JAPANESE BURIAL PLACES

Spaces between life and death

Politecnico di Torino Master of Science in Architecture Construction and City

Master Thesis Project

Author: Giorgia Barale

Supervisor: **Prof. Filippo De Pieri**

Co-supervisor: **Prof. Mauro Berta**

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A chi ha sempre creduto in me.

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INTRODUCTION

A lot of people have asked me why I decided to bring this topic up. The first answer I got was because they are extremely attractive places.

Many times, on my way to the office near *Gaienmae Station*, for coffee breaks or to eat my *bento* box, I found myself walking inside *Aoyama Cemetery* without even realizing that I was walking through a centuries-old cemetery in the heart of Tokyo. Obviously, being a burial place, it is a quiet environment, but there is more to it than that. The sense of peace and quiet was something inexplicable: the charm of this place with its thousands of streets, its cherry trees in bloom during the spring, the micro houses, but also skyscrapers with a direct view of some monumental tombs, the children having fun in the playground placed among burial lots. All this made this place exciting and intrigued me at the same time. So, used to walk in between *Aoyama* and *Yanaka* on weekend days, and after visiting some well-known burial architectures in Japan, driven by a deep interest, I got my thesis started. The aim of this research is to study how burial was and how the practice of hurial in lapan developed starting from the paration of the first comptories

burial in Japan developed, starting from the narration of the first cemeteries to the most modern ones that are taking hold in Japan.

The paper is divided into three chapters: burial practices in Japan, digital death and the last with the analysis of six case studies.

The first part covers the various phases of burial and the development of cemeteries: from the majestic monumental tombs of the Shoguns to the cremation. We will see how the latter went through a troubled period caused by the *Meiji* government due to its desire for modernization, and then became a burial practice performed in most of the country. In order to better understand the various progress that characterizes the Japanese burials, it was necessary to approach the theme of ceremonies and the different steps that make them up; coming later to the description of the major urban public cemeteries. Inspired by the European cemeteries, the great monumental cemeteries such as *Aoyama*, *Yanaka* and *Tama* started to appear from the 1870s and are called cemeteries-parks used by people, in addition to the practice of burial, also as green areas for the city.

With the new *Meiji* government, a strong wave of modernization and development hit Japan from 1868 onwards. The second chapter deals with changes in funeral practices and rites. Following a sharp increase in population and exorbitant prices for a burial plot, new burial methods are studied. From scattering the ashes as a legalized practice to burial in small cells arranged on illuminated *Nōkotsudō* walls. Up to the development of automated systems that take the urn from underground storerooms and deliver it to visiting relatives.

Finally, in order to make readers better understand how modern and contemporary burial sites in Japan are organized and to emphasize the importance given to relatives visiting these places, six Japanese case studies are taken into consideration, some of which were directly visited by the author. Chapter three consists of the analysis of six famous cemetery projects located in different contexts. These were subjected to a detailed historical-critical reading and subsequent redesign, from which common features emerged. These are then summarized in four key concepts: the accesses, the narrative dimension of the building, the isolation toward the surrounding and the visibility in the context. The last case study, the *Ruriko-in Temple*, is an urban project located in *Shinjuku*, the beating heart of Tokyo. This district also features a competition of ideas promoted by the "arch out loud" organization in 2016 on the design of a vertical cemetery. On the basis of the key concepts used previously, some proposals from the competition that reflected these concepts have been selected.

CHAPTER 01

BURIAL PRACTICES IN JAPAN



Bird's-eye view of Aoyama Cemetery, Tokyo. Source: reddit.com

The word burial encloses many treatments of the body. The term itself concerns different meanings and actions, from the burial process to the associated ceremony, to the place where the body is buried as a final arrangement *[FAVOLE A., 2011]*. In the Japanese culture, there is no a traditional *"Japanese way of disposing the deceased persons' remains"* that has been passed on to recent years *[KAWANO S., 2010]*.

Graves have varied several times through Japanese history and changed especially according to the social class. In fact, the arrangement of the body in the coffin or whatever it is, with flowers or objects, can communicate different information on the deceased. In this chapter, we will see how the burial method *-maisou* 埋葬- changed over the years, influenced and controlled by religion and politics. Starting from the huge tomb construction called *kofun* which witnesses the social hierarchies during this historical period, to current days with the cremation spreading, due to impurity reason of the body and the real problem of the lack of space.

1.1 BURIAL AND CEMETERIES DEVELOPMENT

THE ORIGIN

Since ancient periods, the disposition on the ground, as a burial method, the internment and cremation were all practiced in Japan. From the time when hunting and gathering in the village were the main activities -during the Jomon period (10.000-300 BC)- researchers found early burial practice's witnesses [KAWANO S., 2010]. Later -during the Yayoi period (ca 300 BC-AD 300) the society moved to an agricultural economy and deceased bodies started to be placed in simple coffins realized with wood, stone or pottery.Someyearslater,manytombswere distributed all over Japan corresponding with the exponential growth of the Yamato family (AD 300-552) [Івідем, 2010]. During this time, in order to show off their religio-political power, many family leaders erected huge tombs that took the name of kofun. These important constructions are around 160,000 all over Japan and represent the richest material of the Kofun period (AD 300-600) [UNESCO.ORG].



Emperor Nintoku in Kofun period. Source: https://www.roningallery.com/ emperor-nintoku-viewing-the-house-of-his-people

Kofun are considered the mounds constructed for the elite class and they experienced important changes in identity over the years. Mainly diffused in south Japan and the Kansai¹ area [CAROLI R., GATTI F., 2004], this monumental tombs surrounded by water, together with the grave goods discovered inside, proved a great testament to Japan's history and cultural evolution [BRITANNICA.COM].

In the beginning, viewed from above *kofun* were round-shaped, passing into the square to round back with an old keyhole shape on top. The tomb was composed mainly by earth and enclosed space for the coffin and the deceased's goods. All these could be dropped inside through a vertical passage placed near the top and when the burial procedure was terminated, it was closed off. Deceased's personal objects, jewelries, iron weapons ceramic vessels and *haniwa*² sculptures, were all the goods founded in the graves. Sometimes coming from other countries, goods were buried together with the body, representing important elements to understand the social status and the intense commercial trades with Korea and China [*IBIDEM*, 2004].

Haniwa, firstly house-shaped and secondly human and animal-shaped, were probably made to support and protect the deceased in the afterlife.

PHOTO: Aerial view on Nintoku Kofun in Sakai, south of Osaka.Source:https:// kyotoobserver.wordpress.com

- ⁽¹⁾ Kansai literally means "west of the border" and it is the region placed in the southern-central region of the main Japanese island of Honshu. ⁽²⁾Haniwa 埴輪 are the terracotta figures
- ⁽²⁾Haniwa 埴輪 are the terracotta figures of people, animals and houses which were interred with the deceased in Kofun period (AD 300-600).

kofun 古墳

kú 古 "ancient" bjun 墳 "burial mound"

As we have seen, most developed in the Kansai area, the largest and most important *kofun* has been found on the plateau above the Osaka plain. The most famous and impressively one is the *Daisen Kofun*, located in *Sakai City*³, where probably the *16th Emperor Nintoku* (AD 290-399) was buried. Inscribed in the UNESCO World Heritage list, it is considered one of the three largest tombs in the world, which measures 487 meters long and almost 300 meters wide. It belongs to a collection of 49 *kofun* called the *Mozu-Furuichi Kofun Group*, which varies in type and sizes [UNESCO. ORG].

⁽³⁾Sakay City in the south side of Osaka. It has been one of the greates and significant Japanese seaports since the Medieval period.





The Konda Gobyōyama Kofun, Furuichi Tomb Group, with surrounding satellite tombs. Source: Pearson Richard, University of British Columbia, Vancouver, 2018

Until the early eight century, double burial was a common practice between aristocracy and sovereigns. They were used to erect a short-lived internment structure *-mogari no miya-* waiting for the real and final disposition, such as the *kofun* previously mentioned. The time in between was the period in which *"survivors had to do their best to win in the redistribution of power, position and prestige" [KAWANO S., 2010].*

Later on, due to the Chinese influence [AVELINE-DUBACH N., 2014], the intense religious changes and the establishment of Buddhism in the Japanese country (AD 538) [CAROLI R., GATTI F., 2004], the glorious funeral culture started its decline. Already in early Japan, government was controlling mortuary customs. Politics opted to ban the construction of the temporary double burial facilities and, directed to all the Japanese inhabitants, regulated the size of the tombs. Consequently, the impressive burial mounds -kofun- became smaller and used by people of lower status, forming primary cemeteries.

Between 1100-1200, small community cemeteries started to develop near temples and villages [KAWANO S., 2010]. People in front of those new places, sometimes still behave leaving the deceased body randomly, sometimes proceeded with internment, but without building any individual memorial.

At the beginning of the *Edo Period* (1603-1868), the mortuary affairs were mainly controlled by Buddhist communities which were earning their incomes from funeral rites and ceremonies. In 1640, the Tokugawa shogunate, to control their inhabitants introduced the "Danka"⁴ registration [AVELINE-DUBACH N., 2014].

In order to repress Christianity, each family le was compelled to sign up to a definite Buddhist temple and in return, the people affiliated received care from the "temple supporters' organization" [FuJII M., 1983]. Not all the inhabitants could afford the affiliation, in the case, they couldn't pay, their corpses were discharged in a mass grave [BERNESTEIN A., 2006].

The *danka system* became an obbligation with the *Meiji Restoration* in 1868 [*IBIDEM*, 2014].

During these years, the *Tokugawa* shoguns, which reach high prosperity as the administrative center, focused deeply on cemeteries construction and arrangement of the deceased.

The Zojo-ji temple⁵ in Roppongi guest the Tokugawa Shoguns Mausoleum. Partly bombed on wartime, remains includes six shoguns burial.

Buddhism started its falling when to the *Meiji Era* (1868-1912) followed the *Edo Period*. Characterized by the modernization of Japan, the *Meiji Period* replaced Buddhism with Shintoism.

⁽⁴⁾ Danka 檀家制度 presents in the country since the Heian period (AD 794-1185), it consists in the affilitian between Buddhist temple and housholds. During the Edo period the system works as a citizen registration. ⁽⁵⁾ Zojo-ji temple 增上寺 stands next to Tokyo Tower. The complex consists of several buildings, including a mausoleum of the Tokugawa family which members ruled Japan as Shōgun betweem 1600-1868.

1.2 GRAVES AND CEMETERIES IN THE MEIJI ERA

THE MEIJI RESTORANTION 1868-1912

The establishment of the Meiji government brought new national changes, including a deeper control over dead bodies by the state and the normalization of deceased care. The new authority adopted a strong *anti-Buddhist* approach, by promoting *Shintoism* as the only religion that could make the State stronger and cohesive, so the only faith possible for Japan. Indeed, was seen as an obstacle due to the closeness of Buddhism to *Shōguns*, the warrior side.

Later in 1868, Shintoism became the official religion of Japan and consequently, Buddhist institution lost its monopoly and opted to step aside. Family members of Shinto priest were allowed to celebrate Shinto funerals and five years later the whole population was authorized too [KENNEY E., 2000]. In order to end the connection with Buddhism, the new religion tried to universalize funeral rites and building family graves, a symbol of eternity and house of the remains that had to be honored and preserved.

In 1873, in order to safeguard the public health, the government banned cremation all over the country, also for the reason that it could not belong to the new civilization *-bunmei* 文明- [CAROLI R., GATTI F., 2004], [See cremation chapter]. This anti-Buddhist action caused a real shortage of mortuary sites.

The cemeteries in Tokyo could not host the deceased bodies due to a previous prohibition.



Floats for the Kansa Festival, 1843. From Edo to Meiji Period. Source: https://brewminate.co





m/japan-from-the-edo-period-to-the-meiji-restoration/sub105/item488.html

Shinto suburbs cemeteries were the solutions, which suddenly became public burial properties [BERNESTEIN A., 2006]. In 1872, complemented by the idea that "tombs should be built in pure earth and preserved forever", the Finance Ministry started to reorganize and examine the

Japanese ground. Already two years before, in 1870 he began to reconsider determinate lands. Paying attention to what was economically constructive or not, he decided that "graveyards, as in the past, will be tax-free land" [IBIDEM, 2006].

Graveyards lands were still under government jurisdiction, but the state would not receive any money from those lands. Alarmed by this fact, authorities proscribed the development or the construction of new graveyards on any private land in the Tokyo urbanities, except previous administration permission.

By doing so, the idea of using existing cemeteries spread over Japan helping the establishment of public "eternal cemeteries" *-eikyu bochi*. Ordinances arrived in mountain areas too, where authorities designed an "eternal graveyards owned in common"- eisei kyoyu no bochi [BERNESTEIN A., 2006].

In April 1874, the Finance Ministry and the Council of State issued new guidelines on the graveyard -bochi-. The immense control of the Meji government was clear and from this moment it officially defined the bochi as "an area with tombs (funbo) clustered together that is approved and registered by the government" [IBIDEM., 2006].

Furthermore, every religion or nationality was accepted in the collective burial graveyards *-kyōsō bochi-* and everyone, even low social class, could be buried in the new graveyards.

Consequently, these latter were moved in small villages or next to the temple, even though instigated several debates. Soon, the state decided to reorganize the lands on which temples and shrines were placed and expropriated their nearby properties. In addition, it declared that the cemeteries placed in the temples and shrines confines were not rearranged but, on a condition, that those cemeteries would allow Shinto burials on their lands. Even though Buddhist monks were against this action, they didn't have the authorities to oppose.

Later, monks were astonished when discovered that "Buddhist holy ground" was used by other members religions. Due to those reasons, numerous debates and fights dominate years between 1870-80s. Monks obtained parts of the Buddhist grounds, excluding those that could obstruct the future improvement of the urban plans.

According to the Meji Civil Code a grave became an image of eternity and have to be well-maintained [KAWANO S., 2010]. Only graveyards with clear boundaries certified and registered by the government were considered proper cemeteries and to be a tax-free graveyard [BERNESTEIN A., 2006].



A scene of the Haibutsu kishaku, anti-Buddhist violence movement of the Meiji Period, 1907. Source: https://commons.wikimedia.org/wiki/File:Haibutsu_kishaku.jpg

Buddhism and Shintoism have coexisted in Japan since the VI century when Buddhism arrived in the island.

Shinto is an indigenous Japanese religion that didn't properly have a religious structure until the establishment of the Meiji period in 1868 when became a religious doctrine. Usually, the term *Shinto* is translated with *"The way of Gods"*. This meaning arises from the union of two *kanji*⁶: *"Shin"* that means gods or spirits, and *"tō"* which meaning is way or path. In fact, Shinto doesn't have one main god, but Shintoist people have many *kami*⁷. *Kami* are considered as powerful spirits and could take on many forms such as places or natural phenomena. For this reason, this religion is considered an animistic one. The main worship of *Kami* is celebrated at *Jinja*⁸ 神社 – the public shrine with a wooden or stone *torii*⁹ before the entrance - even though many people have a small intimate shrine at home – *kamidana*¹⁰. What concern the Shinto ideology, afterlife and belief don't have a central role in this religion. More than faith, Shinto people are used to make rituals and practice observance. Moreover, rather than preparing to the next world, Shintoism is focused on the current world and its good relation between people and spirits. *"Japanese was born Shinto, married Christian and died Buddhist."*

[Anonimous]

buddhism and shintoism

Regarding Buddhism, originally it has been brought from India to China, and then from this last, it has been spread all over Japan with an already high-developed culture. Buddhism has numerous sects but the one that established in the country is the "Mahayana" -that means Great Vehicle. This religion plays a really important role in the first part of the early history of Japan. With the Meiji restoration was put aside in order to heighten the Shintoism. The main worship of religion is celebrated in Otera a = + the Buddhist temples. Usually, families celebrate funeral - Shoshiki - in Buddhist temples. During the day of the funerals, the deceased's family is reunited in front of an altar and the priest recites sutras¹¹. After the ceremony, most of the time the body is cremated, and ashes are placed in a vase. It is placed on a small altar - butsudan- at home until when the vase finds his grave.

After all, in the past Shintoism and Buddhism were deeply connected and for this reason, some forms merged together complementing each other. Simply fluidity connects both, this explains why there is no conflict or contradiction between the two. While religion is not part of a Japanese's daily life, many Japanese consider the two religious practices as prominent parts of Japanese culture and often they observe both without any discrepancy. Around 80 percent of the Japanese marriages are based on Shinto ceremonies and more than 90 percent are buried according to Buddhist rites. [Fuji M., 1983]

⁽⁶⁾ Kanji 漢字 are Chinese ideograms and represents one of the three scripts used in the Japanese language with the Hiragana and Katakana

⁽⁷⁾ Kami 神 are at the base of Shintoism and is an all-embracing word which includes gods, spirits, ancestors, natural phenomena and supernatural powers.

supernatural powers. ⁽⁸⁾ *Jinja* 神社 - "place of the god(s)"- is the old name to indicate a Shintoist Shrine. It's the most important building which house one or more *kami*.

⁽⁹⁾*Torii* 鳥居 sacred gate before the entrance of a Shrine.

⁽¹⁰⁾ Kamidana 神棚 are the small altars which people are used to keep in the house.

⁽¹¹⁾ Sutras are a collections of reliogious dialogues and discourses of the classic Buddhism.



Wedding ceremony at Meji Jinju Shrine, Toyko. Source: Author



The Senso-ji Temple, Asakusa, Tokyo. Source: Author

1.3 THE PRACTICE OF CREMATION

JAPANESE PREHISTORIC RITES

Performed prehistoric since times, cremation has always been part of the funeral world, but especially in the last few years, it became a modern reality. It has started to take on a central role, especially in Japan due to historical development as a modern nation-state [BERNSTEIN A., 2006] While for the Christian religion the practice of cremation has always made people talk, for Buddhist people it takes part of their daily routine since ages, even though "it was never mandated as a Buddhist doctrine" [BERNSTEIN A., 2006]. Over the years, cremation had faced several debates, especially with the Meji Restoration which started in 1868.

In this moment, Japan has just started a new modernization towards the Western world direction and cremation was considered an old method to belong to the new civilization. The government didn't want to have a connection with the past, and cremation, practiced by Buddhism, was seen as a strong threat to be handled, aside from being nonhygienic and non-healthy action. At that time, Tokyo was provided of eight crematories highly working. Bodies were burnt just at the sunrise and sunset time with the collaboration of Buddhist temples. In some countryside places, cremation was conducted by the deceased's relatives with the help of other inhabitants. In other villages, special people called *onbo* were in charge of taking care of the procedure and safeguarding the cemetery. Despite population opposition, according

to these beliefs cremation was warded off and nationally prohibited subsequently a cremation ban enacted in spring 1873.

