University of Cyprus
Department of Architecture

ARH 201 Architectural Design Studio
Spring Semester 2017
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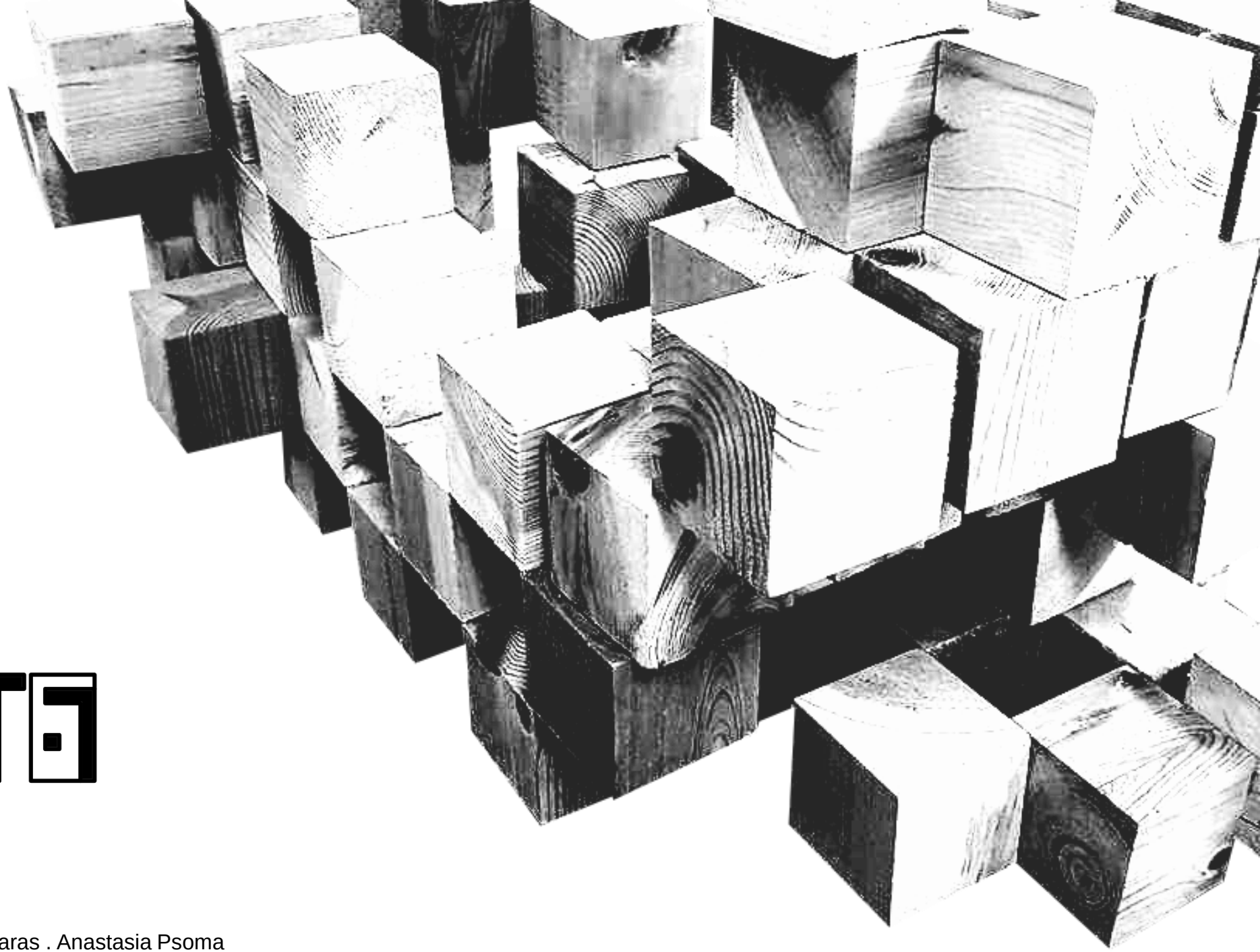


HABITAT 67

Moshe Safdie

Aristofanis Hadjicharalabous . Michalis Psaras . Anastasia Psoma

Content

- The architect wanted to reinvent the apartment building. He attempted to balance the **cold geometry** against the living **nature**.
- Safdie: "**For everyone a garden**" , He believed that suburbs weren't necessarily bad, but that city living is important. He asked himself if people had more **space** and **light** would they stay in the city.

Introduction

Moshe Safdie is an Israeli-born leading architect, urban planner, educator, theorist, and author. Embracing a comprehensive and humane design philosophy. He is committed to architecture that supports and enhances a project’s program; that is informed by the geographic, social, and cultural elements that define a place; and that responds to human needs and aspirations. Having completed a wide range of projects, such as cultural, educational, and civic institutions; neighbourhood's and public parks; mixed-use urban centres and airports; and master plans for existing communities and entirely new cities. Safdie currently has major projects under construction in the U.S., Asia, and India.

- Safdie moved to Canada in the 1950s, first developed the ‘’Habitat ’67‘’ concept as part of his thesis at McGill University in 1961, entitled "A Case for City Living".
- At 1960’s the Canadian Economy was at its post-war peak, and levels of prosperity and quality of life were at all-time highs. 1967 was a year where freedom of speech truly took on its full meaning—a mystical, inspiring, unifying and effervescent year which prepared Montreal to host one of the largest world fairs.
- When Safdie, still an intern, starting his career in the office of Louis Khan, he submitted his design for the Montreal Expo ’67 entitled as “Man and his World’’.

Typology and inspiration

Habitat's living units resembled a Taos Indian pueblo

A university trip to southwestern America during the architect’s studies was the first sparkle and an inspiration for the main idea of the project.

Sketch of habitat 67 by the architect Moshe Safdie

Pueblos,(community - town – village)

Communities housed in apartment structures built of stone, adobe mud, and other local material. These structures were usually **multi-storied buildings** surrounding an open plaza. The rooms were accessible only through ladders lowered by the inhabitants, thus protecting them from break-ins and unwanted guests.

