

# Chapter \_05

## Precedents

This chapter will illustrate the precedents that guided the concept and design development phase for the proposed intervention. The precedents can be divided into three main categories:

- Theory - *Flexibility*
- Language - *Adaptive re-use / Industrial architecture*
- Programme - *Temporary housing*

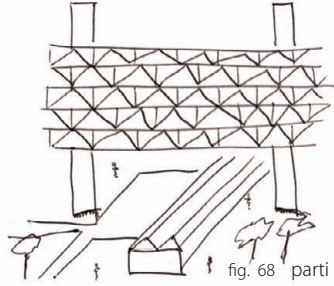


fig. 65 rail track leading to rebecca station



# La Ville Spatiale

Paris, 1958 - 62: Yona Friedman



## Description

Between 1950 and 1973, Friedman visualised a city of flexible, mobile dwellings and housing units, allowing the inhabitants to freely manipulate their environment according to their wishes and habits in urban everyday life based on his project *La Ville Spatiale* (The Spatial City) (Ley & Richter, 2008: 124).

The theoretical backbone for *La Ville Spatiale* was based on a “multi-story space frame grid”, supported by widely spaced pillars to minimise the connection between the city and the natural environment. In addition, Friedman introduced flexible modular structures on the higher levels that would be determined by the users, or inhabitants, and not on a fixed infrastructure. Advocating that infrastructure should not be determined or determining (*ibid*: 124). *La Ville Spatiale* is elevated above the

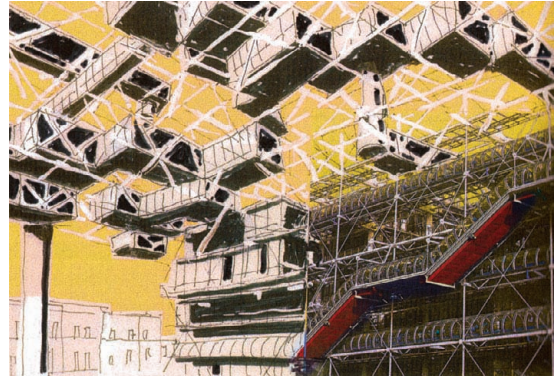


fig. 66 “Extention to the Centre Georges Pompidou” , Paris (1959), by Yona Friedman

surface of the existing city fabric, not only allowing for ‘mobile architecture’, but also a flexible network of social relationships that could expand organically within the current urban space (Friedman, 2006: 16).

## Relevance

The main purpose of Friedman’s participatory design was to decrease the decision-making role of the architects/planners to the least amount by only observing them as being “mediators” (Friedman, 1975: 54) who offered their technical practices to inhabitants willing to decide on the design of their dwellings by themselves. This is of specific importance not only for the democratisation of urban living and architecture - one of the most critical issues of current times - but also for social sciences and communication studies in the context of complex global cities (Ley & Richter, 2008: 127).

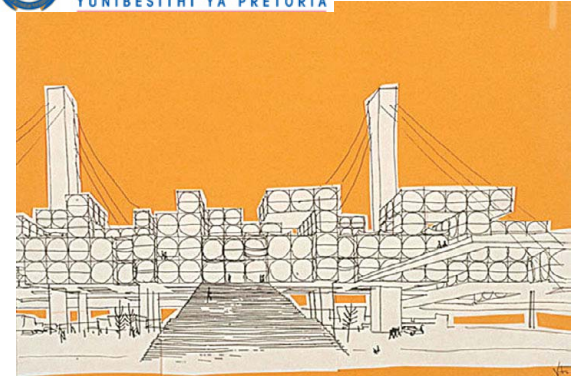


fig. 67 “Ville Spatiale” , Paris (1959), by Yona Friedman

## Conclusion

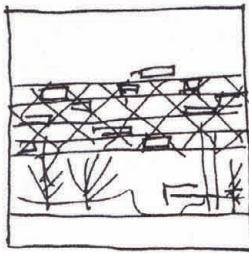
The Spatial City’s intention was not to counteract or overhaul the existing city, but rather to coexist as an additional network disconnected from the existing urban fabric, in an effort to preserve the character of the city. Due to this, it would not be located over major city centers or historical sites, but rather over underutilised space in and around the city.