"When bodies are burned, the smoke spreads out in all directions and the severe stench injures people's health"

[Police words, Bernstein A., 2000]

As a consequence, the Tokyo government ordered to move all the crematoriums outside "the red line" surrounding the city [BERNSTEIN A., 2006].



The cremation practice is carried out under a wooden awning, ca. 1880. Source: https://wellcomecollection.org/works/sred9tfq



After the cremation relatives pick bones from the ashes. Source: https://wellcomecollection.org/works/pnfxt5nz

The Japanese ritual o



Of course, Japanese society divided into two sides: people for and against. Some Japanese where supporting cremation as a modern action for the cemeteries organization, benefiting the public health, and in favor of the ancestor as well.

After the deep dissatisfaction and complaining about this government action, the opponents prevailed. In May 1875 the cremation ban was reversed, after just two years from its promotion *[Kawano S., 2010].*

f Kotsuage. Source: Illustration by Landis Blair

"It is deeply lamentable when the corpse is buried in a faraway place and become a ghost without any ties[...]"

[Anonimous, Bernstein A., 2000]



Japanese funeral customs, ca. 1880. Source: https://wellcomecollection.org/works/uv8v8udx

Day by day cremation started to take roots in the new Japanese civilization more than internment due to different and significant reasons. Cremation was faster in the procedure of decomposition, the space occupied by ashes was certainly less than the whole body, wild animals weren't attracted by the remains, and mainly the pollution was reduced therefore cremation got positive points on public health. In a rapid change of mind, for the previous reasons in 1897, the government ruled that people dead by the epidemic disease had to be cremated. The percentage of cremated bodies rapidly increased from 54% in 1950 to 91,1 % in 1980. Specially in Tokyo, Osaka, Nagoya, Fukuoka and in the prefecture of Hokkaido, Ishikawa and Fukuoka percentage touched the 100% [Fujii M., 1983].

In the countryside, however, most of the bodies were still buried without beeing burnt [AVELINE-DUBACH N., 2014].

Therefore, the laws previously named had positive consequences for cremation supporters: they promoted the construction of new crematoriums out of the city center.

Moreover, the old custom of practice itself changes a little bit: from this moment only close relatives took part of the ceremony. Though once funerals were held at home, nowadays it is not possible anymore. Ceremonies are held at the Buddhist temple hall or in other appropriate spaces. This is due to the small dimension of the modern residences which are built in urban areas [*FuJII M., 1983 p.49*].

The rite was quite similar to the actual one. The body was brought to the crematorium complemented by a document which certified the cremation willpower. Then, after paying an amount of money, the dead body was lied down on a tray. Furnaces are switched on. The family was conduct to a waiting room and after one hour and a half, when the ashes were ready, they were invited to the *kotsuage*¹² rite. In a special room, relatives picked the bones out with chopsticks and transferred them to an urn or more.

In relation to the cremation ban enacted during *Meiji Era*, Tokyo's 23 ward counts nine crematoria, which six of them are private and run by the company *Tokyo* Hakuzen¹³ [BRASOR P., TSUBUKU M., 2016].

Nowadays Japan counts almost 100 percent of cremated bodies. In fact, most of the crematorium are fully booked. The biggest crematorium in Japan is *Toda Saijo*. Placed in *Itabashi Ward*¹⁴, it's a private facility, it counts 15 furnaces and around 14,000 bodies are cremated per year. Prices varies from \$536 to \$1610 for the top-grade cremation (59,000 yen to 177,000 yen) [*IBIDEM,2016*].

⁽¹²⁾ Kotsuage 骨揚げ represents rite when relatives gather around the body burnt and pick up the bones usign special long chopsticks. They transfer remains of the body into the urn. Usually, this moment is the only one which let people use chopsticks to pass something to each other.

⁽¹³⁾ Tokyo Hakuzen is a japanese funeral company which provides funeral services. It offers cremation services, ceremonial hall, lounge space and shop in each location.

⁽¹⁴⁾ Itabashi Ward - 板橋区, Itabashi-ku is one of the 23 Tokyo's districts and is located at north-west side of Tokyo city center.

1.4 THE FAMILY TOMBSTONE

THE HAKA 墓



A family tombstone in the Yanaka Cemetery after the ceremony. Source: Author.

While elite class used to be buried in majestic tombs, individual tombs lined up, sometimes double, were the most common in Japan. In the Japanese funeral history, building a family gravestone -haka 墓- starts to become a common practice in recent years [KAWANO S., 2010]. It is just at the end of the Tokugawa period (1603-1867) that the first family graves begin to appear, turning into the most popular type in the Showa period (1926-1989) [IBIDEM., 2010]. The reason why family tombstone developed is not totally clear, but certainly, the shortage of ground in urban areas contributed to it and, further, the family's relationship was getting stronger. One more explanation, in the late Meiji (1868-1912) and Taishō period (1912-1926), powerful families who wanted to show off their

grandness, began to apply for a family grave plot. While common people used a wooden biodegradable marker to label the burial area, well-off families accompanied the deceased with opulent ceremonies and the burial space was marked with stone and wood indications, ensuring constant maintenance [KAWANO S., 2010].

The *ie*¹⁵ 家 system wasn't the same in all the country, in fact *"in a small island* community in Mie Prefecture the most family gravestones were established after the 1950s" [KAWANO S., 2010].

The *le grave* represents a form of family formed by at least three generations living together and le is expected to last through more generations *[TANAKA K., 2007]*

"In 2003 I observed the process of conversion to family graves on the outskirt of Tokyo. People were tying up the older cemeteries by collecting the individualand-couple-based gravestones scattered around the cemetery and establishing new family graves in the middle of their plots, surrounding them with gravestone for individuals. At this field system an informant explained to me that the older gravestones were erected when people practiced burial, and in those days, people buried the dead in an empty area of the cemetery rather that maintaining family-based plots" [KAWANO S., 2010]

⁽¹⁵⁾ *le* 家 means home or family. The le system born in the Meiji period in order to consolidate the family relationship. Moreover, the system expects the development of the family through generations.



A couple who is cleaning the family grave, Tama Cemetery. Source: Author.

Though cremation, a practice that was already existing in Japan, didn't require a family grave, in some case, especially in urban areas, people wanted to build the same in order to make ritual care easier. In addition, the price and the maintenance fee for the younger generation on a communal grave were cheaper than a singular one. Practical and functional reasons have made the religious meaning of the tomb disappear ″a process of turning becoming religious space into permeant homes for the family dead". [KAWANO S., 2010] Therefore the population growth, the urbanization and development of transportation made some cemeteries essential space for urban area development. According to this, in late 1800 several graveyards were transferred from the city center to suburbs, far away from busy areas. After the postwar, people from the countryside moved to the city center. Here they start a new job, make a family, buy a house and then they feel the necessity to build a grave in order to place the family's remains. The possibility to achieve a burial space became a real important success in a Japanese men life. In this way, he could sleep forever in his family grave together with all his beloved relatives [KAWANO S., 2010].

"I have heard people who have acquired graves say that now they can die without worries. In a way, obtaining a grave is like making a reservation at a good hotel before taking a trip or buying a house in the new town to which you will be transferred by."

[Kawano Satsuki]
1.5 THE GRAVE PROGRESS

FROM A WOODEN MARKER TO A STONEGRAVE

The stone structure was not commonly built at the burial or the internment site for ordinary people until at least the late Edo period. In many parts of Japan, temporary wooden grave markers were used rather than gravestones.

Between the second half of the XII and century, archaeological studies XIII showed that primitive cemeteries started to emerge. While at the beginning the body was left on the ground, after the XIV century Japanese began to conduct a kind of funeral process: the body was buried, and the pagoda was erected on it. This construction erected for the beloved deceased was to make a connection to the Buddha and to prevent disaster or negative episode. Basically, the stone wasn't a grave marker location, but it had a religious value.

A close cemeteries idea connected to the village started to appear toward the end of the *Middle Age* and the establishment of the *Edo period* (1603-1869). Followed a group of specific people who were in charge to handle funerals and to preserve cemeteries. Those spaces began to fil with stone structures disposed of an uneven way.



Graves at WAoyama Cemetery. Source: Jon Allen.





Wooden sotoba 卒塔婆 at a tomb in Yanaka Cemetery. Source: Author.

There were many different burial sites, while the shogunate and high-class families could afford extravagant stone structures, the normal inhabitants were buried in the around, sometimes without a coffin, other times without any mark on the soil. Already during these years, a gravestone could be abandoned, due to money reason or ancestor missing. In this case, certainly, the gravestone would be reused or in other cemeteries in case of no donation, it would be demolished [KAWANO S., 2010]. The development of cemeteries brought positivity to the country because the dead would have a proper space where to sleep forever and temples began to show off more their power [VISENTIN, 2014]. While the kofun tombs, previously described, were built to show the family power and magnificent, the classic tombs, developed during the Tokugawa period, were the symbol of family and eternity and must be honored. The gravestone is formed by a stone bohyo- on which the deceased's name is inscribed. The urn, with ashes inside, is placed in a small hole behind the stone [KAWANO S., 2010] together with the temporary wooden bar -kariihai- on which the post-mortem Buddhist deceased name is written. Information regarding the dead are written on a long wooden bar called sotoba, probably used instead of stone during the Heian period [VISENTIN, 2014]. A photo of the deceased and flowers are placed on the grave while the Buddhist monk reads sutra. Here incense is burnt. The picture and the kariihai are later moved to the butsudan - the small altar placed in the relatives' house.

Today the ideology of the gravestone changed completely. In the past, it was the place on which funeral rites took place, but today it represents the destination where relatives go on *Obon* festivities.



Wooden sotoba 卒塔婆 at a tomb in Yanaka Cemetery. Source: Author.



A particulat family grave in the Tama Cemetery. Source: Author.

1.6 FUNERAL RITES AND CEREMONIES

Although the Meiji government tried to make *Shintoism* the main religion prevailing in the country, the funeral ceremony had a Buddhist orientation. While Shintoism and Buddhism coexist together, they have different ideology on death.

The *Shintoism* associated the term of death to the impurity *-kegare*¹⁶-, especially related to the process behind the death. Due to this reason, it was important to conduct a precise funeral rite in order to guide the dead to the kingdom of the dead.

On the contrary, Buddhism was more related to a "salvation in the afterlife" [CAROLI R., GATTI F., 2004] and to the idea that people had to leave life in a natural way because in Buddhist, death belongs to the process of life. [VISENTIN, 2014]. There were two main ways to die: pokkuri, the sudden death, and the rosui, death caused by the age or the health.

"A local Buddhist priest told me that each person has a spirit (tamashii 魂) within their body (karada 体) and when a person dies, the spirit leaves the body." [НYUNCHUL K., 2012]

Buddhism had such a success in Japan because it offered a wide range of services both during the mourning and



Japanese funeral processions: the cortège proceeds towards the temple, ca. 1880. Sour

after, and prices were relatively low. Buddhist monks were very careful in taking care of the graveyards and helping needy families.



ce: https://wellcomecollection.org/works/uv8v8udx

In the past, ambitious families used to show their power spending a big amount of money for funerals, from the ceremony to the inurnment, resulting in a real dominant social statement. Gorgeous funeral processions were held, encouraging the modern funeral industry [BERNESTEIN A., 2006].

The organization of a procession wasn't easy and probably there were some people who were on charge to do it. Sources attest that in the Tokugawa era there were some businessmen who took care of funerals.

The official introduction of *sōgiya* -the full-service undertaker- dates 1886 and by the end of Meiji period, they became an affirmed industry *[IBIDEM, 2006]*. They offered different services, among which rental of *kago*¹⁷, mourning clothes and all the necessary to act the funeral procession, to the lower class. The funerals, of people who could not afford all of this, were celebrated in the early morning or in the late evening.

⁽¹⁶⁾ Kegare is the english term and it is a concept opposite to purity in the Shinto religion. Generally, it can be purified by ritual ablutions.

⁽¹⁷⁾ Kago was the palanquins to carry coffins during the processions.

Processions lasted until 1913 when due to the intense traffic, it became problematic to organize them. In the 1910s the motorized hearse replaced the old manual one and gradually processions were switched to farewell ceremonies [BERNESTEIN A., 2006].

In February 1989, a solemn funeral parade took place as a tribute to the late Emperor Hirohito who died at the age of 87. Due to the great contribution who the Emperor brought to the country for 62 years of reign, its funeral has been broadcasted live on nationwide television.



Funeral processions, 1890s. Source: Meijishowa.com

Fun Sou



eral of Emperor Hirohito was attended by representatives from 164 countries, Tokyo, February 1989. rce: https://manila-shimbun.ph/japan_news/exclusive-funeral-preparations-started-7-years-before-emperor-hirohitos-death.html

Since the past, when a person dies, different procedures have to be followed. First, a relative had to get a document that certified the real death and after twentyfour hours from the death, it was possible to start the funeral ceremony. Secondly, in order to help the body to reach earlier the afterlife, parents clean it with water -yukan¹⁸ 湯灌 that literally means "washing a corpse with lukewarm water" [Fujii M., 1983]. Moreover, water is offered to the corps -matsugo no mizu 末期の水¹⁹- as a symbol to eliminate the pollution. Deceased hands are joined together -gasshō 合掌²⁰- and dry ice blocks are placed surrounding the body to prevent the decomposition. Ice is replaced every twelve hours by undertakers. White thin fabric covers the body and a haori 羽織 ²¹ dresses the corpse [HYUNCHUL K., 2012]. The body is placed in the coffin with the head, covered by a white towel, facing the north side and the face west -kita makura 北枕²². Some objects, such as weapons in the past²³, are put inside the box to ward off evil or ghost from the deceased.

Nowadays if the deceased dies at the hospital, the family can ask the undertakers to move it to the deceased's house. Once at home, the Buddhist monk from the family temple goes to the house and together with the close family decide the chief mourner -moshu 喪主 or seshu 施主 for the ceremony [HYUNCHUL K., 2012]. Here the monk reads sutra and later back to the temple has to find a Buddhist post-mortem name -kaimyō 戒名- for the deceased. This practice, according to the complexity of the name, varies in the price: from cheap or free name to million ven [Rowe M., 2000]. In relation to the economic Japanese growth in the 1960s, prices increased a lot, but this fact doesn't obstacle some rural families who consider kaimyō a prestigious representation of social status.

Relatives, neighbors and friends are invited to say farewell to the body and offer money - omimi お見舞い²⁴.

During the wake, the day before the funeral incenses to purify the space, candles, flowers and rice balls - dangoare placed next to the coffin [FuJII M., 1983]. After praying, before leaving the house, visitors clean their hands with water and salt in order to rinse the pollution of death. Normally the funeral *-soshiki*²⁵- is held after three days from the death and it lasts not more than half an hour. Later, the coffin is moved onto a long black funeral car and drove to the cremation place *-kasōba* 火葬場.

Cremation generally takes around one hour and a half. Here the coffin is placed on a tray which rolls into the furnace. Meanwhile, relatives are invited to a waiting room where they can sit and a break. When cremation is over, remains are on the tray. Here families and friends with the help of long chopsticks move bones into the urn *-kotsuage* 骨揚げ. The urn will be later buried in the family grave.

⁽¹⁸⁾ Nowadays undertakers or the hospitals take care of this procedure. ⁽¹⁹⁾Even though nowadays many people die in the hospital and there is no time to make this procedure.

⁽²⁰⁾ Gasshö 合掌 means "palms of hands joint together". It is a ritual gesture for prayer or greeting in different Buddhist traditions

⁽²¹⁾Haori 羽織 is a traditional Japanese jacket. ⁽²²⁾ Kita makura 北枕_originally from

⁽²²⁾ Kita makura 北枕 originally from Buddhism. When Buddha passed away, his head was facing to the north side.

 ⁽²³⁾ Instead of weapons, today they put a knife for a men or scissors for women.
(24)Omimi お見舞い literally means "an expression of one's sympathy". Relatives and friends goes the deceased's place and offer money.
(25) According to Hyunchul K. in the past

⁽²⁵⁾According to Hyunchul K. in the past the real funeral ceremony was held after the cremation. Before it there takes place the missō 密葬- a private ceremony with few intimate relatives.

In conclusion, the farewell ceremony kichūbarai 忌中払い -literally "getting out of the period of pollution"- is held in order to dissolve pollution and alleviate pain. "The funeral is only the first of a series of

[mortuary] rites conducted on behalf of the spirit of the deceased" [SMITH R. J., 1974].

The spirit, still infected and dangerous, needs to be purified through several rituals. On the Buddhist altar *-butsudan* 仏壇-, at the deceased's home, incense and flowers are offered and rituals are accomplished. After forty-nine days the spirit of the deceased should have reached the new world and it marks the end of the mourning period *-imiake*. In order to complete perfectly the process, the house has to be purified and objects used for the funeral rite are burnt.

There are some festivals called on $sh\bar{o}gatsu$ 正月 on New Year's Day and bon 盆 festival of the dead -hold 13-16th August- that are still celebrated by the communities. During *bon* festivals, people think that spirits of dead come back to greet families during festivals.

In those days relatives offer deceased's favorite food, flowers and incense at the butsudan. They go to the cemeteries to clean and honor the graves and at the end of the festivities families go to the river and light paper lanterns in order to brighten the way back to spirits.



Bon festival in Shimokitazawa, Tokyo. Source: Author

1.7 THE CEMETERIES SHORTAGE

GRAVES REORGANIZATION



Higashiotani Cemetery in Kyoto. Source: reddit.com

While in 1872 new large public cemeteries were merged and developed in Tokyo suburbs, such as *Aoyama*, *Yanaka*, *Zoshigawa* and *Somei* Cemetery [*AVELINE-DUBACH N., 2014*], by the late nineteen century, the willing of establishing public "eternal cemeteries" -eikyu bochi- by Meiji government resulted difficult to carry out. In 1889 the city of Tokyo revealed a new renewal urban plan complemented by a rearrangement of burial graves "scattered"

around the city" [BERNSTEIN A.,2006] to make space for new roads and railways. Years of debates and misunderstanding, the Great Kanto Earthquake iin 1923 and the abuses during the reconstruction brought to a more substantial shortage of graveyards [IBIDEM, 2006].

In the 1920s, with the necessity of reorganizing burial grounds, planners were called to settle new cemetery areas easy reachable according to the traffic networks and public transports. Got inspired from European landscape graveyards, in particular of German inspiration, new public cemeteries were constructed.

