



BASIC INFORMATION ABOUT NAGAKIN

The Nagakin Capsule Tower is the first built in 1972, building based on the idea of habitats capsules. Its architect, Kisho Kurokawa, conceived this project as a mega-structure in which the habitable prefabricated modules are inserted, showing through their design ideas interchangeability, recyclability and versatility in architectural works. Due to its location in one of the neighborhoods most economic activity of the city of Tokyo, Japan, the building was designed especially for those working in central Tokyo but living in the suburbs, at considerable distances or even in other cities, but that business had to stay in central Tokyo. Therefore the project had the function of serving as a hotel, business or studio building.

"... Staircase towers are typically used by companies that need their employees in Tokyo. They are also used as artist studios or offices." (Kisho Kurokawa) The project Nagakin Capsule Tower consists of two towers or structural cores of about thirteen stories high that incorporate services and facilities; 140 capsules to 4 different types are attached. The set comes complete with a ground floor located a cafe and a first floor where offices are located, lower resources represent entrances, mezzanine - areas - are not a finished or complete architecture. It is considered as a building changing over time. Despite this, it not completely ignores the tradition, because in the small scale of the design of the capsules is the proportion of Japanese tatami.

ELEVATION
STRUCTURE
FUNCTIONS

MAINTENANCE
OF TOWERS

Although capsules were well equipped, the high price of these, because of the high manufacturing cost and location of the building in one of the most expensive neighborhoods of Tokyo made were bought mostly by companies and not by private owners. The decay of the building made in 2007 was decided to demolish despite requests against it including his own Kisho Kurokawa. Today the building is still standing and several of its owners strive to restore capsules they own and intend to revitalize the whole. Some arguments have emerged in favor of demolition are the use of asbestos in its construction, the building little resistance against earthquakes and the low percentage of land use solar (the construction of a new building that would increase proposed 60% land cover). Given these drawbacks, Kurokawa criticized the capitalist mentality with which the project and the little maintenance that has made this loss. He also proposed, following the principle of the building, "capsule" capsules to replace them, leaving the towers as architecture that endures. After the architect's death in 2007 the building is abandoned and is now one of the last Metabolism buildings still standing.

LOCATION

The Nagakin Capsule Tower stands at Tokyo, Japan, in the district of GINZA, one of the most expensive neighborhoods of the city, as its name, which translates as silver district. This is a focal point of the city where both the business and business is concentrated.

CONCEPT

As the economic and technological development is growing cities face increasingly moderate population growth leading to consider issues related to the territory of the cities. In response to these problems, born in the 1950s idea of mega-structure. The concept of "mega structure" is given in the architecture of several countries simultaneously, and while maintaining a common idea, every author defines it a little differently. According Fumihiko Maki member Metabolist group Japanese, the concept of Megastructure is defined as:

TRANSPIRENT

"... A large structure which has open for all the functions of a city or part of it... The development of modern technology has done its existence possible... It is in some ways an artificial feature of the landscape..." (Fumihiko Maki "Investigations in Cell-structure Form", St. Louis, 1964, p. 8) For Kenzo Tange, Metabolism is "a low level and a benchmark of Japanese architecture of the period, one mega structure is: "... A way to scale the human man, which includes a Mega-Form and disparate units combined quickly, which fit into the larger structure..." while Ralph Wilcoxon projects Librarian at the College of Environmental Design, Berkeley, megastructure is: "is not only one:

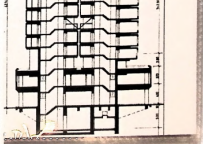
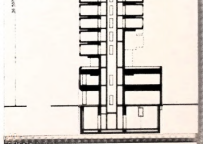
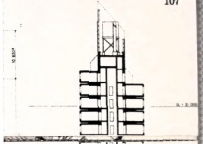
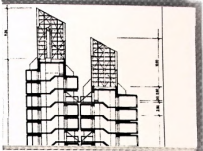
PREVENTION
STRUCTURE

"... Large structure, but also a structure that often is built with modular units. You can create a large expansion and even "integrated" if it is structural framework in which they can build "skys" or "beds", being very profitable and diverse - floor structural units (eg. rooms, houses and small buildings of other types. It is a structural framework to a much larger shell life than the smaller units that could support...

