



## **precedent studies**

# The TakeHome

Office of Mobile Design, Jennifer Siegal  
Desert Hot Springs California, currently under construction 2006



Take Home is the latest line of prefabricated housing systems from Office of Mobile Design. The Take Home aims to provide affordable architecturally designed homes. The design philosophy of OMD is that of sustainability, affordability and time savings. Take Homes are currently priced at around \$250 per s.f., which includes the house, foundation, engineering, local transportation, taxes, and site permitting. Through prefabrication building technologies and a defined buying process, Take Homes are ready to move into in the average time of 5-10 months, compared to the typical 16-24 months for typical traditional home building. The Take Homes fit within the standard dimensions of codes relating to trailer park homes, which allow for the units to travel on a chassis easily. There are currently 3 Take Homes in pre-sale located in Desert Hot Springs, California. These three bedroom, two bathroom homes offer high-end amenities such as fully landscaped courtyards with pools, passive cooling systems, Italian Boffi kitchens and Duravit bathrooms. The buyer is able have the home tailored to their specifications with upgrades that range from 100% solar power and water heating, to bamboo and radiant heated floors. This mass-customization allows homeowners the possibility to have a unique but relatively affordable home.

<http://www.thetakehome.com>





The Take Home is able to provide relatively fast and affordable shelter. By working within standard sizes and developing a standard practice for customization, the project was able to achieve its goals. Although \$250/s.f. is not really "affordable", as a whole package with the high-end amenities, it is relatively competitively priced. But again a lot of these features are optional. The beauty of this project is it's ability to become what you need or want. The use of modular sized components, and their rearrangement and reconfiguration to adapt to the user and provide a quick means of a shelter is an important aspect to study. The possibility of mass-customization is a very powerful duality that has great potential. As architecture increasing becomes commodified, this concept of mass-customization can be a tool for the affordable nature of architecture to become an affordable and personally obtainable object, while being able to offer a level of personalization that makes it custom to the people living in it. The modularity perhaps also suggests a level of possible modification and reorganization to adapt to future change.

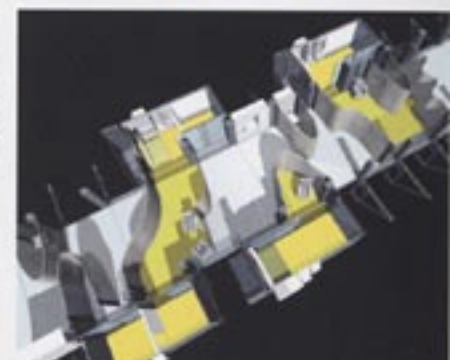
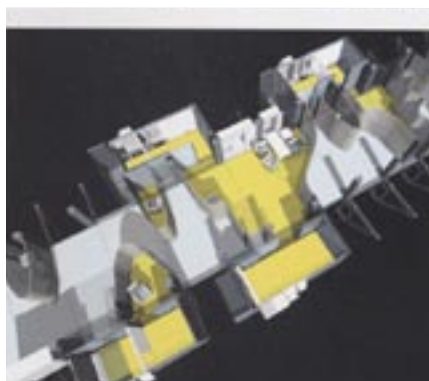
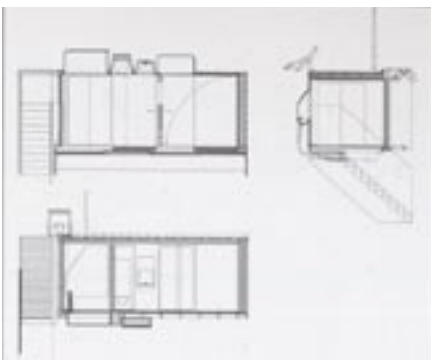


# The e-HIVE

LARGE, Doug Jackson  
Industrial Port Area, Oakland California

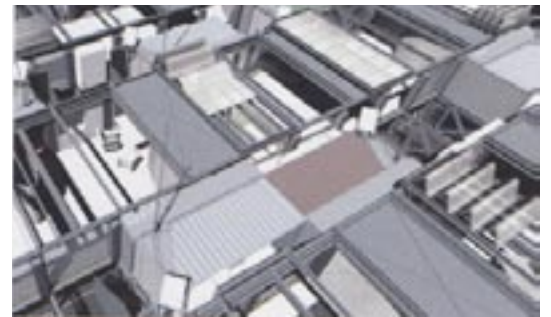


e-HIVE is a community of digitally and physically networked spaces on a 22-acre site in the industrial port area of Oakland, California. The primary components are based on a modified 20 ft. shipping container able to accept various standardized "plug-in" fixture modules to accommodate storage or hygiene needs. These standardized and largely self-sufficient individual dwelling units allow for its maximum flexibility. A transverse sliding partition within the unit acts as a curtain to separate and mediate spaces within the container. With the application of technology, it is possible to integrate various entertainment, communication and lighting to the e-HIVE, so that the individual unit is not "shacked by the real time within which it is located, but rather can accommodate the idiosyncratic schedule of its occupant." <sup>1</sup>



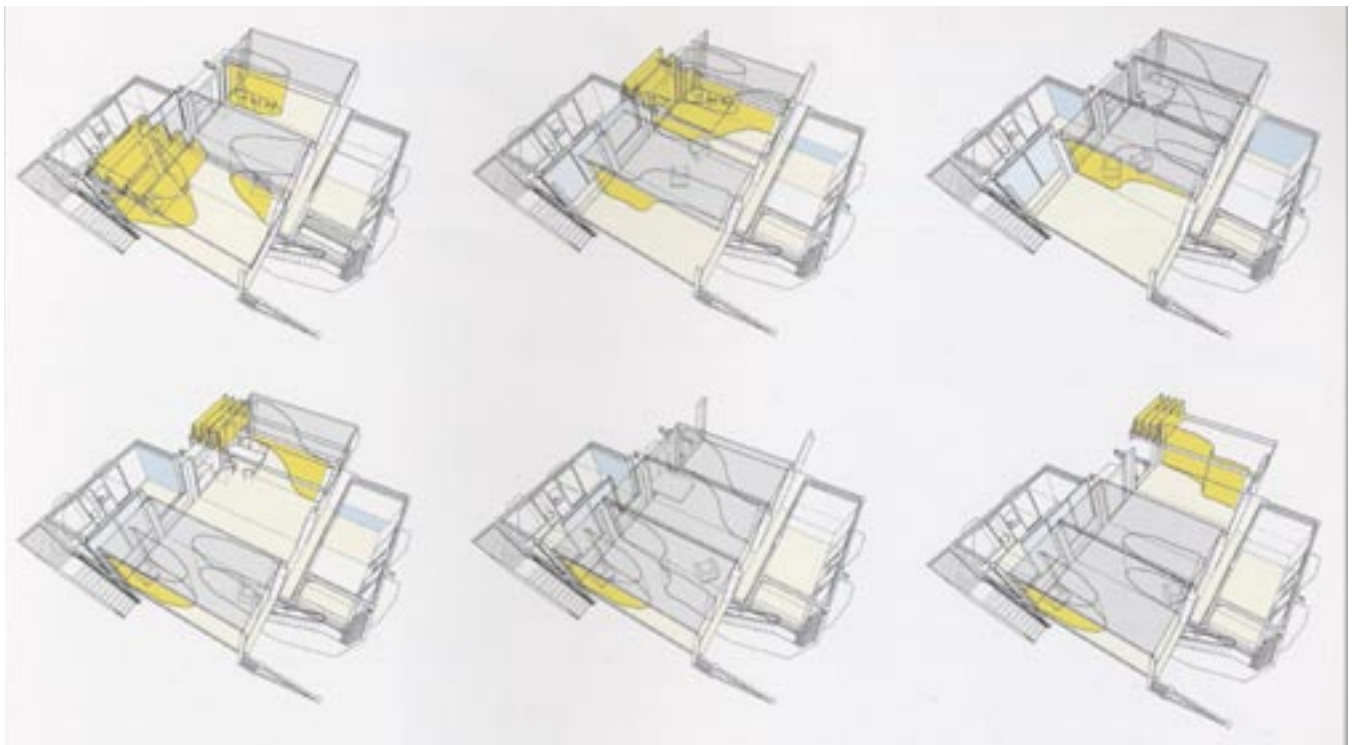


This begins to question the value of "telepresence": the use of any type of mediated communication technology to impart the sense among its users of being in the same environment. Although telepresence can really affect and reconceptualize our experience of the world including architecture, e-HIVE establishes connectivity on an ad-hoc basis.

