

Modular Construction

Modular constructions are sectional prefabricated buildings, or houses, that consist of multiple sections called modules. The modules are six sided boxes constructed in a remote facility, then delivered to their intended site of use. Using a crane, the modules are set onto the building's foundation and joined together to make a single building. The modules can be placed side-by-side, end-to-end, or stacked, allowing a wide variety of configurations and styles in the building layout.

Modular construction... is faster, less expensive, allows for high levels of quality control and significantly reduces waste and truck traffic. It's also safer for workers as construction is done inside in controlled environments.

– NYC Mayor Michael Bloomberg

Bloomberd
– NYC Mayor Michael

A Modular High-Rise

The developer of Atlantic Yards in Brooklyn is exploring plans to build what would be the tallest prefabricated steel structure in the world, a 34-story apartment building. The "modules" could be built in a factory and bolted together on-site, as in this hypothetical section:

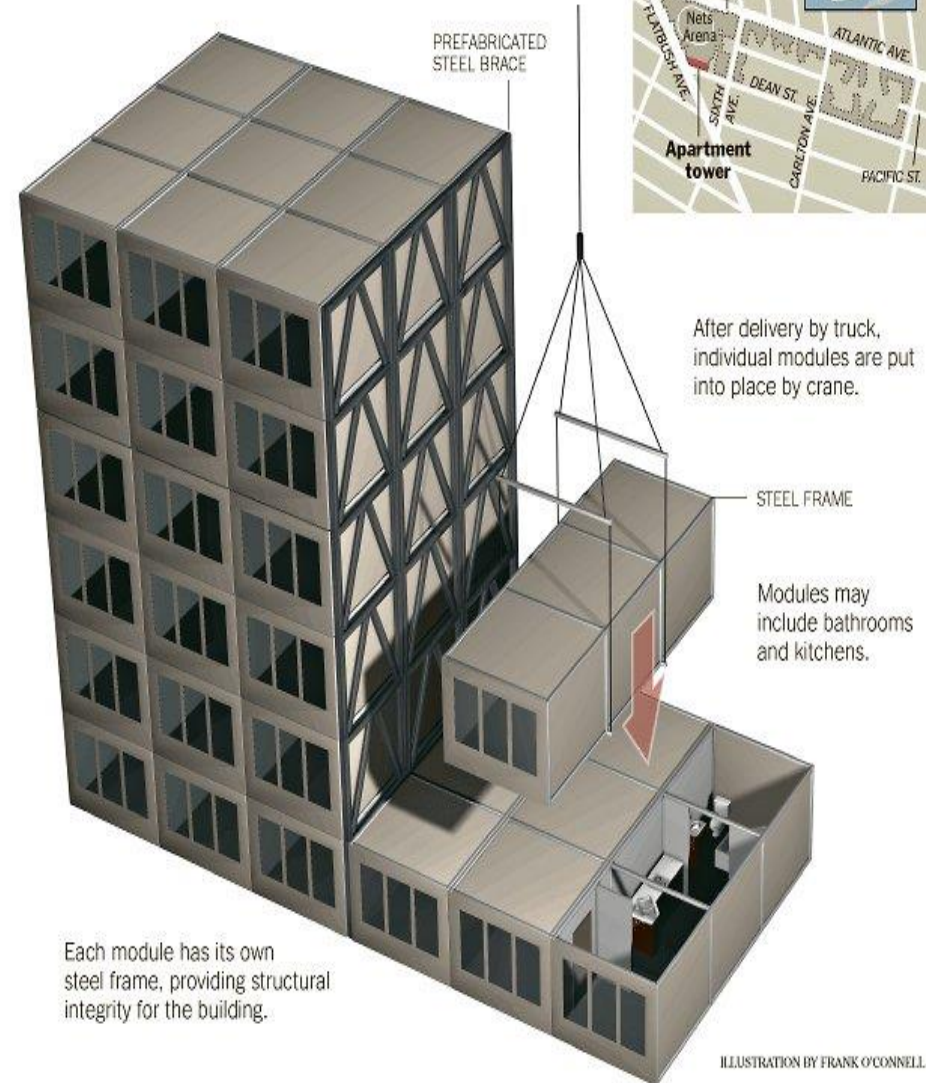
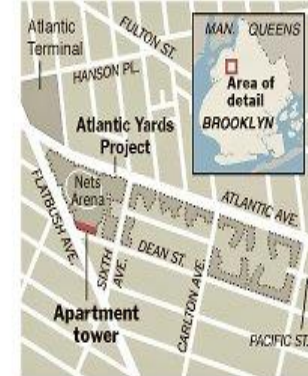


ILLUSTRATION BY FRANK O'CONNELL

Case Study 1: Raines Court



Raines Court is a multi-story modular housing block in Stoke Newington, London.