METHODOLOGY

"Ralph Wilcoxon," Council of Planning Librarians Exchange Bibliography," No. 66, Monticello (Illinois), 1960, is suggested p. 2)
From the ideas Metabolism Japan Metabolism in the sixties. This movement is made up of young architects among them Kenzo Tange and Takashi Asada. The current ranges from architecture and urbanism to industrial design. Metabolism looking for a balance of public and private spaces and reflected the latter in the form of capsules of small size that are produced individually. As the same says, the metabolism is also related to the idea of nature and impermanence of things, traits, moreover, characteristic of Japanese culture. Metabolism presents a dynamic and changing city, which behaves more like a living thing as a static object, where the fixed parts of variables are distinguished a flexible, changing, dynamic and has the possibility of extending the system. The Metabolists use technology to create projects where there is still more monumental part to which cells are attached, as if it were a tree. These projects therefore can easily distinguish the idea of the Megastructure capsule or module. Kiyonori Kikutake Japanese architect, Kisho Kurokawa, Fumihiko Maki and Masao Oshika, and graphic designer Kiyohi Arita, in his 1980 manifesto consider:

"Human society is like a vital process, a continuous development of the area in the earth. The reason why we use the biological term 'metabolism' is that we believe that design and technology should denote human vitality" (Kisho Kurokawa) The capsules are developed as modules covering the basic needs of a cabin. They are



designed as an inexpensive place that will be built at the factory and transported to the building site to be treated in situ, so it should be easily transportable and lightweight. Since it is expected to last approximately twenty capsules years maximum, they should also be easily replaceable. These prefabricated coils have dimensions of 4 x 2.6 m. Eight types of capsules extending to the position of the windows, the arrangement of the entrance and placement of furniture finishing materials are prepared. As a result of these types capsules super-decision, delicate and standardized arrangement. The equipment of each type of capsules varies, but always as basic elements remain the bed, closets for clothes, desk, full bathroom, television, air conditioning, color TV, audio equipment, stereo, electric, washbasins and towels normally offered by hotels. Although this variety of capsules not all of them came into production was prepared.

The building consists basically of the towers or structural axes, facilities and capsules. Due to the expected lifetime of the capsules and the possible use of all these changing, the building was divided into three zones: the structural axes, capsules and equipment. A laminate of prefabricated piping system where each unit consisted of a set of flat bars divided into six pipes containing hot water, cold water and drainage was used. Each unit saved three floors. The construction of the creators also made from prefabricated parts and three-dimensional structures, which was a quick assembly, this does not stop being effective. Facilities equipment joined by feasible tubes of a meter. Some openings in the floor of the capsules allow access

to those tubes for connection, testing and repair. Structural joints: The heads of the capsules with structural towers were made possible by the use of cones. They raised capsules and placed at the desired height to be welded to the tower itself.

The towers, besides being the structural basis of the project, also contain building entrances and vertical communication cores contains the equipment and facilities of the project and are the heart that is "plugged capsule". The base of the building and the towers were built with a rigid structure of steel and reinforced concrete, leaving the lighter construction materials capsules.

The capsules were designed as prefabricated modules designed so that all contain the same parts, factory assembled, in order to transfer the finished capsules to work for placement in the building. The capsules adhere to the cores by four bolts high strength. The process of building these works similar to shipping containers, where a box-shaped structure of steel, as light as possible, in which all other parts are welded. The exterior of the capsules is composed of panels of galvanized steel of 1.2 m x 2.3 m. These measures are due to the number required for the manufacture of all capsules and the small size of the factories where they are produced. The galvanized steel panels also received a treatment based sand and bright spray called Katox to prevent the formation of rust and corrosion. For the fire resistance of the building, the structural elements were coated with a layer of asbestos spray about 45 mm thick.

Structural cores are constructed of rigid steel frames and concrete. From the ground floor to the second floor was used reinforced concrete while the upper floors lightweight concrete was used. To use as far as possible of the steel structure, precast concrete was used in the construction of the towers in such a plant entrance to the elevators. The capsules are composed of steel boxes and finished with galvanized steel sheets reinforced those who are given an acid coat and a layer of spray Katox. The execution on site had several problems related to the transport of the material. On the one hand, because a location in the city center, the trucks could only reach the site at certain times of day. The site was also reduced in size considering that the work had to arrive and remain stored until its use in construction many large prefabricated elements. All these problems are not managed by the project team, made only could carry and set a specific number of capsules a day, slowing somewhat playing.