The first modern park-like cemetery was the *Tama Cemetery*, constructed in 1923 and placed in the western suburbs of Tokyo [KAWANO S., 2010].

These new typologies were no more called *bochi* -the common graveyardbut new as reien 霊園, literally gardens of souls [BERNSTEIN A., 2006]. Including lush vegetations, flowers and path the *Tama cemetery* was the first of a series of garden-style cemeteries built on the neighborhood of Tokyo, Osaka and Yokohama.

With the purpose of making a healthier society, new crematories have been developed too. In some cases, existing furnaces systems have been renewed directly by the authorities reducing the time necessary for the cremation process. In 1938, placed in a green buffer area, the city of Tokyo decided to erect one public crematorium: the *Mizue funeral center*. With its initimate and comfortable ambience, it has been considered as a model throughout the country [*AVELINE-DUBACH N., 2014*].



Detail of a graves, Sayama Cemetery, 2018. Source: Fani Atmanti

Still supporting the transferring of graveyards on to the outskirt, in 1925, to meet the inhabitants need, Tokyo allowed temples to develop a "walled-in site one-third the size of former graveyards to hold ossuaries -nokotsudo- for cremated remains." [BERNSTEIN A., 2006].

Serious graveyards shortage problems affected the postwar years.

By the 1970s, new cemeteries were needed and to figure out the lack, the government let "private companies and Buddhist institutions develop a number of large-scale for-profit cemeteries" [KAWANO S., 2010]. The construction involved lands far from residential areas, especially on hillside zones [IBIDEM, 2010]. The involvment of the Tokyo municipal government ended in the 1970s [AVELINE-DUBACH N., 2013].



A cemetery next to Nogizaka Station, Akasaka, Toyko. Source: Author.

"In the middle of 1950s, approximately 30 percent of the population lived in the cities, but by the early 1960s city dwellers represented approximately 70 percent of the population"

[Satsuki Kawano]



Yanaka Cemetery and the closeness to residential buildings. Source: Author.

1.7.1 AOYAMA CEMETERY

Placed in between the Aoyama Omotesando and Gaienmae districts, land that in the Edo Period was full of shrines and samurai houses, the Aoyama Cemetery, also called Aoyama reien, is considered as the first public cemetery in Tokyo city. It dates 1872 and at that time it was developed in the outskirt of Tokyo covering an area of 263,564 square meters on land previously belonging to the Gujo Clan, a prominent family during the Meiji Period.

In September 1874, the cemetery opened to citizens and was considered the main grave place for foreigners residents who helped with the country's industrial development during *Meiji Government*. Every religion can be buried in there and it counts about 260,000 parcels.

In 2005, the gaikokujin bochi -foreigner cemeteries- was under threat of removal due to the unpaid maintenance fee, but some foreigner residents paid the amount and managed to keep this important witness in the cemetery. Historical and prestigious tombstones are placed in the Aoyama Cemetery too.







Aoyama Cemetery during the cherry blossom, Tokyo. Source: Timeout.com



Closeness to residential buildings in Aoyama Cemetery. Source: Author.

In 1926 all the buildings that were surrounding the Aoyama Cemetery have been donated to the Tokyo City. So, it became the first public cemetery in Japan *[E-OHAKA.COM]*.

Regarding the distribution, the cemetery counts a vast number of people buried in different size plots. They are kind of lined up creating small paths in between which run both vertically and horizontally. Two main wide tree-lined alleys, which cross the area from north to south and West to East, are frequented by numerous taxis and bicycles. During springtime, those trees become one of the main spots in Tokyo for the cherry blossom *-hanami*²⁶. At the corners of the cemetery, it is possible to find granite and stone shops and other funeral components.

Over the years the shortage of space and gravestones in the city center worried people and make them look for new grave solutions. To face this lack, the *Metropolitan Aoyama Cemetery* makes available old tombstones that are assigned once a year through a lottery system. Every year between June and July there is the application period in which people who want to be buried

⁽²⁶⁾ Hanami 花見, literally means "flower viewing", is the most famous Japanese traditional activity between young and adults during spring period. Today it consists in having a party under the cherry blossom, called sakura.

in the prestigious space of *Aoyama Cemetery* can apply through a lottery to determine the loan grave, that is generally on August *[E-OHAKA.COM]*.

The cemetery can offer two types of facilities. One plot measure 1.60 sqm and the price for a permanent use is \$36,427 (4,376,000 yen) accompanied by an annual administrative fee of about \$10 (1,220 yen). It is possible to buy a plot of 4.00 sqm for \$91,067 (10,940,000 yen). In this case annual fee is around \$20 (2,440 yen). These prices are just for the land then people have to add the price of the gravestone that could start from \$3307 (400,000 yen).

Though it is really expensive to be buried in *Aoyama Cemetery*, it represents a place really wanted by people because it is like a kind of status.

Just residents who have lived in Tokyo for more than 5 years with a certificate of resident card and it's important to know that double applications are not allowed. Moreover, at Aoyama Cemetery, if the maintenance fee is not paid for five years, the permission for the use of the grave could be revoked [BRASOR P., TSUBUKU M., 2018]

IMAGES

- 1. View of a Aoyama Cemetery portion. Source: https://www.otsukastone.co.jp/ blog/14011
- 2. Commemorative monument for the foreigner cemetery in Aoyama Cemetery. Source: Author
- 3. Narrow street between houses and the cemetery. Source: Author
- 4. One of the two main street that cross





the Aoyama Cemetwery



Easily accessible from many popular tourist areas, the Aoyama cemetery is frequented by many visitors and inhabitants too. It is not only one of the oldest cemeteries in Tokyo, but also an important green oasis for the city.

Close to the Aoyama Cemetery, there is the Aoyama Funeral House which has been established as a private sanctuary in 1890, then it has been donated to the *Tokyo City* in 1914 and has been rebuilt in 1974. Here it's possible to celebrate just one ceremony per day and can be held family funerals, large and small-scale funerals and pre-mortem funerals.

Space is divided in the ceremonial hall around 415 square metres with 300 seats, the waiting room, the social gathering room with tatami mats, baths, toilets and kitchen. It's possible to find changing rooms and mortgage rooms with cold storage. In these private rooms relatives can keep the deceased for up to seven days before the funerals [AOYAMASOUGISHO.JP].

A lush courtyard contributes to creating a peaceful atmosphere alleviating the sadness of relatives.

People can rent these spaces for 24 hours or just 8 hours and prices of rent changes according to the usage time.



Aerial view of Aoyama Cemetery, Tokyo. Source: https://fr.wikipedia.org/wiki/Cimeti%C3%A8re_d%27Aoyama

1.7.2 YANAKA CEMETERY

The Yanaka Cemetery, well-known with its old name Yanaka Bochi, was originally being part of the Tenno-ji Temple 天王 寺 who started the construction in 1274. Yanaka Cemetery perfectly witnesses the separation between Buddhism from Shintoism -shinbutsu bunri- operated by the Meiji government from 1868. At that time the cemeteries were affiliated to Buddhist temples. In 1872, after the Meiji decision, when Shinto religion was elevated above Buddhism, Yanaka Bochi has been confiscated from the temple and opened as a new public cemetery turning into park cemetery. It measures 100,000 square meters and it quests around 7,000 graves.

Even though Japan and its inhabitants are renewed to be a neat population, the disposition of the tombstones looks like a labyrinth, far from the orderly rows of British or American cemeteries. Typically, of Yanaka Bochi is its *take-gaki-* bamboo fences. Here, different styles are used to separate each plot in order to easily identify their locations.







Small road in between the Yanaka Cemetery, 2018, Tokyo. Source: Author



Gravestones keeping, 2018, Tokyo. Source: Author

The cemetery is well-known to host the Tokugawa clantombs, especially the tomb of the 15th and last Tokugawa shogun of the Edo period, Yoshinobu Tokugawa who died in 1913. Its resting place has its own magnificent fenced-off section, visible through the gate. Not just the last shogun is buried here though, there are more important historical bodies in Yanaka cemetery, such as actors, poets, politicians, writers etc.

Just a few minutes from the Nippori station, it is to be reached from every district in Tokyo. In April, Yanaka Cemetery becomes full of people due to its famous cherry blossom. The main street, which divides the area into two sides, is covered by pink flowers falling from cherry trees. More than a cemetery, together with Aoyama Cemetery, Yanaka one is renewed to be an important park in the Tokyo city center. Many Tokyoites and tourist go to Yanaka Bochi for relaxing and jogging. Particularly on weekend days, the area results very populated. Famous for its cats, in Yanaka cemetery it is possible to find stray cats sleeping on a gravestone or eating from obāsan who feed them.

IMAGES

1. A Sunday afternoon in the crowded Yanaka Cemetery, 2018, Tokyo. Source: Author

2. The Cherry Blossom in Yanaka Cemetery. Source: https://www.tokyoin-pics.com/yanaka-cemetery

3. The Tokugawa family's (1603-1868) private Cemetery located in Yanaka Cemetery. Source: Author

4. The Cemetery is used like a public park too, indeed in the pic a men doing jogging in Yanaka Cemetery. Source: Author







As a consequence of the growing population of the city of Tokyo new cemeteries were necessary outside the city limits. The *Tama Cemetery*, the first of its kind, with the name of *Tama Graveyard*-多磨墓地*Tama Bochi*- opened in April 1923 in the southwestern suburbs of Tokyo, between the cities of *Fuchu* and *Koganei*. It is situated around forty minutes from Tokyo city center, in an area strategically chosen for the good infrastructure it was surrounded by.

Deeply studied by the chief of the Tokyo parks department since 1921, *Inoshita Kiyoshi* who acutely analized the American and European suburban cemeteries, Tama cemetery has been evaluated as the first *"modern-park cemetery"* [AVELINE-DUBACH N., 2013]. He wanted not just to improve the infrastructures of the city, but the life and death style of their inhabitants [BERNSTEIN A., 2006]. Based on a German model, from an architectural point of view, it has been deeply planned.

Indeed, it presents a geometric and it is divided into 26 parts.







Tama Cemetery gravestones. Source: Author



Tomb in Tama Cemetery, 2018, Tokyo. Source: Author

Thanks to this organization and due to the large dimensions, there is a bus which carries visitors close to their grave. Wide alleys, rich in lush vegetation, characterize the pattern of the cemetery.

In 1935, it has been redesigned as Tama Cemetery and became the largest green area in Tokyo. Thanks to its dimension and beautifulness as well, it has been identified as a perfect space for family members where "they could pray for the welfare of spirits 'sleeping in a natural beauty'" [BERNSTEIN A., 2006]. The association of burials and parks together resulted in the perfect combination for the society. In this way the park cemetery idea was very successful also for another reason: the gloomy idea of death was relieved by the beauty of nature. Consequently to its success, the concept of gardenstyle cemetery expanded quickly to other cities between the 1920s and 1930s.

Nowadays, like many other parks in Tokyo, Tama Cemetery offers the famous cherry blossom during springtime and can be considered the perfect space for a relaxing walk. While, it is possible to find several Buddhist and Shinto graves and others with Christian crosses on top, there are many foreigner tombs too, especially of people coming from the Middle East. Many historic and notable people are buried in Tama Cemetery and due to the closeness to the Chofu airport and the rigid flat grid, it was used as a hiding place and reparations area during the World War II.

Since 1963 only reburials and other similar uses have been practised in Tama Cemetery. In 1962 a green lawn-type have been added to the cemetery and in 1993 the columbarium Mitama hall was added too.

General tombs measuring 1.75 square meters are sold for \$12,863 (1,545,250 yen) with a maintenance fee of \$10 (1,220 yen). Bigger plots around 4 square meters can cost \$29,703 (3,568,250 yen) with an annual administrative fee of around \$27 (3,220 yen).





IMAGES

- 1. A Sunday afternoon in the crowded 2. View on some tombs in Tama Cemetery.
- 3. A grave in Tama Cemetery. Source: https://www.tokyo-in-pics.com/tamacemetery. Source: Author
- 4. In 1993 the colombarium Mitama hall wass added to the cemetery. Source: Author








CHAPTER 02





Led glass Buddha statues in Ruriden colombarium, Toyko. Source: Chris Mcgrath.

From the end of *Tokugawa dynasty* to the *Meiji Restoration*, Japan's society changed over the years. With the Japanese transformation which started in 1868, the nation steered to a new strong and unified world power country [*CAROLI R., GATTI F., 2004, pp.127-137*].

Deeply connected to the old traditions, the country overcame the rooted fear of death and developed new funeral solutions facing the incessant and frenetic society growth.

The ageing population, the declining of fertility which contributed to lose the *ie* value [*TANAKA K., 2008, p.183*], the lack of space for the construction of new cemeteries and the unaffordable cost for a small piece of land had made Japan aware of a real problem.

In this chapter, we will see how, following the economic growth, which characterizes the first half of the twentieth century, the funeral industry became a real business, which reached its peak in the post-war years.

In the last few decades, Tokyo with its "mass death society" [ALLISON A., 2017] resulted to be the most expensive city were to die. In order not leave many families to fight with the end of life and to face the "relation-lessness" between generations [FISH M., SOLOMON E. G., 2019], new compacted and more affordable cemeteries typologies have been designed in the recent years: from the scattering of ashes to the innovative columbarium.

2.1 MODERNIZATION OF CEREMONIES AND BURIALS

NEW BURIAL METHODS

After centuries of isolation, in 1868 *Meiji* government opened Japan towards the industrialization. Facing to the western countries, authorities brought several innovations to the country.

Between 1955-1973 the country has been involved in an exceptional economic growth [AVELINE-DUBACH N., 2014] where the funeral industry, which appeared in the late nineteenth century, reached its peak. While the modernization and digitalization transformed the society [ULGUIM P., 2018], at the same time the country increasingly lost old customs.

Little by little, the society changes caused the *ie* broken. Consequently, the family grave became less popular and most of the time neglected *-muen funbo* 無縁 墳墓. Basically, *ie grave* was limited and unilateral²⁷, the economic burden of the maintenance fee and, in a society based on labor, the care of the family grave caused the broken of a deep-rooted tradition [INOUE H., 2011].

With all these changes, the country faces to a new typology of a common ceremony which takes the name of *chokuso*. Considered as a *"direct funeral"*, it consists of a simpler funeral sided by cremation that takes place immediately after the death²⁸ [IBIDEM, 2011].



Charnel house, Bansho-ji Temple Ossuary Crystal Palace, Nagoya. Source: http://blog. daum.net/bmpark1004/201

To face these transitions in the Japanese society, together with the shortage of land, authorities tried to establish new burial solutions. According to the variations in percentages which increased from 26.8% in 1896 to 97.1% in 1990- [Suzuki H., 1998, p. 183], cremation became a rooted practice in Japanese life. Consequently, in the 1990s the scattering of ashes gained social success, and, despite the Buddhist temples opposition, the natural funeral -shizenso- were promoted.

An alternative popular burial method is the "space burials" supported by the *Elysium space company*. A little portion of cremated remains is launched into space for a considerable price -\$1,990compared to the value of a burial plot in Tokyo [VINCENT J., 2013].

The "tree burial" in a large memorial park managed by temples is another option, popular especially between women. In some place there is the possibility to be buried under cherry blossom *-sakuraso*. Here, customers can choose from the different design typologies with distinction in prices. Ashes go directly into the soil without the necessity of any maintenance from the family. The temples offer eternal memorial service. One famous no-profit organization is called the Ending Center which opened in 1989 [ALLISON A., 2017 p.18].

Another kind of burial is *Nōkotsudō* 納骨 堂 which consists of a vertical cemetery containing ossuaries. Here people can buy an urn place or a vault in which the deceased-to-be will be buried.

⁽²⁷⁾ The ie grave could be inherit just by the family paternal side.

⁽²⁸⁾ Since 2015, it's possible to book a home ceremony on Amazon website paying around \$320 (35,000 yen) [COLARIZI A., 2018].

2.1.1 THE SCATTERING OF ASHES

SCATTERING OF ASHES AND GFPS

Although the practice of cremation has been present in Japan since ancient times, the *scattering of ashes* is a current topic [*Rowe M., 2011*].

Due to direct and indirect witness, it's not easy to understand how common and how this practice was diffused in Japanese history.

In 1990, Yasuda Mutsuhiko²⁹ with a friend discovered that, in some Japanese regions, communities were still disposing dead bodies close to rivers or elsewhere, without cremating them. Yasuda discussed that the practice was not illegal, actually was not covered by any laws. [IBIDEM M., 2003]

So, he highlighted this phenomenon and decided to promote the scattering of ashes.

Yasuda understood that choose how to be buried and if be buried wasn't a free decision in the country. As consequence, in 1991, he cofounded the *GFPS*³⁰, *Grave Free Promotion Society*, with the goal of spread scattering ceremonies all over the country and also support Japanese's freedom to decide how to be buried *[KAWANO S., 2010].* GFPS became famous for being the promoter of the *"natural funerals"* - *shizenso*. Actually, the ash scattering was reducing both economic and careful responsibilities to the younger generations. With this method, nature would take care of the ashes. Moreover, considering nature as eternal, after death the continuity would be preserved through nature *[KAWANO S., 2010]*.

The "new" practice supported by *GFPS* was environmentally friendly and traditionally connected with history. *[Rowe M., 2003]* In fact, forgetting the burial place was an ordinary usage in the Japanese traditions. As previously seen [See Chapter 1], in the early Japan erect a grave marker on the burial location was not in the usage, but it was built in a different place. Later, when grave markers started to be commoner, they were wooden realized so, the place was still unmarked due to the wooden decomposition.

Over the years, the natural funeral became very popular, so much that "in 1998 the term shizensō officially entered the Japanese language" [IBIDEM, 2003, p.86].



Scattering of ashes in the sea. Source: https://scatteringonwater.co.uk/news/ashes-sea-japan/

Despite its success, it has been criticized a lot by Buddhist monks. They argue that Japan doesn't have a sacred river like Gange where to scatter ashes, but the last ones have to receive a proper ceremony and grave [PRIEST YUKO MIYASAKA, 2004]. Nevertheless, monks idea is not correct, because, actually, GFPS is keeping alive the memorial ceremonies. Furthermore, this kind of funerals practice could take a lot of time before being actualized, because its a relatives' decision [KAWANO S., 2010, p.116]. Once the body is cremated following the traditional method, relatives, under the control of GFPS members, have to crush bones into powder [ROWE M., 2003, p.89]. Then, when ashes are ready, relatives generally scatter them in the mountains, in the forest or in the ocean, maybe even two years later.