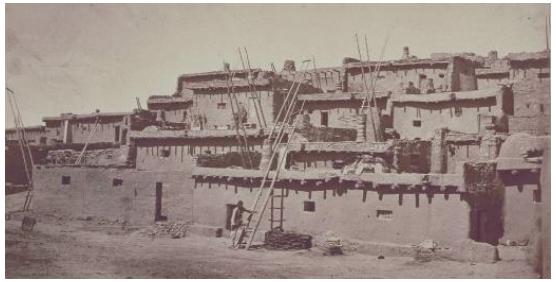
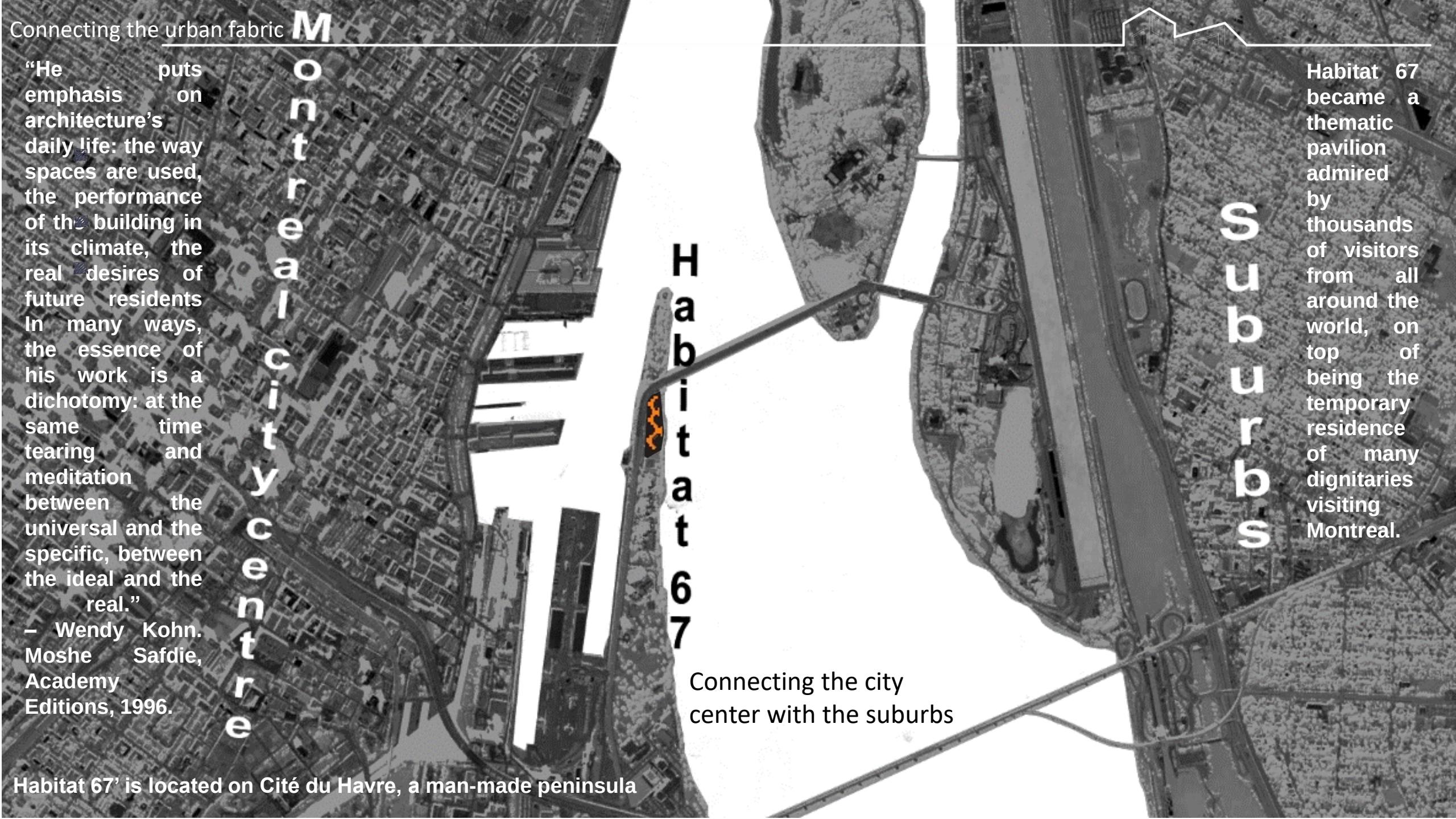


Photo of the pueblos as they look today



“He puts emphasis on architecture’s daily life: the way spaces are used, the performance of the building in its climate, the real desires of future residents In many ways, the essence of his work is a dichotomy: at the same time tearing and meditation between the universal and the specific, between the ideal and the real.”
– Wendy Kohn. Moshe Safdie, Academy Editions, 1996.

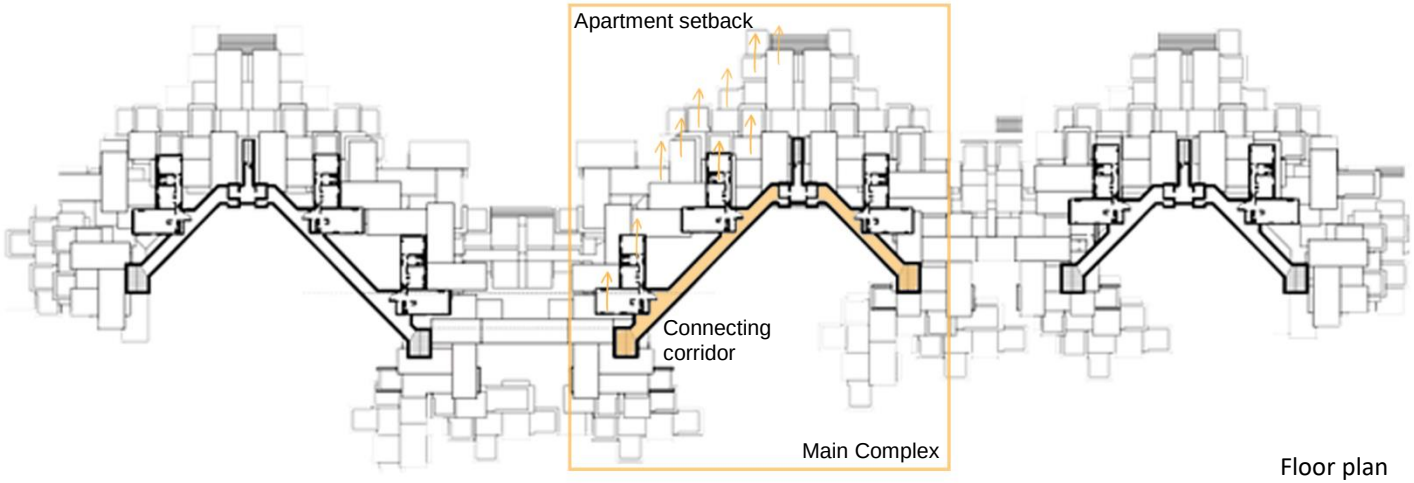
Habitat 67 became a thematic pavilion admired by thousands of visitors from all around the world, on top of being the temporary residence of many dignitaries visiting Montreal.

