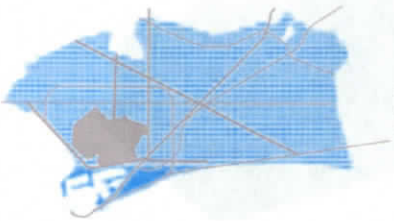
CERDÁ'S BLOCK SCHEME



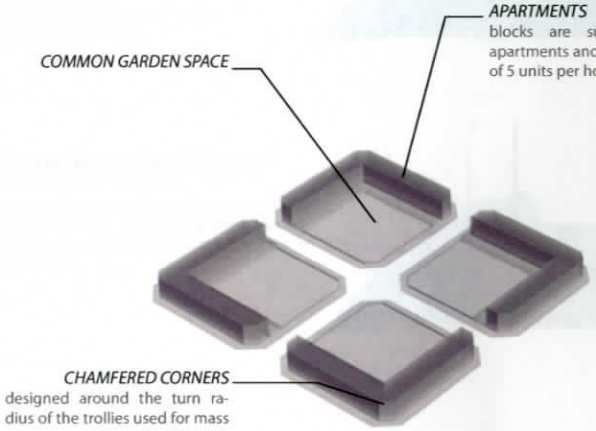
CERDÁ'S ORIGINAL PLAN

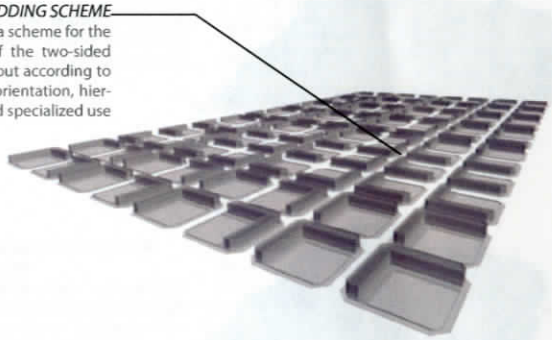
EXTENTS FOR RECONSTRUCTION
design by Robert Hook

ENTRANT FOR RECONSTRUCTION
design by Antonio Rovira
called for a plan to radiate around the original medieval walls, with a gridding of streets between the major radials.



REALIZED PLAN FOR RECONSTRUCTION
design by Illdefonso Cerdá
major avenues were widened restrictions were placed on rebuilt buildings wall thickness and material subject to approval building height depending on importance of street



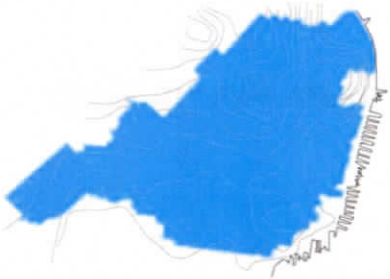


1906

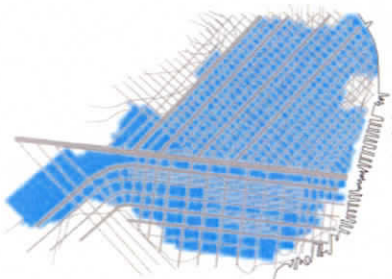
SAN FRANCISCO
EARTHQUAKE + FIRE

MAP OF THE FIRE'S EXTENTS

MAP SHOWING IMPACT ON BAY AREA

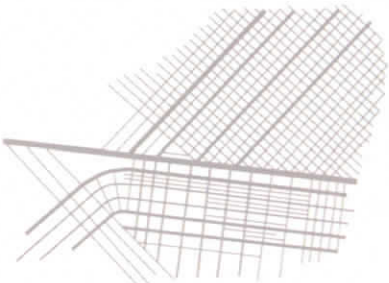


EXTENTS OF FIRE DAMAGE



EXTENTS OF FIRE DAMAGE

immediately after the fires and tremors subsided, the actual damage could be tallied. Upon further investigation it was determined that due to San Francisco's role as a central money lending hub for the entire west coast, the city would have to be rebuilt immediately.

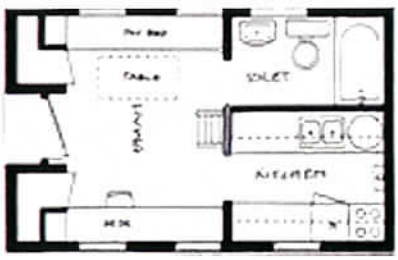


REALIZED PLAN FOR RECONSTRUCTION

using absolutely no federal relief funding, the city of San Francisco was rebuilt almost exactly as it had been. The only major improvements were to the major byways which were widened.

PRECEDENT ANALYSIS

PREFABRICATED COMPARISON CHART



TumbleweedTinyHouses

s-house
160sq.ft.
16x10x14'
$29,990

All work is done by one person, Jay Shafer. House is built in his workshop and delivered via flatbetd truck to the site. He also allows buyers to purchase bare bones versions to cut down on cost, and is open to any modifications as long as they are physically possible. . The prefabrication process takes 10 to 16 weeks, from the placing of an order.

Accommodates: 1
ProductionTime: 10-16
Sustainability: add-on
ClimateAdaptability: n/a
SiteAdaptability: flat
Arrival: flat-bedtruck

TomahouseTomatech

mpc (multi purpose cabin)
22.09sq.m.
4.7x4.7m
€4,000

The MPC is based on a 4x4 module, created out of an extruded aluminum structural tubing system, with integrated plumbing and electrical. The foundation system works with a variety of adaptable piles. The entire structure is delivered on 4 standard pallets and can be constructed in as little as 4 hours.

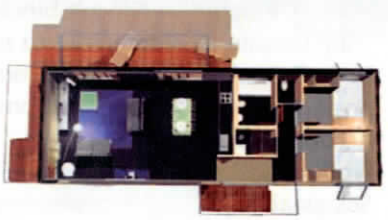
Accommodates: infinite
ProductionTime: Ready To Ship
Sustainability: n/a
ClimateAdaptability: n/a
SiteAdaptability: multiple piling systems allow for a multitude of siting options.
Arrival: flat-bedtruck

Ral-Homes

ral 2 2x6m Module $5,170per

A system of prefabricated structural panels which are bolted together to forma a series of segmented and intersecting arches, creeating a module of infinte expandability over an orthagonal grid.. The kits arrive from Australia pre cut and ready to assemble with an approximated build time of each 2 meter segment 4 hours.

Accommodates: infinite
ProductionTime: 4 hours
Sustainability: recycled materials
ClimateAdaptability:
SiteAdaptability: primarily flat, although slight variations can be accounted for.
Arrival: as kit

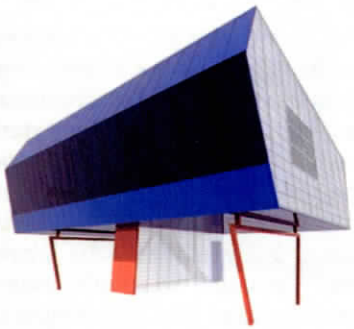


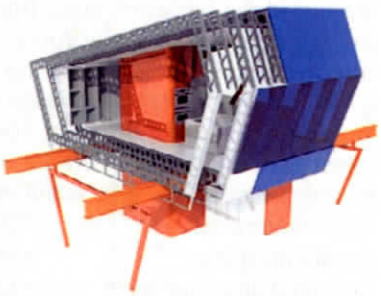
Tim Pyne

m-house 1,000sq.ft. $272,000

m-house (pronounced 'mouse') is a beautifully designed and meticulously detailed contemporary house or office. It is entirely manufacturered under controlled factory conditions, by a skilled workforce, which guarantees both quality of build and delivery time. m-house arrives in two pieces, each 3m (10' approx) wide, which are then joined together on site, which takes about a day. It comes completely fitted-out and ready for you to move into immediately, and delivery is 12 weeks after order.

Accommodates: 2-3
ProductionTime: 12 weeks
Sustainability: daylighting, relocatability
ClimateAdaptability: originaldesign can be customized upon ordering.
SiteAdaptability: flat
Arrival: flat bed truck





U p H o u s e

1 2 0 0
4 8 ' x 2 4 '
1 1 5 2 s q . f t .
$ 3 0 6 , 6 6 5

The UP!house is an investigation into a prefabricated architecture that borrows from the world of industrial design, specifically automotive design and production techniques. With options ranging from power windows to home theater entertainment packages, the UP!house is an attempt to make the purchase of the single family house more akin to that of the latest model Jetta.