Not only it met the legal requirements of security in the building, but he was also endowed with exits escape routes in case of fire. The advantage of having two vertical communication cores was that it increased the number of escape routes. The stairways were joined by several points creating floors and both were unfired and floors that were independent.



JAPANESE METABOLISM WAS MORE THAN JUST AN ARCHITECTURAL MOVEMENT: IT WAS A LIFESTYLE.
Two young Portuguese architects, who currently reside in Kinta Kurakawa's Nakagin Capsule Tower, report on their daily 21st-century life in one of the 20th century's most iconic buildings.

We first went to visit Kinta Kurakawa's Nakagin Capsule Tower as architects (and tourists). We got lost on our way there and ended up arriving late in the evening. The initial impact was strange: it was as if we were looking at an old friend that we had known for a long time, an interesting feeling when you first visit a building you thought you knew everything about. Only one capsule had the light on. "Oh, hi," we thought. We entered the lobby, but the doorman quickly saw us too. "No visit! We please!" were the only two phrases we could understand. By chance, while we were being ushered back out onto the street, a Japanese man in his late 50s was arriving and, in nearly perfect English, he started asking us questions: "What happens to many people about this building? What brings you here?" We were cautious, but he asked those questions and replied truthfully. "We're architects. We've just moved to Tokyo and we're tremendously admire this building. We'd like to live here." Top and above: Metabolism had very few opportunities to translate its principles into full projects, and the Nakagin Capsule Tower, built between 1959 and 1972 by Kinta Kurakawa in Tokyo's Shinjuku district, is certainly the most famous example. The building's two concrete towers, standing 11 and 13 stories high,

are connected to one another and have a stair and elevator shaft at the centre of each. They house a total of 60 prefabricated capsules, each of which is independent from its neighbour, being attached to a projection from the central load-bearing frame Kintok-san laughed, gave us his business card and said: "Maybe I can help." Thanks to this encounter, a few days later we would be living in the Nakagin Tower. Indeed, Kenzo-san had his office in one of the capsules and a friend of his had an office available for rent. We met his friend, who subsequently became our landlord, and he was delighted to find someone as enthusiastic about the building as he was.

When he was young he dreamed of living there, read everything about the building and the Metabolists, and had ended up buying his own capsule, where he lived for several years before moving to the suburbs upon his marriage. He was really happy that someone still believed in the building and wanted to live there. On that day he moved in, the capsule greeted us with the joy and excitement we would not forget anytime soon: "You are very likely the last people to live in the Metabolism." Every time we meet an architect and our address comes up we get the same reaction: "What's it like to live in the capsule?" In the first question. "That we get some sceptical remarks about the available floor area, followed by curiously regarding the rent. While our average printed just more than our luck, we always give the same answer: "It's different from what we were used to." Inside, the space doesn't seem that small. And, honestly, it doesn't even seem so relevant in our daily life. The capsule perfectly fulfils its modern function of a "machine for living" and,

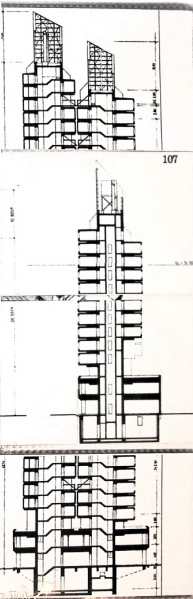
as a concept, which theoretically makes the experience even more extreme, we can live normally. We are happy here. We prefer to live in a smaller space in central Tokyo than in a big house in the suburbs. Our wishlist is to have more space and a summer room at night to rest. We feel like normal, happy people, a little like the "contemporary normal" whom Foucault wrote about. Nevertheless, it still feels like we are living somewhere in between: between a normal and a sophisticated equipment.

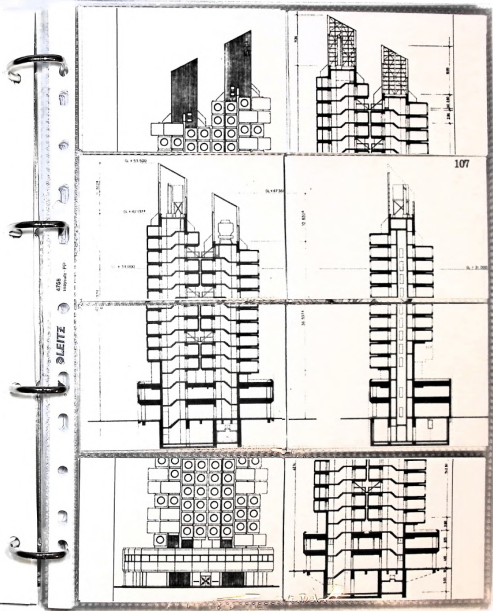
The window is large and circular; it seems huge in such a space. Our room faces west, overlooking the surrounding crossing, where the traffic could only reach the site at certain times of day. The site was also reduced in size considering that the work had to arrive and remain stored until its use in construction many large prefabricated elements. All these problems are not managed by the project team, made only could carry and set a specific number of capsules a day, slowing somewhat playing.