Connecting the city center with the suburbs

Habitat 67’ is located on Cité du Havre, a man-made peninsula

Habitat ’67 pioneered the combination of two major housing typologies – the urban garden residence and the **modular high-rise apartment building**. The Habitat ’67 is actually **12- storey complex** (158 dwelling units) with the following main characteristics:

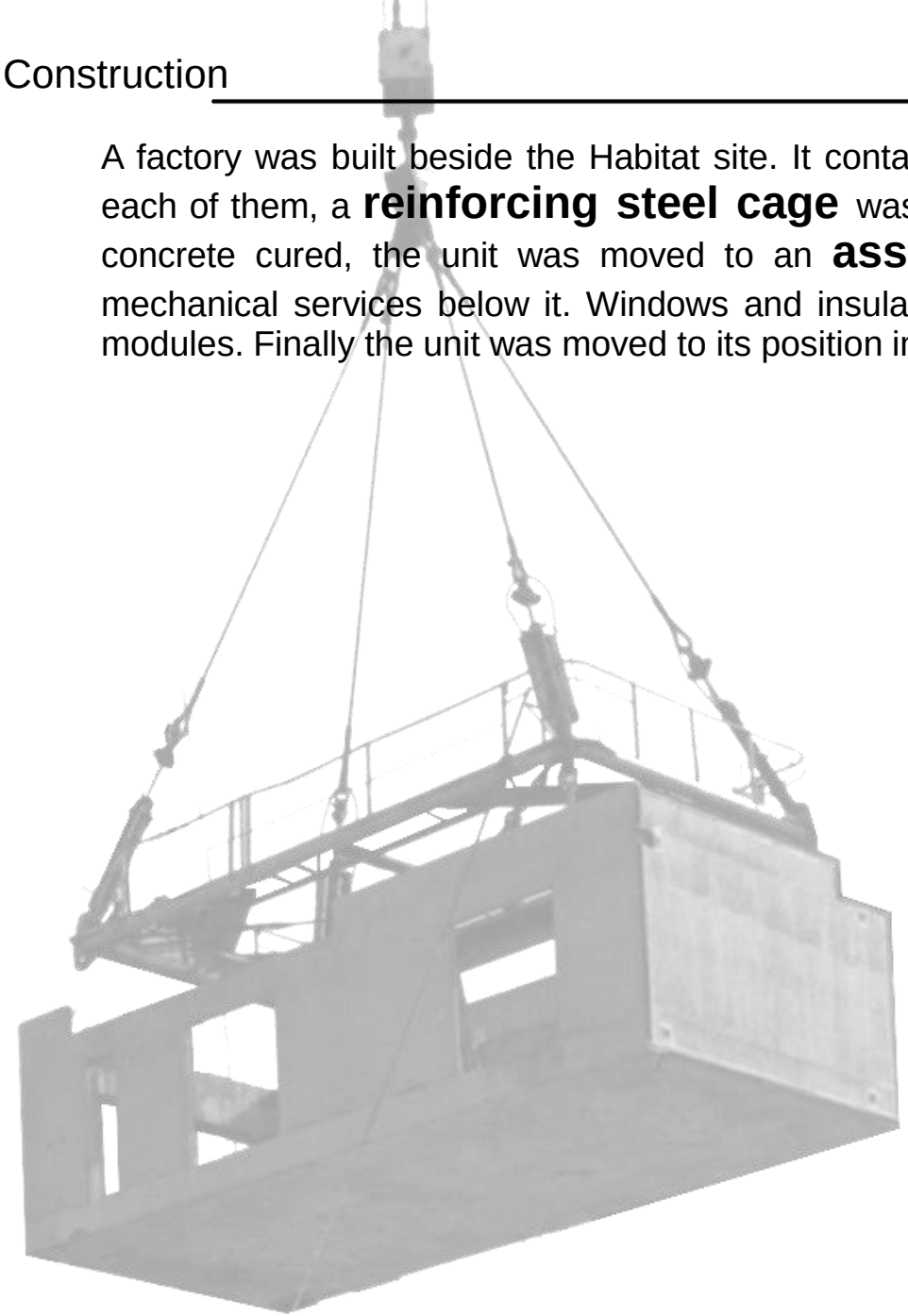
- 15 models varying between 1 and 5 modules
- Views on 3 sides and landscaped terraces
- Surface areas vary from 624 to 3,000 square feet,
- Spread out over 1, 2, 3 floors
- Private terraces from 225 to 1,000 square feet
- 6 elevators
- Walkways at various levels giving access to residences
- Central heating and air conditioning



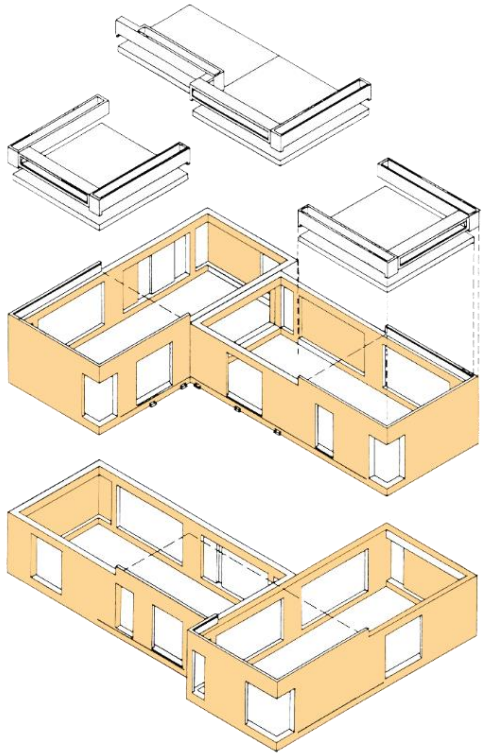
Floor plan

Construction

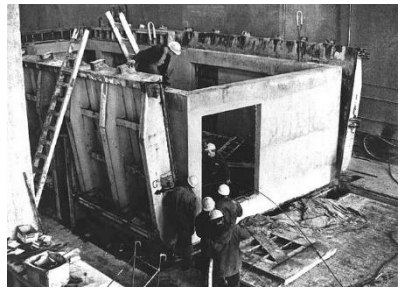
A factory was built beside the Habitat site. It contained four large **molds** in which the standardized units were made. To make each of them, a **reinforcing steel cage** was placed inside the mold, then concrete was poured around the cage. After the concrete cured, the unit was moved to an **assembly line** where a wooden sub-floor was installed with electrical and mechanical services below it. Windows and insulation were then inserted; afterwards **prefabricated** bathrooms and kitchen modules. Finally the unit was moved to its position in the building.