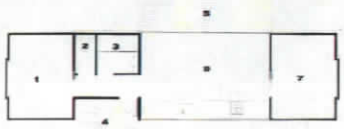
Accommodates: 2-5
ProductionTime: 5 weeks
Sustainability: daylighting,
ClimateAdaptability: modular design for customization
SiteAdaptability: flat site
Arrival: flat bed

T o b i a H u b e r
p o l i s

Due to the increase in individualisation and in single households, the demand for small and affordable apartments is rising permanently, especially in metropolitan cities like London, Tokyo and New York. Thus the prices for rents and real estates are constantly going up as well.

'POLIS' takes the winning concept of the American 'Mobile Homes' and puts it into the centres of the urban cities. The company develops living units particularly for an urban space, which you then purchase and attach to docks of already built houses.

Accommodates: 2-5
ProductionTime: 5 weeks
Sustainability: daylighting,
ClimateAdaptability: modular design for customization
SiteAdaptability: flat site
Arrival: flat bed



1 BEDROOM 2 TOILET 3 BATHROOM 4 ENTRANCE
5 DECK 6 KITCHEN-LIVING ROOM 7 (EXISTING)

SmartShax

shax
60sq.m.
$83,000

Black Barn is a modern Viking longhouse. A luxurious, basic black-washed box, with a tared wooden roof and exposed roof beams. With its extremely narrow form, it has a very exciting and dynamic interior, while at the same time, with its many bedrooms, convertible loft and generous storage spaces, provides quality living for families with children.

Materials and solutions are naturally first-rate, but at the same time, we've focused on keeping the price at a very attractive level.

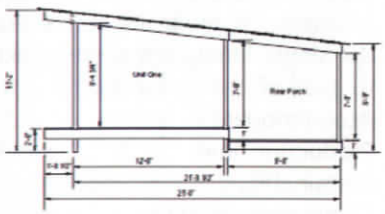
Accommodates: 2-5
ProductionTime: 5 weeks
Sustainability: daylighting,
ClimateAdaptability: modular design for customization
SiteAdaptability: flat site
Arrival: flat bed

PinchHouse

blackbarn
167sq.m.
350,000Eur.

Lightweight, timber environmental huts designed by architect Ken Latona ideally suited to the Australian coastal climate. " Basic amenity plus maximum connection to where you are". Particularly suitable for remote, isolated or difficult blocks. They contain all ammenities to reside off the grid, and also offer compositing toilets for total autonomy.

Accommodates: 2-5
ProductionTime: 5 weeks
Sustainability: daylighting,
ClimateAdaptability: modular design for customization
SiteAdaptability: flat site
Arrival: flat bed

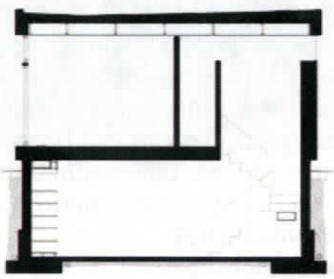


ShelterKitInc

unit one
12'x12'
expandable
$9,535

The kit includes all of the materials required to create a weather-tight shell on your foundation: hardware, fasteners, framing, siding, exterior doors and windows, flooring, roofing, drip edge and trim. All materials are hand selected, carefully cut to precise dimensions, labeled, and packaged in easily indentifable bundles that two people can carry. An illustrated Construction Manual describes each step, from the construction of a pier foundation to the installation of the roof, all in simple, easy-to-understand language. A tool kit that contains everything you need for assembly of the kit is also included.

Accommodates: 2-5
ProductionTime: 1 week
Sustainability: recycled materials
ClimateAdaptability: open design framework allows for climate based adaptability.
SiteAdaptability: flat
Arrival: as kit

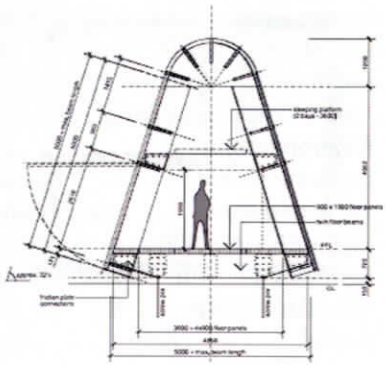


RocioRomeroDesign

lv home
1,150sq.ft.
$32,900

The layout of the home is mainly about efficiency as well as creating the best lighting and viewing solution for the home. The service spaces, which includes: kitchen, bathrooms, closets, utility closet, are all tucked in the back of the home. The clerestory windows above these spaces give these rooms nice natural light. The living spaces, which includes: living room, dining room, and bedrooms define the majority of the space. These spaces face the large sliding doors and windows and have ample light throughout the day.

Accommodates: 3-5
ProductionTime: 10 weeks
Sustainability: recycled materials
ClimateAdaptability: passive air system
SiteAdaptability: flat
Arrival: flat bed truck



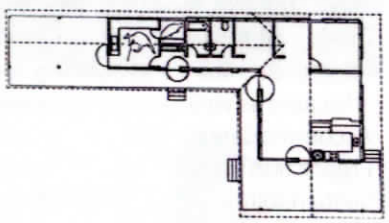
Stutchburry & Pape

cardboard house
50.00sq.m.
430,000

The Cardboard House is conceived as a kit of parts comprising a flat pack of frames, and infill floor and wall panels. It uses minimal fixings: nylon wing nuts, hand-tightened polyster tape stays and Velcro fastenings are used to assemble the frames and protective skin system.

A series of repetitive portal frames are both spaced and stabilised by a standardised secondary structure, similar to the interlocking spacer sheets found in wine boxes. Once assembled, the structure provides a creative architectural frame from which the house derives its aesthetic.

Accommodates: 2-3
ProductionTime: 6hrs
Sustainability: recycled materials
ClimateAdaptability: operable enclosure allows for flexibility
SiteAdaptability: flat
Arrival: light commercial vehicle

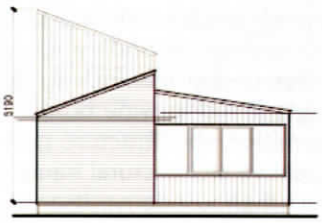


Peter Meyers

knockabout walkabout
211sq.m.
$97,000

A low cost house, suitable for location and, when necessary, relocation almost anywhere. Screw-pile technology, united to a lightweight frame and double roof system, eliminates costly mass foundations. Tying the double roof to removeable screw piles makes a very strong building, with the earth itself providing structural restraint.

Accommodates: 4-5
ProductionTime: 3wks.
Sustainability: relocatable with screw-pile foundations. Active double skin roof.
ClimateAdaptability: open design framework allows for climate based adaptability.
SiteAdaptability: flexible
Arrival: flat-bedtruck

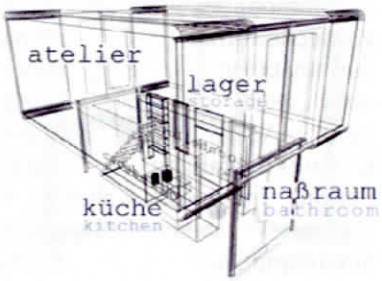


Prebuilt

freedom
102sq.m.
$90,000

Each house is created by experienced craftsmen in the quality controlled indoor environment of Prebuilt's Melbourne factory using a range of locally sourced materials. The result is high performance, precise workmanship and cost efficient construction. Using the patented fold-up process, the completed homes are deconstructed into folds and then shipped. Once on site the final construction of prebuilt homes only takes a couple of hours.

Accommodates: 2-5
ProductionTime: 5 weeks
Sustainability: daylighting,
ClimateAdaptability: modular design for customization
SiteAdaptability: flat site
Arrival: flat bed

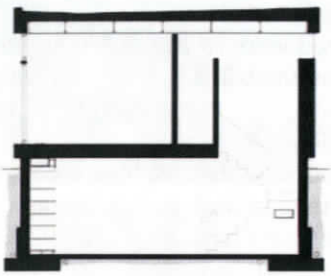


PeterHaimerl

CocoBello
Mobile Atelier

The mobile atelier consists of three interlocked components which can be unfolded horizontally and vertically to produce a two-storey atelier unit. On the top floor, there is a large, bright atelier room with facilities for media connection which allows the user a good overview of the surroundings. On the ground floor, the sanitary and cooking area is located as well as a storage room.