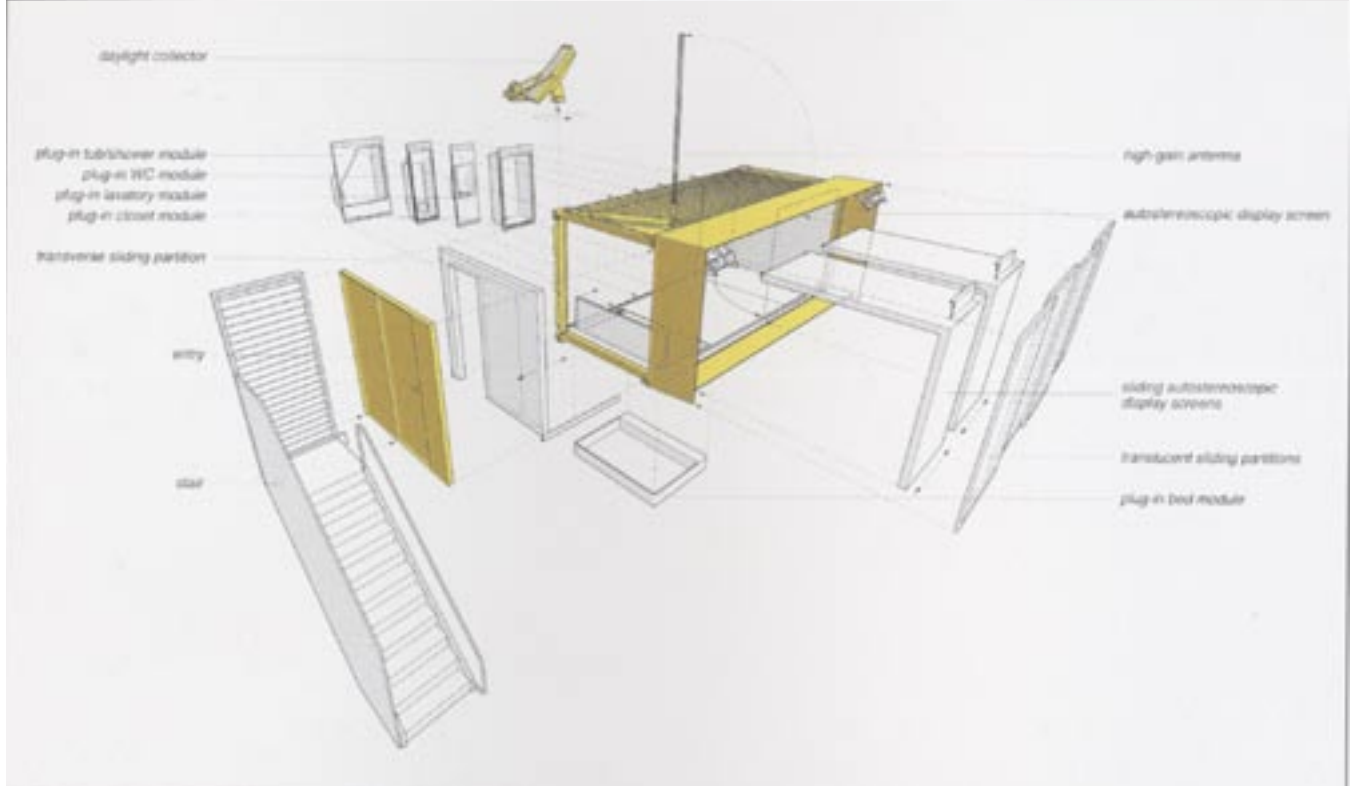
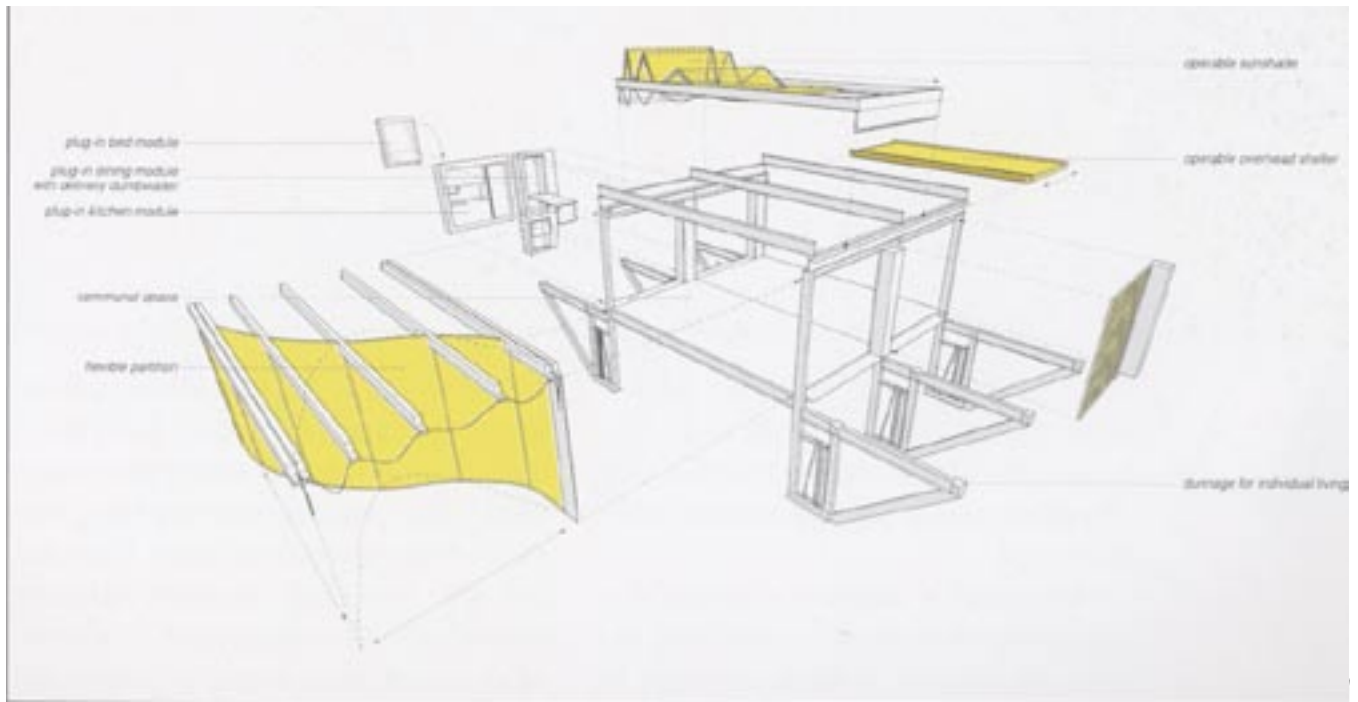




e-HIVE is all about flexibility and variability: "from its ability to weave together interior and exterior, and to extend and connect the individual dwelling units with a new type of space based upon a nonrectilinear formalism that arises directly from its need to be flexible. Furthermore, by enlisting the occupant as an agent of the physical networking of individual spaces, the e-HIVE gives, by analogy, palpable expression to the digital connectivity that it also provides."<sup>1</sup>



1 Siegal, Jennifer. *Mobile: The Art of Portable Architecture*. 1st. New York: Princeton Architectural Press, 2002.



The theme of mass customization allows for a high level of personalization while using standard elements. Starting from a standard box, one can adapt it to whatever specifications they want. There may be the question of whether or not the high level of specificity might outweigh the original factors of being low cost. However, the use of prefabricated parts and the clever use of very cheap materials such as the curtain partition, make this project quite effective. The evolution and mediation of space within the box, pushes the notions of living in a metal container box. Along with the integration of media and technology, there is large potential for collaboration between units and the development of a community or a "e-HIVE".

# Casa Familiar: Living Rooms at the Border

Estudio Teddy Cruz  
San Ysidro California, 2001



The project takes place in the streets of San Ysidro, California, located across the US - Mexico border from Tijuana. The program undertaken for the local nonprofit social services organization, Casa Familiar, is a 3-stage, 8-year plan for the improvement of the urban core.



With the aim of changing the existing zoning to promote higher density, mixed uses, and affordable housing, this organic, incremental plan's first phase involves the renovation of a historic church into a community center and offices for the organization, as well as a public garden.



In the second phase, a concrete-frame "arbor" will be constructed in the garden and will act as a shaded walkway connecting the street and alleyway, or as an area where new public uses such as a community market can operate.

The third step will see the concrete frame as the support for the affordable housing to be built upon, under and around it. The flexible nature of these dwellings are better suited to the residents.