Friedman’s manifesto principles are that buildings should:

- Touch the ground (natural environment) over a minimum area.
- Allow for disassembly and movement.
- Be capable of various forms determined by the inhabitant



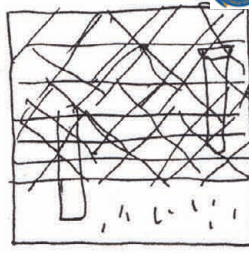
# "VILLE SPATIALE"



LAST, BUT NOT LEAST,  
I GET BACK TO MY  
FAVORITE IDEA:  
THE "VILLE SPATIALE"



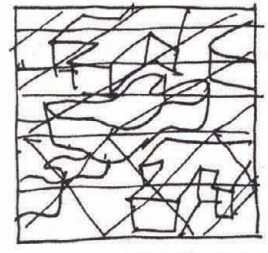
IT MEANS A  
PARTICULAR MIXTURE  
OF RULES  
AND IRREGULARITY



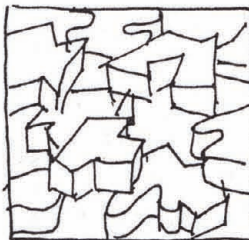
THE "VILLE SPATIALE"  
CONSISTS OF A MORE  
OR LESS REGULAR  
RIGID SUPPORTING GRID:  
THE "INFRASTRUCTURE"



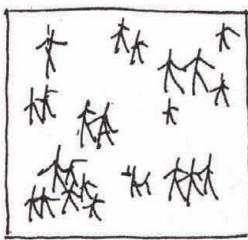
WITHIN WHICH INDIVIDUAL  
HOMES ARE INSERTED  
FORMING AN IRREGULAR  
PATTERN



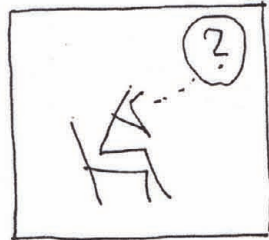
AS FOR THE SHAPE  
OF THOSE INDIVIDUAL  
HOMES  
ANYTHING GOES



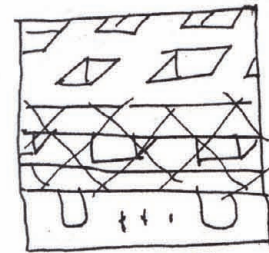
THUS THE "VILLE  
SPATIAL"  
IS A "MERZSTRUKTUR"  
AT URBAN SCALE  
FOR A MASS-SOCIETY  
CONSISTING OF  
INDIVIDUALISTS



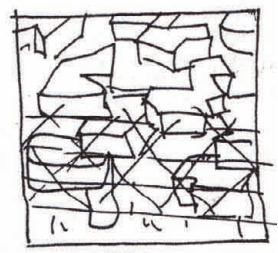
THIS IS OUR SOCIETY  
TODAY:  
A CROWD



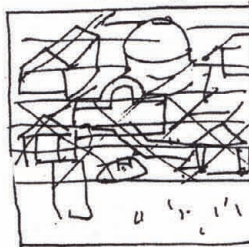
I DO NOT KNOW  
HOW A "VILLE SPATIALE"  
WILL LOOK