According to the growing society and the economic development, funeral companies began to offer their own version of scattering of ashes. *Koeisha* became the first business organization Tokyo based to offer ocean scattering *kaisō- services [IBIDEM, 2003 p.108]*.

⁽²⁹⁾ Yasuda Mutsuhiko is the pioneer of shizenso and who cined the term. In 1991 conducted the first service with his Grave Free Promotion Society. ⁽³⁰⁾ The Grave Free Promotion Society 葬送の自由を進める会 is a NPO organization born in 1991.

2.1.2 NŌKOTSUDŌ 納骨堂

THE PLACE OF THE DEAD IN THE SPACE OF THE LIVING

The number of Buddhist temple in Tokyo Prefecture counts 2874 [AVELINE-DUBACH N., 2014, p.8]. Not all of them have a cemetery nearby but they are authorized to build a mortuary site.

In the last years, due to the shortage of the land in the city centre and according to the changes of society, monks opted to convert their authorized cemetery space into new conventional *Eternal Memorial Grave -eitai kuyōbo-* which takes the name of *nōkotsudō* -literally ossuary. It consists in a columbarium or *"Burial Hall for ashes"* [*FISH M., SOLOMON E. G., 2019*] where individual urns with deceased's remains are deposited inside.

Nōkotsudō typologies started to emerge in the late 1980s in accordance with the social and cultural changes, and especially in the recent years where the problem of relationship with the deceased increased. Since those years, *nōkotsudō* spread all over Japan.

While once Buddhist temples were supporting the family graves and the close relationship between the family's members, nowadays they promote the individual "locker-style" ossuary [SPRINGER K., 2017] correlated by a simplification in funeral ceremonies. Due to the "relationlessness" considered as a split between the consolidate relationship within the family's member, [FISH M., SOLOMON E. G., 2019], supporting a family grave became a problem.



"Coin-lockers" ossuary in Shokakuji Temple, Osaka. Source: www.setsuko-sakakibara.com

"There was a time when the family grave was always close to the home and visiting the grave was just part of one's every- day routine"

[Kiyoshi Sey Takeyama, 2019]



Jodo Shu Ichigyo-in Temple, Tokyo. Source: Photographer Miyagawa.

Essentially, in an ageing society, where many old Japanese nowadays die alone, *Nōkotsudō* accommodated urban demand. There are around one hundred ossuaries [*E-OHAKA.COM*] in the Toyko's 23 Wards which differs all in order to accommodate people needs. The different types can offer indoor plots, singular lockers, individual small altars and cellars with an automated storage system.

On the list on the website *E-ohaka*. *com* is possible to compare all the *Nōkotsudō* and choose the one that reflects the customer's needs. Generally, columbariums are placed inside a traditional or renovated temples; sometimes designed by a well-known architect, such as in the case of *Rurikoin Temple* [See Chapter 3] or *Jodo Shu Ichigyo-in Temple*, respectively designed by architect *Kiyoshi Sey Takeyama* and architect the *Kengo Kuma*.

Combing two dimensions like architecture and logistic dimensions, *Nōkotsudō* are mostly located nearby a lived area, such as a station to generate a closeness among the living and the dead [*FISH M., SOLOMON E. G., 2019*]. Indeed, they are easily reachable, and commuters can rapidly greet the deceased's parent on the way back home. In the temple, it is often possible to find a hall, farewell space, meditation zone, a prayer area, visitors rooms and columbarium with vaults. The more traditional temple that decided to leave untouched the architectural shape of the building, it just introduced the columbarium wall, such in the case of *Koukoko-ji Buddhist temple* 琉璃殿.

Situated near Ushigome-Yanagichō Station, the temple is surrounded by lush trees and vegetation creating a peaceful atmosphere. Inside the building, the wall counts 2,046 small altars with a glazed Buddha's statues, on the back side deceaseds' ashes are hide and stored. In order to get access, visitors have to swipe an Id card at the entrance door. Once entered to the columbatium their

Once entered to the columbarium, their corresponding LED Buddha statue lights up with a different color.

"Now, there are fewer children in Japan, so some people don't have anyone to take on the responsibility of caring for their tombstone anymore... it is getting difficult to hand over the family grave to the next generation."

[Buddhist priest Taijun Yajima of the Koukokuji Temple]

IMAGES

 Koukoko-ji temple from outside. Source: Tg24.sky.it
Koukoko-ji interior space. Source: https://edition.cnn.com/style/article/ future-of-funerals/index.html
A lady choosing her future vault. Source: Emiko Jozuka
Taijun Yajima the priest of the temple shows the lockers where the urns are storaged. Source: Tg24.sky.it







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Instead, in the lastest generation ossuaries, such as in Ruriko-in Temple with its 7,500 graves [See Chapter 3] and Jodo Shu Ichigyo-in Temple, there is an automated system and retrieval technology underground. Very silent and guick, it works as the previous one with a personal ID-card that kin have to own in order to enter to the temple, but here there is no personal vault. Thanks to the innovative system, urns, with a bar code inacribed to be recognized, are collected from the storage and distributed to the different altars placed in the "meeting room", usually characterized by warmth and private atmosphere [KUMA K., 2019]. As previously said, most of the ossuaries have been placed in the lived area and are really close to a station. This location has been studied in order to keep a living connection with the previous generations. Toyota L&F's company who developed the Ruriko-in system, during the promotional video it describes the temple as "another world close at hand" -chikaku ni aru betsu no sekai. There is a strong connection between the Shinjuku station containers (commuter trains) and the rectangular boxes measuring 28/28/65 including ashes: both are moved according to a network of railways [FISH M., SOLOMON E. G., 2019].

In *Nōkotsudō*, ashes are stored for a period of 13, 33, 50 years relating to the amount paid during the acquisition. In the case of *Koukoko-ji*, ashes are kept for 33 years before being interred definitely under the *Ruriden* building in a communal area, in order to make space for incoming ashes. In *Ruriko-in* case, ashes are stored in the building forever.

Nōkotsudō, with their eternity treatment, represent the ideal solutions for those who are single, doesn't have a family anymore, don't want to burden to relatives who lives out of the city or can't enter to the family grave³¹. According to this, many people die alone and are discovered days or weeks later in their apartment. This phenomena "called lonely or solitary death" -kodokushi, koritsushi- [ALLISON A., 2017, p.18] became very common in recent years.

Over all, it is a cheap solution compareed to the old and traditional grave where a plot of 3 sqm could cost \$100,000. Temples sell different kinds of packages, such as an individual, couple or familiar one and prices vary according to the customer's choice.

Although nearby residents' complaints the *Nōkotsudō*, especially the one studied by *Toyota L&F* system, exploiting a small lot in the heart of the city, resulted really successful.

In urban areas, these kinds of buildings classified as *"indoor ossuary"* have increased by 30% in the last ten years *[Nikken Asian Review, 2017]*.

IMAGES

1. Space before entering to the "meting room" where altars ale located. Source: Photographer Miyagawa.

2. Altars in Jodo Shu Ichigyo-in Temple. Here visitors receive their urns. Source: Photographer Miyagawa.

⁽³¹⁾ Sometimes women could not enter the family plot of her father because her married name was different. At the same time, She wasn't able to enter the family plot of her husband either, because he was a second son and hadn't yet purchased his own family plot.

2.2 THE PRE-FUNERALS PRACTICE

SEIZENSŌ 生前葬

Therefore, the deep authorities of the funeral industries' caused a decadence of the burial ceremonies, which used to be opulent in the past. Old people, disoriented by modern society and missing the traditional rites with meaningful religious connotations, feel the need to organize their funeral. So, at the end of the twenty-first century the *pre-funerals -seizens* \bar{o}^{32} - developed. Pre-funerals are conducted during life and "express new ideals of independence and self-sufficiency in later life" [KAWANO S., 2004, p.156]

To the end of the 1980s, funerals had evolved into ceremonies sets sold to the inhabitants.

Aged Japanese, total strangers with the new Japan, started to take charge of their ceremony and plan it. During the ritual, all the attentions are on the future deceased who speaks and plays as an actor. The deceased-to-be declared that doesn't need a popular funeral, but he just wants to customize it according to his needs. Sometimes, doing the funeral in advance, people reduce relatives pressure and unburden them of a large amount of money³³ charged for the final funeral.

⁽³²⁾ Seizensō 生前葬 literally means funerals during life.

⁽³³⁾ The average in 2008 price is 2,31 millions of yen. [Japan Consumers' Association_https://japantoday.com/ category/features/opinions/planning-for-a-funeral-in-japan]

⁽³⁴⁾Born in Hokkaido, *Mizunoe Takiko* 水の江 瀧子 was a Japanese actress, film producer, radio and TV presenter.

The famous *Mizunoe Takiko*³⁴ has been the first actor of a documented prefuneral which took place in 1993 in a Hotel in Tokyo *[IBIDEM, 2004, p.156]*. Celebrated like a party with numerous guest, an altar with flowers and music, at the end, the madame thanked her guests and said goodbye to everyone.

The importance of seizenso is relevant for Japanese because it makes the deceased-to-be realize how temporary his existence is and prepare him for a new start, waiting for the last real day. [IBIDEM, 2004]

Furthemore, several aged people go to book and choose their urn's place ahead of time. CHAPTER 02

"It's fate that I got introduced to this style of graveyard. It's much more convenient," said Yumiko, a woman in her 70s, "I don't want my relatives to go to the trouble of maintaining my tombstone when I'm gone."

[Yumiko Nakajima, 2016]

2.3 HOTEL FOR DEAD

ITAI HOTERU

Due to the high number of dead people that affects Japan every year and will mark the close future -in 2040 number of death will change from 1.33 million to 1.67 million [COLARIZI A., 2018]- the country felt the need to build itai hoteru -translated as corpses hotels. These structures 24 hours opened, while look like common buildings from outside, in the interior, can guest dead body waiting for the cremation slot. In the city of Tokyo, in the peak periods, the queue extends until one week, due to the limit number of crematorium [See Chapter 1].

The *itai hoteru* is a cheap solution to storage the bodies. Designed with several rooms, intimate relatives can pray and in some of them spend the night with the deceased until the cremation call. The first *"hotel for dead"* opened at the beginning of twenty-first century, and there is just a little number compare to the large amount of population. Kanagawa prefectureⁿ with a population of around 9 million, presents just 20 authorized crematoriums with more or less 80,000 annual deaths [LEWIS L, 2018].

Lastel is a "hotel corpse" in Yokohama owned by Hisayoshi Teramura. Here, it is possible to rent refrigerated coffins for \$106 (9,000 yen)per day. When families plan to view the deceased, the automated system delivers coffins from the storage. The structure can gust normally 18 dead bodies, in case of necessity, it can be easily upgraded.

Different protests diffused toward the opening of *itai hoteru* between the population, but there are no strict rules that forbid the construction of this kind of mortuary structures nearby residential area [*RICH M., 2017*].



While crossing the infinite streets of Tokyo, one thing stupefied and interested me at the same time: the incredible closeness between graveyard and houses.

In Italy, we are used to seeing cemeteries detached from the urban centre, due to healthfulness, peacefulness and respect for the burial sites³⁵.

In Tokyo, every time that I was going up to observe the city from above, I got surprised by how many balconies were facing to tombstones.

Most of the people are not enthusiast of living in those apartments adjacent to graveyards. *Jiko bukken* 事故物件, translated in English as *stigmatized property* or *incident property*, are the houses or apartments in which some negative accidents happened inside, for instance, a lonely death, suicide or other facts. In this case, if a flat placed close to a cemetery, it will be mildly stigmatized depending on the view from the window [*SWANCER*, 2018].

"The thought of having to wake up and see that for the rest of my life — it's too much,"

[Watanabe H, 2001]

meigi-gashi

Due to the shortage of graveyards of the recent years and the unstoppable development of the cities, many empty areas turned to be cemetery plots or several houses have been built close to burial grounds. According to Japanese law, except the Buddhist temples, only noprofit organizations have the permission of construction and run cemeteries. Actually the residents complain that most of the times these conditions are often abused in order to profit from this market. Besides, they affirm that some head priests of local temples are involved in an activity called *"meigi-gashi"*, where they got money from private companies who actually run the cemeteries. Named by the opposer locals, this practice consists in the arrangement of gravestones next to residential houses in the already densely populated areas of Tokyo. Additionally, cemeterial lands are free of taxes and those grounds can be sold for up ten times the price of the soil on which cemeteries are built.

New revisions have been developed in order to figure out this problem and to solve the high discontent among residents.

Nowadays temples must be the owner of the land under development and the temples out of the city of Tokyo can no longer be the handlers of cemeteries [GILHOOY, 2001].

⁽³⁵⁾ In June 1804, Napoleon Bonaparte established the "Décret impérial sur les sépultures" or better known as "Edict of Saint-Cloud. According to this document, new cemeteries and the burial practices were regulated. Bodies could'not be buried in the church anymore, but must be interred outside the city's walls.



Closeness between houses and gravestones, cemetery in Nishikamata. Source: Author.



Severals multi-storey building facing to the Aoyama cemetery. Source: Author.

CHAPTER 03





This chapter consists of a historical-critical analysis of six cemetery projects carried out by world-renowned architects from the late 1990s to the present day. From the map on the left it is possible to understand how the analyzed complexes are geo-located throughout the Japanese territory: from the *Hokkaido* island to the north with the *Hill of Buddha* by *Tadao Ando*, then down to the area around Tokyo with the Sayama Lakeside Cemetery by *Hiroshi Nakamura and NAP*, passing through the Japanese capital with the *Ruriko-in Hall* by *Kiyoshi Sey Takeyama + Amorphe*. In Gifu Prefecture, it is possible to find the *Meiso No Mori Funeral Hall* by *Toyo Ito* and just below the *Inagawa Cemetery* and *Chapel* by *David Chipperfield Architects*. Lastly, in Oita Prefecture, the *Kaze No Oka Funeral Hall* by *Fumihiko Maki*.

These sites, located mainly in unurbanized contexts, are part of public and private cemeteries already existing before projects' construction or renovation. The only structure among the case studies analyzed that is placed in a densely urbanized context is the *Ruriko-In Temple*.

In order to analyze these case studies exhaustively, in-depth research of bibliographic sources in international journals was fundamental. This together with all references is included at the bottom of each paragraph on the individual case study. The following analysis is flanked by a series of photographs, some of which were taken by the author, and different representation tools such as plans, 3D models, illustrations with isometric explosions, perspective views and where necessary sections in order to make the reader better understand the project. In addition, this design rereading is accompanied by four key concepts, represented through essential drawings placed at the beginning of the study of each project. These analytical categories briefly summarize the salient points of each project which are access, narrative dimension, isolation toward the surrounding and visibility in the context. Finally, these parameters will be reused in the final part of the thesis work for further analysis of the results of a recent competition on vertical cemeteries in Tokyo.

3.1 Kaze-no Oka Funeral Hall - 風の丘葬祭場

Fumihiko Maki & Associates



Location Nakatsu, Oita prefecture, Japan

Structural System Reinforced Concrete, Steel

Site Area 33.317 mq

Building Area 2.515 mq

Construct period 1997

Architects Fumihiko Maki & Associates







ISOLATION TOWARD THE SURROUNDING



VISIBILITY IN THE CONTEXT







Over the years Nakatsu's 30 years old facilities became old-fashioned and inadequate, so the well-known designer, theoretician, teacher and architect Fumihiko Maki³⁶ has been invited to design an updated version of the complex and create a connection with the park surrounding. After a personal experience, he conceived the new municipal crematorium Kaze No Oka -風 の丘葬斎場 that literally means "Hill of the winds". In fact, it is placed on a hill ground in the outskirt of Nakatsu, a small city of 70,000 people in the South Island of Kyushu, and the building has been designed with the collaboration of the professor of landscape architecture Toru Mitani.

"The qualities of great architecture are those that provide rich spatial experiences and the provocation of images"

[Fumihiko Maki]

In the vast area in which the complex is situated, an oval grassy and path has been placed on the top of this hill. It has been curved and tilted toward the south and, to complete the scenery, designers planted a row of trees in a way that the line of the mountains is emphasized. In totally harmony with the surrounding nature, together with the existing cemetery and several 3rd-century burial mounds discovered just a few years before, during early site investigations, the complex creates a suggestive landscape well merged with the context. In its entirety, it is considered as a sculpture in the park. Moreover, not just structural and aesthetics expedients, but acoustics ones as well. In fact, in a cutting in the ground, a "body" has placed in order to createreverberates. Wind bumps into it and generates singular and harmonics tones.







Spaces division

Cremations in Japan are highly ritualized ceremonies and generally follow a set process that begins with the farewell service, followed by incineration and closes with the enshrinement of the deceased's bones and ashes. Succeeding this sequence of spaces, Maki conceived correlate rooms with each other.

The crematory is divided into three main spaces: the funeral hall on the west side where vigils and funeral service are held, the cremation area on the east side and a waiting rooms in the center where to spend time between the functions. The geometrical shapes that depict the spatial character of each of three buildings were complete with brick, Corten steel and fairfaced concrete. All these materials with a natural character, in order to maintain a deep connection with the environment, have been carefully chosen.

"We decided to use colors ranging from gray to black, to express dignity, and brown, to create a feeling of gentleness"

[Fumihiko Maki]

Moreover, with the intention of creating abstract sculptures merged with nature the real height of the constructions is hidden by mounding up the surface of the grass.

⁽³⁶⁾ Maki had been among the first young people from Japan to study in the United States after World War II (POLLOCK N. R., 1998). He's one of the most American-oriented, and in that sense most Westernized, architects in Japan. But at the same time he shows us something Japanese in his work.
Well combined with the nature, the building presents a fluid appearance where the spatial organization plays a fundamental role.

The keyword of this project was what the architect called "Ma" translated as a gap between every space.

Instead of funerals in the Tokyo city center, where people are at every corner, the architect's idea is translated into the project designing a very well-space building.

> "Circuitous but deliberate, winding but goal-directed, passage through the building recalls the approach to a traditional shrine or temple where the final destination is not revealed at the outset"

[Fumihiko Maki]

Maki with this concept reminding to the tradition of Japanese shrine and temple tends to create a "transition spaces". From the entrance to the complex, people are involved in a process that, unintentionally, have to follow. Every single room, connected by walkways and corridors, is spaced to the next one in a way that visitors have time to stop, both temporally and virtually, reflect and walk before access to the next room. In this way, they also contribute not to reveal the final destination but to create a mysterious feeling.

In order to provide the right atmosphere according to the room activity, windows are minimized and are placed close to the ceiling or the floor level to keep privacy and to emphasize the volumes.