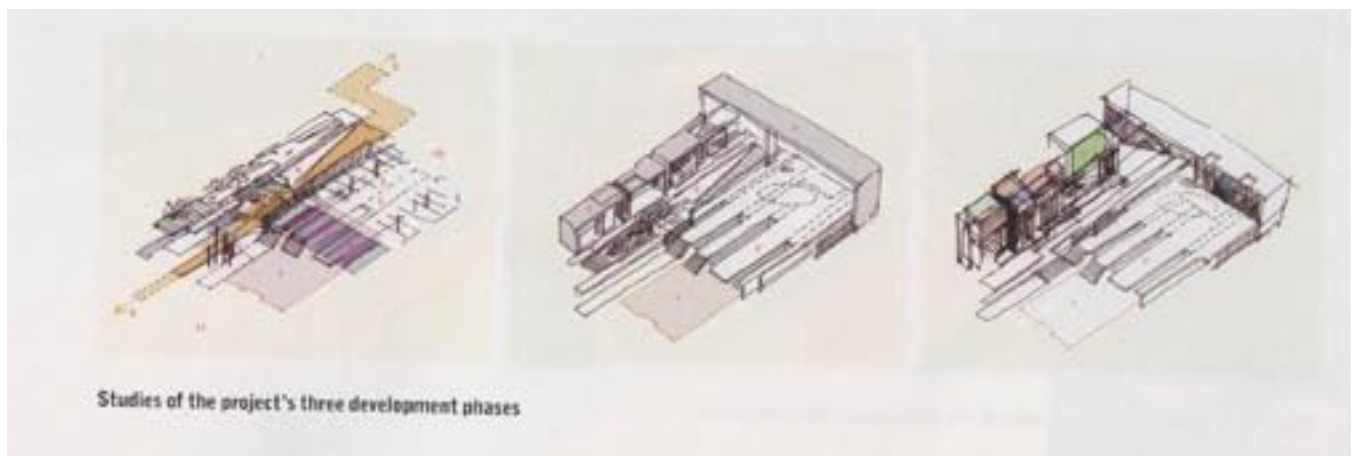
The open-ended nature of this project allows for a myriad of possibilities to take place in the interstitial and in-between spaces. The almost deliberate ambiguity reflects the unwillingness to dictate the final outcome of how it is used. Instead it offers suggestions and provides the foundation for future possibilities.





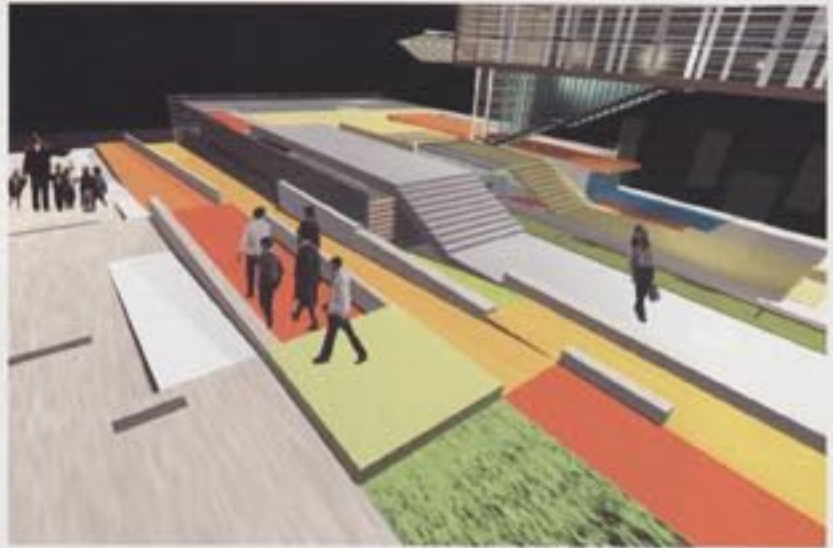
View of the existing alleyway (top left), and three successive proposed phases of development

The key aspect to this project is the incremental implementation of design and growth. By using very simple, open and direct steps, the design enables the growth of this urban border city. The interweaving of program space and uses allows for a rich diverse mix of culture and happenings. The construction of little pieces, slowly add up to make a big change by the 3rd stage. The process of change and development with the use of small scale interventions is a key aspect of this project to study.

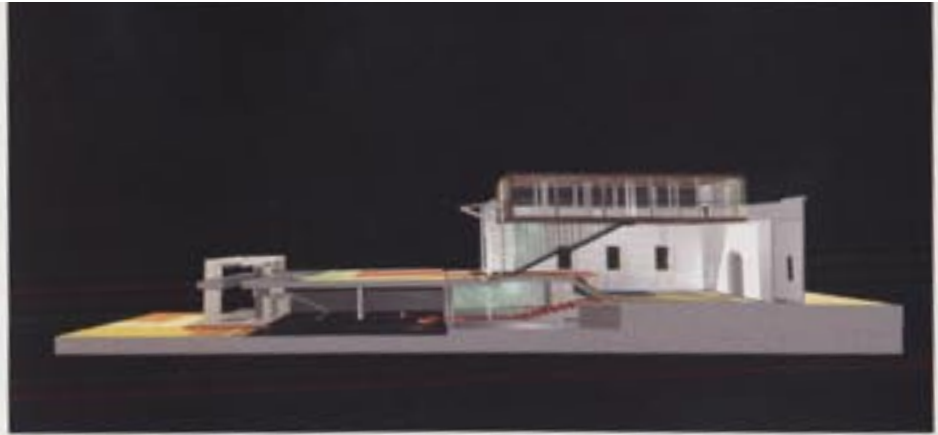


Studies of the project's three development phases

Casa Familiar: Living Rooms at the Border  
Estudio Teddy Cruz



Different views of the interior garden at the three phases of development



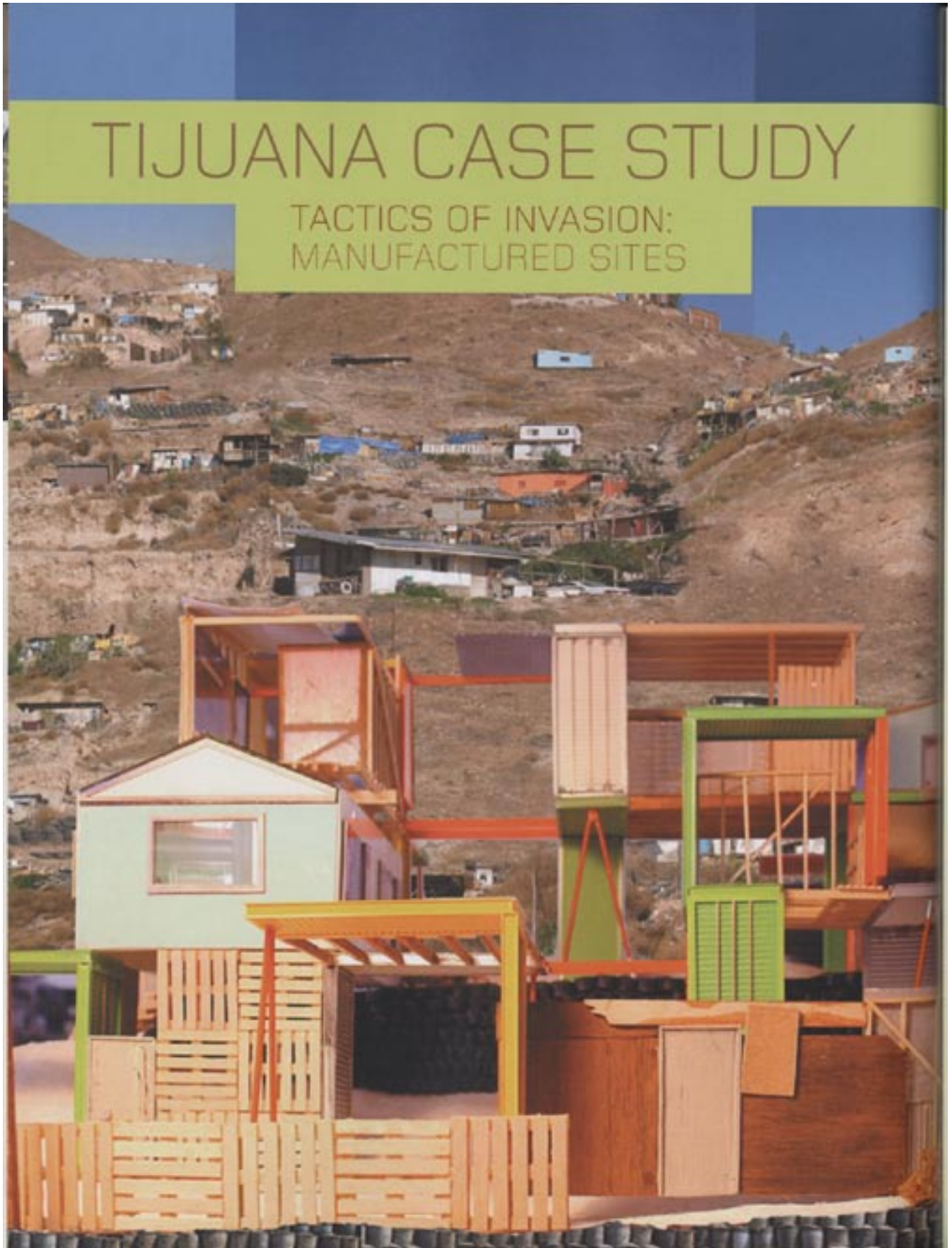
Section through the renovated church with the Casa Familiar offices on the upper level