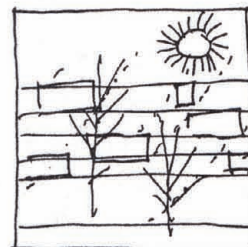
IT CAN BE THIS



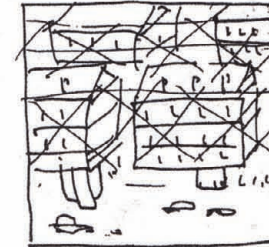
OR THIS



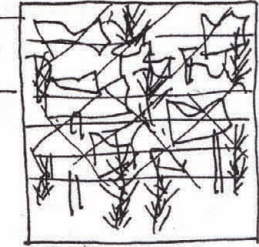
OR ANYTHING ELSE



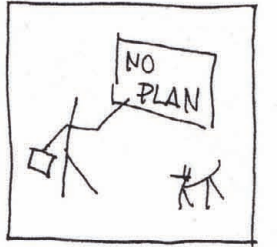
THERE IS NO GRAMMAR  
TO THE "VILLE SPATIALE"  
EXCEPT RESPECT  
OF DAY-LIGHT



IT CAN LOOK AS WELL  
AS THE CITY YOU  
LIVE IN



OR IT CAN BE  
COMPLETELY  
UNLIKE  
TO ANY CITY



IT CANNOT BE  
PLANNED,  
IT CAN ONLY HAPPEN

fig. 69 series of diagrams illustrating concept for 'La Ville Spatale'



# Potteries Thinkbelt Project

Staffordshire, UK. 1964: Cedric Price

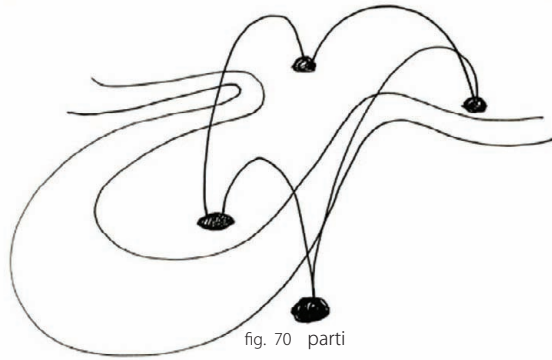


fig. 70 parti

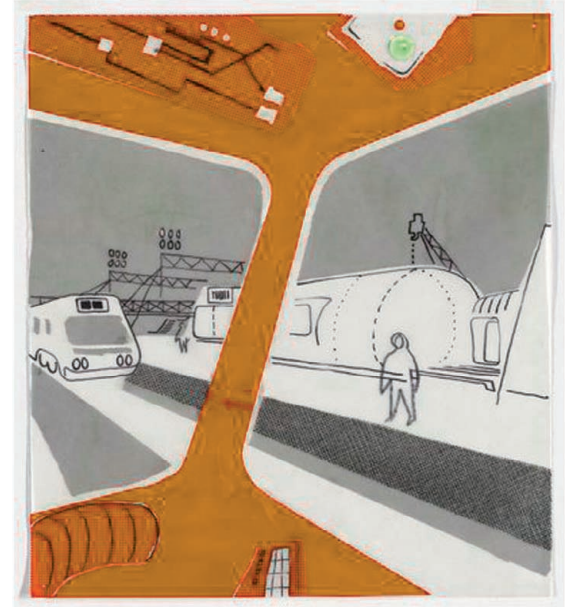
## Description

In the Potteries Thinkbelt Project, Price presents the ideas for a time-based, self-regulating mobile architecture and applies them to a large-scale planning experiment for the economically depressed region of North Staffordshire (Kronenburg, 2007: 60). The project utilised miles of redundant railway tracks in the creation of a flexible educational institution for 20,000 students. Envisioned on an underused industrial site with prefabricated and mobile facilities, redefining not only the way this specific location was observed, but also the thought of what a university might be (Lobsinger, 2000: 24). Price referred to the project as a social-economic instrument, a controlled yet flexible experiment intended to catalyse and accommodate change at all levels of interaction.