Spaces division:

- 1. Entrance
- 2. Forecourt
- 3. Entry porch
- 4. Oratory
- 5. Inurnment room
- 6. Crematory hall
- 7. Furnace room
- 8. Waiting lobby
- 9. Waiting room
- 10. Chapel



Opaque walls

Existing gravestones





The crematorium can be easily reached by car and once arrived at the site, visitors can enter through the main entrance on the north side. This space, created in order to make people comfortable, is thought as an environment to prepare them before entering. Indeed, since the first moment, the path direction is diverted in order to hide visitors' view and make them concentrate on their feelings. Here, it is framed by a long horizontal wall of bricks and the roof of the porte-cochere in a position offering convenient access to all the buildings. Walking through the gallery, at the end of it, there is the crematoriums building's semi-opened porch where, without any structural function, a pillar stands in the room ending in a gap into the ceiling.

Artificial light is rarely used, priority is given to natural light coming from above, designing a purely symbolic space.

mourners Moving on, reach the oratory. The latter represents the place where the last goodbye with the deceased takes place and in order to generate a suggestive atmosphere, in this room light is semi-screened through a latticework of bars. Consequently the farewell ceremony, relatives gather for the last send-off before the cremation. These typologies rooms are designed to face the opened court with a basin of water where space is surrounded by floor-to-ceiling glass.

A system of pipes is placed on the bed of stones in order to let water circulate regularly and quietly and to remove the overflow due to the rainwater. The sky view and the reflections played with clouds and water are another way to make people involved with feelings and emotions and let them come back with the outside world.

Transition space separates the latter rooms to the incinerators and here more than one family may be present at the same time.







So once bodies are moved to the furnaces, relatives are invited to have a break in the waiting rooms.

Through a passage with a wooden slope on the left and concrete steps on the right, visitors go-ahead to the waiting area, designed differently from the other spaces of the building. This area is the only one in the complex that faces to the surrounding park. Interacting with the level change of the ground, the triangular wall which pierces the wide garden is angled in the direction of the stunning range of the *Yabukei mountains*. The waiting area, provided of small tables and tatami floor, let relatives can sit and enjoy the beautiful traditional landscape framed by the large windows.

> "It was wintertime and we were taken to a big crematorium, it was like an airport terminal, there were so many cremations happening at once. It took less than one hour for the cremation. [...] It doesn't give people the repose of time to think about the deceased." [Fumihiko Maki, 2009]

Later when the incineration process is ended, staff hand over bones and ashes to the relatives in the enshrinement room. In order to give a warmer impression, the room presents walls and ceiling plastered and the light passes through horizontal louvres, creating calibrate spots of light. Going toward the funeral hall people have to walk along a semi-opened corridor where the beautifulness of the Kaze-No-Oka park is emphasized. Creating some dynamism in the hall, the architect designed an octagonal shape -7m high- with the walls of the façade lightly inclined toward the visitors giving the idea of collapsing.





CHAPTER 03

Four circular skylights create a vertical atmosphere and on the left side, light reflects on the pool of water on the external perimeter and enters through a low window. On the exterior, the massive octagonal shape presents an idea of stability and gives the impression of being stuck into the ground.

Different geometries and materials contradistinguish the Kaze-No-Oka Crematorium. Every part of the building is deeply studied and well distinguished from each other.

Considering Kaze-no Oka as a building related to the daily life of normal people, Maki didn't want "to create a very light and open space because then it becomes like a sport club" [NEUSTEIN D, 2009]. Even though there are no rules on how to make a crematorium, space should be studied in order to offer something to relatives, not just the pain of death. That's the reason why all the details are accurately designed. Moreover, in order to make a clean and tidy architecture, thanks to the advanced technology instead of one large chimney, he realized six small and short chimneys, which were easily masked by the building's parapets. Trying to hide all the elements that could remind to a cemetery, people once in the park "they see how nice it is, they tend to come back." Even if "the idea of being next to a crematorium is a little creepy," says facility director Katsuhiko Oie, "people are starting to use the park more and more." Maki worked really close to the project and often designed details during the construction of the building. All these elements demonstrate how much the building is connected with the earth and the environment surrounded by.

The complex has been appreciated not just for the attention to details but also for the architect's handling of the subject of death. All the expedients make the Maki's architecture truly connected with feelings and emotions. In fact, Fumihiko Maki conceived this project consequently the experience of his mother's cremation. He understood that was necessary to realize not just a crematorium but even a place where people, while going for the cremation they can also reflect and spend their spare time and enjoy the atmosphere. In this way, he designed a sequential experience of places which make people impressed and live like a journey from the arrival to the left. Maki's architectural philosophy has been deeply understood that many people wanted to be cremated in this complex, so much that young people go there to register their name in advance.

In Kaze-No-Oka Crematorium families can hold ceremonies inside the building and prices range between \$138 for the super basic one to \$5,511for the most opulent one (15,000 yen to 600,000 yen). With the cheapest one, just five people are admitted to the ceremony, instead of around one hundred people are accepted with the most expensive one.



Cover. Entry porch with an iconic pillar ending in a vacant hole. Source: http://www.workvisions.co.jp/weblog/2014/10/14

1. Exterior view of the whole building, like a "sculpture" in the park. *Source: https://www.51tbtx.com/21phc2/xepk5.html*

2. Passage to the entrance with concrete and opaque walls and wood ceiling. *Source:* https://note.com/ronro/n/ncd1b99095668

3. Transition space between the waiting area and the funeral hall from which the photo has been taken. *Source:* https://note. com/ronro/n/ncd1b99095668

4. Entrance of the farewell room with warm atmosphere. *Source: https://www.51tbtx.com/21phc2/xepk5.html*

5. View to the water courtyard. *Source: https://iwase-atelier.* com/blog/7442/

6. Passage in front of the farewell rooms.

Source: http://www.workvisions.co.jp/

7. Waiting room view to the planned park. Source: https://note. com/ronro/n/ncd1b99095668

8. Water mirror close to the chapel space. Source: http:// ishikawa-ao.hatenablog.com/

9. Interior view of the chapel. Source: https://finn-wilkie.tumblr. com/post/134822925759/fumihiko-maki-kaze-no-oka-crematorium-nakatsu

10. Corridor between the courtyard and the farewell rooms. Direct light from the courtyard comes in. *Source: https://note. com/ronro/n/ncd1b99095668*

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Tadao Ando Architect & Associates



Location Sapporo, Hokkaido, Japan

Structural System Reinforced Concrete

Site Area 1,800,000 mq

Building Area 402 mq

Construct period May 2014 - December 2015

Architects Tadao Ando Architect & Associates





Makomanai Takino Cemetery -真駒内滝 野霊園- is located in the outskirt of South Sapporo, Hokkaido³⁷, about 20 km from the city center. Opened in the 1884, the cemetery is considered as a park-like complex. With its enormous dimensions and lined up graves, *Takino cemetery* covers an area of around 180 hectares. At the entrance, at one edge of the site, it is possible to find a reproductions of twenty Easter Islands Mooi sculptures and further down a replica of Stonehenge on scale 1:1, representing a sacred place which connects the earth to the sky.

> "Hokkaido is a vast land of great nature splendor. Its beauty is awe-inspiring that evokes forgotten feelings in Japanese. Emotions bring out our drive to live. The whole body of the Ataman Daibutsu can't be seen from outside. Snow accumulates on its head in

What remains hidden from view sparks the creativity."

[Tadao Ando, 2017]

Close to the entrance the area has been dominated for 15 years by a huge - 13.5 tall-meters per 1500 tons- *daibutsu³⁸*. In order to enhance the great statue lost in the landscape and to create a new attraction, the cemetery administration enlists the well-known Japanese architect Tadao Ando³⁹.

winter.

So, based on a previous construction, the architect proposed an artificial hill called *"Hill of Buddha"* from which only the head looks out.

³⁷ Hokkaido -北海道- is the second main island of Japan and the largest in the north of the country. The capital and biggest city of Hokkaido is Sapporo -札幌市.

³⁸ Daibutsu, 大仏 in Japanese, or *giant* Buddha is generally used for Buddha statues with vast dimensions.

³⁹*Tadao Ando* is one of the most known architect in Japan. Born in Osaka city in 1941, he is a self-taught architect.





the architect with its intervention, more connected to landscape architecture than architecture, managed to enhance deeper the beauty of this land, so much that the area is not considered just like a

"The project might be considered on the scale of landscape rather than architecture. It required a special frame of mind to rearrange the environment and was a challenging and precious experience for us."

cemetery, but like a park too.

the 35-year-old cemetery.

[Tadao Ando]

Completed in December 2015, it has been opened to the public in July 2016 and become the stunning centrepiece of

Changing appearance in each season,

The "park idea" plays a decisive role in this development because the area is attended by many families with their kids. Here they can play, run and rest on benches distributed along the path. Furthermore, festivals and fireworks events held in the area are a big opportunity to bring people from the cities nearby and create impressive scenery. Following the traditional Japanese festivals, the most crowded days are the Obon days⁴⁰ on 13th and 15th August. During the three-days festivals around 100,000 visitors come to the Takino cemetery. Here relatives go to their deceased's tombstone for praying and on the "Spiritual Sacrifice" day a ceremonial bonfire is set at the cemetery park creating a suggestive scenery.

⁴⁰Obon -お盆- or just Bon -盆- is an annual Buddhist festival for commemorating the deceased people. Each year during Obon event, it is believed that ancestors' spirits come back to the living world to see off their beloved relatives. This festivity belongs to one of the three major holiday seasons in Japan with New Year and Golden Week. Obon is observed from the 13th to the 15th day of the 7th months of the year, which it changes according to the solar or lunar calendar - August or July.







Drawing by Tadao Ando

The idea of the project arose from the cemetery director who wanted to create a pleasant and welcoming cemetery enhancing the attractiveness of the site with its seated cross-legged Great Buddha. Tadao Ando inspired by the Ajanta rock caves⁴¹ and the Dunhuang *caves*⁴², taking advantage of the sloping hill of the park where the cemetery is located, and close to the Buddhist tradition of place huge Buddha's statues inside the temples, he embedded the statue designing a gentle landscape with changeable green skin enclosing the pre-existing stone. He covered the new architecture by 150,000 colorful plants of lavender⁴³ disposed of by concentric circles. Consequently the change of the seasons, the plants are green during spring, turn to purple during summer bloom, and become totally white in winter due to snow reasons.

"The design intention was to create a vivid spatial sequence, beginning with the long approach through the tunnel in order to heighten anticipation of the statue, which is invisible from the outside."

[Tadao Ando, 2017]

The architect, to give a more serene appreciation of the complex, designed a lively spatial sequence that people have to follow in order to see the Buddha. Indeed, in order to encourage people imagination, the statue can't be seen from outside, except the head that comes up from the hill. The project is divided by a central axis path 130 meters long which leads people to the hall placed at the end.

⁴¹ Placed in India, the Ajanta Caves is considered UNESCO World Heritage Site as a masterpiece of Buddhist religious art. It consists in around 30 rock-cut Buddhist caves monuments which constitute ancient monasteries and worship-halls.

⁴² Treated a UNESCO World Heritage Site too, the Dunhuang caves, also known as Mogao caves, are situated along the Silk Road. Carved into the cliffs above the Dachuan River, in China, they represent the wider, richest and longest used treasure house of the Buddhist art in the world.

⁴³ Lavender is a local flower that represents the beauty of the region. All the plants have been planted on ground nearby and later replanted on the project site.

To emphasize the peaceful atmosphere, after about half of the way, before entering the tunnel, visitors have to cross a courtyard surrounded by a concrete wall with a transverse rectangular water basin.

To make people' soul purified, Ando forced them to walk around the basin on the right or left. Water represents a sacred boundary which symbolizes the division between life and the spiritual afterlife.

On both short edges of the courtyard, there are two circular pavilions. They remind and reinterpret the two bell towers that already existed on the site. Those were removed for the new project and nowadays are spaces used as a gallery and café during warm seasons. Here Ando used the traditional formwork matrices in the format of tatami mats for the courtyard walls.

Crossed water people are back on the central axis that brings directly to the end of the structure. Using bare reinforced concrete as a material, he realized a dark 40 meters tunnel that gradually and mysteriously conducts visitors to its end.

No artificial lights are included in it, spaces are just brightened by natural beams of light coming from the entrance or from the top of a truncated cone placed at the bottom of the tunnel.



Spaces division:

- 1. Chozuya (water for puri-
- fying yourself)
- Water court
 Circular pavillion
- 4. Approach route
- 4. Approach
- 5. Tunnel
- 6. Buddha Rotunda
- Passage spaces
- Opaque walls



The concrete ceiling made by a ribbed concrete structure, forming arches onesixth of the circumference in size, ends up with the open-air Buddha Rotunda that embraces the great statue.

"When the hall is reached, visitors look up at the Buddha, whose head is encircled by a halo of sky at the end of the tunnel."

[Tadao Ando, 2017]

Here, people stand like a dwarf in front of the giant Buddha which, according to Ando's will, it is exposed to the atmospheric agents, a condition that strengthens the visitor's spiritual encounter. In fact, during winter, snow covers the entire landscape, including the hill, which ultimately looks like an archaic burial mound, a monument from ancient times.

Regardless of religion, sex, and nationality, anyone can be buried in this traditional cemetery choosing the grave typology among different options. Makonomai Takino cemetery is a very huge area and here it's possible to find and eventually choose different gravestones typologies from the resort funeral area, to family tomb and pet grave. Regarding prices are not so affordable thou, for example, a tombstone maintenance fee in the Rose Garden price is around \$8000 for two people. If someone doesn't have any successor, the deceased can be placed in the Furusato Mausoleum paying \$1130 (121,000 yen).







The designer didn't think just to the architecture aspect, but he also created a thoughtful and isolated path, where, while walking toward the nstural lighted end, visitors can pray, reflect, feel different emotions and listen to the eco of sounds. In this way, the architect designed a real meditation footpath where visitors can focus on their feelings and experience a suggestive atmosphere changing during the day.

Moreover, creating a covered architecture, he avoided the problem of climate. The changeable weather, especially in Hokkaido winter, could interrupt the prayer of the people who had come to visit the family tomb.

The Ando's design was decisive in increasing the beauty of the site. While from the outside the volume is hermetically closed and even if a partly underground project, it created games of lights, paths of reflection and undoubtedly a suggestive atmosphere once people reached the bottom of the tunnel. Nature has an important role in his projects and with the hill he tried to create a connection with built and the surrounding nature.

Using vegetation as a cladding, Ando has made environment take control of the space, "[...] reshaping the way we view the manmade element inserted into the land" [TADAO ANDO, 2018].

Furthermore, with his development, he increases the site mystique feeling and make the area feel more sacred.





Cover. The head of the great Buddha coming out from the hall. Source: https://fotopus.com/index.html/module/Library/action/ContributeImageDetail/cont_cd/2706270#/page/5/

1. Front view. The former statue standing in the cemetery before the Ando's intervention. *Source*: https://blog.goo.ne.jp/maruo5278/e/122264a25fa546ba9d32ff45ff853d3b

2. Great Buddha frontal view after Ando's construction. *Source:* https://www.lecosmopolite.it/tadao-ando-sapporo-buddah/

3. Before 2014 the statue was standing alone in the huge cemetery. *Source:* https://www.davidairey.com/tadao-ando-hill-of-buddha

4. Artificial hill view covered by lavender plants. *Source: https://tabilist.net/24264/*

5. Aerial view over the complex. The gently sploping hill embraces the Great Buddha. Two circular pavilions are connected by a water basin. *Source: https://www.floornature.it/mostra-tadao-ando-challenge-armani-silos-milano-14613/*

6. Approching to the tunnel. The hill covered by meters of snow looks like an ancient burial mound. *Source: Author*

7. The ceiling of the tunnel-shaped passage that leads to the Great Buddha is realized in ribbed reinforced concrete structure. *Source: Author*

8. The view of the whole Buddha. Source: Author

9. Particulary view of the Great Buddha covered by snow due to the openineg over its head. *Source: Author*

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CHAPTER 03





Location Inagawa, Hyogo prefecture, Japan

Structural System Reinforced Concrete

Site Area 144.477,28 m2

Building Area 631,08 m2

Construct period 2016 - 2017

Architects David Chipperfield Architects




ACCESS



ISOLATION TOWARD THE SURROUNDING NARRATIVE DIMENSION



VISIBILITY IN THE CONTEXT







The uncommon topography of the Inagawa cemetery placed in the Hokusetsu mountains range, north of Osaka, dictates the nature and development of the new visitor center. Taking advantage of the site conformation, the complex, which presents a warehouse designed by Tokyo studio Key Operations characterized by a carbonized and red-dyed cedar cladding, is expanded across terraces and it is considered as the largest park cemetery of the Kansai area. In 2013, it has been commissioned by the Boenfuyukai Foundation, same owners of Savama Lakeside Cemetery, to the English architect David Chipperfield.

I see this chapel as a contemporary sanctuary that transcends religious denomination. Kind to visitors and a home to gods and Buddhas, without any particular religious affiliation, this is a place that allows us to rest.

[Hideyuki Osawa]

It opened to the public in May 2017 and thanks to the abilities of the architects, it results perfectly merged with the lush surrounding environment.

Regardless of religion or cultural background, people from inside can enjoy the beautiful and colored landscape through the big window frames that characterize the whole project. Spaces are all aligned with an architectural flight of stairs that has a central role in the complex.







Conceived as a contemplative space, the *Inagawa Cemetery* presents a visitor center and chapel. It is placed across terraces and it's crossed by a monumental staircase heading visitors up to an existing shrine at the top of the mountain. It divides the site into two parts and marks the project's axis on which the entire complex is developed.

According to David Chiepperfield⁴⁴ project, all the functions of the complex are combined under one sloped plane roof which line follows the view direction from the access up to the end of a route. It begins at the entrance and is symbolically marked by a water trough. On the same axial direction which links the two ends of the site, a small stream comes down from the shrine on top directly towards the entrance of the building. The gate represents an important passage which separates the two world: the living one and the sacred one. Designed as big opening, the gate frames lush vegetation which in turn partly covers what lies behind it. A small pool of water is placed just next to the entrance.

"The building is unlike any other in the past, and as my friend, the artist, Thomas Struth, aptly remarked, "Small but big at the same time." With its exquisite balance, it is also a place that is gentle yet strong, sacred yet intimate."

[Hideyuki Osawa⁴⁵]

Water has an important and strong connection: it represents the edge between two worlds and between past and present. This essential meaning is spread too through the Chipperfield's architecture. He creates an aggregation of contemplative spaces under one roof and it acts as a gateway between the present life and the afterlife, where people can gather before moving into a restful atmosphere.