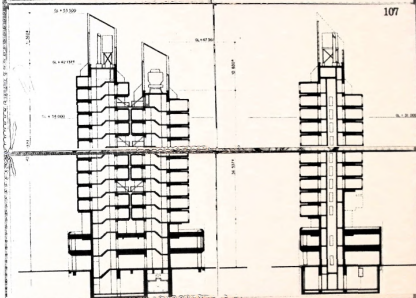
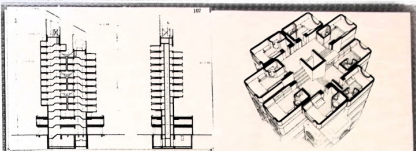
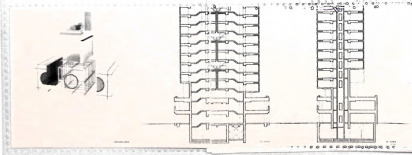
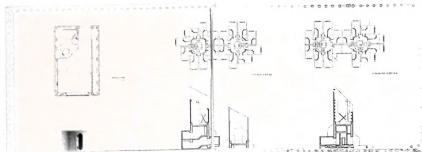
All the surfaces are in contact with the outside and the insulation is not particularly good. The result is simple: the summer is hot and the winter is cold. The feeling during winter. There is an enormous ventilation system integrated into the original design of the capsule. The wheel button allows three options: "hot," "low" and "high," but the air temperature cannot be controlled since it is set by the general system of the entire building. The air ducts are damaged in many places and some residents speak of possible contaminations. Even though we use an electric

heater and the capsule is warm when we go to bed, all the heat quickly dissipates overnight. The windows were originally fitted with a fan-shaped triple-sash, of which only a central pane remains.

When we take off our jackets or get changed, we have to stare everything overnight. The space is limited, but ergonomics is all-encompassing. A 35-centimetre-deep closet covers the entire wall and serves as the storage space for the capsule, simultaneously featuring a sliding table, a dining table, a wardrobe and a set of shelves to store other objects. There isn't much space for coat hangers, but the table is large and folds away, disappearing when not required. It's relatively like a sink, but its width is impressive: while the table is folded down in its horizontal position, the mechanism is collected in a cavity and becomes invisible with the table, so your elbows don't hit against it. The capsule encloses similar small details everywhere—in a very simple and almost imperceptible way. Kurakawa made living in such a space easy. As time passes, we get the feeling that maybe we don't need more space than what we have now. The TV is set in the original, although it is the same size. The radio doesn't work and the only functioning buttons on the "control panel" are the ones that switch on the two sources of light in the room: a large central lamp and a small, individual reading light. The fridge is small and light, like a minibar, but very useful. The freezer is not used and thus becomes the cooling unit. We were lucky that it works, because placing a standard refrigerator in that space would have been a nightmare.



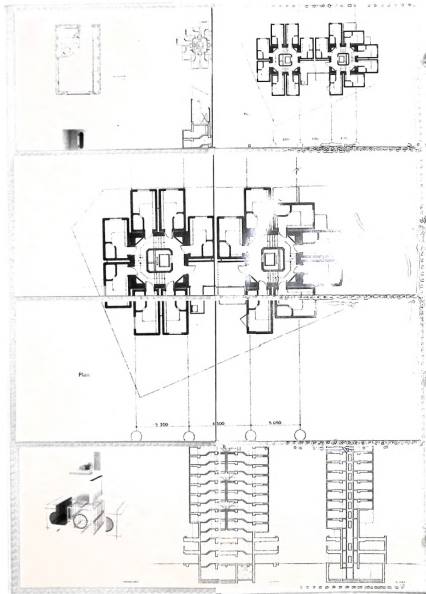




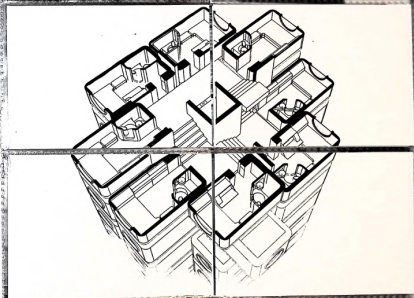
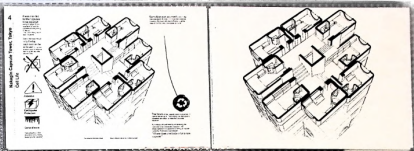
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中銀 カウセルタワービル