View of the housing in the third phase



# Manufactured Sites

Estudio Teddy Cruz  
Tijuana Mexico Case Study



Teddy Cruz describes how his practice in San Diego has used its experience of Mexican/us border conditions to inform a project of 'urban acupuncture' that has the potential to bridge the enormity of a transnational divide that exists between two adjacent communities. In essence a simple prefabricated aluminium frame, Manufactured Sites could provide the much-needed, small-scale infrastructures and services for *favela*-like settlements.

The international border between the us and Mexico at the San Diego/Tijuana checkpoint is the most trafficked in the world. Approximately 60 million people cross annually, moving untold amounts of goods and services back and forth. This contested zone is the site of massive contradiction, defined and redefined every day by the unstable balance of two powerful forces. On one hand are the 'legal' actions and 'official' urban policy prompting the federal government to rethink surveillance infrastructure, incrementally transforming San Diego into the largest gated community, while on the other hand insurgent and 'illegal' actions proliferate in both border cities in smaller-scale, spontaneous occupations and appropriations that seek to blur and transgress the 10-foot-high steel wall that divides these border cities.

Even though our practice is primarily interested in challenging the rigidity of San Diego's discriminatory planning regulations and housing policy, it has also been researching, by physically dwelling at the shared edge of these two border cities, the role of housing within the strategies of invasion and appropriation that shape the informal communities of Tijuana. Learning from Tijuana's practices of everyday life has informed our efforts to develop the conceptual tools to rupture the dam that keeps this city from spilling into San Diego. While in San Diego the effort has been to contaminate urban legislature with the 'spillage' of heterogeneity and juxtaposition found in Tijuana, the energies that drive our practice within Tijuana via projects such as Manufactured Sites have to do with imagining a project of urban acupuncture that can inject services and small infrastructure into the precarious condition of the *favela*-like settlements on the city's periphery.

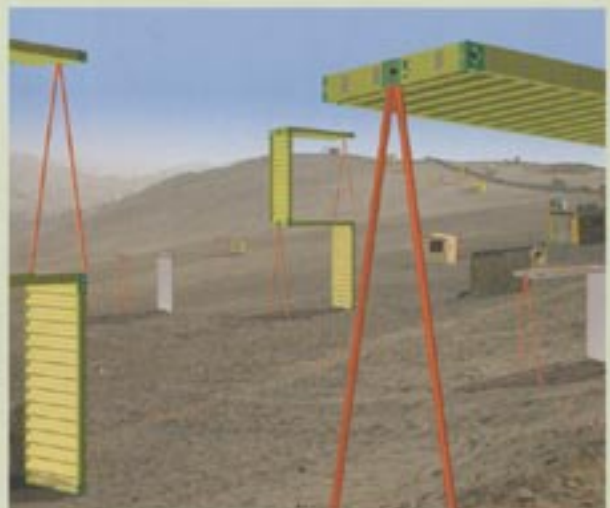
Manufactured Sites explores the start-up housing processes within Tijuana's slum communities. In his most recent book, *Planet of Slums*, Mike Davis reminds us that one billion people live in slums around the world and that it is in fact in those types of settlements that we can find a laboratory to advance ideas of housing in relation to sustainability, technology and community. Working at the San Diego/Tijuana border allows us to closely observe this phenomenon, as Tijuana's informal periphery is incrementally shaped by nomadic settlements that appear from one day to another, growing at an even faster rate than San Diego's gated communities.

This proximity has given us an opportunity to speculate on relevant issues in contemporary debates about architecture and urbanism. It has provoked research into the tactics of invasion that characterise some of these



First Step: The frame

The *maquiladora*-produced metal frames are distributed at the moment of invasion. Families use them to deploy their first traces of occupation on the vacant land. The frames come equipped with prefabricated footings that can be injected into the rubber-core retaining walls, providing added stability.





start-up settlements, where the potential of a temporal, nomadic urbanism is supported by a very sophisticated social organisation. Hundreds of dwellers, called 'parachuters', invade, en masse, large public (sometimes private) vacant properties. As these urban guerillas parachute into the hills of Tijuana's edges, they are organised and choreographed by what are commonly called 'urban pirates'. These characters, armed with cellular phones, are the community activists who are in charge of organising the first deployment of people on the sites, as well as the community, in an effort to begin the process of requesting services from the city.

Through improvisational tactics of construction and distribution of goods and ad-hoc services, a process of assembly begins by recycling the systems and materials from San Diego's urban debris. Garage doors are used to make walls; rubber tyres are cut and dismantled into folded loops, clipped in a figure eight, and interlocked, creating a system that threads a stable retaining wall, and wooden crates make the armature for other imported surfaces, such as recycled refrigerator doors. After months of construction and community organisation, the neighbourhood begins to request services from the city. In other words, inhabitation happens first and infrastructure follows. The city sends trucks to deliver water at certain locations (one of the first infrastructural elements to be implemented is a water tank on top of some dwellings). Electricity follows as the city sends one official line, expecting the community to 'borrow' the rest via a series of illegal clippings called *diabólicos* (little devils).

The sites are comprised of the stitching of these multiple situations, internal and external, simultaneously. The interiors of the dwellings become their exteriors, expressive of the history of their pragmatic evolution. As one anonymous resident put it: 'Not everything that we have is to our liking, but everything is useful.'

#### North to South Disposable housing

A Tijuana speculator buys houses slated for demolition in San Diego. He puts them on wheels and brings them to the border where they will wait in line for their right to cross. Once in Tijuana they are placed on top of steel frames, leaving a space of opportunity beneath them.

It is clear that, very easily, one risks romanticising these environments and, in a sort of ethnographic gaze, patronising their fragile conditions. We cannot forget that they are the product of resistance and transgression. In a time when architecture has been so distant from the political ground and the social fabric that shapes it, the critical observation of these settlements and the assessment of possible tactics of intervention to assist their organic evolution is a risk worth taking.

In other words, the image of these informal communities' 'poverty' that planners in Tijuana and the institution of architecture want to obliterate in order to install their own project of beautification in the *tabula rasa* of the periphery is superseded by a sophisticated social choreography and organisation, and a temporal process of negotiating boundaries and resources. It is precisely these organisational practices and the differential systems that are invented in these environments in order to promote spatial promiscuity that can shape an alternative process of intervention in the contemporary city.

Analogous to the process of transinstitutional triangulation enacted 20 minutes away from these settlements, in San Ysidro, in order to create a microzoning strategy for Casa Familiar the Manufactured Sites project needed as a foundation a similar economic and political



#### Frame as infrastructure

The frame comes with a reliable, clip-on fibre-glass water tank containing two weeks' supply





#### Uses of the Frame

The frame is conceived as a 'hinge' that can facilitate and strengthen the connection to the variety of recycled materials and systems. Allowing the human resourcefulness and social organization that characterises the construction of these settlements, the frames come with a manual that can help dwellers optimise the threading of certain popular elements, such as pallet racks and recycled joints. The frame can also act as a formwork, allowing the user to experiment with different materials and finishes. And can also transform into a stair system to facilitate circulation across the difficult topography, becoming the base system for receiving some of the recycled houses from San Diego.