## Relevance

Price's project was intended to drive economic and social change. The transfer points would be under-utilised sites for the growth of new trade, manufacturing and residential settlement. Critical to Price's thinking was his belief that any structure would have a limited life of 20 years, although within that period it was purposefully designed to be in a state of constant change (*Ibid.*:27). Price's architecture administers with the visual and invites one to re-consider the experience of time and social interaction in the present. Time is not the buildup of historical process, but rather the fourth dimension and not reducible to a visual vocabulary. Price advocates that the social produces the architectural form in time and the new social forms of time and space are not comparable to what our perceptions have experienced to date (Casteus, 1996: 376).

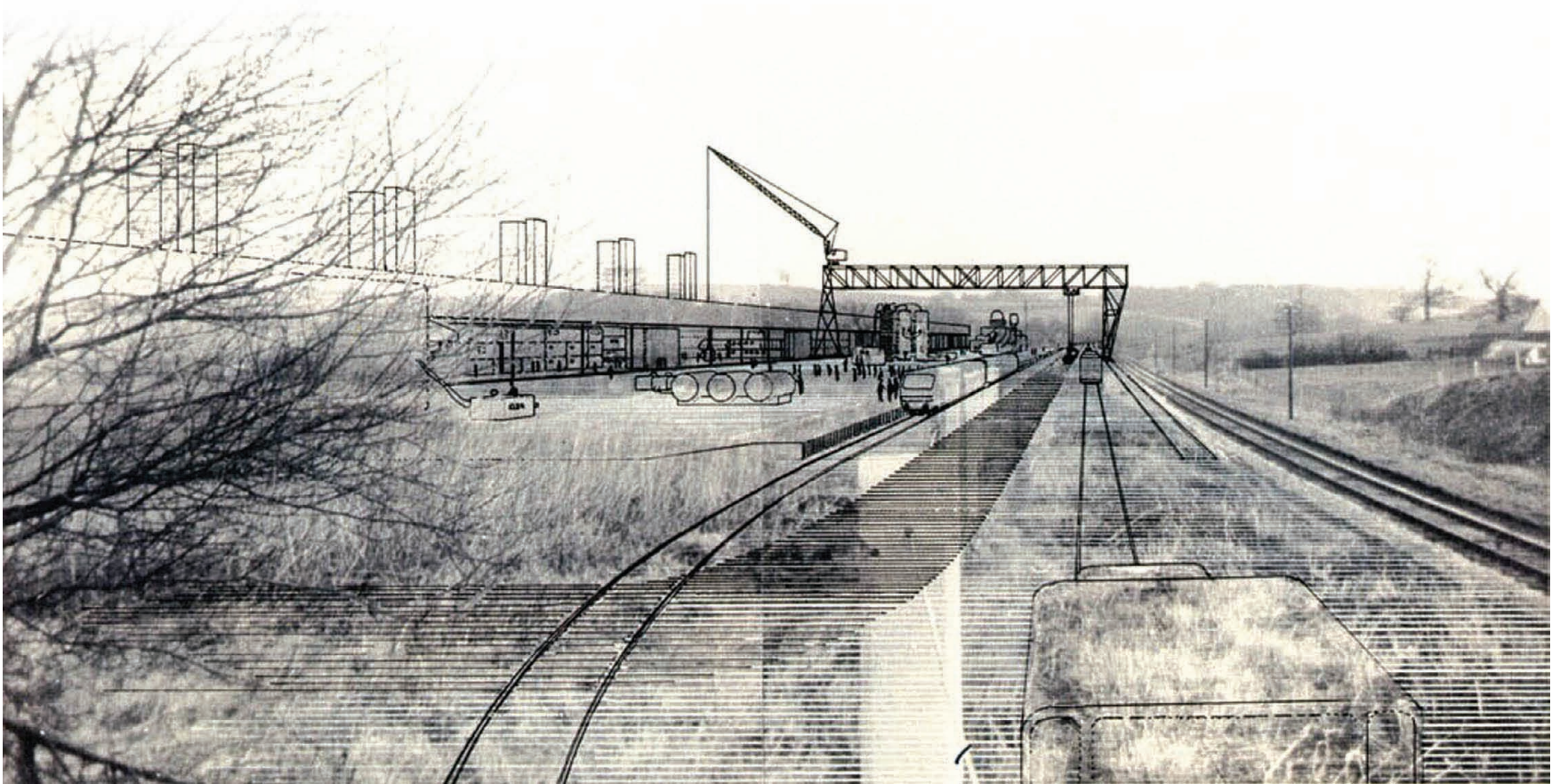
fig. 71 Perspective from railway module



## Conclusion

Price consistently challenged the belief that buildings were a fixed response to a static problem. His vision of architecture, as a time-limited, flexible entity rather than a fixed, permanent form, led him to explore the concept of buildings as objects that defined public space rather than discrete environments that define boundaries into which you enter.

fig. 72 The Rail connections not only acted as a connection between various sites, but also acted as an educational facility and workshop. This was achieved by having container modules that could be lifted by cranes and transferred onto or off a train depending on specific needs.