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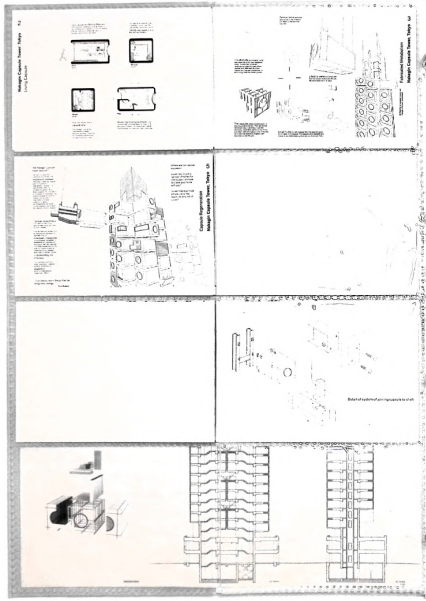


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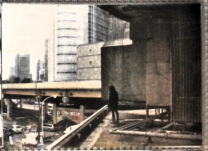
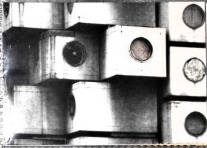
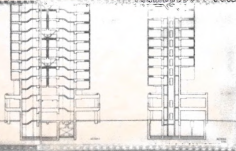
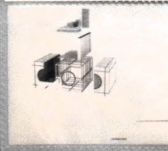
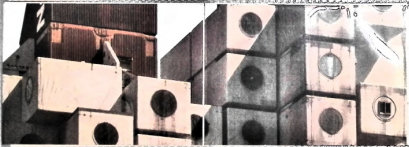
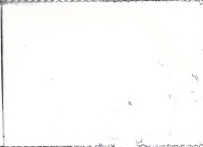
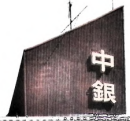


中銀カプセルタワービル

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Midori Capsule Tower Tokyo
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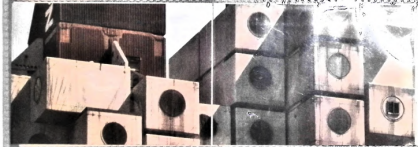
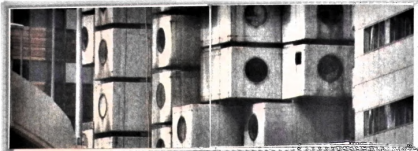


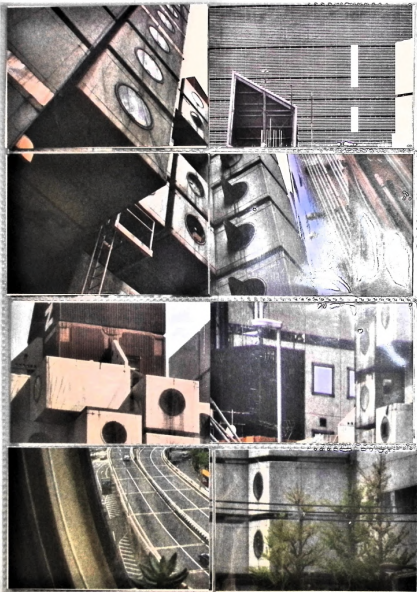
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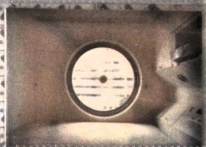
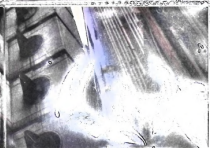
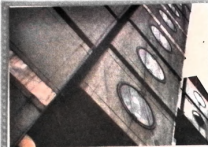


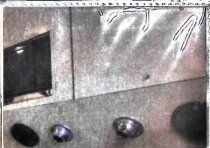
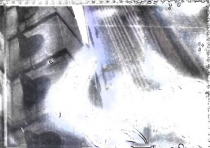
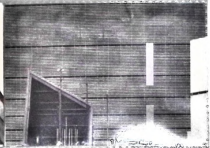
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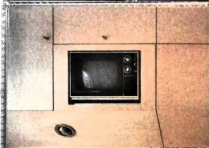