**North to South: A city constructs itself from the waste of the other**  
 Tijuana recycles a variety of materials and systems from San Diego. Discarded tyres became retaining walls. Leftover wooden pallets become dwellings. Recycled garage doors become walls and partitions. Some of these fragments are transformed into operational systems. Retaining walls made of whole tyres are further improved by the ingenuity of necessity, as people construct their own sites for inhabitation. Conventional tyres are dismantled and transformed into a system of clipped and interlocking loops to hold a more solid and stable structure.



framework. In this transborder scenario, the main agencies involved are *maquiladoras* – NAFTA-supported, foreign-owned manufacturing companies, such as Sony or Samsung, operating in Tijuana to take advantage of cheap labour and low tariffs – as well as the municipality of Tijuana and an NGO, such as Casa Familiar in San Ysidro. *Maquiladora* industries have strategically positioned themselves close to informal communities of workers in Tijuana to avoid having to invest in transportation infrastructure. At this moment, there is not an official political mechanism that can monitor the transactions between *maquiladoras* and the communities they interact with to ensure some sort of social and economic equity. In other words, the CEOs of these companies are not contributing any resources to the development of minimal infrastructure needed in the informal communities that surround them.

The Manufactured Sites project proposed a collaboration between a San Diego NGO and the Municipal Planning Institute (IMPUJ) in Tijuana in order to channel funding from international foundations. Because of the formal protocol of Tijuana's

larger, interwoven and open-ended scaffolding that could help strengthen an otherwise precarious terrain, without compromising the temporal dynamics of these self-made environments. By bridging man-made and factory processes of construction the frame questions the meaning of manufacturing and of housing in the context of the community. Here, manufactured housing is not a minimalist object deployed on the ground, but an actual site, open for multiple futures.

Many lessons can still be learned from the great transnational metropolis stretching from San Diego to Tijuana, as it embraces recurring waves of a new mix of immigrants from around the world. It is out of these socio-cultural and economic tensions, and from territories of political conflict, such as this one, that critical architectural practices can emerge. These are also the transborder urban dynamics that continue to inform our work as we straddle the politics of (contaminating) zoning in San Diego, on one hand, and the tactics of invasion and the informal in



#### Tactics of Invasion: Start-up settlements in Tijuana

- Vacant land is 'spotted' for invasion.
- 'Pirate saboteur' organises the invasion.
- Invasion happens at dawn; invaders carry materials for start-up shelter.
- Recycled materials are incorporated.
- First consolidation takes advantage of leftover materials.
- Progressive consolidation is achieved out of social organisation.
- The local municipality begins providing services.

This 'double-sided' practice represents a pursuit for an architectural language that can be deterministic and ambiguous simultaneously, in order to frame the seemingly chaotic processes of development in many of Tijuana's nomadic settlements.

government, there is no existing model for public-private transnational collaboration to support speculative projects and help enact policy. The alliance between the municipality of Tijuana and Casa Familiar in San Ysidro has created the momentum to enact funding and policy, which would require the CEOs of the *maquiladoras* to reinvest in the communities they inhabit by sharing their own technical capabilities to facilitate minor infill infrastructure for start-up housing settlements.

In order to support this process, we are currently proposing a prefabricated *maquiladora*-produced aluminium frame that can act as a hinge mechanism to mediate the multiplicity of recycled materials and systems imported from San Diego and reassembled in Tijuana, giving primacy to the layered complexities of these sites over the singularity of the object. This frame, which can also act as formwork for a variety of positions and scenarios where a stair, pad or wall is needed, comes equipped with preassembled footings that would stitch into the existing rubber-tyre retaining walls, a bracing system that supports a plastic water pouch containing two weeks' supply, and is designed to adapt to the most popular systems that are distributed at the moment of invasion. This small piece is also the first step in the construction of a

Tijuana, on the other. This 'double-sided' practice represents a pursuit for an architectural language that can be deterministic and ambiguous simultaneously, in order to frame both the seemingly chaotic processes of development in many of Tijuana's nomadic settlements and the immigrants' tactics of encroachment into the relentless homogeneity of San Diego's picturesque order.

Can new notions of architectural form emerge out of these social formations, territorial projects whose main focus is not the object of architecture, but the subversion of the information imprinted artificially on the land, the alteration of the boundaries and limits established by the institutions of official development? A different notion of housing can emerge out of this terrain, pregnant with the promise of generating an urbanism that admits the full spectrum of social and spatial possibility. ▣

#### Note

1 Mike Davis, *Planet of Slums*, Verso (New York), forthcoming. Introduction published in *New Left Review*, March/April 2004. See [www.newleftreview.org/04/03/001.shtml](http://www.newleftreview.org/04/03/001.shtml).





**Housing of Contingency: Temporal urbanism**

The frame's main objective is to mediate between site and house. Without compromising the improvisational energies of the communities and their temporal evolution, it adds, via a sort of urbanism of acupuncture, structural reinforcement to an otherwise precarious terrain. As the frames interconnect and are infilled by other systems, the overall system becomes a temporal scaffold that can frame the complexity of the sites. As time goes by, the frame might disappear, but only after establishing a choreography of interventions and relationships that will have given form to the new city.

# Paper Loghouse

Shigeru Ban

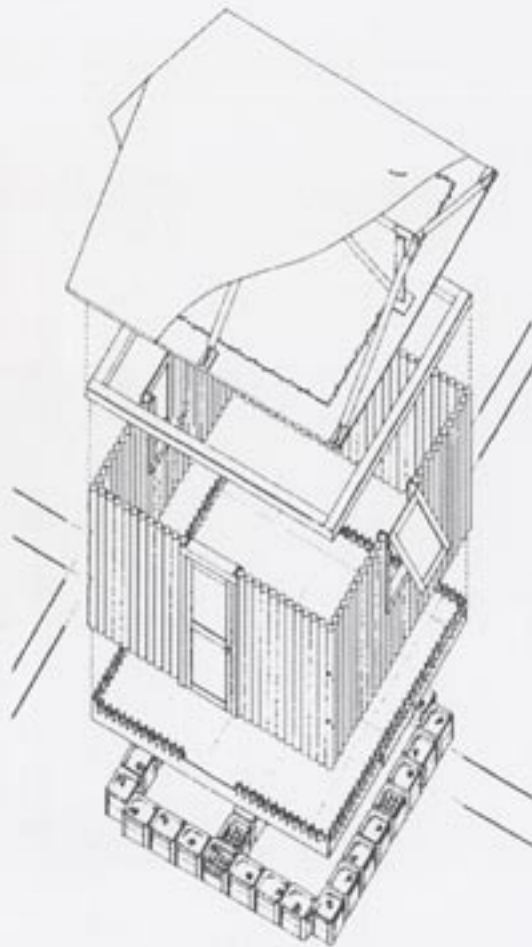
Kobe, Rwanda, Turkey, 1995

The simple construction of these Paper Loghouses, with Ban's signature use of recycled paper tubes, allows for easy and cheap installation of these shelters. These temporary refugee shelters are made up of individual simple tubes, which when combined together make the wall of the house. These houses are truly cheap and affordable, though they are for refugees and not the typical housing market. But one cannot help thinking about what other applications they can be used in.

SHIGERU BAN

Paper Loghouse  
1995

Foto di Photos by Masayuki Hira



Esposizione isometrica  
con gli elementi che compongono  
la struttura, vedute dall'esterno  
e di un interno e prospetti.

Axonometric exploded diagram  
showing the elements that make up  
the structure, views of the exterior  
and an interior and elevations.

La casa è stata progettata per le emergenze causate  
da guerre e da calamità naturali. Un primo esemplare  
è stato realizzato in occasione del terremoto di Kobe,  
sistemi analoghi sono stati successivamente utilizzati  
in Rwanda e in Turkey.

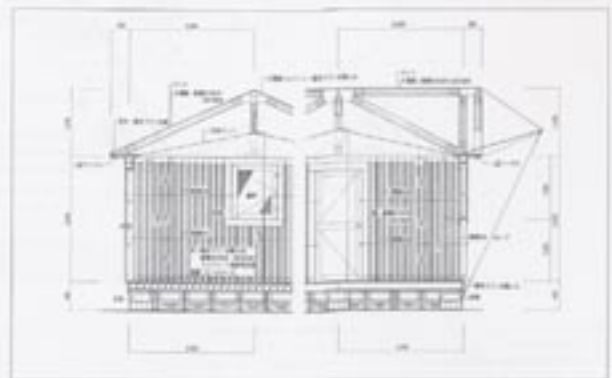
The house has been designed for emergency use  
in wars or natural calamities. The first model  
was constructed at the time of the Kobe earthquake,  
similar systems have been used subsequently  
in Rwanda and Turkey.





Le caratteristiche principali della Paper Lodge sono l'economicità della struttura, la possibilità di realizzare senza difficoltà la costruzione e di riciclare le parti in un secondo tempo. La struttura è composta da casse di birra riempite di sabbia, montate su pali con tubi di cartone spessore 100 mm, spessore 4 mm, soffitti e tetto di tela. Tra i tubi è applicata una spugna impermeabile all'acqua, il tetto e il soffitto sono separati per assicurare il ricambio dell'aria. Una Paper Lodge costa circa cinque milioni di lire.