⁴⁴ Born in 1953, David Chiepperfield is an English architect well-known over the world. He has several offices such as London, Berlin, Milan and Shanghai. ⁴⁵ Hideyuki Osawa is the chief director of the Boenfukyukai foundation. During economic growth, it promoted the realization of different high-quality cemeteries between the 60s-80s. Later according to people changing needs, the Foundation shifted its attention on creating a more cosy environment for visitors and relatives.

The roof, the walls and the ceiling are all realized with poured reinforced concrete of a light reddish tone -polished in some surfaces and sandblasted in othersthat gives a monolithic and uniform appearance to the structure. Using the same material on all surfaces, the building presents an unusual effect. The interior space presents a regular shape plan with many rooms gathered around the courtyard, except the isolated chapel. Placed on the north-east side, it is possible to enterinto the chapel through a small corridor from the courtyard or, as an alternative route, from a slight ramp from the car park. Designed as one single room pure in its form, it is well isolated from the exterior world and it has been designed as an unadorned and guiet room.

"Light works like sound, constantly changing, affecting the mood of a place and how we view it"

[Edmund Sumner, 2018]

With minimal heating and artificial lighting, it presents large windows disposed on either long side of the room facing onto different small gardens, one a little bit bigger than the other on the left side. Being the gardens surrounded by opaque walls, indirect sunlight enters from the top opening of the green space creating a suggestive and intimate ambience.

The silence and the lack of religious elements make it a contemplative space where the passage of time is scanned by natural indicators.

Spaces division:

- 1. Entrance
- 2. Chapel
- 3. Tree garden
- 4. Reception
- 5. Memorial room
- 6. Wildflower garden
- 7. Visitor room
- 8. Lavatory



Passage spaces

- Opaque walls
- - Existing gravestones





Just a few essential elements are present in the spaces. Designers opted to use very simply, informal painted wooden furniture such as chairs, benches and tables custom designed specifically for the project.

On this side of the building is possible to find the reception, the archive and some staff rooms.

In the middle between the chapel and the other part of the building, there is a corridor with three memorial rooms. They are divided by pleated *washi*⁴⁶ curtains and presents minimal furniture that can be re-arranged according to mourners necessities.

> "The balance between the naturally lit shadowy areas and artificially lit areas was a theme that I was drawn to photographing this project. I found myself revisiting certain areas at different times to capture how light changed throughout the day."

[Edmund Sumner, 2018]

Chipperfield architect opened southeast façade with a big window frame and directs the gaze toward the top of the hill. Moreover, these informal spaces where people can eat and relax, are all facing a wildflowers courtyard which represents the heart of the building. It has been inspired by delicate colors coming from the Japanese countryside and here is possible to find bushes and traditional Alpine flowers.

On the opposite corner of the prayer room, divided by the green garden, people can gather and rest in the visitor's room provided by tables and chairs surrounded by wall glass in order to admire the greenery in the middle.







Thanks to the different expedients studied by Chipperfield, the project presents a unique atmosphere enhanced by keeping a common language throughout all the project. Visitors once inside, especially into the chapel, can pray and focus on the rhythm of time underlined by nature sounds, waving leaves and indirect or artificial light. In order to create the right atmosphere the artificial light composition, which plays an essential role in the project, has been deeply studied by Viabizzuno light designers.

> "Relying on indirect sunlight from the gardens on either side, the chapel visitor finds seclusion and their focus is drawn to the essential rhythms of time through the natural indicators of daylight fluctuation and seasonal foliage changes."

[David Chiepperfield]

The strategy utilized by the architect of highlighting the connection between old and new and life and afterlife is a remarkable process.

Using simple elements, such as the stairs connecting the two poles of the site or the water component, he managed to create a deep evocative design, making the complex the counterpoint to the shrine. Overall, David Chipperfield's architecture, pure in its form, results perfectly on balance and well merged with the lush surrounding environment. Moreover, regardless of religion or cultural background, people from inside can enjoy the beautiful and colored landscape thanks to the constant visual connection through the full-height openings directed to the top of the mountains. In this way, he wanted to make people react in front of beautiful scenery, feeling emotions and sensations in a way that they can become attached to the place.







"Our mission is to further develop the value of the building as a person who takes responsibility for caring for it after building it down. I hope that people from all over the world will visit and become a place of prayer that can be shared beyond the religion and race through the ages, and that idea spreads like a ripple."

[Hideyuki Osawa]

⁴⁶Washi 和紙 is the traditional Japanese paper where "Wa" means Japanese and "shi" means paper. In Japan is a really important Japanese craft and it is registered as a UNESCO cultural heritage. It is made from local fibre and manufactured by hand.



Cover. Particular of a passage connection. Source: Photographer Edmund Sumner _https://www.designboom.com/architecture/ chipperfield-inagawa-cemetery-08-08-18/

1. The conformation of the ground where the cemetery with its gravestoned develops. Source: http://www.boenf.org/reien/inagawa/index.html

2. Side view of the building well merged with the cemetery. Source: https://www.keyoperation.com/archives/projects/ inagawa-reien/

3. Entrance of the building. On the background it is possibile to see the ossuary on the top of the mountain. *Source:* https://www.keyoperation.com/archives/projects/inagawa-reien/

4. Photo took from the staicase to the building. Source: http:// www.boenf.org/reien/inagawa/index.html

5. View on the courtyard, photo took from the chapel side. . Source: Photographer Edmund Sumner _ https://www. designboom.com/architecture/chipperfield-inagawacemetery-08-08-18/

6. Interior of the prayer room with simple wooden furniture and large openings on both long sides. *Source: Photographer Edmund Sumner_https://www.designboom.com/architecture/chipperfield-inagawa-cemetery-08-08-18/*

7. View from the interior of the visitors' room. The space faces to the wildfrowers courtyard. *Source: http://ak-archi.com/blog/2018/12/8339/*

8. Photo took from the courtyard. The building results well merged with the nature surrounding. Source: Photographer Keiko Sasaoka, Yuna Yagi _ https://www.world-architects.com/en/akira-koyama-key-operation-inc-tokyo/project/inagawa-cemetery-chapel-and-visitor-centre?nonav=1

9. The whole building from saw from the north side. Source: Photographer Keiko Sasaoka, Yuna Yagi _ https://www.worldarchitects.com/en/akira-koyama-key-operation-inc-tokyo/ project/inagawa-cemetery-chapel-and-visitor-centre?nonav=1 **10.** The Inagawa cemetery chapel and visitor centre. Source: Photographer Katsu Tanaka

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3.4 Sayama Lakeside Cemetery - 狭山湖畔霊園

Hiroshi Nakamura & N



Location Kamiyamaguchi, Saitama Prefecture, Japan

Structural System Reinforced Concrete, Wood

Site Area 50,000 mq

Building Area 483 mq + 114 mq

Construct period 2011 - 2014

Architects Hiroshi Nakamura & NAP











In honour of its burial center's 40th anniversary, the Osawa family, owner of the Boenfukyukai Foundation, commissioned the renovation of Sayama Lakeside Cemetery Park Community Hall and Forest Chapel. The competition held by the Osawa family awarded the Japanese architect Hiroshi Nakamura and his team.

Built in 1971, the cemetery is located fifty minutes ride north-west of Tokyo, in a very lush environment and next to the biggest Tokyo's water reserve. Addressed to relatives coming back from visiting deceased, the new architecture wants to mitigate the people thoughts and make them relaxed. The development, which stands at the entrance to the cemetery, consists in a Community Hall with an inner core of services functions and an outer ring for the public.

"I wanted to create a space of peace that was interdenominational and welcomed even those who have no religion, to show people should come together in harmony."

[Hiroshi Nakamura]

In a second moment, captivated by the interesting architect's project, Mr Osawa invited him to design the chapel too. Detached from the Community Hall and placed close to the forest, the vertical chapel has been thought as a space for spiritual reflection. While the two buildings are contemporary designed, at the same time they are considered the "interpretation of traditional Buddhist temple and Shinto Shrine". Indeed, unconcerned the visitors' belief, Sayama Lakeside Cemetery can be attended by different religions and worship. Here, the architect designed the environment as a spiritual and contemplative space in order to create a space both for mourning and remembering.







The development of the Sayama Cemetery bears the name of *Hiroshi Nakamura & NAP* and consists of two different and separate buildings: the Community Hall and the Chapel.

The first one, standing at the entrance to the cemetery as a gateway between the secular to the spiritual, replace the previous and dated buildings. Taking advantage of the hilly ground, it's designed on as a single-story building with parking area and other service spaces located out of view in a way that the architecture looks clean and organized.

Following the gentle slope way to the entrance, people are captured by the sounds and the peaceful atmosphere that the reflecting water basin, which partly wraps the building, recreates. Thanks to this, *Nakamura* and his team designed a building nestled in the lush greenery that looks like floating on the water.

"I envisioned an architecture that reflects on the life as it lives by the water conserved by the forest, and eventually returns to this place after death."

[Hiroshi Nakamura, 2016]

In order to enjoy as much as possible the beautiful view, the inner space is disposed concentrically to the reinforced concrete central core. Cladded with polished black stucco made by local craftspeople, it presents an interesting match with the wood used for the roof generating a warm and pleasant atmosphere.

Thought as a place for relatives to relax, it presents an irregular circular plan with a reception area, offices area, pantry, four farewell rooms and a cosy lounge space. This space is characterized by an almost 360 degrees window, which let people feel the deep connection with the exterior.

To enjoy this scenic view, a continuous leather bench designed under the glass invites people to "sit and rest a while before they leave" [NAKAMURA H.]. It runs almost along all the perimeter in order to make visitor admiring the exterior beauty reflecting into the infinity pool. Still facing the water, the gatherings rooms are designed with minimal furniture and are separated by customized curtains which guaranty visual continuity through the community space.

The roof has an important role in project design. With several similarities from the outside, it looks like an umbrella or a countryside hat typically used in East Asia in order to avoid the sun while working the soil. The roof composed with metal material on the exterior side is supported by 120 wood beams which vary in length and angle disposition to answer to the irregular building plan. Beams exceed over the community hall perimeter in order to be reflected on the water and behave as a shelter and protection for visitors inside.

The ceiling height changes according to interior spatial flow: lower near the entrance in order to invite visitors in but rises higher where people gather and stay. Once sited on the bench, the ceiling trick directs visitors' eyes to a stunning view straight ahead to the reflecting water and the Chichibu Mountain. According to this, the architect conceives the site no just as a spiritual place but also an emphatic place that gives privacy and positive energy to visitors even though it represents the place of death.

Spaces division:

- 1. Entrance
- 2. Reception
- 3. Lounge
- 4. Visitors room
- 5. Office
- 6. Flower counter
- 7. Rest room
- 8. Reflecting pool



Passage spaces

- Existing gravestones
- Context











To the opposite wall side, where the roof seems to end, a clerestory window let the sunlight enter into the building drawing dynamic lights effects. Here, to filter the strong sun rays during the hot season, a maple tree has been placed in the hole in order to filter the strong sun rays during hot season, as if the tree is coming up through the building.

Overall more than aesthetics aspects, during the design project, architects paid attention to the environmental regulation: cool air enters from the pool and warm air going up is expelled into the maple garden.

"The light of the sun reflects off the pool and the beautiful image of its ripples appear on the ceiling. The aspect of the sunlight filtering through the trees and top-side light gradually and steadily changes throughout the day in correspondence to the drifting clouds and the breeze. When visitors come to pay their respects, it serves as a place where natural phenomena can be felt as being quietly spoken to by their deceased loved ones."

[Hiroshi Nakamura]

Five minutes' walk from the Community Hall, standing on the border between forest and cemetery there is the origamilike shape: Sayama Forest Chapel. With a vertical shape, it presents an irregular plan and it represents a masterpiece of the architect Hiroshi Nakamura and his team. Nature, here as in several Japanese architectures, is considered as a sacred space. In fact, in order to emphasize the connection with it, designers took care of many expedients. Developed on a triangular site, while there is no the main façade, seven large triangular, glazed openings eight and a half meters height characterize the walls on all directions. As a consequence, this particular conformation decides the steep shape of the roof.

> "Thereupon, I found the forest to be the subject of prayer mutual to various religions and conceptualized an architecture that prays to the forest while surrounded by trees."

[Hiroshi Nakamura]

The pillars are realized with 251 different sizes of beams of laminated larch wood. They represent the only structural elements present from the ground to the summit and are joint at the top to form a sasu (truss-like) frame that gives the traditional Gassho-style building. Perfectly earthquake resistant, with deep roots in the Japanese culture, this building characterized by a thatched wooden and sloped roof are very popular in the well-known UNESCO village in Shirakawago, located in Gifu Prefecture. Gassho structures are famous for their strength and their religious meaning. Indeed, literally "Gassho-zukuri" means "shaped like praying hands".




Thanks to local craftsmen, the realization of the chapel assumed more value. The wooden beams are left unfinished to emphasize the connection with the several trees which surround the prayer space. While warm tones characterize the interior space, from the exterior, a grey color makes it looks like colder. In fact, the cladding of the construction, manually folded by local artisans in order to fit seamlessly into the subtle threedimensional curves of the roof, consist in sand-cast aluminium tiles of 4 mm thick of six different sizes. The density and the reflectance of the material make it totally natural and unique.

As important as the exterior is the inner space in which the architect and the team spent all the attention. With simple furniture, that can be arranged to the different religious ceremonies, they created a unique space that underlines the beautifulness of the surrounding environment. The floor intentionally slants slightly toward the altar so, while a mourner is praying, he can perceive a deep connection with nature. Moreover, the altar, south oriented, is idealized as a spiritual space rather than a religious one. It's made of water-polished slate, with gently rounded edges, can be modified according to the different religious rituals.

> "In building the Community Hall of Sayama Lakeside Cemetery, I had wanted you to create a place that embodies a cemetery's timelessness, a place where the passage of time itself plays an important role in making it a richer place."

> > [Hideyuki Osawa]



The location of the construction and the strong connection with the environment make this project inimitable.

The choice of natural materials as wood and glass, which characterized the elemental architecture, had an important role in the project. Very well merged with the surrounding nature, Hiroshi Nakamura handled the subject of death with remarkable sensitivity and poetical effect. He managed to create a quiet and peaceful atmosphere where people can spend part of the day relaxing and meditating. The illuminance, deeply studied, is constantly changing with reflections from the pool and sunlight that streams in through the trees. All these expedients combined with an unadorned architecture embodies essential tool to bring out the feelings and the emotions of the visitors. In fact, thanks to the deep sensitivity and the thoughtfulness to mourners' feelings, this project has been awarded several times and the architect has been admired by people and experts.

Even though is far from the Tokyo city center, at Sayama Cemetery prices are not so affordable. Moreover, nowadays just a few plots are available. For example, a plot of 2.5 sqm costs around \$12,394 (1,500,000 yen).

For a bigger one of 3 sqm the graveyard usage fee is around \$14,873 - 17,351 (1,800,000 - 2,100,000 yen) and a plot that measures 3.2 sqm could costs \$15,864 (1,920,000 yen). The big issue of the lack of successors that afflicts the elderly, in the Sayama cemetery a permanent service system is guaranteed. Here whatever plots people decide to buy, the annual maintenance fee is around \$83 (10,000 yen).



Cover. Detail of the Chapel. Nature is reflected in the triangular shape window. of the chapel. *Source: Fani Atmanti*

1. The Community Hall results well merged with the surrounding environment. *Source: Fani Atmanti*

2. The chapel detached from the community hall is almost placed in the lush forest. *Source: http://www.boenf.org/reien/sayama/index.html*

3. The Community Hall and the water pool in front of the building; under it the parking area. *Source: https://www.archdaily.com/780211/sayama-lakeside-cemetery-community-hall-hiroshi-nakamura-and-nap*

4. The entrance of the Chapel. The shape of the building reminds to the Gassho-style houses typical of the city of Shirakawa-go. Source: https://www.dezeen.com/2016/08/08/sayama-forest-chapel-hiroshi-nakamura-nap-japan-a-awards-architizer/

5. The interior space of the Community Hall where the sun light coming from the high opening combined with the reflections on water create a suggestive ambience. *Source: Author*

6. The whole building reflected on the water pool in front of

it. Source: http://www.spoon-tamago.com/2016/01/25/theremarkable-sayama-lakeside-cemetery-by-hiroshi-nakamuranap/

7. The view from the lounge hall to the scenic landscape. *Source: Author*

8. The visistors' rooms facing to the pool. Source: http://www. ltg-sys.com/works/36/

9. The lounge space provided on the long circular bench with the wooden roof of the Community Hall. Source: http://www.boenf.org/architecture/sayama-hall_en.html

10. Frontal view of the Chapel designed by Hiroshi Nakamura & NAP. *Source: Fani Atmanti*

11. The structure reminds to Gassho-style building, where Gassho-zukuri means "shaped like praying hands". Source: https://www.yatzer.com/sayama-forest-chapel

12. Detail of the cladding surface of the chapel's roof. It consists in sand-cast aluminum tiles manually folded. Source: Author

13. The altar inside the prayer space. Source: Author

14. Warm and elemental wood furniture. Source: Author

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3.5 Meiso No Mori Funeral Hall - 瞑想の森 市営斎場

Toyo Ito & Associates



Location Kagamigahara-shi, Gifu Prefecture, Japan

Structural System Structural System: Reinforced Concrete

Site Area 6.695,97 mq

Building Area

2.265 mq

Construct period 2006

Architects Toyo Ito & Associates











The well-known Japanese architect Toyo Ito has been called for the reconstruction of the old crematorium nestled in the forest of Kagamigahara city, a small town of 150,000 inhabitants around 12 kilometres from Gifu city. Built-in the park-like cemetery, the new experimental building Meiso No Mori Municipal Funeral Hall has been inaugurated in August 2006 and become very popular for the unique and essential architecture. Meiso No Mori, that literally means "Forest of *meditation*", is a complex well combined with the lush forest in the southern area, the structures and the lake to the north side.

The curved lines used for the design become the landscape, in harmony with the silhouette of the mountains, the structure contains the lake in front of it, in a way that it looks like embracing the space. This last has a strong relationship with the building.

Water with its continuous transformations together with the green mountains identify the area.

All these create an interrelated system that the architect tries to represent in his works with the help of the landscaper and professor *Mikiko Ishikawa*.