Project Details

Completion: 2003

Cost: £8.9 Million

Clients: The Peabody Trust



An extended experiment into the potential for delivering high-quality housing through off-site construction methods, Raines Court stands as the first Housing Corporation funded modular housing scheme in the country. Three separate blocks – linked by a central circulation core – are arranged in a 'T' formation to address a road, a railway and a private landscaped courtyard.



Site Plan



Case Study 2: Nakagin Capsule Tower



The Nakagin Capsule Tower is a mixed-use residential and office tower designed by architect Kisho Kurokawa and located in Shimbashi, Tokyo, Japan.

Will Nakagin Capsule tower respond?

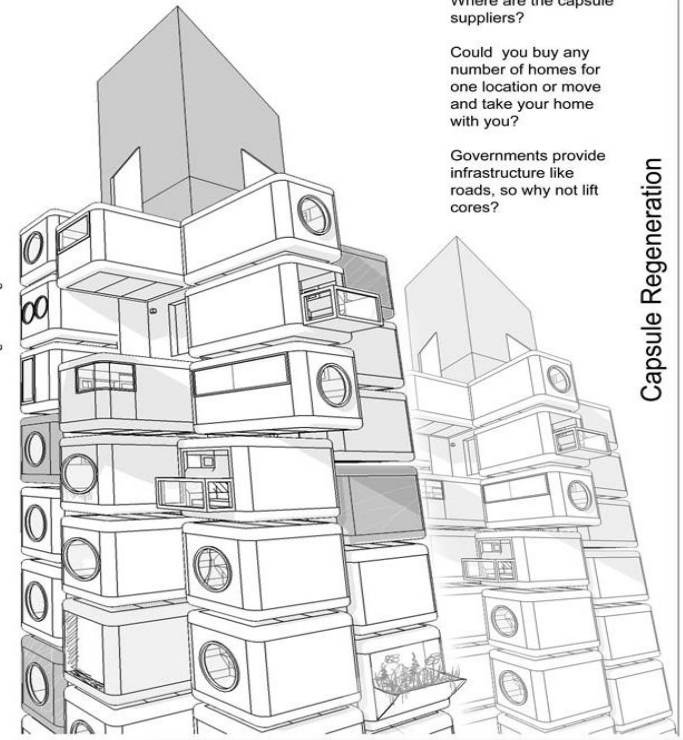
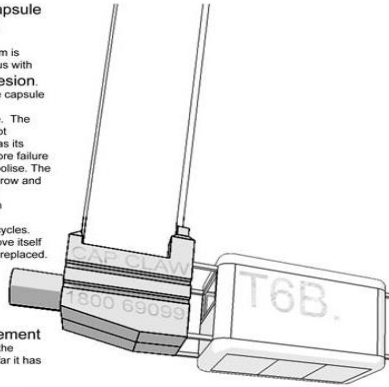
The idea of metabolism is somewhat synonymous with **responsive cohesion**. This doesn't mean the capsule tower is necessarily **responsively cohesive**. The capsule tower does not successfully function as its theory suggests. Its core failure is its inability to metabolise. The building designed to grow and change has not even responded to its death sentence, let alone pre-programmed life cycles. For this building to prove itself the capsules must be replaced.

Capsule replacement is a major concept of the capsule tower but so far it has not been realised.

If this architectural artefact is to be **responsively cohesive** the capsules must be **individually changeable**. Once individual metabolism is established any manufacturer may supply their own capsules. This would provide not only the ability to change but also an interesting mix of capsules finally able to fulfill the concept of **representing the individual**.

The potential is here for a living, responsive, cohesive building; metabolism is **adaptation**, which is fundamental to responsive cohesion.

"True beauty lies in things that die, things that change."
- Kurokawa



Where are the capsule suppliers?

Could you buy any number of homes for one location or move and take your home with you?

Governments provide infrastructure like roads, so why not lift cores?

Capsule Regeneration
Nakagin Capsule Tower, Tokyo 5