Accommodates: 2-5
ProductionTime: 5 weeks
Sustainability: daylighting,
ClimateAdaptability: modular design for customization
SiteAdaptability: flat site
Arrival: flat bed

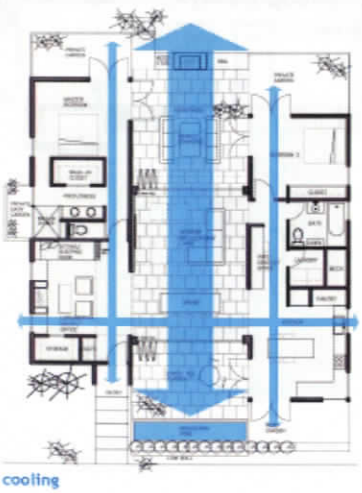


RocioRomeroDesign

lv home
1,150sq.ft.
$32,900

The layout of the home is mainly about efficiency as well as creating the best lighting and viewing solution for the home. The service spaces, which includes: kitchen, bathrooms, closets, utility closet, are all tucked in the back of the home. The clerestory windows above these spaces give these rooms nice natural light.

Accommodates: 2-5
ProductionTime: 5 weeks
Sustainability: daylighting,
ClimateAdaptability: modular design for customization
SiteAdaptability: flat site
Arrival: flat bed



MichelleKaufmannDesign

sunset breesehouse
1798sq.ft.
$249,000

The Sunset Breezehouse modular home is a flexible, eco-oriented, light-filled home. A third 248 sf module can be easily added as a third bedroom. This module can either be attached to the second bedroom, or designed as a flexible free-standing pavilion which can be used as a guest bedroom, office, or pool house. 4 bedroom and larger versions are available as well, and the home can be built upon a full foundation, including a walk-out basement or garage spaces.

Accommodates: 2-5
ProductionTime: 4-6 weeks
Sustainability: daylighting, natural ventilation
ClimateAdaptability: operable breezeway
SiteAdaptability: flat site
Arrival: multiple flat beds

ModAbode

e-bode
3.6x14.4m
50sq.m.
AU$120,000
US$90,266

The e-BODE consists of prefabricated, modular units that are constructed in a factory to ensure a finish of the highest quality. An e-BODE is ordered with ease and manufactured in a few weeks. The modules arrive at your site on a flat-bed truck, ready to be positioned on the foundations.

Accommodates: 2-5
ProductionTime: 3-4 weeks
Sustainability: daylighting, compositing toilet
ClimateAdaptability: modular design for customization
SiteAdaptability: variations can be accommodated for through modular system of consruction
Arrival: flat bed

HiveModular

b-line
medium
1780sq.ft.
$140per.sq.ft.
$249,200

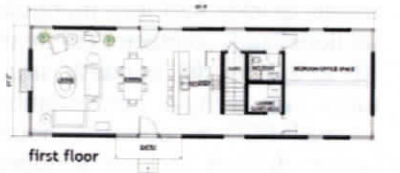
Hive homes use a modular construction system, which provides a high level of quality control, minimizes exposure of building materials to the elements, and shortens construction time.

Accommodates: 2-4
ProductionTime: 8 weeks
Sustainability: recycled materials
ClimateAdaptability: n/a
SiteAdaptability: flat site
Arrival: flat bed

AlchemyArchitects

weehouse
14'X24'
336sq.ft.
$54,500

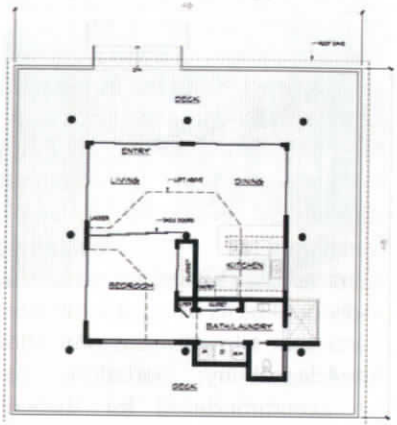
Available as studios, one- and two-bedroom,kitchen/living, sleeping, and stair models, weeHouse modules can be customized or combined to fit your needs. The system allows the addition of modules, stairs, movement of windows, change of materials. . The only things left up to the owner and contractor are: the foundation, utility hookups, and simple fitting & seaming of the modules.
Accommodates: infinite
ProductionTime: 8 weeks
Sustainability: daylighting
ClimateAdaptability: design is on an individual basis using standardized parts that allow for customization
SiteAdaptability: variations can be accommodated for through modular system of consruction
Arrival: flat bed



CleverHomes

nowhouse
sa-1
2400sq.ft.
$125,000

Through their systemized design and construction process, your SA1 can be modified immediately, if needed, as well as pre-engineered for a future addition. By adding simple interior partitions, the house can accommodate from 2 to 5 bedrooms. We can also change the overall dimensions of the building to provide for any site constraints or permit regulations, or to provide for additional space. You can add roof decks, garages, carports, gable roofs, and change other architectural aspects to the home.
Accommodates: 2-6
ProductionTime: 6 weeks
Sustainability: recycled materials, daylighting, solar power.
ClimateAdaptability: n/a
SiteAdaptability: primarily flat, although slight variations can be accounted for.
Arrival: as kit



Pole House

honu
855sq.ft.

Pole house construction virtually eliminates the need for expensive terrain-altering site work, excavations and retaining walls. Difficult terrain is generally not a problem, making otherwise undesirable hillside, sloped, marshy, rocky, sandy or flood prone sites suddenly affordable to build upon.

Indigenous, recyclable and readily renewable materials are preferred depending on quality and local availability. Craftspeople you choose within the local community can carry out the entire construction assembly process.
Accommodates: up to 12
ProductionTime: 8 weeks
Sustainability: recycled materials
ClimateAdaptability: open design framework allows for climate based adaptability.
SiteAdaptability: piling system allows for adaptability
Arrival: as kit

Icosa Village

decapod
472sq.ft.
$14,230

The weather-resistant cardboard structures called PODs ship as flat pieces measuring 96 in. long. Prescored and prepunched, the panels quickly fold into triangular sections and connecto to create 12- to 26-foot dia. geodesic structures. Two people can assemble a small POD in about 4 hours. Larger designs include windows and insulation. Although PODs are designed as temporary emergency shelters, Icosa says most inquiries have come from arts festival planners who find the structures more attractive than tents.
Accommodates: up to 15
ProductionTime: 4 hours
Sustainability: recycled materials, relocatable
ClimateAdaptability: open design framework allows for climate based adaptability.
SiteAdaptability: piling system allows for adaptability
Arrival: as kit

BreckenridgeParkHomes

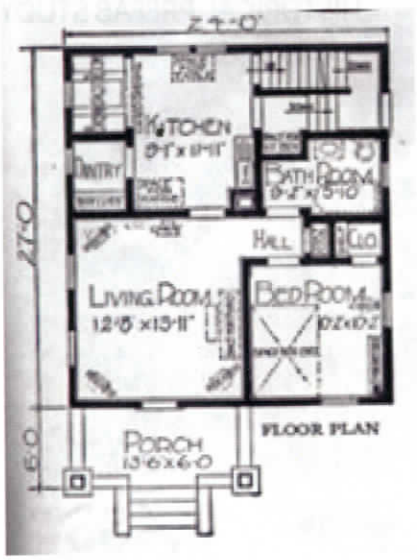
modern park trailer
400sq.ft.
$45,000

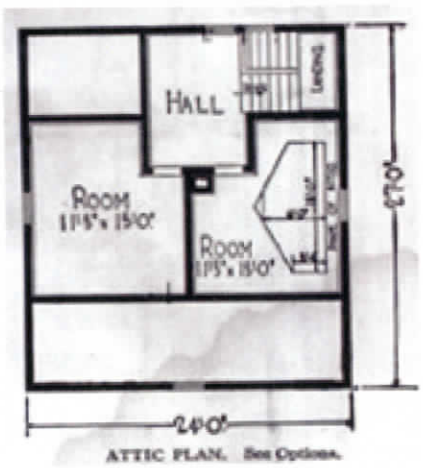
Built on a standard mobile home chasis, the Modern Park Trailer allows for ease of mobility and modern ammenities in one package. The package is built by Breckenridge Trailer homes in their manufacturing plant and delivered to the site ready to be occupied.