The principal advantages of the Paper Lodge are: the structure's low cost, its ease of construction and the fact that its parts can be recycled for use in the future. The structure is made up of beer crates filled with sand, walls made out of cardboard tubes (100 mm in diameter, 4 mm thick) and a canvas ceiling and roof. A layer of waterproof sponge is put between the tubes. The roof and ceiling are separated to ensure the change of air. One Paper Lodge costs around 2500 euros.

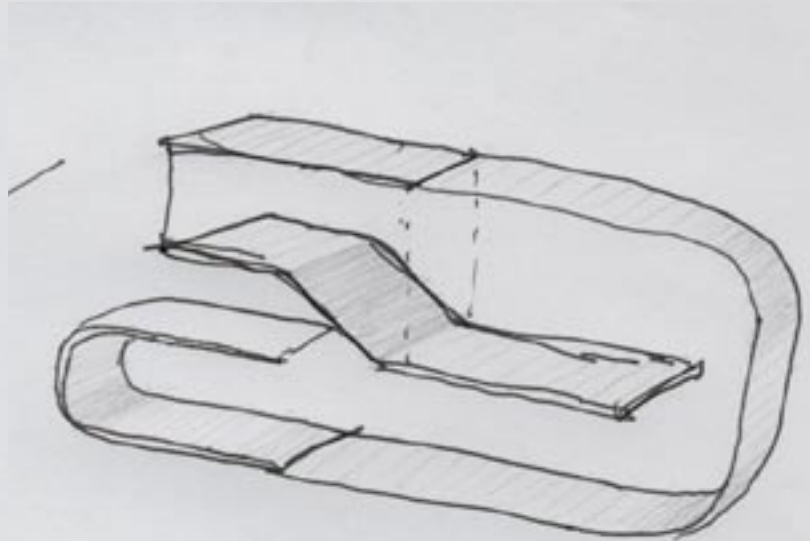


# Analysis Artifacts

Preliminary Sketches

CASA FAMILIAR:  
LIVING ROOMS AT THE BORDER.

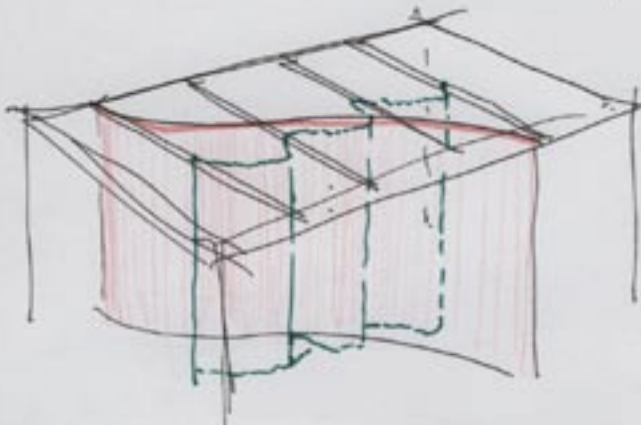
- 3 stage, 8 year plan. →
- higher density
- mixed uses
- affordable
- renovate church → community centre, public garden
- concrete frame → walkway, market
- infrastructure → flexible



interweaving of spaces  
using a basic framework as a base  
for future structure

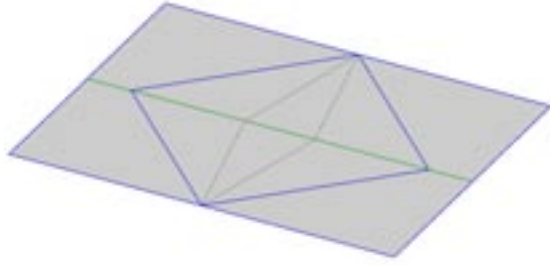
e-HIVE.

the act of  
separating / enclosing  
space



# Analysis Artifacts

## Paper Model Configurations



standard 8.5" x 11"  
sheet of paper



paper after a  
series of folds



single unit configuration

The artifacts take standard sized units and arrays them in different configurations to create unique and distinct shapes - that at another level can become building blocks for something further. The ideas of standardization, but also mass customization are present. Adaptability is also an important factor in these studies, as their ambiguity for use allows for an open examination of their possible implementations and uses.



combination of 3 units to form a cell



spiral configuration



multiple cell configuration



ring configuration



multiple cell configuration

# Don't Miss a Sec

Monica Bonvicini

London, December 2003



A new way to view London: from a toilet  
Usable bathroom exhibit boasts one-way mirrored walls

An art exhibit of a usable toilet enclosed in a cube of one-way glass is seen across the road from London's Tate Britain Museum. The person inside the outhouse can see passersby while remaining invisible to them.

LONDON - Visitors to Britain will find a new stop on London's site-seeing route this spring: a usable public toilet enclosed in one-way mirrored glass situated on a sidewalk near the River Thames. The contemporary art exhibit, which allows the user to see out while passers-by cannot peep in, toys with the concepts of privacy and voyeurism.

"I think there'd be a twinge of not believing that people outside couldn't see you," said Jeff Boloten, as he peered into the glass cube to see the metal prison toilet and its transparent walls.

The exhibit, entitled "Don't Miss A Sec," is on display at a construction site across the road from Tate Britain, the national gallery of British art from 1500 to the present.

As museum-goers inquisitively press their noses to the reflective glass, and construction workers mill about, it isn't difficult to see why people would feel uneasy about using the glass outhouse.

"Playing with the idea of the most private bodily function and having to sit on a street corner is just bizarre," said Boloten, who works at the Tate Britain.

"The construction site makes it interesting because portable toilets are at construction sites all the time, but, the Tate Britain's a respected institution; the juxtaposition makes it more unique," he said.

Far from testing the viewers' levels of embarrassment versus exhibitionism, the artist, Italian-born Monica Bonvicini, conceived of the idea while watching people at art openings. Amid the gossip and pageantry, nobody wanted to leave the room for fear of missing a key entrance or comment. The "Don't Miss A Sec" exhibit -- which was unveiled in December -- reflects peoples' reluctance to leave the spectacle, and allows the art-goer to remain in the action, even while on the toilet.

While some viewers meditate on the exhibit's psychological and cultural implications others revert to telling potty jokes.

British dailies and art commentaries have also had fun with the subject: "Loo with a view" and "Bathroom humor in London" have been among the headlines.



## Panoptican surveillance system

The use of the sterile prison toilet and sink unit stems from the fact that the site once housed the Millbank Penitentiary, where prisoners were held before being transported to Australia in the 1800s.

The prison's architect Jeremy Bentham had hoped to create a Panoptican, or all-seeing, surveillance system for the penitentiary.

His design envisioned a cylindrical central tower, from where a guard could see all the prisoners in their cells, which radiated out from the tower, without being seen himself.



Bentham believed that the knowledge that they were being watched would prevent prisoners from being disobedient, and that they would come to internalize the watchful eye and be able to act as their own guards if they were eventually released.

Although Bentham's Panoptican was never realized, 21st century surveillance systems, like closed circuit television (CCTV), have taken on a similar role.

"Don't Miss a Sec" turns the tables by taking the all-seeing power away from the camera and giving it to the person on the toilet, while letting them remain invisible to the world.

But peoples' fears of being seen with their pants down still hold strong.

In 2000, a pair of self-proclaimed performance artists caused an uproar when they relieved themselves on artist Marcel Duchamp's 1917 sculpture of a urinal, on display at London's Tate Modern gallery.

But, even with full permission to defecate on Bonvicini's work of art, Britons and tourists alike tend to shy away from the challenge.

Considering that four-man outdoor urinals are a frequent site in the U.K. capital, some may question the need for nerves. And in some cultures using the toilet is not considered a private matter at all. In fact, it was common for ancient Greek aristocrats to discuss political and business affairs while attending to their own "personal business" in communal bathrooms.



Carlile, Jennifer. "A New Way to view London: From a Toilet." *MSNBC.com*. 5 March 2004.

# Glass Outhouse

Patrick Killoran

SculptureCenter, Long Island City, 2002



Modified portable toilet.