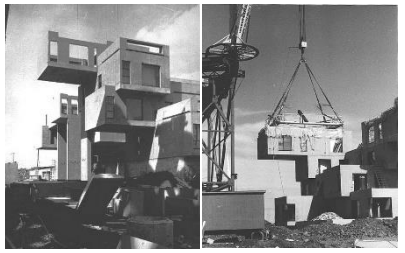


As Habitat was designed, it resembled a curious **concrete** mountain of dwelling places, strikingly **modern**. Each rectangular module would **cross over another**, so the roof of **the one underneath would bear the load of the one on top**, with the non-overlapping areas generating patches of outdoor space.



Axonometric representation of a unit





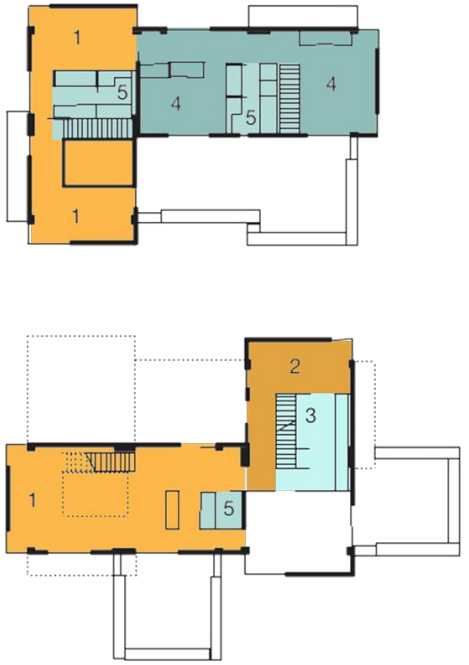
Photos from the construction site

Interior

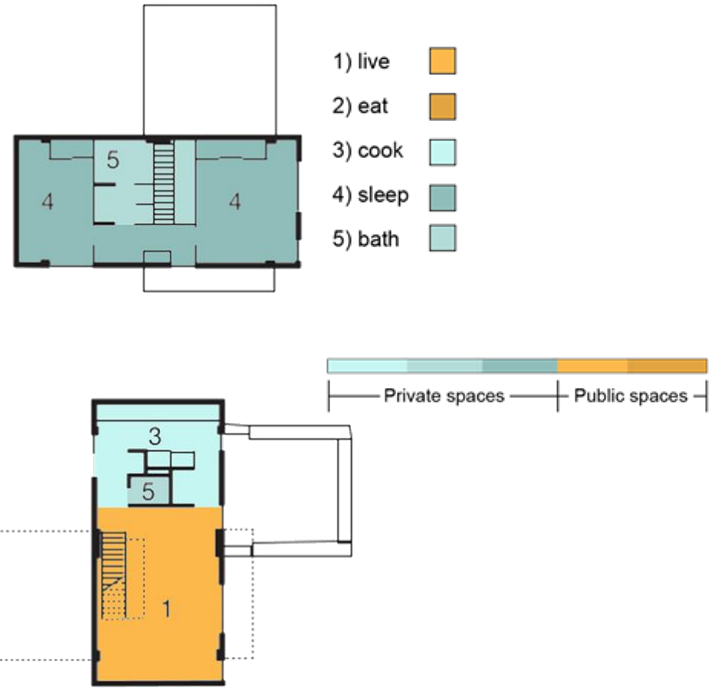


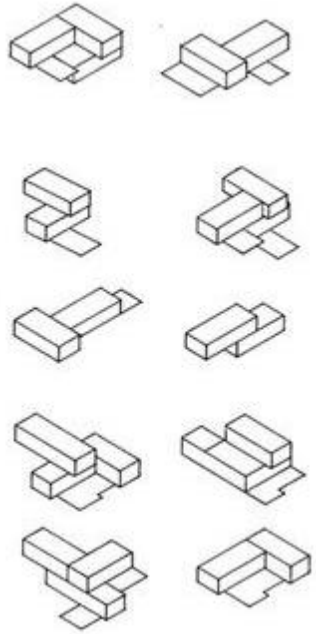



- The apartments consist of one to four 55m² boxes creating various configurations.
- All of the houses have one 20m² to 90m² **private roof garden**.
- Each unit looks similar to the rest , creating a **common external appearance**. But every house is differs from the others when it comes to the interior, as the resident can transform his space.



Floor plans



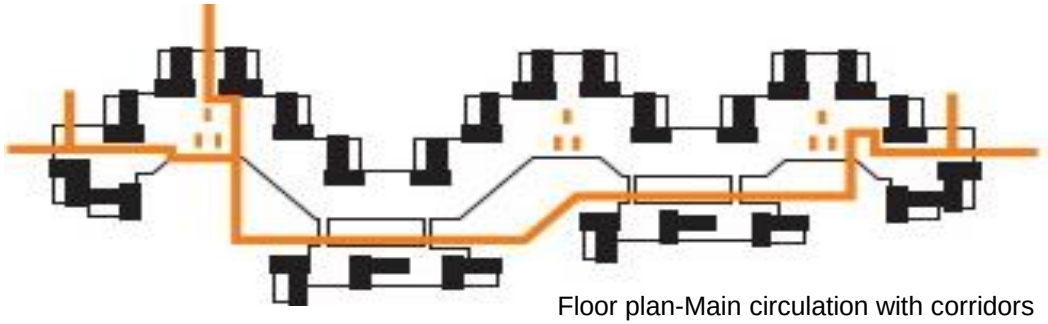


Combinations of multiple unit set-ups




- **Common circulation**

Circulation within the habitat is achieved through 18 **external corridors-** streets 7 **stair shafts** and 6 **elevator shafts**, without the elevator being the main access to upper stories as it stops at every forth floor.