# NYC High Line Park

Manhattan, New York. 2009 -2011.: James Corner Field Operations & Diller Scofidio + Renfro

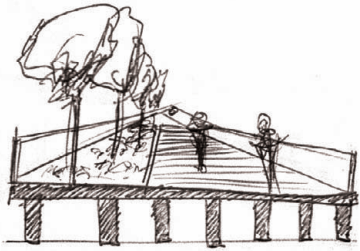


fig. 74 parti

## Description

The High Line (HL) is a public park in New York City, constructed on an elevated 1930's freight rail infrastructure in Manhattan's West Side. The HL was designed by architects Diller Scofidio + Renfro in partnership with James Corner Field Operations (landscape), in response to the self-germinating, wild landscape that grew on the existing structure after the trains stopped running the past 25 years (City of New York Parks & Recreation, 2009: 2).

The HL's landscape consists of trees, grasses, perennials and bushes, alike the HL's original scenery. A large portion of the steel Art-deco railings was restored. Concrete pathways, lighting and seating were installed, and many of the redundant rail tracks were incorporated into the proposed design (*ibid*: 3).



fig. 73 artist's illustration of the High Line public park





fig. 75 NYC High Line Park

## Relevance

Dealing with the programme of ‘infrastructure adaptive reuse’, the designers faced a constant battle to create an additional identity for the dilapidated 2.5-kilometer-long infrastructure without stretching it too far from its rich industrial past. The designers approached this by withstanding the temptation to over-design and to “do too much” (Pearson, 2009: 86). The architects stated that “We kept protecting the High Line from architecture... the idea was to retain the singularity of the place, to capture its postindustrial charm.” (*Ibid:* 87)