An existing portable toilet was fitted with special walls and doors that allow the occupant to see out but the public cannot see in. The toilet is functional. Glass Outhouse is an unlimited edition of porto-potty. [www.patrickkilloran.com](http://www.patrickkilloran.com)

A tale of two toilets - Front Page

Art in America, Feb, 2004 by Raphael Rubinstein

Following reports in the media about Bonvicini's piece, which is free but only open for use during certain hours of the day, some New Yorkers were reminded of a piece on view in the courtyard entrance of New York's Sculpture Center a year earlier--Patrick Killoran's Glass Outhouse. This was a standard portable toilet that the 31-year-old New York artist had altered to create a see-through-mirror effect similar to that of Bonvicini's subsequent work. Looking at photos of the structure housing Bonvicini's toilet--a perfectly rectilinear box--one couldn't help thinking that Killoran net only seemed to have arrived at the idea first, but also had done so with far greater conceptual elegance. By choosing to use a portable toilet, of the kind often found at construction sites and outdoor public events, Killoran neatly alluded to the occasion of his piece: the inauguration of the Sculpture Center's new home, a renovated industrial building in Queens. (Glass Outhouse remained on view for some 10 months and was free and usable during the center's regular hours.)

In contrast, the external form of Bonvicini's work appears to have no specific relation to its own function. Rather, like previous pieces of hers, it alludes chiefly to Minimalist sculpture, that is, to the realm of galleries and museums. One could argue that Killoran's economy of means--adapting a preexisting object through a simple but crucial operation (shades of Duchamp's urinal)--is artistically and intellectually stronger than Bonvicini's much more elaborate (and no doubt much more costly) construction. Doesn't a work of art, even one that serves the most quotidian of functions, need to possess a certain internal logic, a correlation of concept and form, in order to be esthetically compelling?

On one level the coincidence of these two toilet sculptures is just another story about precedence, but it's also an occasion to compare two related works of art and make a qualitative distinction between them. For art aficionados that should count as a truly welcome public convenience.

Rubinstein, Raphael. "A Tale of Two Toilets."  
*Art in America*. February 2004.



# paraSITE

Michael Rakowitz

Cambridge, Boston, New York, Baltimore, 1998

PARASITISM IS DESCRIBED AS A RELATIONSHIP IN WHICH A PARASITE TEMPORARILY OR PERMANENTLY EXPLOITS THE ENERGY OF A HOST.

paraSITE proposes the appropriation of the exterior ventilation systems on existing architecture as a means for providing temporary shelter for homeless people.

PARASITES LIVE ON THE OUTER SURFACE OF A HOST OR INSIDE ITS BODY IN RESPIRATORY ORGANS, DIGESTIVE ORGANS, VENOUS SYSTEMS, AS WELL AS OTHER ORGANS AND TISSUES.

The paraSITE units in their idle state exist as small, collapsible packages with handles for transport by hand or on one's back. In employing this device, the user must locate the outtake ducts of a building's HVAC (Heating, Ventilation, Air Conditioning) system.

FREQUENTLY A HOST PROVIDES A PARASITE NOT ONLY WITH FOOD, BUT ALSO WITH ENZYMES AND OXYGEN, AND OFFERS FAVOURABLE TEMPERATURE CONDITIONS.

The intake tube of the collapsed structure is then attached to the vent. The warm air leaving the building simultaneously inflates and heats the double membrane structure.

BUT A HOST IS CERTAINLY NOT INACTIVE AGAINST A PARASITE, AND IT HINDERS THE DEVELOPMENT AND POPULATION GROWTH OF PARASITES WITH DIFFERENT DEFENSE MECHANISMS, SUCH AS THE CLEANING OF SKIN, PERISTALTIC CONTRACTION OF THE DIGESTIVE APARATUS, AND THE DEVELOPMENT OF ANTIBODIES.

In April of 1997, I proposed my concept and first prototype to a homeless man named Bill Stone, who regarded the project as a tactical response. At the time, the city of Cambridge had made a series of vents in Harvard Square "homeless-proof" by tilting the metal grates, making them virtually impossible to sleep on.

PARASITES RESPOND TO THIS DEFENSE BY ANCHORING THEMSELVES WITH HOOKS AND SUCKERS ONTO SKIN, OR DIGESTIVE MUCOUS MEMBRANE, AND BY DEVELOPING PROTECTIVE DEVICES AND SUBSTANCES WHICH LESSEN DEFENSIVE CAPABILITIES OF THEIR HOST.

The system by which the device attaches or is anchored to the building is designed to allow the structure to be adaptable. The intake tube can be expanded or tightened to fit the aperture of the vent through an adjustable lip made possible by elastic draw-strings. Hooks are attached to the metal louvers for reinforcement.

THERE IS "TENSION" BETWEEN A HOST AND ITS PARASITE, SINCE THE HOST ENDEAVOURS TO GET RID OF THE FOREIGN BODY, WHILE THE PARASITE EMPLOYS NEW WAYS TO MAINTAIN THE CONNECTION WITH THE HOST.

The connection of the inflatable structure to the building becomes the critical moment of this project.



Since February 1998, over thirty prototypes of the paraSITE shelter have been custom built and distributed them to homeless individuals in Cambridge, Boston, New York, and Baltimore. All were built using temporary materials that were readily available on the streets, such as plastic bags and tape.

While these shelters were being used, they functioned not only as a temporary place of retreat, but also as a station of dissent and empowerment; many of the homeless users regarded their shelters as a protest device, and would even shout slogans like "We beat you Uncle Sam!" The shelters communicated a refusal to surrender, and made more visible the unacceptable circumstances of homeless life within the city.

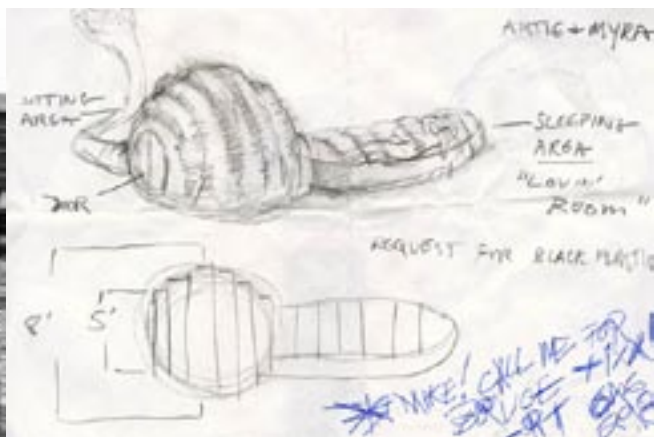
For the pedestrian, paraSITE functioned as an agitational device. The visibly parasitic relationship of these devices to the buildings, appropriating a readily available situation with readily available materials elicited immediate speculation as to the future of the city: would these things completely take over, given the enormous number of homeless in our society? Could we wake up one morning to find these encampments engulfing buildings like ivy?

This project does not present itself as a solution. It is not a proposal for affordable housing. Its point of departure is to present a symbolic strategy of survival for homeless existence within the city, amplifying the problematic relationship between those who have homes and those who do not have homes.

The issue of homelessness is of global proportions and it is foolish to think that any one proposition will address all the issues associated with this problem. There are many different types of homeless people. The mentally ill, the chemically dependent, those who are unable to afford housing, men, women, families, even those who prefer this way of life are included among the vast cross section of homeless people in every urban instance. Each group of homeless has subjective needs based on circumstance and location. The project does not make reference to handbooks of statistics. Nor should this intervention be associated with the various municipal attempts at solving the homeless issue. This is a project that was shaped by Rakowitz's interaction as a citizen and artist with those who live on the streets.







## (P) LOT

Michael Rakowitz

Museum Moderner Kunst Stiftung Ludwig Wien (MUMOK), Vienna, 2004



(P) LOT questions the occupation and dedication of public space and encourages reconsiderations of "legitimate" participation in city life. Contrary to the common procedure of using municipal parking spaces as storage surfaces for vehicles, (P) LOT proposes the rental of these parcels of land for alternative purposes. The acquisition of municipal permits and simple payment of parking meters could enable citizens to, for example, establish temporary encampments or use the leased ground for different kinds of activities. A first initiative for this re-dedication is realized through the conversion of ordinary car covers into portable tents, available for loan at the MUMOK. Visitors to the museum and interested citizens who wish to participate in the development of this proposed culture will have the choice to use one of five covers ranging from a common sedan to a luxurious Porsche or motorcycle, thereby enabling a broadcast of desire within the marginalized space of need.



## Stair to Park

Heavy Trash, [www.heavytrash.blogspot.com](http://www.heavytrash.blogspot.com)  
Los Angeles, 1997

In June 1997, Heavy Trash installed their first project - a 2,000-pound stair providing temporary access to Triangle Park at Santa Monica and Bundy. A 7'-high fence had been erected around the park to prevent the homeless from using the grassy enclave. The City solved the "problem" by using \$28,000 of tax-payer funds to fence off the park and permanently remove it from the public realm. For three weeks, the stair allowed the local community to use the park again.