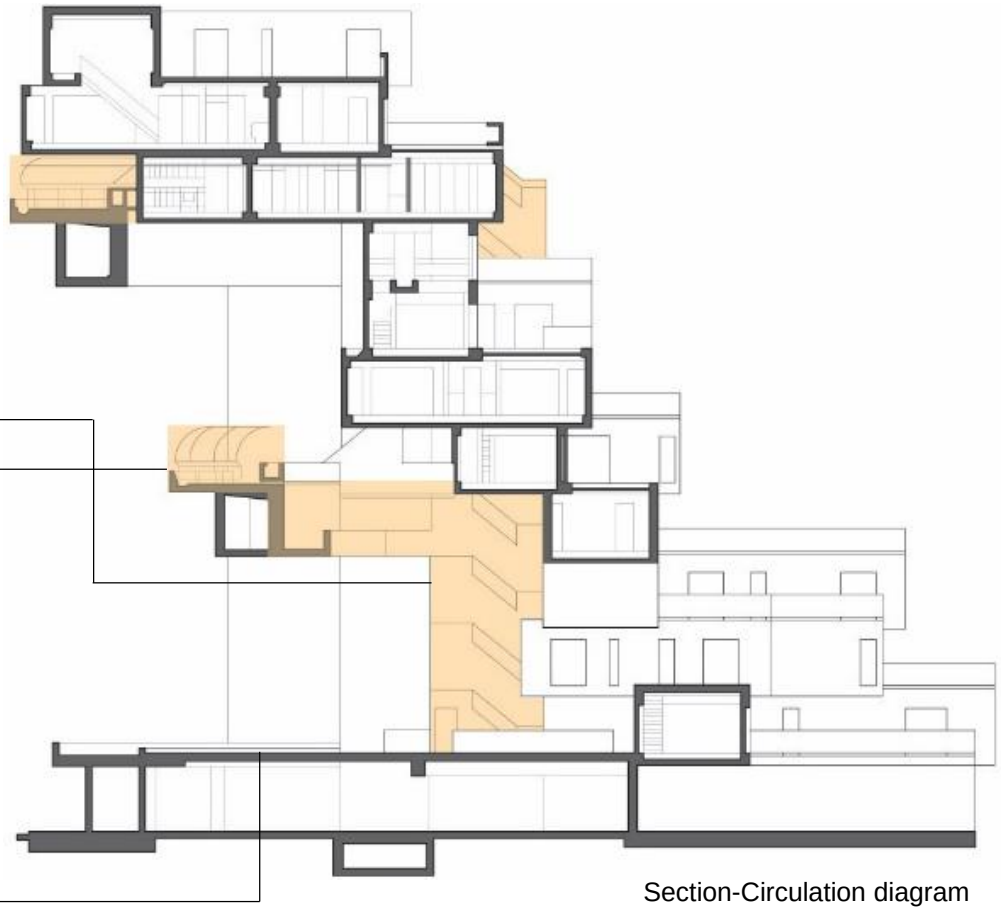


Floor plan-Main circulation with corridors

- **Private circulation**

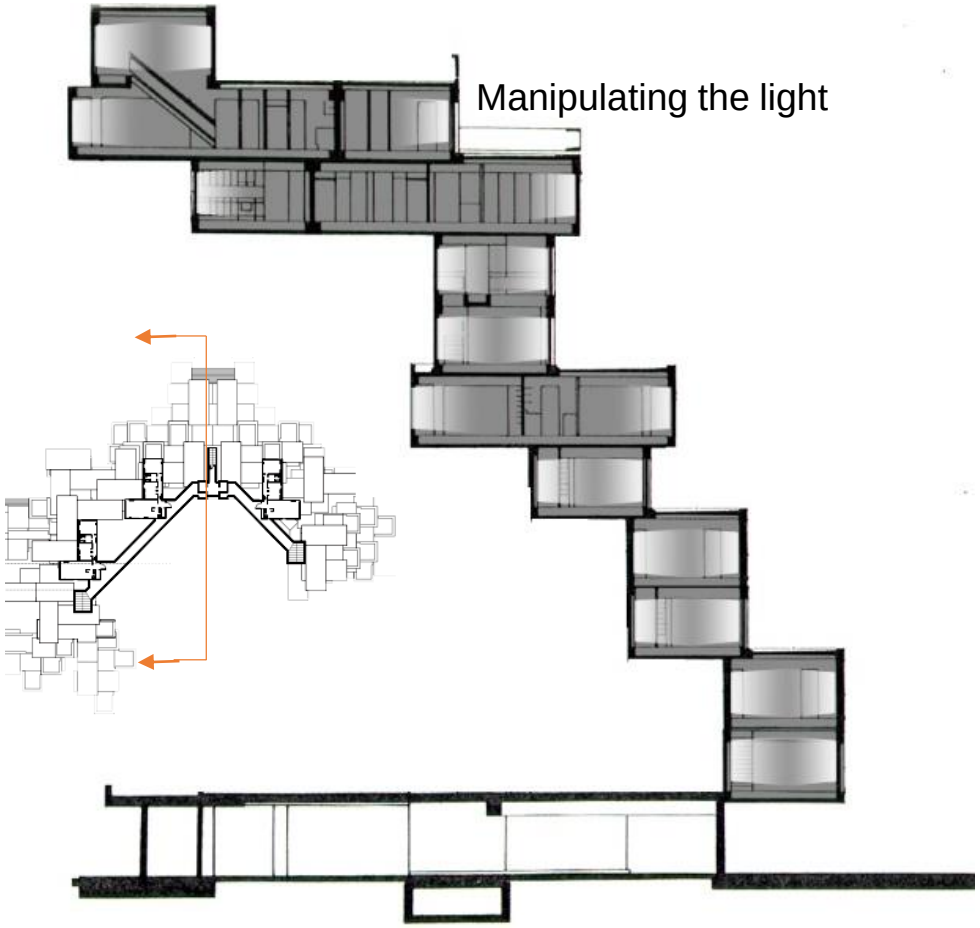
Many of the apartment consist of more than one boxes that are interconnected through small staircases

The circulation system gives to the habitat the essence of a vertically developed village.