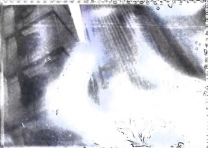
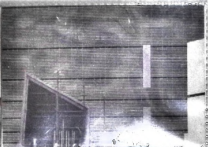




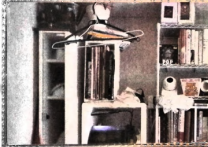


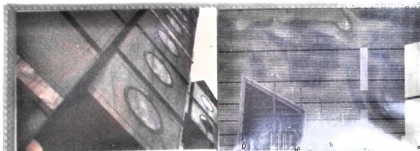
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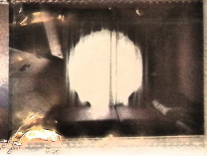


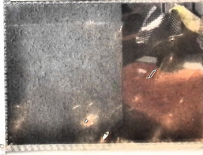
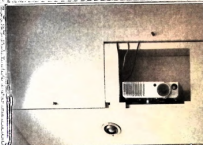
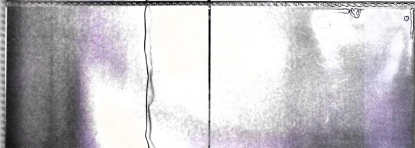
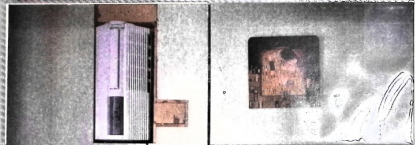
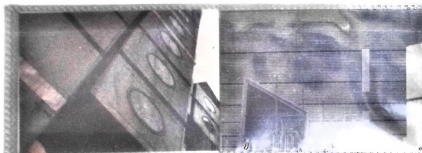
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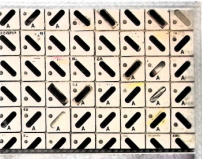


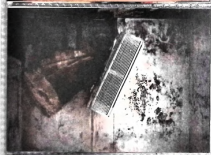
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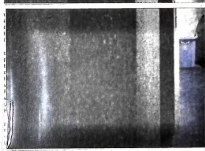
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MADE IN JAPAN





FAKA FINDS A HOME IN GINZA

RECONSIDERING THE NAKAGIN CAPSULE TOWER

The slow deconstruction of Kisho Kurokawa's Nakagin Capsule Tower in Tokyo began in April 2011 and will continue through the end of the year. The tower's demolition is no surprise, as its problems were well known from the start. That I surprised half a century is a feat in and of itself. Kurokawa showed us a version of a possible cool world that proved to be immensely influential, for better and worse. While we shouldn't repeat the tower's mistakes, his opinion about alternative futures is a legacy worth noting.

On a warm September evening ten years ago, we couldn't have known how important our chance meeting with Kenzo Fukuda, a Japanese fab broker, would be. By 2010, the informed public and disciplinary debate about the Nakagin Capsule Tower had been going on for some time. Architects like Teyo Ito and even Kisho Kurokawa himself were pro-demolition. After all, that would have been the Metabolist response. A few other voices, perhaps more detached from the original 1960s goal or just imbued with a nostalgia feeling they had difficulty expressing in Japan's fast-paced society, suggested preservation. That night, we had no opinion on the topic. We were excited because we had just arrived in Tokyo and we were going to visit one of the most-see projects from our list of arch-tourist destinations. The building in front of us was not the one we were promised by the books we read. The pristine white capsules were now gray, old, damaged structures. Patches

were everywhere, with signs of corrosion and water leaks hiding in plain sight. Of all the circular windows, only half a dozen were illuminated. The convenience shop on the street level didn't belong to any of the usual bigger chains in the city, and it had goodies we couldn't find anywhere else. We didn't notice any of these details. Instead, we saw the Nakagin we wanted to see.