Toyo Ito's projects guarantee continuity of spaces, functions and create a fluid space. Inspired by trees, water and wind, rigid shapes and straight geometry lines are turned into organic shapes and curves. Transparency is one of the main elements of his construction [ALESSIO L., 2009] in fact in Meiso No Mori he created a project that works as an instrument able to connect the two worlds, resulting in a space for reflection and contemplation.







Roof line

Considered as a *"spontaneous construction"*, Kakamigahara Crematorium stands inside a park on the lowest point of the area, replacing a previous demolished crematorium.

It measures 2.265 square meters and while it presents an irregular floor plan, the space is fluid and well organized. Thought with a double envelope, the building contains other smaller and closed marble volumes.

"Toyo Ito was free to realize his idea of a funeral hall not constrained by religious content"

[Anonimous]

The interior distribution is quite simple. Basically divided in two areas, the first for the ceremony moment and the second for gathering and resting. Once people enter to the building through the large entrance placed on east side, they can find a bright hall facing to the lake. Here, they are in a huge indoor-outdoor space that works as circulation area.

In front of them there is the fisrt compact volume, the heart of the building. It encloses two similar farewell rooms and the two *"inurement rooms"* where ashes are transferred into urns followed by placement in a niche or some other resting location. Another spacious area separates the previous space to the six cremators.

Light plays an important role and every regular volume is realized in light marble in order to reflect the light and create a peaceful ambiance.

On the opposite side of the entrance, there are three waiting rooms with tatami floor, small tables and chairs. Families are invited to take their shoes off and to gather commemorating the deceased all together dealing with the magnificent environment framed by the huge glass walls. These rooms have a view over the water where thanks to continuous glass wall, wafer-thin frames, and rounded roof, nature seems to pierce into the space, emphasizing the strong relationship between in and out.

The second floor is occupied by equipment above the cremation area.

The building is covered by unique curved roof, characterized by an organic shape in order to create a close connection with the nature nearby. Realized with the collaboration of the structural engineering *Matsuri Sasaki*, this roof was the result of an algorithm that made it possible to generate the best structural solution applying the principles of *"evolution"* and *"self-organization"* of living organism. The structural analysis replicates the plants growth which are continuously transformed by the nature's rules.

Despite it has been realized with reinforced concrete, they tried not to make a monument or stately building but they imagined the roof as delicate cloud.

> "Rather than the heavy, dignified architecture usual with crematoria, we imagined a soft place, as if a gentle snowfall had settled lightly upon the site to form a broad and generous roof."

[Leo Yokota]

Indeed, its shapes give to the complex a sense of dynamicity and fluidity and the thinness of the roof make it very light full.

Spaces division:

- 1. Entrance
- 2. Hall
- 3. Administrative
- 4. Valedictory room
- 5. Hall
- 6. Furnace room
- 7. Inurnment room
- 8. Waiting lobby
 9. Waiting room

10. Machine room



Passage spaces Opaque walls

Existing gravestones





Measuring 2270 sqm and just 20-cmthick of single sheet, the undulating roof makes the building floating on the ground and thanks to the reflection in the water of the artificial lake, just in front of the building, creates a suggestive atmosphere. The covering is supported by four structural cores and 12 thin and white cone columns that look trickling down from the roof. Inside of them, the system of collecting rainwater coming from the roof is hidden in the concavity [GAMBONI C., 2012].

> "We designed with consideration for the relationship with the surrounding landscape," Ito says and "We determined the degree of various bumps on the roof according to the ceiling height required in each interior space of the building. Then we made an initial digital model with which we did a series of structural analysis tests to find the form that achieves the best structural solution"

> > [Toyo Ito]

The soft roof lines, characterized by concavities and convexities, also articulate the interior ceiling. Here, the height of the roof has been modified according to the room activity. From the exterior, the roof extends to protect the big underneath windows which work as walls of the building. They depict the main facade and create a tight connection with the lush environment -sensation deeply wanted by the architect. In fact, for Ito, interior and exterior space are considered one indivisible element, indeed his mind constantly moves from in to out looking for the perfect atmosphere. In particular, for the Japanese architects, humans, architecture and environment are elements that are extremely connected.







Thanks to the materials utilized, such as reinforced concrete, glass and travertine, overall the architect Toyo Ito created a warm and intimate ambience which conveys a sense of peacefulness. In harmony with all the environment surrounding, this atmosphere let people meditate and reflect, escaping from death emotions.

"Architecture has its roots in nature and should ideally follow a process of natural creation, as similar as possible to the process of growth and development of a plant or fruit"

[Toyo Ito]

Detaching from the idea of "LESS IS MORE", the architect's intentions are well explained in Meiso No Mori project. In fact, with its technique, Toyo Ito transformed modern architecture into organic forms, such as trees and caves. In addition, he designed fluid spaces connected with a deep dynamic force avoiding the idea of box-like buildings. To sum up, according to his design, he wants visitors to feel emotions inside his architecture, or rather his architecture has to generate feelings to people who live in it.





Cover. Particurar view of the pillar mirrored in the lake in front of the crematorium. Source: Author

1. The unique roof of the building deeply studied by specialist. Source: http://architectuul.com/architecture/municipal-funeralhall-in-kakamigahara

2. Side view of the front side of the building facing into the lakeside. Source: https://architizer.com/blog/inspiration/stories/architectural-details-toyo-ito/

3. Reverse shot of image n. 2. Source: Author

4. View from the interior hall toward the lush environment. *Source: Author*

5. Front view of the whole building. Photo took over the lake. *Source: Author*

6. Photo took approaching the site. Entrance side. *Source: Author*

7. The fluid and organic line of the roof. Pillars are mirrored in the water of the lake. *Source: Author*

8. The interior space in between the farewell rooms and the six cremators with different height of the roof. *Source:* http://www.sanyoukensetsu.co.jp/wordpress/?p=3898

9. The waiting lobby. The different materials utilized are concrete, glass and travertine. *Source: http://www.abitare.it/en/gallery/research/reviews/mattone-calcestruzzo-acciaio-legno-in-architettura-gallery/?foto=2#gallery*

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Kiyoshi Sey Takeyama + Amorphe







Location Shinjuku, Tokyo, Japan

Structural System Reinforced Concrete

Site Area 962,40 mq

Building Area 528 mq (6 F + 1 BS)

Construct period 2012 - 2014

Architects Kiyoshi Sey Takeyama + Amorphe











Ruriko-in Byakurenge-do is a temple located in the famous shopping district in the Tokyo city center: Shinjuku, heart of the night life and skyrocketing prices lands. Just five minutes from the crowded Shinjuku Station, the site is easily to be reached, not only from Tokyo but from the nearby prefectures as well.

Untraditional, the Buddhist temple looks different from the common ones where the structure is developed horizontally. With its chalice-shape the appearance of the building is definitely a modern one. Its convex and concave concrete blunt surfaces stand in the urban landscape seeming in dissociation with the other buildings and it looks like floating on the ground. Designed by Amorphe firm, they projected this type of structure to enhance it in the context in which it is located, but also to give value to the structure as a container of a sacred space [FISH M., SOLOMON E. G., 2019]. Moreover, they tried to recreate an internal natural environment and peaceful atmosphere, isolating visitors from the crowd district. The firm chooses to develop the building in a vertical direction in order to face the lack of space that affects the city of Tokyo in recent vears.

In addition, without any doubts, this temple represents an innovative and progressive building enclosing many functions just in one structure. According to a non-stop request from Japanese inhabitants, it represents the possible prototype for the near future, and it's considered the most cutting-edge of the worldwide temples. It presents an ossuary that houses until 7,500 cremated remains all located in the high-tech vault system regardless of religions and cultural background. Provided of an innovative technological system -developed by Toyota L&F- works with an electronic card which let relatives enter the ossuary for visiting and praying their beloved.






Spaces division

At first sight, people can't imagine that the building is a Buddhist temple. *Rurikoin Byakurenge-do* that literally means "White Lotus Hall" is a multi-story charnel house. Designed in 2012 by the Japanese firm *Kiyoshi Sey Takeyama & Associates*, it represents the interpretation of a Lotus flower, a representative symbol of the temple. Even though it appears a massive structure due to the reinforced concrete, it is a modern construction deeply rooted in traditions.

It is easy to be reached through a small 4 meters road surrounded by hotels on the north and south sides, a three-story apartment building on the west side and a parking lot on the east side [FISH M., SOLOMON E. G., 2019]. Just before entering into it there is a resting space all paved with stones as a temple approach. In front of the gate, visitors can find a maple tree, symbol of the temple, and a little stream that represents a boundary between the life and afterlife world. In order to enter the temple, people have to cross a flat bridge on the path spanning the stream. On the water, when the season comes, lotus flowers float on the water's surface.

"Once, temples in Japan were not only a place of prayer and training, but also a school, hospital and cultural complex of museum, concert hall, library and so on. This project is an attempt to revive these cultural programs in a contemporary temple's design."

[Kiyoshi Sey Takeyama]

Designed with a regular floor plan, the building is something unique, where the modern technique is mixed with the traditional form of Buddhist temples. Instead of developing the building on a horizontal plane, the architect vertically organized the project. Furthermore, the building is lifted up from the ground. As the traditional Buddhist temple where the areas are separated -such as the Buddha's statue, the office and the cemetery- the base of the building is smaller in order to give a floating idea between the high constructions that characterize the district.

The structure of the building very well studied by the engineer Imagawa Kenei is realized to offer maximum performance in case of a violent earthquake, using the most advanced technology which allows the construction last more than 300 years [FISH M., SOLOMON E. G., 2019]. Moreover, according to the small and narrow dimension of the plot and the closeness to other buildings, in order to create a calm and peaceful atmosphere designer used those thick white concrete walls combinate with a strong form to protect deceased from the noise of the district. Multiple activities are performed in this building, giving the idea of a prototype of a future temple.

Once visitors cross the entrance, they are in a friendly lobby. Placed near the desk, a hi-tech black box welcomes deceased's relatives who are "sleeping" in the building. Swiping their Id card, they get access to enter into the ossuary rooms. Actually, the hall doesn't look like an entrance of a temple but more to a hotel one, with aromatic wood and the sound of water, coming from the waterfall on the right side. Here, a wall of windows framed the 6.6 meters-waterfall that covers the side of the building and makes people relaxed recreating a natural environment.

Spaces division:

- 1. Courtyard
- 2. Entrance
- 3. Lounge
- 4. Reception
- 5. ID-card scanner







This atmosphere generated by the water, the sound and the light together with the interior design are studied in detail and present deep traditional references.

Water is an important element in Japanese culture. In the past, it was used to purify the body and brought guides from life to afterlife. This element is also present before entering into the Hondo room on the 4th floor with a new type of suikinkutsu. Realized by the soundscape artist Taiko Shono, it's a modern interpretation of the traditional handwashing placed before the access to a temple where visitors, usually, have to clean their hands with a bamboo spoon. On the terrace, a metal vase (7) contains water for the ritual and the excess overflows below into a tubular instrument generating a pleasant sound. In this way values of the earthly life will be transferred to the new life.

While the thick reinforced concrete walls give a massive idea, the round building shape and the smoothed edges mitigate the first impression. Moreover, the architect decided to imprint on the internal walls the grain of natural wood with planks of cedar. Many details designed by the architect contribute to generating a studied and peaceful atmosphere. Such as, in order to enlighten the building inside, small round and rectangular windows are placed randomly on the main façade.

Besides, many functions are grouped inside the Ruriko-in and the different rooms can be used for different activities.











The heart of the building is an off-limits area, where up to 7,500 urns can be stored. Only relatives with their Id card can get access. The card activates the technological system which, in less than one minute, brings the urn automatically to one of the eight private worship rooms (11). In additions, together with ashes the deceased's photograph is showed to relatives. In each room, there is a small altar and on the backside of it, there is a precious mural created by a master painter, representing unique microcosm expression.

The 3rd floor is characterized by Buddhist activities rooms. Lectures and meetings are the most common functions performed at this level. Moreover, the *Horyu-ji Kondo* room is dedicated to art, indeed it contains a replica of important murals damaged by a fire in 1949.

The Hondo (12), recognized as the main hall, is at the 4th and contains many important portraits and an iconic statue. The white cedarwood floor from Laos contributes to transmit a warm feeling. Besides, on the same floor, the Ku-no-ma (13) is the narrow and long meditation room in the building that measures tenmeter-high inspired by the Buddhist concept of emptiness. Designed with concrete sloping walls and cypress wood for the floor, space is enlightened by a window placed on the ceiling that allows the sky view. During the construction, the room has been provided of an excellent acoustic system. In here, in order to combine the meditation, the soundtrack can be activated by a small button hidden in the wooden floor.

The tea ceremony room is on the 5th floor next to the piano's room - the *Nyorai-do* where a high gold Buddha statue stands on a blue hand-painted screen.





In addition, designers positioned the sculpture under a well-studied window from where, during equinoxes at 3 pm, delicate sunlight comes and lights the ambience designing an interesting balance inside the room.

More than the design and modernity of the building, architect Kiyoshi Sey Takeyama gave importance to the atmosphere as well. Even though the temple stands in the crowded district, the architect tried to isolate it. Moreover, far from forest or lush environment, with sound and vision, he recreates the nature inside. Overall, the architect designed an intimate and convivial space for the community keeping alive the origins and cultural traditions.

In Ruriko-in clients who buy an urn, they own it forever. The cost of a single unit is around \$8,400 (1 million yen) plus \$110 (12,000 yen) annual maintenance fee. Double unit is much more convenient, price is around \$11,045 (1,2 million yen) with a constant \$100 annual maintenance fee.

Family unit costs around \$18,400 (2 million yen) plus \$184 (20,000 yen) annual maintenance fee. An individual woman can enjoy favorable price around \$4,600 (500,000 yen) and no maintenance fee. One more option is available: paying \$46,000 (5 million yen) the special prayer room is accessible by relatives. It consists in a total private wall painted room where the family can spend time in a peaceful space. Here maintenance fee is \$460 (50,000 yen).

Cover. Detail of the main *façade* characterized by irregular openings.Source: Yoshio Shiratori _ https://www.amorphe.jp/post/142396858109/shinjuku-ruriko-in-byakurenge-do-prize-works

1. The building results surrounded by skycrapers. View from the narrow street. *Source: Oliver Chiu*

2. View of the whole building view from the street in front of it. *Source:* http://www.charnel-etnl.com/list/sibuya/byakuren. html

3. Detail view of the entrance to the temple. *Source*:

4. Top view of the temple surrounded by multi storey buildings. Source: https://www.iconeye.com/architecture/news/ item/12300-shinjuku-temple-tokyo

5. The entire view of the temple. Photo took from the north side. Source:https://www.architecturaldigest.com/story/concrete-tokyo-map

6. Particular of the wood texture imprinted on the concrete walls. Source: Oliver Chiu

7. *Ken-Sui* is a contemporary interpretation of the traditional temple hand washing ritual. In the picture a metal bowl containing water. Visitors have to use a scoop to wash their hands. *Source: Author*

8. View of the high part of the building characterized by several small windows irregularly placed. Source: https://www.amorphe.jp/post/142396858109/shinjuku-ruriko-in-byakurenge-do-prize-works

9. Round and rectangular shape openings on the north façade. Source: Oliver Chiu

10. The entrance hall with the waterfall on the left side of the building. Source: Author

11. Private worship room where thanks to the technological system the deceased's urn is brought to the altar where the relatives are. Source: https://www.ishichou.co.jp/search/detail/id/131

12. Hondo room, is placed at the 4th and is recognized as the main hall. Source: Yoshio Shiratori_ https://www.amorphe.jp/post/142396858109/shinjuku-ruriko-in-byakurenge-do-prize-works

13. The *Ku-no-ma* room ten-meter-high inspired by the Buddhist concept of emptiness. Warm atmosphere thanks to the cypress wood floor and the ray of sun coming from the opening placed on the ceiling. *Source: Oliver Chiu*

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CHAPTER 04

CONCLUSION AND DESIGN PERSPECTIVE FOR A DENSE URBAN ENVIRONMENT

The thesis work wants to make known a topic of architecture that involves cities since ancient times. After coming across traditional cemeteries such as *Aoyama* or *Yanaka*, where space was clearly out, I thought it was necessary to go deeper into this topic.

My research has mainly focused on a critical-historical analysis of six recently renovated Japanese cemetery projects designed by world-famous architects. From their reading, important characteristics emerge, and it allows a stronger understanding of the relationship between family and deceased, but mostly the importance of these burial spaces. These results show how architecture has an important role of connection between the two worlds. To explain it better, four key concepts have been adopted and represented by four concept at the beginning of each case studio analysis in the chapter 3. They are access, narrative dimension, isolation toward the surrounding and visibility in the context. Some of them are closely related to each other and linked to the tradition of Japanese architecture. Although in different ways, the four notions revealed both in an urbanized context and in a natural environment.

The analysis applied to the case studies mainly involves projects located in low-urbanized areas, with the exception of the *Ruriko-in Temple*. The translation of these models into a dense urban context is one of the architectural themes involving large metropolises in recent years and will increasingly affect them in the near future.

By way of conclusion and opening, the following pages take up some of the analytical instruments used for the analysis of the projects in the previous chapter studying them in relation to a particular district of Tokyo: *Shinjuku*. Located in the beating heart of Tokyo, the district has as protagonist not only the last case study, but it has been the center of some significant architectural competitions, including the *"arch out loud"* competition. The latter raised the issue of vertical cemeteries in Tokyo and will be the subject of an exploration with the same key categories used in the previous considerations. Between the 50 results published by the contest jury, the projects selected have been chosen those features related to key concepts which mostly emerged. Although it was not possible to apply a detailed analysis as in the case studies, among these proposals of ideas some interesting design choices emerged as well.

The Ruriko-in Temple previously analized is not the only ossuary in the city. The 23 Tokyo wards provide around 100 columbarium, which 25 of them present an automated system as the last case studio.

Unfortunately, Ruriko-in Temple, thanks to its recent renovation, is the only modern ossuary analyzed because for the other complexes it was not possible to find sufficient material for a detailed study. The list offered on the OHAKAN⁴⁷ website is very precise and every option presents a series of reviews from users. There is the possibility to look for a burial place according to pet burial in the same vault, to the landscape view, to the closeness to Mt. Fuji, to religion and to the closeness to the station. Furthermore, it gives the chance to select the area of interest within Tokyo, then which type of cemetery and finally the kind of grave people want. The webpage gives the information about the available urns and their price, the distance to the nearest public transportation and the services offered by the structure. Moreover, it offers a free tour of the structure on call. Easily, the website lets people compare the ossuaries present in a determinate area and choose the one that mostly satisfies their needs.

