

Flexibility

DEFINITION: “The flexible house is the one that is designed to respond to applications, operations or changing locations”².

- It transforms
- It is mobile
- It fits
- It interacts with users
- It responds to different uses
- It is multifunctional
- ...

“**Humans are flexible creatures. We moved at will, we manipulate objects and we act in a large number of environments**”¹. This is the way that Robert Kronenburg starts at his book his justification about why the architecture is evolving towards flexibility. The flexible architecture is designed to respond to the use, operation or changing location. But it is not a new phenomenon; it is a building system that has evolved over time, while humans have been developing their creative abilities.

An example of architectural flexibility of another era is the one that **Frank Lloyd Wright** applies at his times. Around the year 1910, he got a flexible open plan that has never before been achieved. At that time, it was almost unknown the flexible plan, in the same way that almost no one had worked with the interior and exterior modeled flexibility.

This flexibility achieved by Wright was influenced by his discovery and interest in **Japanese architecture**. It was surely one of the best contributions he made throughout his life, and then, other architects would evolve on the subject.

The flexibility has been developing at the same time that the society, humans, needs and technology has been changing.

Nowadays we can say that a huge improvement adapted to the present has been realized. There are solutions for a lot of situations thanks to the flexibility. We know that any house we build will suffer many changes throughout its life, technical and functional and even morphology, it is why **flexible, transformable and extensible architecture is now much more useful than any building with an accurate typology and functionally stiff and unchanging**. Therefore it is more important that the architecture could be flexible and could adapt to changes, than its exact functional design and sizing.

Nowadays there is a wide variety of homes designed with different levels of flexibility. They try to solve different unknowns (personal of each project), obtaining it in some cases better results than in others.

• **Space's flexibility by moving doors:**

Ant House has **multifunctional** spaces where 6 **mobile** doors at 3 places open and close (so the both spaces are dug out) connecting and filling in 64 ways.



Ant House, Tokyo, Japan, 2007: SpaceSpace

• **Doors that open and folding house:**

Adam Kalkin's houses are clear examples of flexibility. The collectors' one is a big container that with the opening of his huge doors **it transforms** and obtains a space with different characteristics. It is a **mobile** house so you can place it anywhere. He designed also a house where at the touch of a button, the container is transformed into a house of five rooms, and it is also a **mobile** house.

The Ové Glas House (24H) has an integrated body that slides outdoors like a drawer.

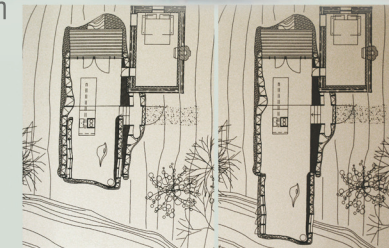
Another project that fits opening his doors is the **Garden Pavilion** (Eightyseven Architects) of Eightyseven. As the pavilion **fits** to the season, it is **multifunctional** (in winter is it is a shed and in summer it is an open lounge) and it has got a strategic gateway that solves both functionalities.



12 Container House, 2003: Adam Kalkin



Push Button House, 2005: Adam Kalkin



The Ové Glas, Suecia, 2004: 24H



Garden Pavilion, Girona, Spain, 2004: Eightyseven Architects

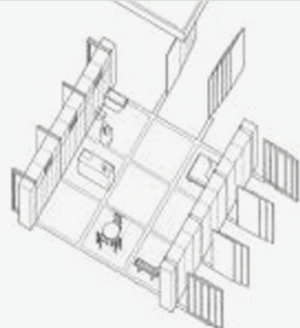
• **Wall's movement:**

Steven Holl designs a project called Fukuoka with **mobile** walls that encourages **interaction with users transforming** the composition of the interiors and get different types of spaces.

The Nine Square Grid House (Shigeru Ban) is another example where the **mobile** walls **transform** spaces or open it. The fixed composition is the systems of two walls and a Universal Floor. A large square floor space, can be partitioned by full-height sliding doors into nine square areas. These sliding doors allow a variety of a **multifunctional** spatial arrangements, that **fits** to accommodate seasonal or functional needs.



Fukuoka Houses, Fukuoka, Japan, 1989-1991: Steven Holl



Nine Square Grid House, Kanagawa, Japan, 1997: Shigeru Ban Architects

• **Accessibility by flexibility:**

The customer, Jean Francois Lemoine, was left paralyzed following a road accident but he did not want the building to be a home for a disabled person. Rather, it had to be a **multifunctional** and surprising universe, a creative scenario in which he would spend most of his days. So Rem Koolhaas designed a house where the various different levels are passed through by a platform that is moved vertically. These **mobile** platforms used to move comfortably the owner from one space to another.



Lemoine House, Floirac, France, 1998: Rem Koolhaas

Learning Activity: Reflections on Housing Task: Identifying critical concepts

Student: Usua Aseginolaza School: Arquitectura La Salle

1-2: Robert Kronenburg: *Flexible, Arquitectura que integra el cambio*, 2007 Art Blume. Page 10

BIBLIOGRAFÍA: Pasajes, arquitectura y crítica (Nº109) pags. 70-71, Sep.09/ Flexible, Arquitectura que integra el cambio (Robert Kronenburg), 2007 Art Blume / El proyecto de Arquitectura: Concepto, proceso y representación (Alfonso Muñoz Cosme), 2008 Editorial Reverté / Espacio, tiempo y arquitectura: origen y desarrollo de una nueva tradición (Sigfried Giedion), 2009 Editorial Reverté