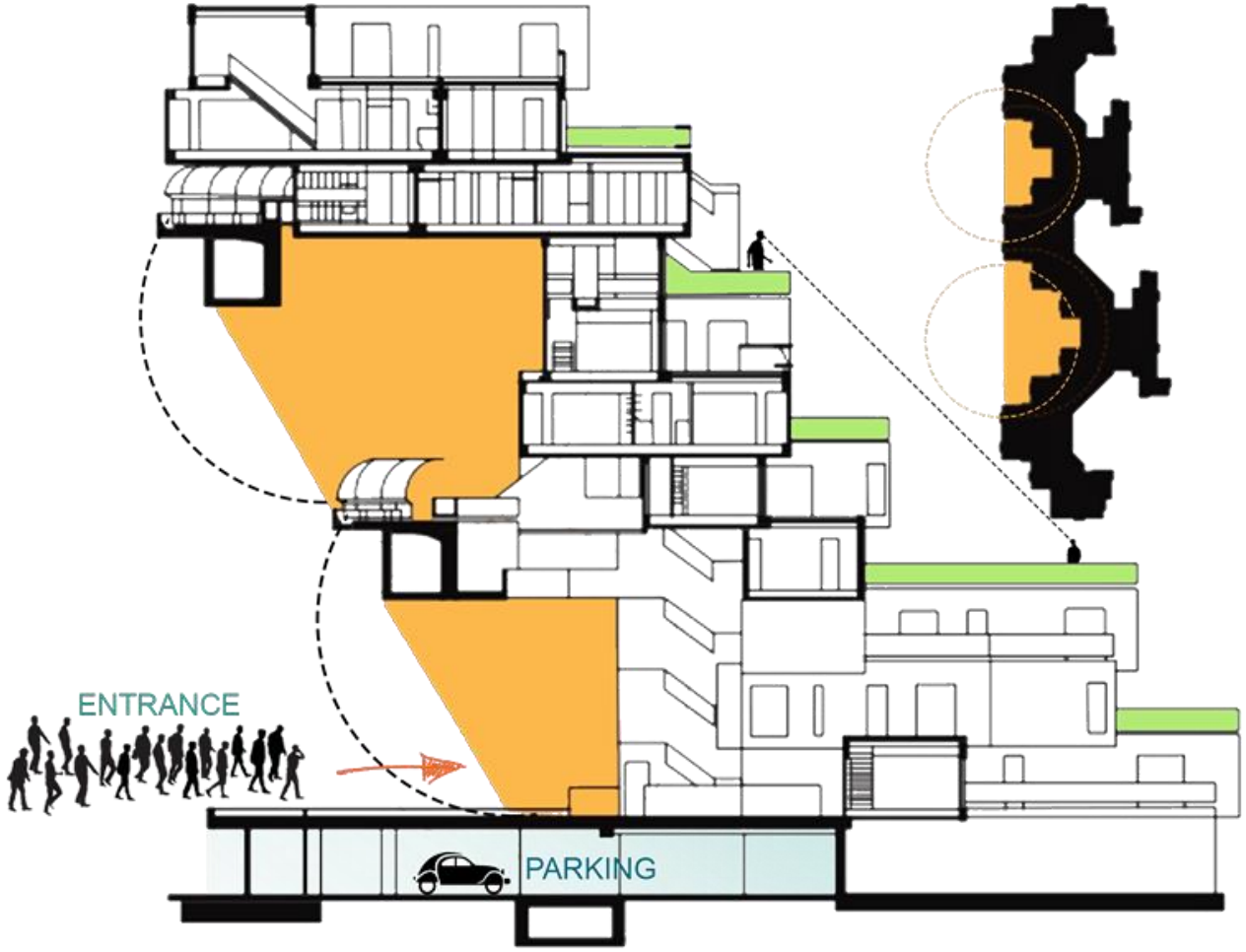


Section-Circulation diagram

Qualities of suburban life in a densely populated environment:
Private garden
Fresh air
multiple exposures



- Every apartment gets at least three hours of **sunlight** every day.
- Apartments have access to **natural light-** at least 3 of the sides of every apartment has windows, a **landscaped terrace** or a solarium.



- Combining **private** and **public** elements
- **Views-Common Areas-Parking** Lot-Entrance

Habitat 67-Today

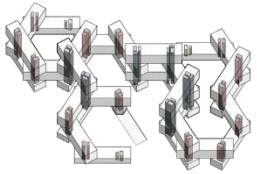
- Habitat 67 passing throughout the years, hasn't lost it's prestige and remains ,a **social experiment**. It has retained its original purpose, and continues to serve as a **successful housing complex**.
- Like other icons of world exhibitions , that there were supposed to be demolished afterwards, such as The Barcelona Pavilion and the Eiffel Tower - Habitat 67 remains an **emblem of it's era**.
- Despite the damages and the fact that the overall building got worn out eventually, with ventilation, heating and maintaining problems the residents tried to restore the **damages** , as the wanted to protect this architecture jewel they were living in.
- After the **renovating projects** of the units, the inside of the building has transformed into a **luxurious contemporary dwelling** for the elite, instead of the low income families the complex used to accommodate.

Sotheby realty, Interior of a unit, Habitat 67

Similar housing projects

The Interlace

Architects: OMA Ole Scheeren
Location: Singapore
Apartment units



The Interlace breaks down the standard typology of the isolated, vertical apartment towers and takes a different approach with an interconnected network of living and communal spaces, combined with the natural environment. The **interlocking** blocks create a village in the sky with gardens and both **private and public roof terraces**. While maintaining the privacy of **individual apartment** units, the design also features **communal spaces** for shared activity.

Golden Dream Bay

Architects: Moshe Safdie Architects

Location: QINHUANGDAO, China
Residential and Retail Complex

Safdie has continued to evolve the original Habitat concept throughout his career. A recent example of his work is the Golden Dream Bay. Designed to create a **garden environment** with public and private green spaces and efficient **sunlight**. The towers are arranged to create large-scale "**urban windows**," open spaces that break down the mega-scale of the project and frame **views** of the sea from the city beyond.

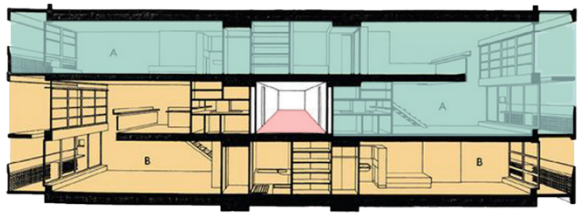
Diagrams-Comparisons

Unite d' habitation
Architect: Le Corbusier

Habitat 67
Architect: Moshe Safdie

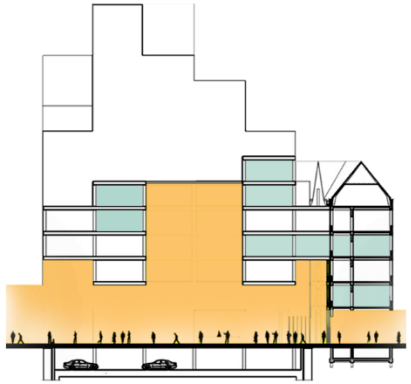
Timmerhuis
Architects: OMA

Connections between the units



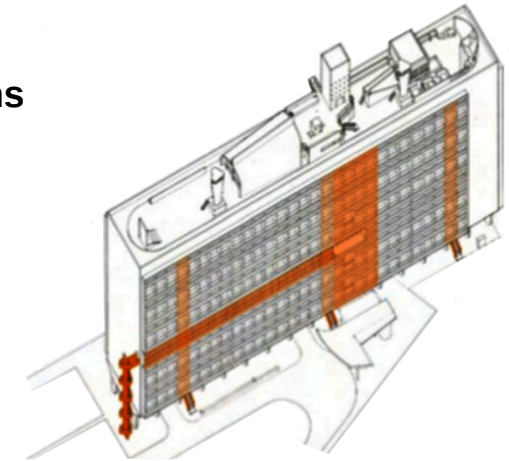
Section
Double level Apartments
Central-Connecting Corridors