Accommodates: 2-5
ProductionTime: 5 weeks
Sustainability: daylighting,
ClimateAdaptability: modular design for customization
SiteAdaptability: flat site
Arrival: flat bed

Sears Roebuck Catalogue

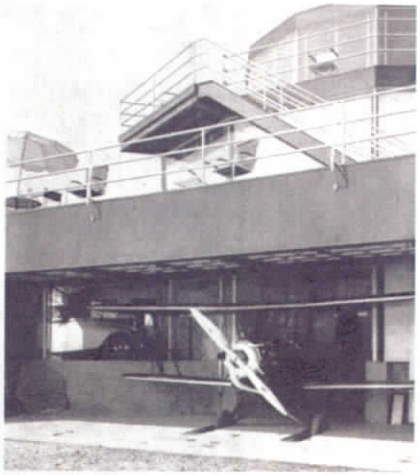
roseland
aladdin co.
$687.80
648sq.ft.

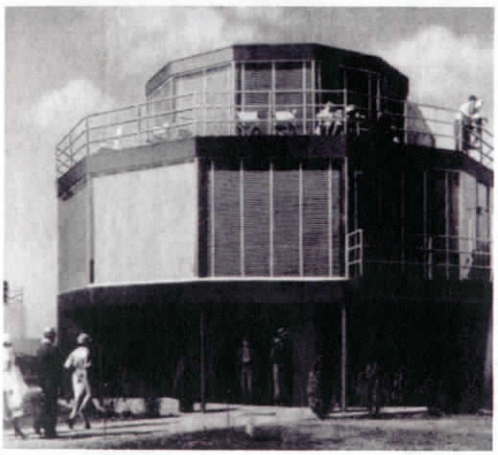




Prefabricatibon of homes began in the 1830s in England where foundries were producing cast-iron homes to be distributed to the ever expanding settlements of California, Africa and Australia. By the following century the business of manufacturing building components that could be constructed on a remote site developed into a substantial industry. By the 1930s, the Sears Roebuck Catalogue had taken over a majority of that market through its development of prefab kits. These kits contained everything necessary to build a home, including furnishings. Over a 40 year period the catalogue delivered over 100,000 of these kits, kicking off the prefab movement in America.

Accommodates: 3-5
ProductionTime: 2-3 weeks
Sustainability: n/a
ClimateAdaptability: regionalized designs
SiteAdaptability: flat site
Arrival: rail



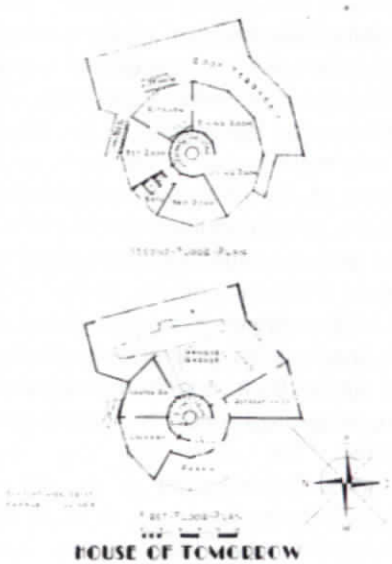


George Fred Keck

house of tomorrow

For the 1933 World's Fair in Chicago, a theme of "A Century of Progress" was developed, to include a number of revolutionary steel-framed housing designs. The three-story, 12 sided "House of Tomorrow" epitomized people"s notions of world in the future. Shaped like a wedding cake, the the house came complete with a hanger to store the family airplane and a machine for cleaning dishes after every meal. The house had central heating, air conditioning, and many other then-uncommon amenities.

Accommodates: 2-4
ProductionTime: 3 days
Sustainability: daylighting
ClimateAdaptability: n/a
SiteAdaptability: n/a
Arrival: as kit



The first floor was designed as the service area, originally containing the garage and an airplane hangar. World's Fair optimists assumed every future family would own an airplane. The second and third floors were the essence of the house, containing the main living spaces and a solarium. The three-story, steel-framed building was originally clad in glass on the second and third floors, yet stands today with typical wood-framed exterior walls and operable windows. Keck defied mechanical engineers, who said that due to the expansive use of glass the house couldn't be heated, and installed a floor to ceiling "curtain wall system". Instead of heat loss during the winter, the level of solar heat gain actually reduced the need for mechanical heating. During the summer the solar gain was too great for the home's revolutionary air-conditioning system to handle, and it failed. When Robert Bartlett moved the house to Beverly Shores, he replaced the glass walls with operable windows to allow for proper air circulation.

DeJongh+Brandenberger

Quonset Hut
960sq.ft.
$1000

Between 150,000-170,000 Quonset huts were manufactured during WWII. After the war, the U.S. military sold the surplus Quonset huts to the public for $1,000 each. Many are still standing throughout the United States.

Accommodates: 2-4
ProductionTime: 3 days
Sustainability: daylighting
ClimateAdaptability: n/a
SiteAdaptability: n/a
Arrival: as kit

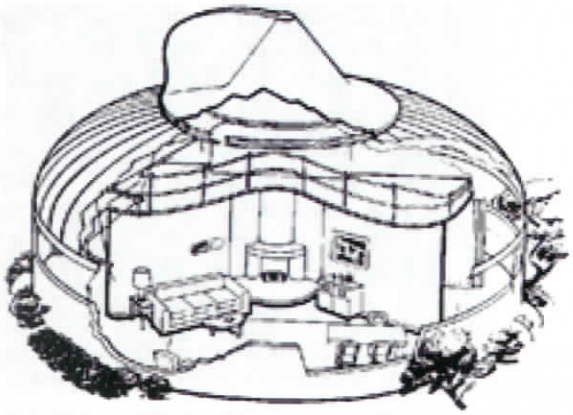
The Quonset hut, whose semi-cylindrical form was copied from the British Nissen hut, by the end of the war differed considerably in construction from its prototype. The original Quonset hut was framed with arch-rib members of steel, T sections, 2 inches by 2 inches by 1/4 inch. The hut was 16 feet by 36 feet in plan. The members were formed to a radius of 8 feet and covered with corrugated steel sheets, borne by wood purlins. The principal improvements over the Nissen type were an interior pressed wood lining, insulation, and a tongue-and-groove wood floor. Innumerable detail problems were encountered in the development of the original T-rib huts, principally because of the necessity for 48 different needs, such as galleys. shower-latrines, dental offices, isolation wards, and bakeries. Each type required individual drawings and layouts for the interior setup, and in many cases it was necessary to develop special interior equipment, such as special ovens and beds, to fit the Quonset hut form. All huts were designed and detailed, using the original T- rib design.

The principal objection to this type of construction was that the curveline of the side walls began at the floor, resulting in a loss of effective width of the hut. A more suitable structural rib was found in the form of a welded strip steel member, 2 inches by 3 5/8 inches. This member actually two light-weight channels welded back to back- contained a groove which held nails. The new rib was fabricated to provide a vertical sidewall, 4 feet high. This new hut was known as the Quonset redesigned hut. Its floor plan was 16 feet by 36 feet. Standard-hut drawings were remade, for both structural and facility details. As the necessity arose for adapting the huts to use as dispensaries, latrines, hospitals, and other special facilities, the details were worked out and checked by actually erecting units in the field at the proving ground, to determine the practicability of the design for field use. In all, 86 approved interior layout plans were prepared for the small hut and the large 40-by-100-foot arch-rib warehouse.

To reduce shipping space and tonnage a redesign, incorporating lighter, corrugated, galvanized sheets for covering and half-inch plywood floors instead of one-inch tongue and groove, was effected. The new hut was larger, 20 feet by 48 feet, and lighter, using 3 ½ tons of steel instead of 4 tons. It occupied from 270 to 325 cubic feet of shipping space instead of 450 cubic feet. The arch-rib again became semi-circular.

Toward the end of 1943, continuations to each end of the hut added 4-foot overhangs to the 48-foot length. The addition was to prevent driving rains and sunlight from entering the hut through the end bulkheads. The total outside length of the hut became 56 feet, but the actual interior living space remained 48 feet. The official Quonset hut dimension nomenclature then became 20-by-56. However, in the spring of 1945, it was determined that the 4-foot overhangs on the huts used in northern or temperate climates were unnecessary, and they were eliminated. In order to standardize the nomenclature for both the northern and the tropical type the dimension nomenclature was changed back to 20-by-48. This. of course, was based on interior, living dimensions; the exterior dimensions of the tropical hut remained at 20-by-56. Throughout this war history, with few exceptions, when Quonsets are referred to they are of the 20-by-48-foot living-space size.