The map on the right shows where ossuaries like Ruriko-in are located in the Tokyo area. These types of columbarium are mainly developed in districts that represent important infrastructural hubs, so that family members can easily access them on weekends, or even commuters on the way back home.

⁽⁴⁷⁾ HAKA 墓 means tomb. The website Ohaka lets people choose where to be buried comparing all the cemeteries in Tokyo. (https://www.eohaka.com/area_list/category5/ scity13100/?cemetery_type_code=4-)





4.2 TOKYO WARDS

23 WARDS - KU区

Since August 1947, the Government of Tokyo made a clear division within the capital of Tokyo. The city presents a levels organization and it is divided into 23 special wards -ku 区- or prefecture which consist in a primary subdivision. Together they make up the heart and the most populated part of Tokyo Metropolis. Divided in turn in 26 cities -shi 市-, 5 towns -cho or machi 町- and 8 villages -mura or son 村 [Tokyo GOVERNMENT BUILDING].

Each ward is divided into neighborhoods where every community developed. The neighborhoods are still divided into blocks called *Chōme* 丁目. While each block is numerated, streets don't have a name. Here, each block represents community, with its organization, its festivities and traditions. A deeper division is the *chōnaikai* 町内会, which consists of a local community or a system of neighborhood association.

Wards division:

1. Chiyoda 2. Chuo 3. Minato 4. Shinjuku 5. Bunkyo 6. Taito 7. Sumida 8. Koto 9. Shinagawa 10. Meguro 11. Ota 12. Setagaya 13. Shibuya 14. Nakano 15. Suginami 16. Toshima 17. Kita 18. Arakawa 19. Itabashi 20. Nerima 21. Adachi 22. Katsushika 23. Edogawa



4.3 SHINJUKU WARD

THE SPLEEPLESS DISTRICT

While over the years many countries worried about preservation and heritage, so much that they took a central role in the global industry, Japan didn't. The city of Tokyo after being destroyed twice⁴⁸, had never been rebuilt following the conservation method. Despite this missing process, even though between the 1970s and 1980s people started to be more sensitive regarding the record and preserve the past, there are no real historical buildings or monuments in the city of Tokyo.

"Tokyo could not be expected to celebrate its history in the way cities elsewhere were doing."

[Jordan Sand, 2013]

Consequently, becoming aware, citizens began to talk about a valued cultural heritage regarding the every day lived. Considering, in this way, the space of the city, the traditions and the residents who were living in Japanese locals houses started to valorize the Tokyo Vernacular⁴⁹ [SAND J., 2013]. Even though there is not a tradition rooted in the centuries, the country has its own history. People are used to thinking about Japan as a tidy and serene country, it wasn't always so. The case Shinjuku was completely unplanned; "It simply grew up over the years around the crucial point of intersection of transportation lines" [GOLDBERGER P., 1975].

⁽⁴⁸⁾ The city of Toyko had been destroyed twice in few years. In 1923 with the Great Kanto Earthquake and in 1945 during the World War II when US firebombs razed the country.

⁽⁴⁹⁾ Every type of city has its own vernacular: a language of form, space, and sensation shaped by the local history of habitation [SAND J., 2013]. Furthermore, signals along the street, in the subway etc., the landscape and the crowd represents the city's vernacular that has to be interpretated.







Under the *Togukawa family*⁽⁵⁰⁾, in 1634 several temples and shrines moved to the western edge of Shinjuku. Not much later, the area of *Naito-Shinjuku* developed as a new station along the *Kōshū Kaidō*⁽⁵¹⁾. Here, samurai were used to travelling on foot from the castle of the *Shōgun*⁽⁵²⁾ and during the journey usually stopped along the street to take advantage of the many guesthouses and taverns. Modernization started very soon and the first railway opened in 1872 under the *Meiji government*.

In 1885, on the Akabane-Shinagawa line operated by the Nippon Railway -the first Japanese private rail company- opened the Shinjuku Station.

The line over the years would become the renowned Yamanote Loop Line. Before that happened, however, Shinjuku Station developed with the additions of the Chuo Line in 1889, the Keio Line in 1915 and the Odakyu Line in 1923 [HORYAK T.]. During 1920, Shinjuku district began to grow rapidly. Areas called Yotsuya Naito-Shinjuku, Ushigome and Yodobashi were integrated to become part of the district. In 1932 the area has been transformed in Yodobashi Ward which developed quickly but later the name of the district has been changed in Shinjuku Ward⁽⁵³⁾. The land, currently occupied by the high buildings, once was the Yodobashi Water Filtration Plant extended for about 170 hectares. After the 1886 cholera pandemic struck, in 1898 the city of Tokyo decided to build this new system in order to renovate the city's water supply. This side of Tokyo, nowadays modernized with lights on 24/7, was a rural area until the Great Kanto earthquake in 1923, which thanks to the good stable seismical characteristics it didn't suffer big damage. Afterwards, looking for a safer area, the city started to develop in this direction.

Consequently, World War II, the notable station continued its development and in 1959 the subway service *Marunouchi Line* have been added.

Later, in 1980 the Toei Shinjuku Line and in 2000 the Toei Oedo Line. During the World War years, Shinjuku didn't get away with the bombing raids⁽⁵⁴⁾.

After this negative period, followed a rapid economic growth that brought good opportunities to the country.

Postwar intellectuals were afraid that the country lacked not only a tradition democratic citizen politics but also a tradition of urban spaces which could welcome such politics. In 1956, the urban geographer Sugimura Nobuji wrote in the journal Toshi Mondai that all the oriental countries, except the ones that had European colonies, were missing hiroba⁽⁵⁵⁾ [SAND J., 2013]. Moreover, he hypothesized that while people gathered together in this kind of plaza, a sense of citizenship arose [IBIDEM, 2013].

In the past, especially the Meji city didn't have planned any kind of hiroba but the planning of traffic flow always overcame. Considered as a public space, the first public park in the country opened in 1903 with the name of Hybia Park [SAND J., 2013] and suddenly suited to frequent mass demonstrations. Under the control of the Tokyo Metropolitan Government and the suburban railway companies, in 1965 the new Shinjuku West Exit Plaza was completed. Designers gave special importance to the idea of "flow plaza" and realized a "three-dimensional plaza" -rittai hiroba- complex as a connection for buses, trains and pedestrians [IBIDEM, 2013].

IMAGES

1. The Yodobashi Water Purification Plant - 淀橋浄水場 - was expanded for aproximately 170-hectare. The aerial photo was taken around 1962. Source: Real Estate Japan, 2015, Shinjuku then and now.

2. The modern Nishi Shinjuku nowadays oppupies the old Yodobashi Water Purification Plant space. Source: Real Estate Japan, 2015, Shinjuku then and now.

3. December 1908 circa, people walking in the street of Kōshū Kaidō - 甲 州街道 - that was one of the five routes of the Edo period. Source: http://chofu-nazotoki.sakura.ne.jp/wp/

4. The National Route 20 which partly follows the Kōshū Kaidō route. Source: Real Estate Japan, 2015, Shinjuku then and now.

⁽⁵⁰⁾The Tokugawa period or Edo period is between 1603 - 1868. ⁽⁵¹⁾Kōshū Kaidō 甲州街道 was one of the

main five routes of the Edo period.

⁽⁵²⁾ Shōgun was the title assigned to the Japan's supreme military commanders during the Edo period. With the Meji Restoration started from 1868, the ruling power returned to the emperor. The residence of the shogun was the Edo Castle, even known as Chiyoda Castle.

⁽⁵³⁾ Yodobashi, however, survives in Yodobashi Camera, a major electronics Japanese retail chain whose flagship store still stands across from Shinjuku Station's West Exit.

⁽⁵⁴⁾ "The Tokyo Air Raid from May through August in 1945 transformed the city. 56,459 buildings were lost because of evacuation and damage during the war, leaving only 6,836 buildings. In addition, while the population was nearly 400,000 before the war, it was reduced to 78,000 at the end of the war" [Shinjuku City Officiale Website]

⁽⁵⁵⁾ Japanese modern translation of piazza.





During springtime of 1969, many protests against the Vietnam War appeared in the commuter hub. Several debates took place in the station, considered the perfect location to get in touch with as many people as possible. With a relevant position, turned out to be quickly an attractive space for many Japanese and the west station exit would rapidly become the gateway for the important business district. One of the most important decisions taken from the government has been the decentralization of Tokyo's commercials hubs near to the transportation core surrounding the city center, becoming the biggest of the new districts.

The turning point of *Shinjuku Ward* goes back to 1991 when the political power was moved in Shinjuku district. The *Tokyo Metropolitan Government Offices*, 48 stories split-tower has been built west of the station following the project of the famous Japanese architect *Kenzo Tange [HORNYAK T.].*

While it represents the power centre of Tokyo, *Shinjuku Station* is considered as one of the most polar and important hubs "... Shinjuku was the vortex of 'modern life,' where newness and normality, mediocrity and excitement converged and encircled the station. Shinjuku continues to play this role today. The station is the busiest [rail terminal] in the world."

[Fredman A., 2010]



in Japan [Івідем Т.]

Nowadays the district of *Shinjuku*, popular for its nightlife, is one of the most popular wards in Tokyo, well-known for its diversity and multiplicity, for the administrative, entertainment, transportation and commercial programs. It presents many skyscrapers that characterized the Tokyo skyline totally in contrast with the past when this area was a rural area and resting place for travellers.

Since the 1920s, *Shinjuku Terminal* was one of the largest in the city and the most-used too.

Regarding the Shinjuku station, today it has over 50 platforms and more than 200 exits. Furthermore, with its 3.64 million passengers per day, in 2011 it has been considered and certified as the busiest station in the world, with an average of 3.64 million passengers per day. Where, during Edo period, there was a countryside area, today people can find a large number of shopping malls, office towers, pachinko⁵⁶, fast food, pubs and the East Asia's largest red-light district *Kabukicho [HORNYAK T.].*

⁽⁵⁶⁾ Pachinko \mathcal{NFYI} is a popular gambling game very popular in Japan. Usually developed on different storeybuilding, players have to drop as many silver balls as possible into a scoring hole displayed on the machines disposed upon rows.



4.4 THE COMPETITION

"DEATH & THE CITY" TOKYO VERTICAL CEMETERY"

After choosing the topic of my thesis, we started to go deeper into the subject.

What we found really interesting was a competition by "arch out loud" titled "Death & The City" - Tokyo vertical cemetery" hold between June and October 2016. Participants were asked to design a proposal for a vertical cemetery making a connection between life and death within the city. The importance of the program wasn't just figuring out the issue of space but also consider the cultural identity of the environment. The variety and diversity, the entrainment, the administrative and the commercial programs, all these layers stitched together made Shinjuku the perfect area to set "the stage for an exploration of architecture for the dead in the realm of the living".

"There's a chronic shortage of cemeteries in Tokyo, and with Japan's aging society in mind, we have to make cemeteries easier for the elderly to visit and more affordable [...]"

[Head priest Kobara]

Facing the lack of space that characterizes the city, participants were invited to propose a relationship between the two unlike environments: the cemetery and the city. The frenetic, chaotic and unstoppable district was an interesting challenge where to set and design a new prayer space, focuses on meditation and silence.





CHAPTER 04

K E Y CATEGORIES





VISIBILITY IN THE CONTEXT

4.5.1 ACCESS

The entrance of a structure might be the distinctive element of the project: it can anticipate what is behind it, but it can also totally hide it.

The Japanese tradition places great attention to the mon 門 that literally means gate. Mon is the first structure that people face when visiting a Japanese building and it could be a fence, a torii or a simple house entrance too. The word generally refers to many gateway structures used by Buddhist Temple and Shinto shrines, but also traditional-style buildings and castles. Designed as a basic structures made by slender pillars or massive timber structures, partly closed or totally opened, mark the transition between the ordinary and the sacred world. Indeed, in the cases' studio previously analyzed, architects always mark the entrance as an important passage, through which people transit. Sometimes the building itself rapresents the gate of the complex, as in the case of the Sayama Community Hall.

Most of the time, and to relation with the distribution, from the access it is not possible to see beyond. The architect often introduces an "obstacle", which varies from a wall to vegetation, so that the visitor cannot perceive what awaits him or which is the direction he has to follow but can only imagine. Other time the view is clear, but there is an obstruction, like a water mirror in the case of Hill of Buddha, that forces people to encircle it.

I tried to find some proposals from the competition that gave some importance to the gate. In the first case (image 1), a parallelepiped is cut on one side to create a sort of full height portal that illuminates and allows access to the inside of the cemetery. Another proposal placed a vast tree at the entrance and the building is developed underground. But while an entrance can be a dark tunnel that directs visitors and then opens into a bright space (image 4), the entrance can also be open. A large square dedicated to the life, movement and emotions, and then flows underground into a space dedicated to intimacy and death (image 5).

IMAGE

A. "THE ROOM" proposed by Danil Gutrychik and Stepan Grigoryan.
B. "THE BODHI OF ASHES : DEATH IS MERELY ANOTHER CYCLE OF LIFE" by Mohamed Derzawi.

C. *"GOOD MOURNING TOKYO"* by Caterina Vetrugno e Aurora Destro.

D. *"TOKYO VERTICAL CEMETERY"* by Kacper Radziszewski and Jakub Grabowski.



4.5.2 NARRATIVE DIMENSION

Japanese architects often talk about the storyline of a building rather than its structure or form. In the analyzed projects, deep attention has been paid on both horizontal and vertical paths in the complexes. Open, semi-closed or totally closed buildings are designed with winding but defined paths with a precise purpose. As for the Japanese shrines which are hidden until the end of the route or the uphill hikes, the same method has been adopted here. The entrance behaves like a gate, from which a path, correlated to the passages of the funeral ritual, begins. It never reveals the destination until the end, such as in the Hill of Buddha complex.

Segmented corridors not only connect the areas but often create different atmospheres by changing shape and lights. These spaces work as "intermediary zones", well explained by Fumihiko Maki in Kaze no Oka project. The intention of these transitional spaces is clear: architects want somehow force people imagination. While visitors are making their individual way inside the building, they have time to stop and wonder before acceding the next room. Once they end up their journey, all can gather together. In Japan, it is said that when the story of the building's spaces perfectly matches, the building has a "ma", a gap space for awareness and silence. *[LAZARIN M., 2014].* According to the expedients considered, deep importance to visitors' feelings arise. Complex are studied in order to provide deceased's relatives with a place to quietly reflect and relax.

Attention to users experience is paid in different competition proposals, especially in one (image C) where every space is designed to provide different feelings and interactions with nature.

Paths like *"intermediary zones"* are translated in the results with an inner route developed in the only possible direction: verticality. Visitors going through the high building can discover several landscapes which change according to the level (image A). Recreational activities are thought for who is visiting the grave. People can promenade through the green building designed as a park (image B). Life and death interact each other in another proposal too: several living spaces are designed above the streets (image D).

IMAGE

A. "INNER LANDSCAPE" proposed by Niccolo Brovelli.

B. "LONG LIVE THE GREEN " by Lee Cheng Ju, Lee Chia Hua.

C. *"TRANSCENDENCE"* by Michael Rahmatoulin, Matthew Dubin, Ace Ren. D. *"WAYFINDING AND COLLECTION"* by Michaela Coe.


4.5.3 ISOLATION TOWARD THE SURROUNDING

In order to maintain a sense of intimacy and privacy, Japanese architecture tends to isolate the visitor inside the structure. Observing the modern residential houses in Japan, especially in the urban context, it was possible to notice high fence wall, blind walls and small openings to the outside. This is exactly the designed that architects, most of the time, adopted in the projects analyzed. The visitor is isolated inside to keep privacy, but mainly to concentrate his thoughts and focus on the reason for his visit. Both in urban and extra-urban contexts minimal perforations, such as in Ruriko-in Temple, or partially screened openings characterize the spaces, for instance in the Sayama community hall. The little light that enters, sometimes from above, creates special light effects that work like sounds: they mark time and create suggestive atmospheres, as for example in the Inagawa Cemetery.

The path which allows the visitor to cross the spaces characterized by deep intimacy then comes to an end in an area of recollection, where nature is often exalted with a strong visual link between inside and outside. Here people can relax and enjoy the framed beauty, as in the visitors' rooms of the *Meiso No Mori Crematorium*. In Ruriko-in Temple plays of lights deeply studied generate a suggestive ambience too and despite the urban and dense contest, nature is inserted through an artificial waterfall on one side. The same process has been applied to fisrt idea proposal in the competition (image A). High and thick walls separated partly the interior from the exterior. A cut on one edge let the light enter and brighten the lush garden in the middle of the building. Relatively closed too is another building proposal (image B) where an articulated core structure is surrounded by a corridor which brings to different rooms and some of them are a space framing the view over the city.

IMAGE

A. "THE ROOM" proposed by Danil Gutrychik and Stepan Grigoryan.
B. "GOOD MOURNING TOKYO" by Caterina Vetrugno e Aurora Destro.



4.5.4 VISIBILITY IN THE CONTEXT

While the first five cases studio are located in a natural environment, the Ruriko-in Temple and the competition proposals stand in the urban centre in between viability and skyscrapers.

Where there was the possibility, such as for *Kaze No Oka Cemetery* or Sayama Cemetery, the buildings followed the topographical trend, or the ground has been shaped and sometimes it is part of the structure itself, like in the case of the Hill of Buddha. In these cases, architects merged the building through materials, colors or natural elements with the contest surrounding. Most of the time these spaces are multi-purpose areas and at the same time represent a meaningful landmark for the environment in which stand.

Notable are the buildings in the urban contest too, which, although lacking large spaces of land, have managed to leave their mark.

The studied *Ruriko-in Temple* represents a landmark in its genre.

It presents a real autonomy in the contest thanks to the architect's choice to curve the shape of the reinforced concrete building in relation with the surrounding constructed environment. The new structure with a smaller base floor seems to float in the context and creates a definite space within the block.

Prominent and unusual options emerge from the competition too. A proposal, formed by an underground columbarium, consists of beams of light flashed at night in the sky (image D). Another one involves high columns working as columbarium during the day and as beacons throughout the night (image B). Still using the vertical space, a group proposed a lively tower of rising balloons containing ashes (image A). Others exploiting all the flat site surface suggest an open public space on the roof-top, in the meanwhile under it, dead's' data are screened (image C).

IMAGE

A. "DEATH IS NOT THE END. BEING FORGOTTEN IS" proposed by Wei Li He, Wu Jing Ting Zeng, Zhi Ruo Ma, Kui Yu Gong. B. "BEACONS OF ETERNITY".

C. "YAOYOROZU".



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