We had no plan other than just acting casual and smoking inside, as architects often do. The security guy kicked us out right away, but in those seconds of hesitating, the right tower elevator opened and Fukuda, the fab broker who happened to be the building's only English speaker, showed some interest in our plight. "Why do people insist on visiting this old building?" he asked. We improvised: "We're looking for a place to stay." It's true that we already had a place to stay, a tiny room with no windows in a shared house a bit far from the "center" near Hokenkagome. Fukuda countered: "I think I have a friend with a capsule to rent. Do you want to see it?" We instinctively answered yes. But could we really live there? A few minutes later, we were in Fukuda's capsule, where several dark-covered wicker seats hung above the sofa, which was also his bed. The furniture seemed lifted from an antique shop, and the TV played a noisy talk show. Invoices, receipts, and other papers were glued all over the walls, evidence that the room served as his office during the day. He warned us right away that "the building was old, and there was no hot water." We visited capsule 8006 the next day. The floor still had the original blue carpet, and the famous wall cabinet was really intact. The bathroom was as

advertised: Without hot water, occupants took scheduled showers in a dedicated prefabricated unit on the ground floor. Okamoto-san, our soon-to-be landlord, was so surprised by our interest that he gave us a special price and almost let us rent the capsule to us. Suddenly we were living in Ginza, supposedly one of the most expensive neighborhoods in the world, in our own "apartment" for less than 300 euros a month. Sometimes you just get lucky.

For the year that followed, capsule 8006 was our home, office, and headquarters. Fabi and I was kind of there, inspirational images were pinned on, guests passed through, photographers captured wonder's, myths were clarified, and articles were written. In our eyes, it was a lively building. Our neighbors were funny: From the pukea next door, who specialized in selling little Kitty dolls and sex toys, to a couple who owned the only fully preserved capsule along with its memorabilia, we owned for all kinds of stories. Takahashi Masahisa, who became one of the biggest advocates for the building's preservation, had just finished refurbishing his first capsule (including an unexpected wood floor) and was on his way to buying and refurbishing another ten units in the following years.

Communication was difficult, but with some help we managed to interview many residents, document their capsules, and hear their stories. The building clearly had serious problems from the start. It had been a "fab" project, a real estate stunt, that should have also led to a future that never happened. Still, the tubular capsules were built in a way that largely followed traditional construction techniques.

They were never truly meant to be replaced, and the project ended up not leading to others that could have indeed worked. The Tokyo public was sold a beautiful fiction that was never meant to happen. Kurokawa, always a provocateur, knew this the whole time.

In the 40 years before we arrived, the plumbing problems became evident, and maintenance was impossible, owing to the hidden placement of the water connections between the capsules and the core. Rather than being independent pods, they stacked vertically, making the removal of one capsule impossible. The stairs were everywhere: New ones were exposed in the staircases, and sewer water dripped from the balconies. There were rotting capsules, populated with beeing plastic and moss, whose doors had collapsed, leaving the interiors visible from the common stairs. One day we woke up to a construction team covering the building with a net to prevent falling pieces from striking anyone on the street. And we haven't even mentioned the asbestos. The building was literally a crumbling ruin. Removal was the obvious solution; the only question was when. It was difficult to express how we felt about it, but we made our first attempt in "The Metabolist Revisited," an essay for *Domus* 868 in 2013. Pre-October, we were the building's first ever non-Japanese residents, and we made an effort to show it to the world. Joseph Gracia, the then editor of *Domus* who invited us to tell our story, summarized it like: "Everyone thinks they know the Nakagin, but no one knows how it is to live there, much less today."

A few years later, we returned to Tokyo and received a warm welcome from the remaining inhabitants, mostly because of our friendship, but also due to the media attention we achieved for the building. They even prepared a capsule for us to stay in for the summer. Demolishing the Nakagin was a legal solution to a complex problem. The building was in terrible condition, and, though preservation schemes were pitched, no one proposed a (financially) viable alternative. Refurbishing the capsule was not possible, and restoring the tower as a monument would be conceptually insulting to the Metabolists. Classifying it as a historic structure was also complicated because of its futuristic appearance, even half a century after its completion. With deconstruction currently underway, years of speculation have finally come to an end. What was once the tallest building in the neighborhood was quickly overshadowed by its context, Tokyo, which today is bigger than the Metabolists could have ever predicted, ended up absorbing the Nakagin into its relentless churn. The last time we saw Kenao Fukuda was in 2015. He lived and worked in the tower and enjoyed drinking every night. He liked us and showed us nice places to eat in the neighborhood. He was from a city a few hours away from Tokyo, where he would go on his motorbike (which we never saw) on the weekends. We were lucky to meet him, as he changed our lives. He was probably the best example of the new city roads that Kanokawa talked about all these years ago.