As finally developed, the Quonset hut required less shipping space than did tents with wood floors and frames, when equal numbers of men were to be accommodated. from: *Building the Navy's Bases in World War II: History of the Bureau of Yards and Docks and the Civil Engineer Corps, 1940-1946.* Vol1. Washington: Government Printing Office, 1947.



BuckminsterFuller

dymax-ion house $40,000

Conceived and designed in the late 1920's but not actually built until 1945, the Dymaxion House was Fuller's solution to the need for a mass-produced, affordable, easily transportable and environmentally efficient house. The word "Dymax-ion" was coined by combining parts of three of Fuller's favorite words: DY (dynamic), MAX (maximum), and ION (tension). The house used tension suspension from a central column or mast, sold for the price of a Cadillac, and could be shipped worldwide in its own metal tube. Toward the end of WW II, Fuller attempted to create a new industry for mass-producing Dymaxion Houses.

Accommodates: 3-5
ProductionTime: 3-5 weeks
Sustainability: packaging toilet, cistern, wind-turbine powered, passive a/c.
ClimateAdaptability:
SiteAdaptability: on central core, allowing for construction on almost any site.
Arrival: rail

The first, most successful dymaxion house design was for the U.S.S.R. for temporary housing during WWII. It was mass-produced and based on tooling for a sheet-metal grain silo. Several hundred units were constructed and installed, before the war ended and the state housing ministry decided that the housing was unsuitable for permanent use. The grain-silo house was reported by inhabitants to be warm, easy-to-heat, well-lit, vermin-proof and arguably superior to the housing previously available at the installed sites.

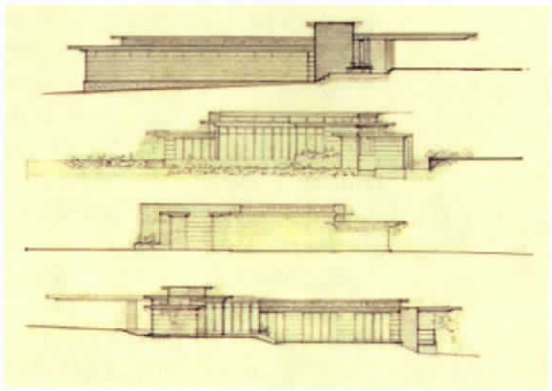
The Siberian grain-silo house was the first system in which Fuller noted the "dome effect." Many installations have reported that a dome induces a local vertical heat-driven vortex that sucks cooler air downward into a dome if the dome is vented properly (a single overhead vent, and peripheral vents). Fuller adapted the later units of the grain-silo house to use this effect.

The final design of the dymaxion house used a central vertical stainless steel strut on a single foundation. Structures similar to a bicycle-wheel hung down from this supporting the roof, whilst beams radiating out supported the floor. Pie-shaped fans of sheet metal formed the roof, ceiling and floor. Each structure was assembled at ground level and then winched up the strut. The dymaxion house was the first conscious effort at an autonomous building in the twentieth century.

It used a packaging toilet, water storage and a vacuum-based wind turbine built into the roof. It was designed for the stormy areas of the world: temperate oceanic islands, and the great plains of North America, South America and Eurasia. At the time, solar cells were not available, so the wind turbine was the only practical way to provide electricity.

In most modern houses, laundry, showers and commodes are the major water uses, with drinking, cooking and dish-washing consuming less than twenty liters per day. The Dymaxion house reduced water use by a greywater system, a packaging commode, efficient horizontally-agitated laundry equipment, and a unique personal cleanser called a fogger.

The fogger used very fine particles of water dispersed by compressed air. The fogger permitted one to clean onself with only a cup or so of water. Fuller is reported to have said that it worked on the same principle as commercial degreasers, but with much smaller water particles to make it comfortable.



Frank Lloyd Wright

Usonian House
960sq.ft.
$1000

Wright had long been interested in designing affordable homes on a massive scale for the American middle class. In 1901 he published designs for elegant, inexpensive suburban homes in several issues of the Ladies' Home Journal. Wright was also interested in urban planning. He began thinking seriously about that issue in the late 1920s and early 1930s. Wright discussed his views in publications, lectures and notably the Disappearing City. He gave visual form to his ideas for a model envirnment in Broadacre City. The notion of the Usonian houses was hatched about the same time. the car, along with other forms of modern communication, would spell the end of the centralized city.

Accommodates: 2-4
ProductionTime: 3 days
Sustainability: daylighting
ClimateAdaptability: n/a
SiteAdaptability: n/a
Arrival: as kit

Wright's Usonian home came on the market at a time of great residential expansion. The boys were returning from the war to marry their sweethearts and start families of their own. Now, the role of the architect was to design a home that was both liveable and affordable. In Long Island, Leavittown was sprawling out over an old potato field at the staggering rate of 4000 houses per year, one every fifteen minutes, to meet this tremendous increase of home buyers. While Wright did not design the Usonian home with such numbers in mind, huge subdivisions like Leavittown reveal the trend in American housing at the time.

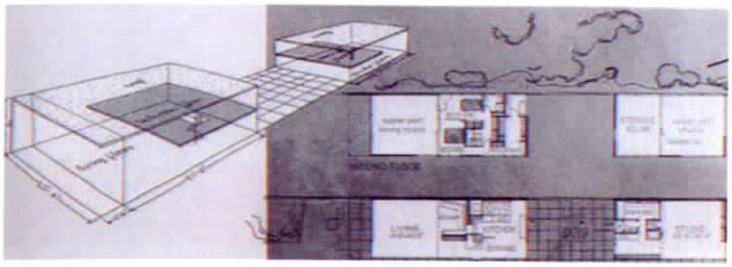
In formulating his last offering to the American homeowner, the Usonian home, Wright took his anti-urban bias (along with his many others) into account. The Usonian Home contains Wright's final ideas on the family and its relation to society. Whereas the prairie home contained Victorian inferences within its goal of providing the ideal family shelter, the Usonian house "addressed the real needs of large numbers of people in a straightforward way without the eccentric and exotic overtones of the previous decade (1)." Though Wright's Usonian house turned away from the elitist quality of the prairie house, it also guarded against the other extreme which was creeping into the housing market: "the too cheap house." Life magazine, which followed housing designs closely, professed in 1953: "The Model T era of mass-produced housing is over. The next era, lacking an accumulated shortage, will be more competitive. . . This will mean more emphasis on quality, design, and adequate space. Which brings us back to Frank Lloyd Wright (2)." Here, the author affirms the fact that Wright's ideas had been somehow deserted, and we were now returning to them.

This return embodied yet another reassessment of the American family's needs by the architect. Wright's clients were now the middle class, not the urban elite. They had witnessed the Great Depression and the great global conflagration which followed. These events effected their budgets, and Wright was presented with a new challenge: creating a livable house which the masses could afford. Affirming the Jeffersonian ideal that land and home ownership wre the birthright of all Americans, Wright offered his Usonian house as the fullfillment of this promise. The word "Usonia" is an expresion of Wright's vision of this high ideal, "a play on `USA.' Wright used it as a substitute for `America,' not the one he saw around him" (Twombley 241), but the future America.

The initial price tag of the Jacobs House in Madison Wisconsin, Wright's prototype Usonian home, came in around $5500.00, as compared to the $7500.00 cost of the average prairie house a decade earlier. For this price, the Usonian client purchased not only economy but technological innovation. The Usonian house was the first to use steam heat radiating from steel pipes embedded in the foundation, eliminating the need for costly and inefficient radiators. Wright utilized a modular grid layout for all of these homes (35 in all), allowing for a higher degree of standardization. Wright's exteriors were composed of glass and waxed-over wood and brick, eliminating the need for paint and other preservatives.