Section
Two Storied Apartment-
Shared Terrace



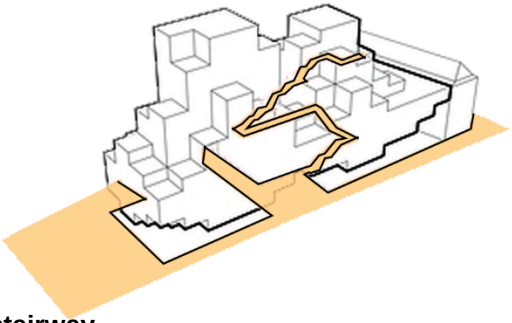
Section
Common space-Ground level
Connected apartments

Circulations



Common corridors
Private-Public Stairways

Common
Corridors-Elevators-Stairways



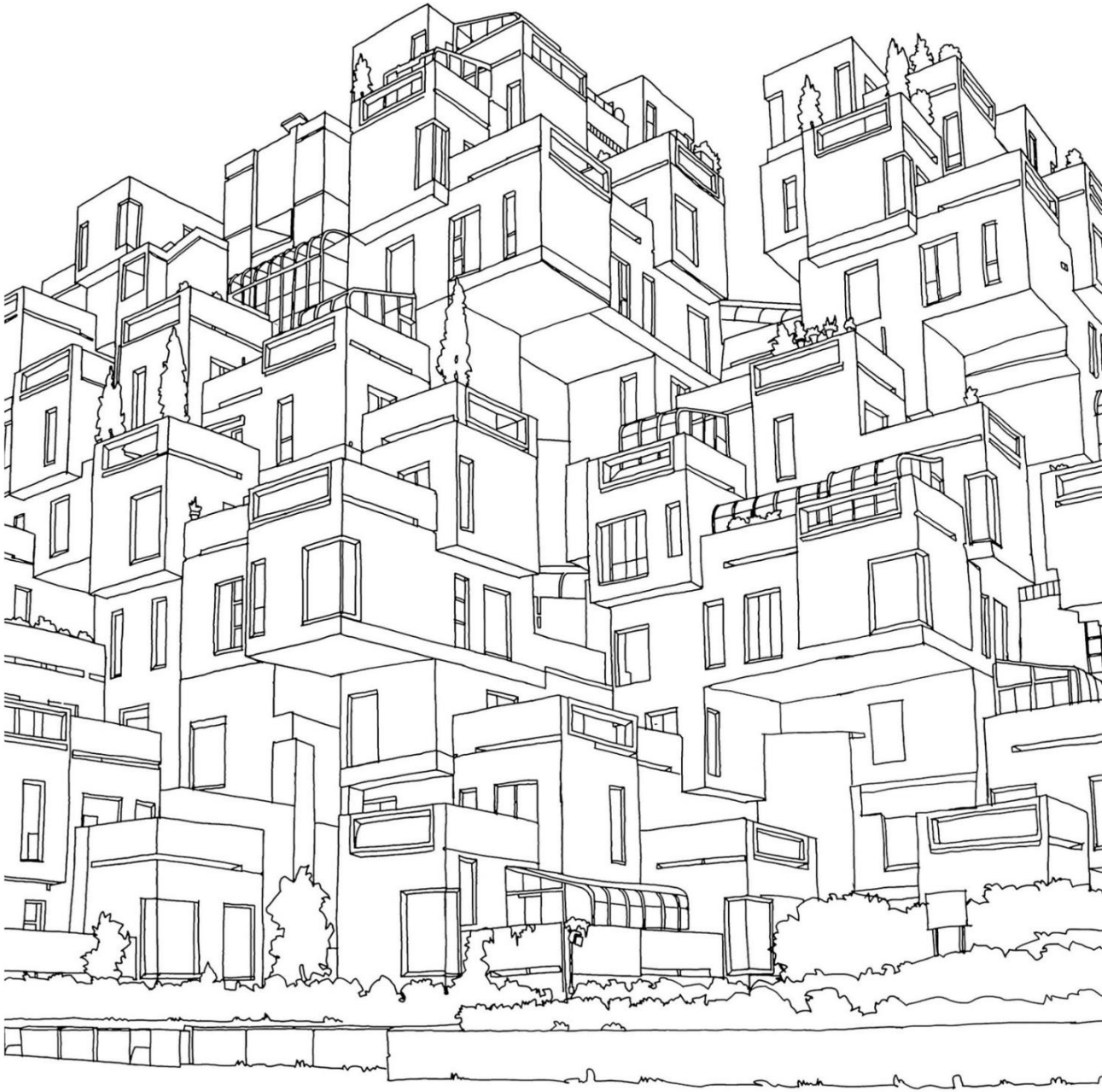
Central stairway

Post occupancy results

- **The habitat was never meant to be public housing project.**
- **Resident Jeanni Saunders: “ a community where people have a feeling of friendship with neighbors, a special place to live”.**
- **It was built for the middle class who were promised affordable housing, but offered sky-high rents in the end because despite the assembly line production, the government had to pay the costs.**