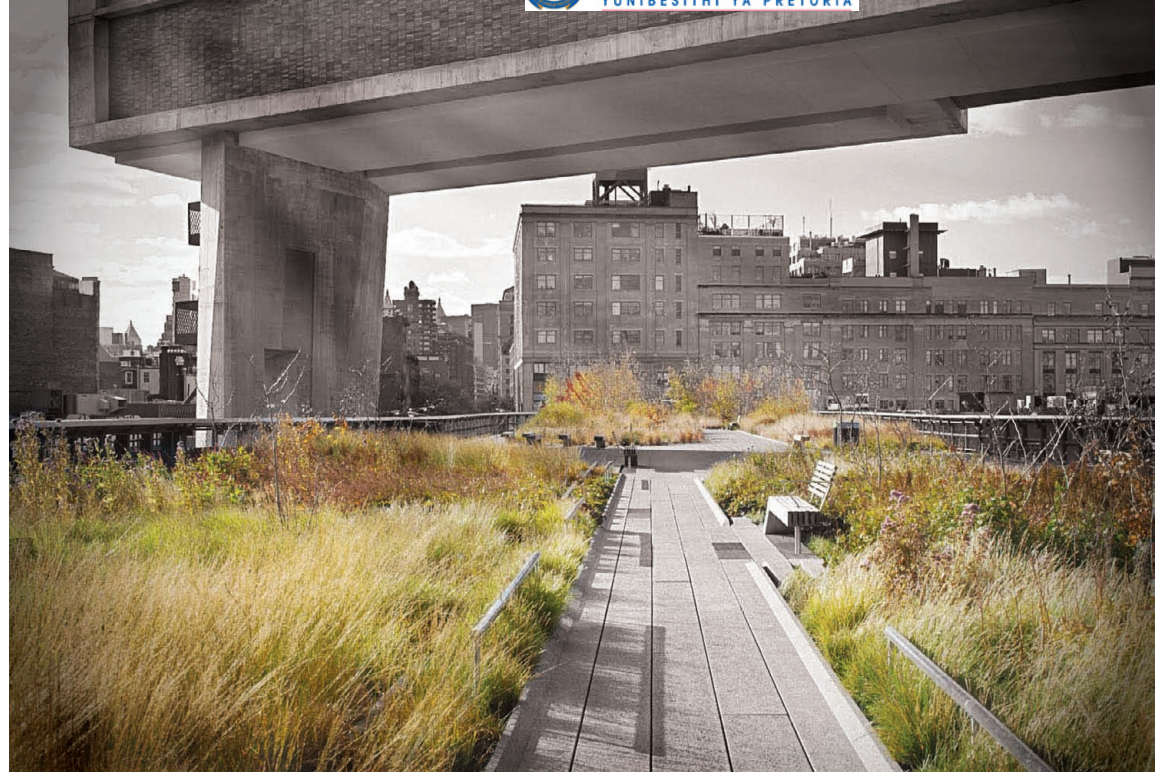


fig. 76 Perspective of pedestrian walk route

## Conclusion

Conceptually inspired by the sombre, lost and “found” (City of New York Parks & Recreation, 2009: 11) beauty of the High Line, where natural vegetative progression has reclaimed a critical portion of existing urban infrastructure, the design aims to revitalise this industrial transport line into a post-industrial mechanism of

leisure and architectural growth. Displaying an alternative approach between plant life and pedestrians, the design strategy of “agri-tecture” (*Ibid:* 12) combines building materials and organic growth into a mixture of various proportions. Accommodating urban, social and recreational needs to a large extent.



# Micro Compact Village

Munich, Germany. 2005: Horden Cherry Lee Architects

"It's short stay, smart living... it shows the value of scale." Richard Horden

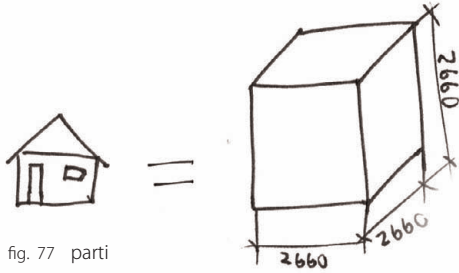


fig. 77 parti

## Description

The Micro Compact Village features seven micro-compact homes (m-ch), each transportable and lightweight, combining high technology and low energy use. The m-ch was developed in response to an increasing demand for temporary housing for students, weekenders and business travellers (Siegal, 2008: 78). The design was inspired by the classical scale and order of a Japanese tea-house, where every space is versatile. All necessities required in a conventional house are provided within a 2.66-meter cube by resolving internal spaces through an "ingenious manner" (Kronenburg, 2008: 108).