Though the Usonian home resembled the mass-produced Leavittown houses in its standardized layout and economic appeal, it was not made for everyone. Mr. Leavitt's homes took fifteen minutes to build. Wright's still took several months. Wright continued to insist that his homes were individually designed, with the peculiarities of the inhabitant and the site kept in mind. The Usonian home made a gesture toward large-scale, low-cost housing for the masses, but were not as economical.

from: *The Usonian Home: Wright Can't Be Wrong.* American Studies, University of Virginia



Charles & Ray Eames

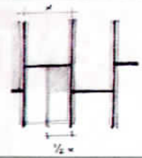
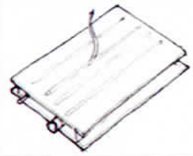
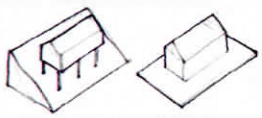
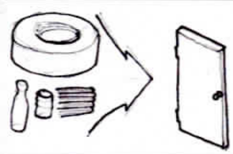
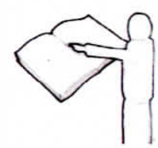
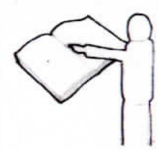
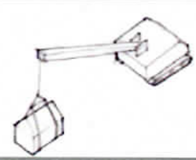
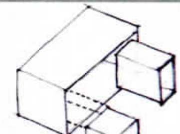
Case Study House #8

Accommodates:	2
ProductionTime:	n/a
Sustainability:	daylighting, modular system,
ClimateAdaptability:	n/a
SiteAdaptability:	n/a
Arrival:	as kit

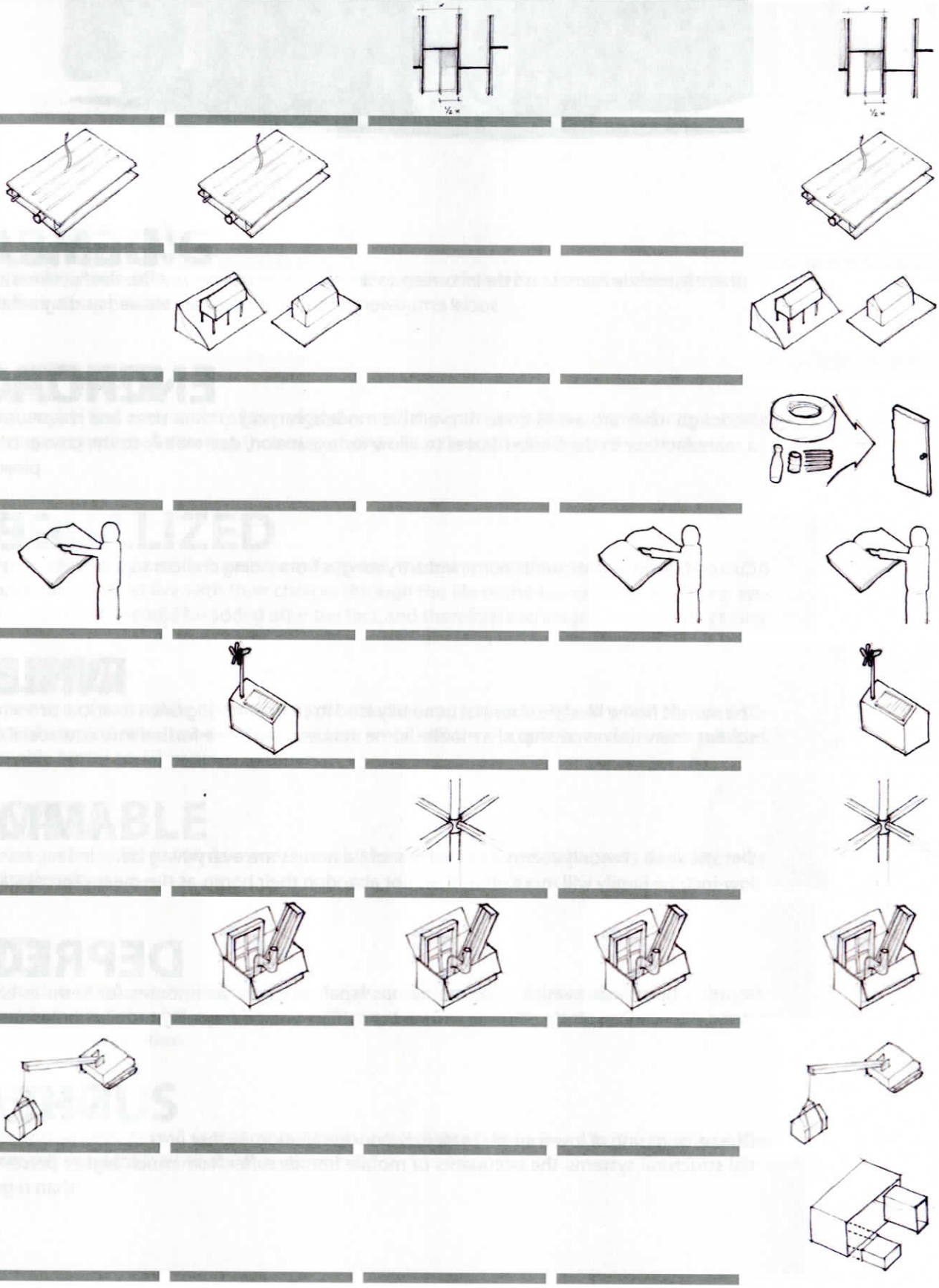
The house they designed, known as the Case Study House #8, or more personably as the Eames House; became one of most popular and recognized, out of a group of homes known as the 'Case Study Houses.' The Case Study House program was headed by John Entenza, the editor of the design magazine, Arts & Architecture; whose initial idea was a design competition entitled 'Designs for Post-war Living.' The majority of entrants involved the industrial design process and industrialization of parts that would captivate the design of Charles and Ray's own home. At the same time, Eames and Entenza wrote an article, 'What is a House?' which primarily served to question the lack of housing in postwar America and contained a number of their groundbreaking ideas on the future of prefabrication. The most remarkable of these ideas was that of "a willingness to make innovative uses of the new technologies developed in wartime." Not long after the publication of this article, in January of 1945, John Entenza launched the Case Study Homes project in which an initial group of 8 architects were chosen to create prototypical homes for the families of postwar California. Of these 8 architects Charles Eames became the 8th, with the production of his own Eames House in Pacific Palisades, California. Although an initial design existed that was entirely different from the as-built design, it is the as-built design that is of importance and will be studied here. In the built design, an essential kit of parts, comprised of joists, trusses, angles, H columns, baseplates, etc. would be assembled together to form a home/studio out of what was traditionally known as a commercial enclosure. By creating a series of bays, enclosed on all sides, a repetitious enclosure system can be made out of a series of identical parts. After construction of the enclosure an infill of all the amenities necessary in a domestic space, as well as partitions in order to delineate separate spaces. With such a construction method a comfortable environment can be obtained at a practical price. This is exactly the design philosophy the Eames' developed with the conception of their home, space enclosed by a module (bay), which has been design internally to "act as a background for a life in work as well as for relaxation with friend and foe." 3 Along the same lines as the Eames' design using standardized parts, I was given the task in Professor Timothy Stenson's design studio of creating a system of enclosure suitable to replace the present 'portable' classrooms found in today's schools. For this project, I set about creating a modular system that can be configured for any number of situations, all using a standard module. Internal to this module, a uniform space is created which can be left open for lecture space or filled with bookshelves or any number of other programmatic requirements. Due to its nature as a module, each individual module can be removed and attached to other classrooms, or used to reconfigure the space of the current classroom. Although this was never the intention of the Eames House, it was a common misconception that this was possible.

PRECEDENT ANALYSIS

PREFABRICATED COMPARISON CHART

	MPC (Multi Purpose Cabin) Jomo Tech	CARDBOARD HOUSE Stutchbury & Pape	M-House Tim Pyne	Wee House Alchemy Architects
MODULARITY				
INTEGRATED COMPONENTRY				
SITE ADAPTABILITY				
MATERIAL REUSE				
MASS CUSTOMIZABLE				
AUTONOMY				
INTERCHANG-ABILITY OF PARTS				
KIT OF PARTS				
PRE ASSEMBLED				
COMPONENTRY				

UpHouse 1200	Dymaxion House	Case Study House #8	Usonian House
Kinyk Architecture	Buckminster Fuller	Charles & Ray Eames	Frank Lloyd Wright