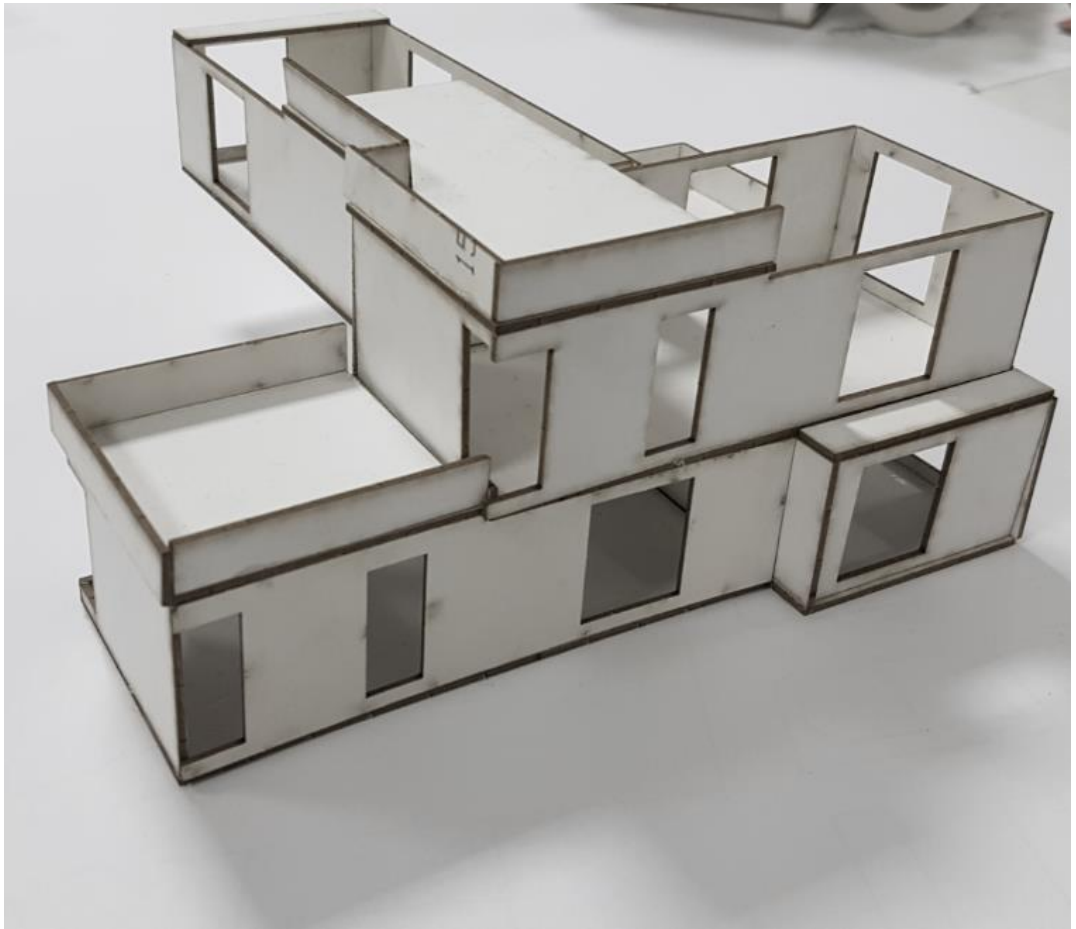
Conclusion

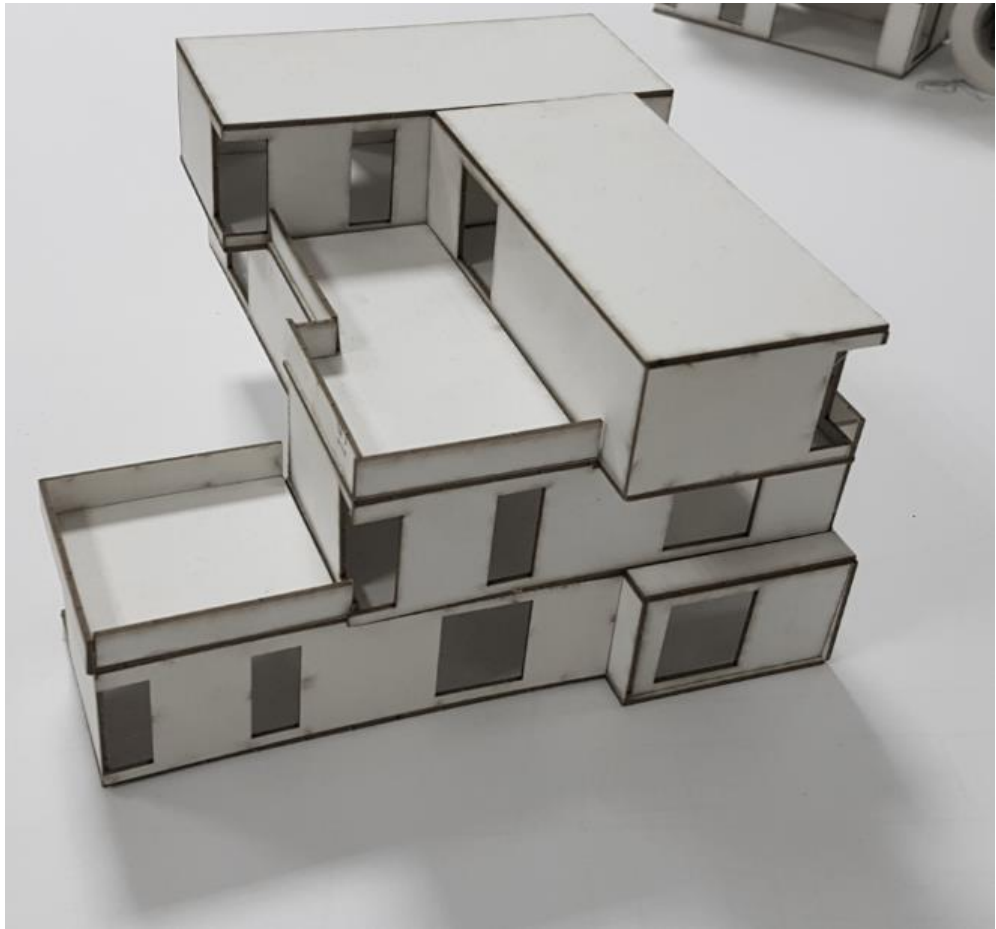
- Not only revolutionary in its time, Habitat 67 has continued to influence architecture throughout the decades as a **manifesto** for a **universal, modular, urban housing**.
- Habitat 67 is a historic monument, recognized around the globe. This emblematic building, had significant press coverage and caused a lot of ink to flow, both locally and internationally and still does.
- Moshe Safdie and his work, have definitely brought an **architectural revolution**. His fresh ideas about how a housing complex should actually be, have changed the way we design and the way we think about the apartment blocks once and for all.
- Not only he came up with ways to improve the housing complexes :with the **prefabricated interlocking and interconnecting overlapping modules**, creating private and **communal spaces**, **planted terraces** and more , but he also sets the tone as to where architecture should be taking as next in this new lifestyle witch demands different housing qualities.



Large scale housing project
Social experiment
Universal unit system
individual apartment units
Interlocking-interconnecting
Overlapping modules
Communal spaces
Private and public roof terraces
Courtyard –green spaces

Units
Stacking up the pieces
Possibility of creating multiple cases





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http://cac.mcgill.ca
http://www.habitat67.com/en/
http://www.msafdie.com/#
http://oma.eu/projects/timmerhuis

Videos:

- Moshe Safdie on "Humanizing Mega scale"
- AD Interviews: Moshe Safdie
- Moshe Safdie on his iconic Habitat 67
- Winter 2013. Waterloo Arch. 392 Urban Precedent 8: Habitat 67