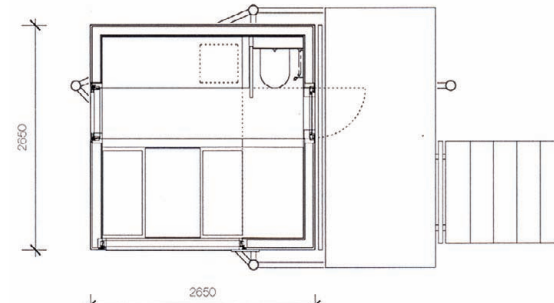
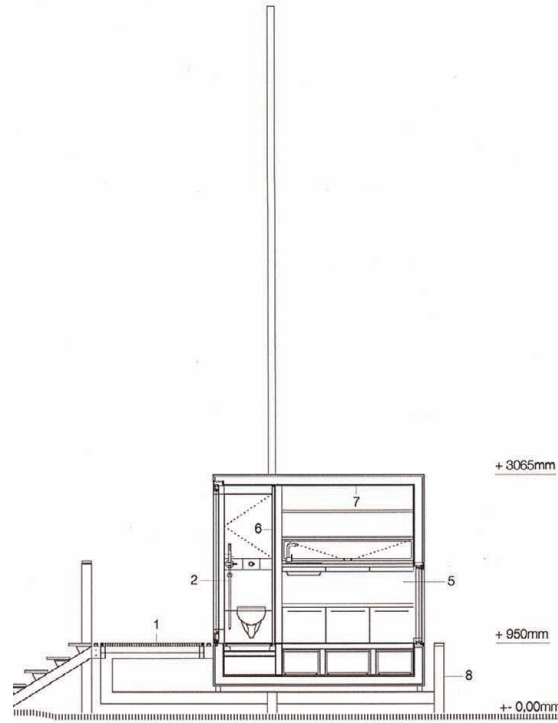


fig. 78 design drawings of modular housing unit



UNIVERSITEIT VAN PRETORIA  
UNIVERSITY OF PRETORIA  
YUNIBESITHI YA PRETORIA



fig. 79 concept model

## Relevance

Arranged on site by a crane, the dwellings connect to services in minutes (Dumaik, 2007: 53). In addition to services, the site needs minimum preparation to accommodate these modules. Several m-ch modules can be mounted on an external frame in a horizontal or vertical fashion around an access core to form a "village" (Siegal, 2008: 78). Elevated from ground level, the 'village' has a minimum impact on its environment.

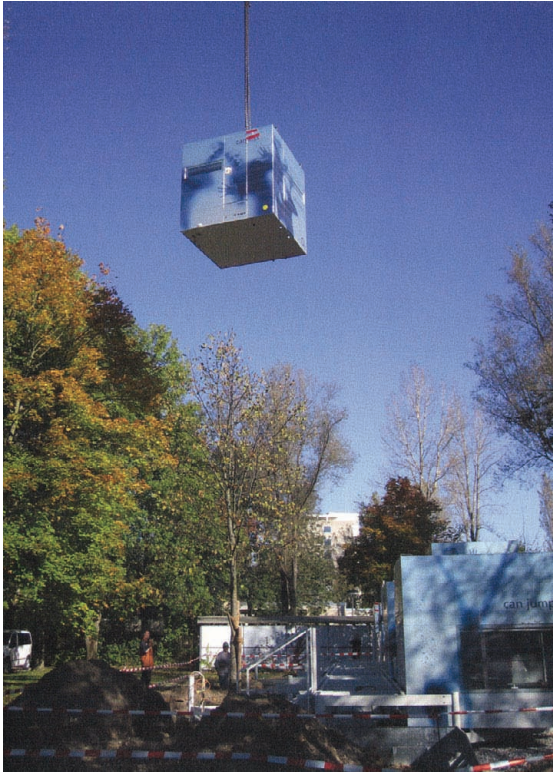


fig. 80 crane transporting module



fig. 81 clustered modules forming a 'village'

## Conclusion

The living experience in a **m-ch** focuses on the essential - less is more. The compact design reflects intelligent use of spaces where lightweight kit-of-parts are strategically assembled to offer mass-customisation to the user. Adaptability and ease of transportation was considered from the initial design phase, resulting in a sleek modular, yet progressive and unique product.