	MPC (Multi Purpose Cabin)	CARDBOARD HOUSE	M-House	Wee House
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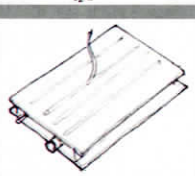
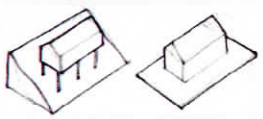
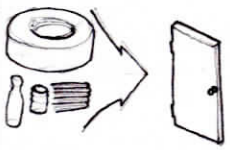
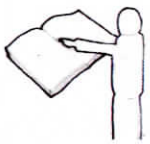
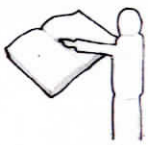
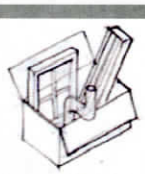
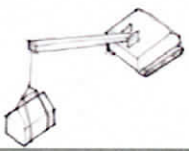
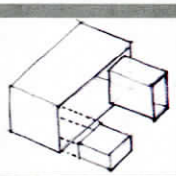
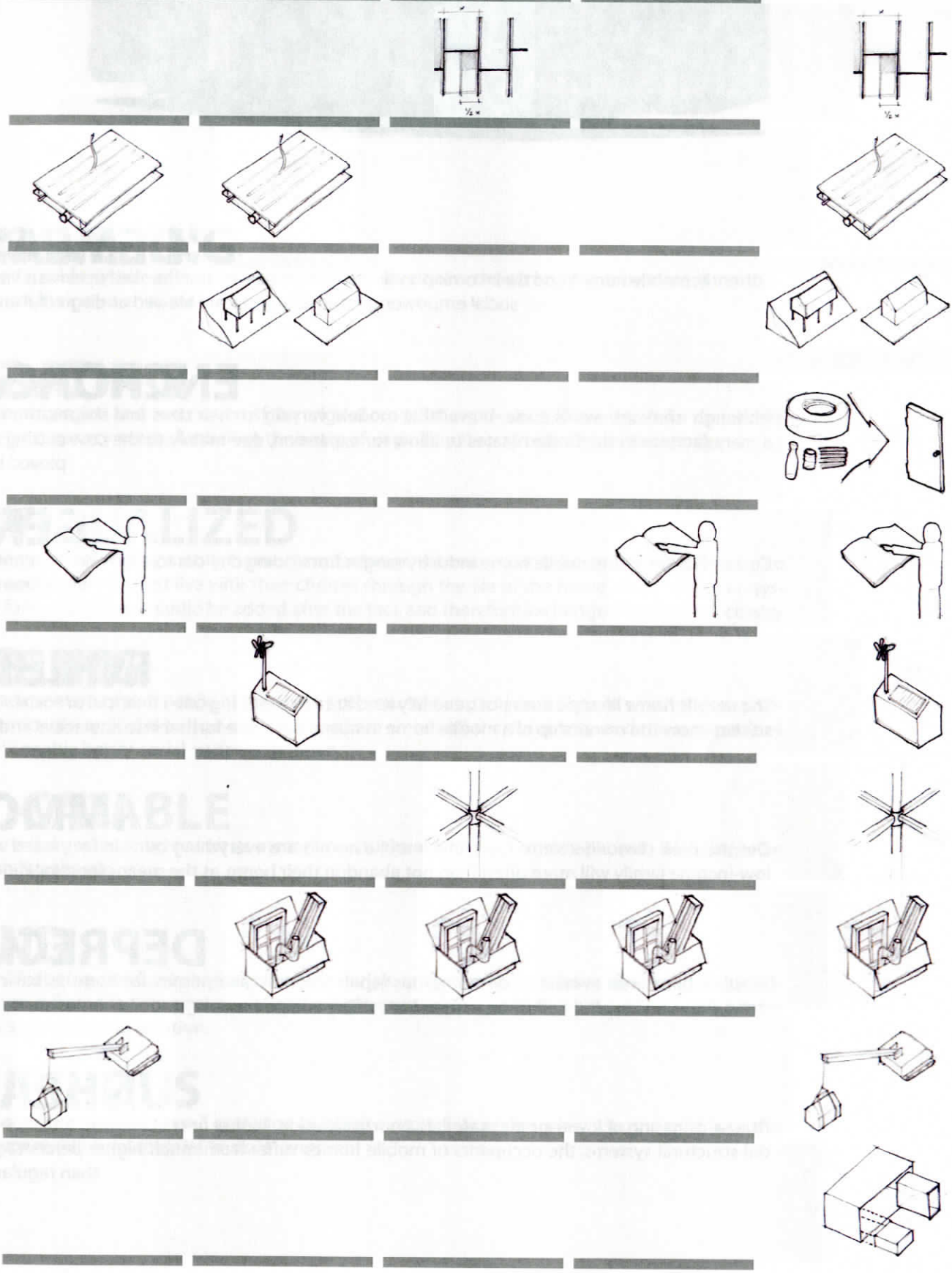
INTEGRATED COMPONENTRY				
SITE ADAPTABILITY				
MATERIAL REUSE				
MASS CUSTOMIZABLE				
AUTONOMY				
INTERCHANG-ABILITY OF PARTS				
KIT OF PARTS				
PRE ASSEMBLED				
COMPONENTRY				

UpHouse 1200	Dymaxion House	Case Study House #8	Usonian House
Kobyk Architecture	Buckminster Fuller	Charles & Ray Eames	Frank Lloyd Wright
			

V

DEMEANING

Currently, mobile homes and their corresponding communities are not loooked upon as a viable means for social empowerment, instead they are viewed as disgracful and undignified.

ENCROACHING

Although their are a multitude of available models, varying in their sizes and shapes, there has yet to be a manufacturer in the United States to allow for expansion, due mainly to the cost-cutting measures employed in the industry.

GENERIC

Customization in the mobile home industry ranges from siding choices to entertainment units, but the box always remains the same.

INHIBITING

The mobile home lifestyle does not generally lend itself to bettering one's financial or social situation, in fact studies show the ownership of a mobile home tends to push one further into anti-social and debt-causing behaviors.

IMMOBILE

Despite their comonly referred to name, mobile homes are everything but. In fact, faced with eviction, a low-income family will more often than not abandon their home, as the means for relocation are generally far too costly

DEPRECIABLE

Most mobile home owners incurr numerous repair costs on their homes, for items as basic as doors, windows, floors and roofs. In addition to their immobility and poor quality, mobile homes are nearly impossible to resell

UNHEALTHY

Due to offgasing of lower-grade materials, poor ventilation, higher fire risks and an often less than substantial structural systems, the occupants of mobile homes suffer from much higher percentages of ailments than regular homeowners

S

EMPOWERING
Through an adaptable system of customization, the end user gains the sense of empowerment via their ability to control their own environs.

LIBERATING
By allowing for expansion and contraction of the original model, the end user is allowed to tailor their home based on their occupancy needs, furthering the sense of orginality through identity in their home.

INDIVIDUALIZED
In the current system set up by mobile home manufacturers, the user must choose their options prior to construction and therefore must live with their choices through the life of the home. In a more open system, options for customization could be added after the fact, and therefore exchanged based on necessity

ENABLING
Through the reinvention of the mobile home and it's communal nature, towards one in which the ideal social characteristics of a typical suburban neighborhood are embibedl, the occupants, and the communities that follow will enable better social patterns to thrive.

RELOCATABLE
Along the same lines as its ability to suit its owner's needs, the site too is customizable, with its ability to be relocated with little hassle.

SOUND
Utilizing manufacturing standards, higher quality materials, and more refined fabrication modes (including those adopted from the automotive industry); a higher quality, longer lasting product provides a more economically stable housing solution.

SALUBRIOUS
In the use of quality materials, as well as design in which sustainability takes a key role, the quality of the living environment, will far surpass its "mobile" brethren.

Annotated Bibliography

Banish, Laura *Santa Fe Honored For Housing Efforts* The Albuquerque Journal June 30, 2005
The city of Santa Fe has already begun an effort to create an affordable housing ordinance, however I feel that their means are far out of reach. Their plan is to cut taxes and certain building restrictions for developers who instate their housing plan. Although it is a start, it still leaves the problem up to those building the houses, as opposed to telling them what they have to build, it plans to allow them those responsibilities.

Blau, Eve *The Architecture of Red Vienna* (1919 – 1934), MIT Press, 1999
A thorough case study of the housing conditions of communist Vienna, providing numerous insights into organization, construction, and the social implications of shared housing.

Brown, David J. *The Home House Project: the future of affordable housing,* MIT Press, 2004
A study completed by the Southeastern Center for Contemporary Arts, showing many proposals by architects across the country. It provides an excellent resource to see what has and hasn't worked as well as the numerous solutions that have already been thought out.

Christovich, Mary Louise, Sally Kittredge Evans, and Roulhac Toledano *New Orleans Architecture: Volume I, The Lower Gardern District.* The Friends of Cabildo, Inc Baton Rouge, 1971

Grimm, Julie Ann *Officials Shaping Code for Low-Cost Housing.* The Santa Fe New Mexican. September 8, 2005
This editorial in the local newspaper examines some recent progress the city has made in defining a region outside of Santa Fe in which the new low-cost housing is to reside. It also makes mention of how much the proposed ordinance would cost compared to its benefits. The community will be wholely important in the developing of the ordinance, as well as its success. This article outlines the opinions of the community, stating exactly what it is they hope to make happen.