# Viewing Platforms

Heavy Trash, [www.heavytrash.blogspot.com](http://www.heavytrash.blogspot.com)  
Los Angeles, 2005

As an anonymous arts organization of architects, designers and urban planners, Heavy Trash creates large, disposable art objects that draw community and media attention to urban issues. By explaining a particular urban problem and suggesting a solution, Heavy Trash seeks to provoke dialogue among the residents of Los Angeles.

On April 24, 2005, Heavy Trash volunteers deposited bright orange viewing platforms in front of three Los Angeles gated communities: Brentwood Circle, Park La Brea and Laughlin Park. The purpose of these viewing platforms is to draw attention to the phenomenon of gated communities -- the fastest growing form of housing in the United States. "There are now more than 1 million homes behind such walls in the greater Los Angeles area alone," according to Setha Low, a professor at the City University of New York.

## WHAT'S WRONG WITH GATED COMMUNITIES?

Most people want to live in communities that are safe for their families and most homeowners want to protect their property values. Although these are fundamentally reasonable goals, walling off one section of the city from another is not a reasonable way to achieve them. In fact, doing so can actually harm the very communities in need of protection. According to USC Lusk Center Director Ed Blakely and UC Berkeley professor Mary Gail Snyder, "When public services and even local government are privatized, when the community of responsibility stops at the gates, the function and the very idea of democracy are threatened. Gates and barricades that separate people from one another also reduce people's potential to understand one another and commit to any common or collective purpose."

Instead of walling ourselves off in gated communities, alternatives, such as the following, should be explored:

- Unrestricted pedestrian access. Since it is difficult to commit a property crime in Los Angeles without a car, unrestricted pedestrian access could be provided to all gated communities. This would return the parks, streets and sidewalks that have been removed from the public realm back to the residents of Los Angeles.
- Investment in public infrastructure. Encourage investment in public infrastructure -- like parks, streets, sidewalks and schools -- by restoring local control over property tax revenues, essentially fixing the unintended consequences of Proposition 13.
- "More eyes on the street." Amend zoning code to encourage more mixed-use residential neighborhoods with 24-hour activity. Legalize second units ("Granny Flats") in single-family homes. Both of these actions would put more people outside during the normal course of a day, and nothing works quite as well to make neighborhoods safer, friendlier and livelier.

## WHY VIEWING PLATFORMS?

Like the historic viewing platforms at the Berlin Wall that allowed Westerners to see into East Berlin, the Heavy Trash viewing platforms call attention to the walls of gated communities and provide visual access to parts of the city that have been cut off from the public domain.





# Park Up a Building

Acconci Studio  
Spain, 1996

PROGRAM: A portable park adaptable to a blank wall of any building

ORIGINAL SITE: Alvaro Siza's museum building, Centro Gallego de Arte Contemporanea, Santiago de Compostela, Spain.

PROJECT: 9 pairs of telescoping tubes, U-shaped at one end and L-shaped at the other. The U-shaped ends hook onto the parapet of the building; from the L-shaped ends, one module of a park is suspended on threaded rod.

2 types of park-module alternate: a floor with a seat on opposite sides, inside and outside; and a floor with a seat on the inside and a tree on the outside. A connector, a step, joins one module to another. The floor, the seat and the step are metal grating - you can look up through them; the tree is enclosed within a metal grate, its roots encased in the burlap sack it was transported in. A light from beneath each floor illuminates the park. Each successive module is hung one step higher than the one before: as you walk through the park - as you walk from step to floor, between seat and seat and between seat and tree - you're climbing up the side of the building.

The tubes, the park-hangers, telescope down to 8-foot sections, so that they can be transported and adjusted to buildings of different heights. The PARK can be hung with its companion-unit, HOUSE UP A BUILDING, on different walls; or the PARK can be hung alone.



# House Up a Building

Acconci Studio  
Spain, 1996



PROGRAM: A portable housing complex adaptable to a blank wall of any building

ORIGINAL SITE: Alvaro Siza's museum building, Centro Gallego de Arte Contemporanea, Santiago de Compostela, Spain.



PROJECT: 9 pairs of telescoping tubes, U-shaped at one end and L-shaped at the other. The U-shaped ends hook onto the parapet of the building; from the L-shaped ends hangs one module of a housing complex.

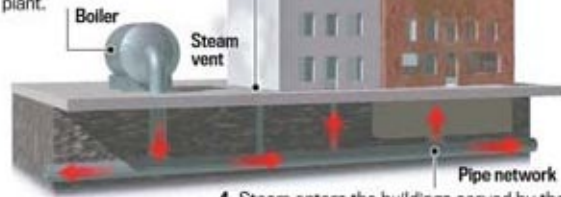
### All steamed up

The Detroit steam network, owned by Detroit Thermal L.L.C., supplies heat to 240 buildings. Here's how it works:

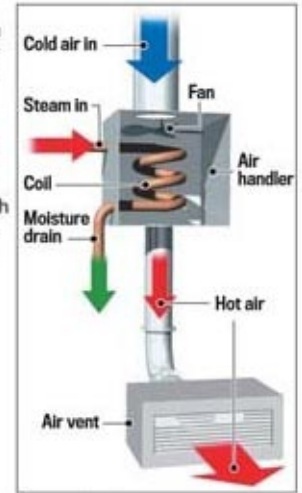
1. Water is heated in natural gas-fired boilers until it evaporates. Pressured steam is piped into a 39-mile network of underground pipes.
2. Steam also is piped in from the city's cogeneration plant.

3. Along the way, some steam escapes through leaks and steam traps, which remove moisture from the pipes. Occasionally, the steam is vented through manholes.

5. Steam is piped through a coil in an air handler. The cold air is heated as it passes over the coil. The hot air is then forced through ducts to heat the building.

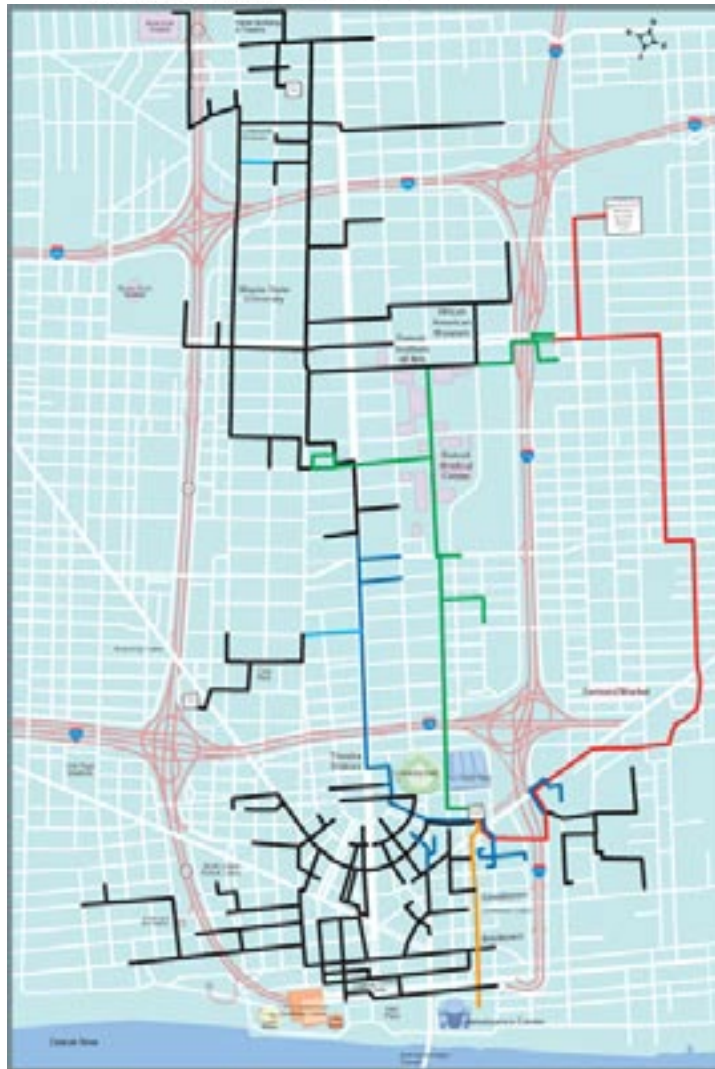


4. Steam enters the buildings served by the network and is used for heat or to power air conditioners.



Note: Not to scale

Tim Summers / The Detroit News



Piping Key	
220 PSI	Red
180 PSI	Orange
120 PSI	Green
100 PSI	Blue
60 PSI	Black
Cold handles	Light Blue

additional research