Gutierez, Laurent and Valerie Portefaix *Homes for China Architectural Design.* Vol. 74 No.1 pp. 80-87
The housing situation in China, although on a totally different scale, has many comparisons that can be made in relation to Santa Fe's situation. This article examines the importance of densification in a successful affordable housing campaign.

Hvattum, Mari and Christian Hermansen *Tracing Modernity: Manifestations of the Modern in Architecture and the City. Routledge Publishers. London, 2004*

International Building Council Uniform Building Code 1997, *International Conference of Building Officials; 75th Edition* (April, 1997)
Having moved from a localized situation in Santa Fe, NM to a world wide study, the Uniform Building Code will be absolutely crucial in the design of a structure which is to reside in any number of places, none of which will be determined until well after the design process.

Kieran, Stephen and James Timberlake *Refabricating Architecture.* McGraw Hill, 2004
It is this work which will form the backbone for my entire thesis exploration. I plan to take Kieran and Timberlake's model for prefabrication to the next level, and address the many issues which are either too vague or left out entirely.

Lopez, Henry M. *Council Oks Overhaul of Affordable Housing.* The Santa Fe New Mexican. August 15, 2005
Currently the Santa Fe City Council's efforts to define a new affordable housing ordinance have been put on hold in order to convene on another topic, the construction of a Wal-Mart Supercenter on the south side of town, in the proposed area designated for affordable housing. The article discusses many of the downsides to the proposal, as well as some unintended consequences. Full community involvement is necessary to get the program going, but issues such as Wal-Mart are standing in the way.

Montoya, Joseph *ARL Proceedings 130: Santa Fe Affordable Housing Program* http://www.arl.org/arl/proceedings/130/montoya_bruger.html
The ARL (Association of Research Libraries) sets up lectures on communal issues around the nation, this being one conducted regarding affordable housing in Santa Fe. The article clearly defines the issues at hand and sets up a means of resolving them. It examines demographics, locations, urban design, materiality and design.

Oppenheimer, Andrea and Timothy Hursley *Rural Studio: Samuel Mockbee and an Architecture of Decency.* Princeton Architectural Press, 2002
The work of Samuel Mockbee and the Rural Studio are perfect precedents for the reinvigoration of a community through housing improvements. The work rethinks how an affordable home should be built, as well as the use of recycled materials to further increase their affordability. Due to the nature of the program, the work is also completed to show the exact ramifications of their construction.

Soria, Arturio y Puig *Cerdá: Las cinco bases de la teoria general de la urbanización* Fundació Catalana per a la Rcerca, 1996.

Steinbaugh, Charles *A Guide To New Orleans Architecture.* The New Orleans Chapter of the AIA. New Orleans, 1974.

COMPETITION BRIEF

REBUILDNEWORLEANS

A SINGLE FAMILY HOUSING COMPETITION

> "There are thousands of underpaid, underutilized, young architects who now have an opportunity to design, develop, and create, great homes for people who desperately need them. By setting up design contests, and utilizing FEMA and money from donations (in kind and cash) people would have a chance at reclaiming their lives, while giving earnest, hard working architects and designers an opportunity to learn, work, earn a living, and develop themselves, while helping others."
>
> urbanrehabilitation

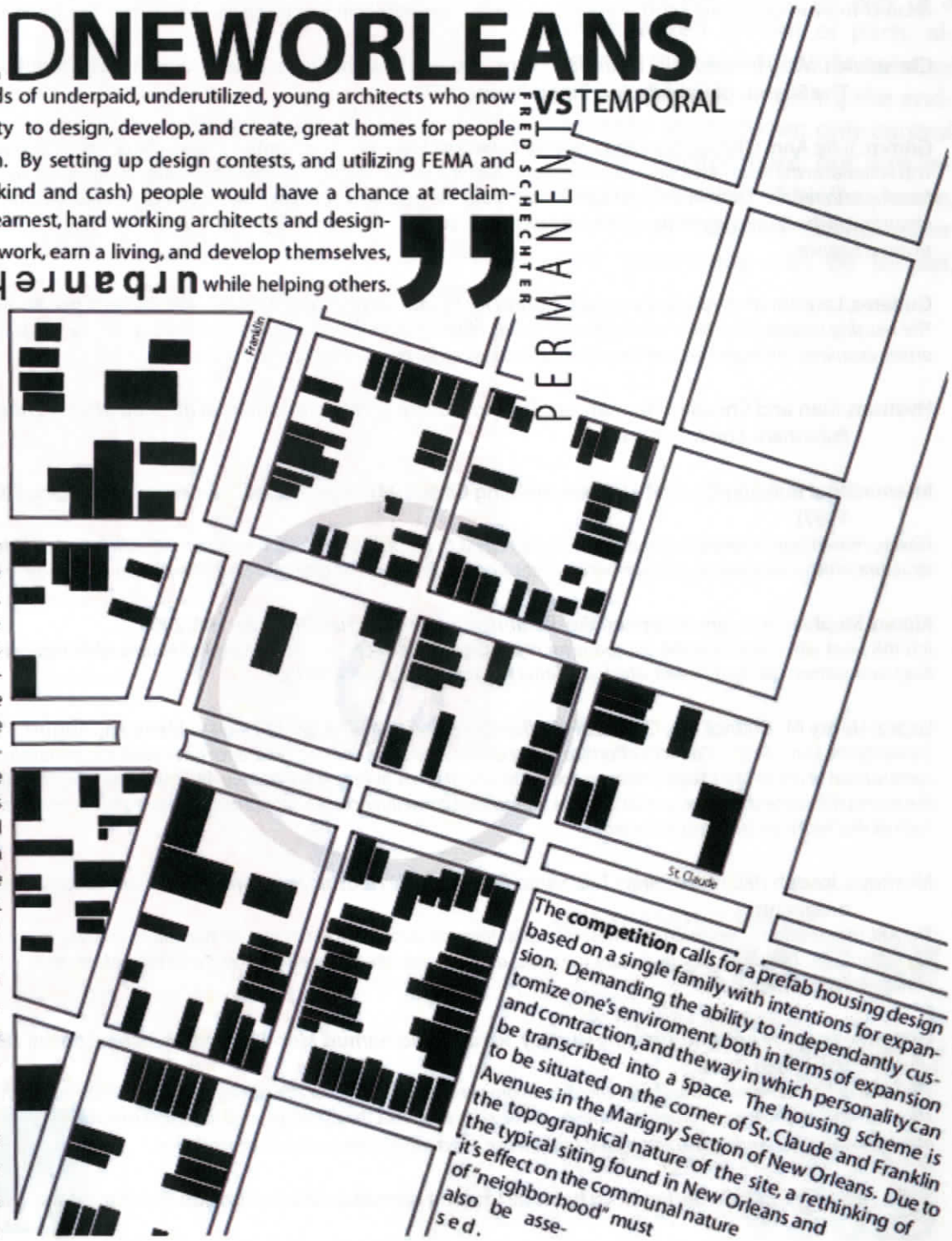
PERMANENT VS TEMPORAL

MORPHOSCHEITER

In the wake of hurricanes Katrina and Rita and the flood that ensued the architectural and planning community have been called upon for their expertise in the rebirth of the affected areas. Currently FEMA has ordered 100,000 mobile homes and recreational vehicles to house an estimated 300,000 evacuees. Although this may provide adequate temporary housing, the question still remains on how to reinvigorate the community, an outcome not generally equated with today's prefabricated mobile homes. The real answer lies in the development of a system able to not only adapt to its site and climate, but also to its occupants.

"Those responsible for rebuilding flood-ravaged New Orleans must make big decisions with imperfect information: How many people will return? What will the new geography of the city look like? And how do you jump-start an economy when there aren't enough workers and customers around? And finally, how do you encourage investment with all these unknowns?"

John Ydstie



The **competition** calls for a prefab housing design based on a single family with intentions for expansion. Demanding the ability to independantly customize one's enviroment, both in terms of expansion and contraction, and the way in which personality can be transcribed into a space. The housing scheme is to be situated on the corner of St. Claude and Franklin Avenues in the Marigny Section of New Orleans. Due to the topographical nature of the site, a rethinking of the typical siting found in New Orleans and it's effect on the communal nature of "neighborhood" must also be assessed.