

CONTEMPORARY DESIGN OF KARUNIA MEMORIAL PARK AND CREMATORIUM IN MEDAN

Chintya¹, Rudolf Sitorus^{1}*

¹ *Architecture Department, Faculty of Engineering, Universitas Sumatera Utara
Jl. Perpustakaan Kampus USU, Medan 20155 Indonesia*

**Email: sitorusrudolf39@gmail.com, chintjoa99@gmail.com*

Submitted July 27th, 2021. Received in revision June 15th, 2022

Accepted June 29th, 2022. Available online June 30th, 2022

ABSTRACT

A funeral ceremony is very important for Chinese-born Indonesian (Tionghoa) because it is believed to be showing their respect to their ancestors. This research was made to provide solutions to land shortages, environmental problems, and a media to promote Tionghoa's culture in Indonesia. The site location is Medan Tuntungan, Simalingkar B. This project focuses on feng shui, yin-yang, and the number eight that is considered a lucky number as the main idea. Not only the green burial and green cremation as the main focus of the project but advanced implementation of virtual reality technology is one of the catches. This design hopefully increases not only the society's awareness of the importance of the environment and Chinese culture but also sublimates one's feeling towards the space.

Keywords: *chinese belief, green cremation, feng shui, yin-yang, capsula mundi.*

INTRODUCTION

Death is not the end. Quoting Chuck Palahniuk, *"We all die. The goal isn't to live forever, the goal is to create something that will."* It means that death is something certain and the goal in life isn't to live in eternity but to create something that will be eternal. In Karunia Memorial Park and Crematorium, together, we create eternity. Death is not the end of a human's journey. There is a popular Indonesian proverb said that *the tiger died leaving its patch, the elephant died leaving its ivory, and the human died leaving its name.* It means that everyone who passed away will surely be remembered according to his deeds [1]. According to science, it has been proven that after mammals die, the immune system

completely shuts, various bacteria appear, and the decomposition process starts [2]. That is proof that our body is working continuously in a never-ending cycle.

Quoting from Elizabeth Fournier's book, *The Green Burial Guidebook*, it states that unconsciously a lot of 4000 m² conventional burial area produced enough wood waste to build forty houses and metal waste to build Golden Gate Bridge [3]. Another proof that even a human no longer lingers around the earth is the consequences of our doings still exist around the earth.

Based on the 2010 Indonesian population census, Chinese-born-Indonesian (Tionghoa) is the fifth large race in Indonesia with a total of 2.8 million [4].

The civilization of Tionghoas in Indonesia started in The Dutch East Indies era in the 1800s [5]. Reflecting on Tionghoa's cultural practice of burial ceremony, it is sure that it's linked to their beliefs and respect for the elders. The prosperity in after-life leads to the prosperity of their living relatives.

Analyzing Tionghoa's cultural belief, the habit of building big luxurious graves for the ancestor are not suitable for the current situation. Based on Medan City Government census data, the birth rate is estimated to increase every year [6]. It's making the earth, especially Indonesia, has two main problems: environment and land shortages that need to be solved. Hence, the urge to create either a heavenly environment or a friendly cemetery is considered crucial, especially in Medan, North Sumatera, where Tionghoa is the third largest ethnicity and home of the largest Tionghoa community in Sumatera [7].

Therefore, Karunia Memorial Park and Crematorium were suitable to be a final project because it solved most of the problems. Karunia Memorial Park and Crematorium were created not only with green burial and cremation but also well integrated with *feng shui*, an ancient Chinese geomancy that claims to create harmony within inner human energy [8]. The ancient practice is agglutinated with contemporary architecture to produce a modern design that fits the current trend. advanced virtual reality technology is used to help to aim not only the goal of life but also to give room for technology to evolve every day.

METHODOLOGY

This design project consists of two parts. The first part is choosing the suitable design location. In this project the site's location has been chose based on the Medan city government regulation of land use and considering the site accessibility, surrounding environment, existing surrounding functions, surrounding scenery, site area, and the utility. The second part is data collection and physical and nonphysical analysis regarding similiar projects to incarnate the desired design. Data is obtained from journals, books, regulations and comparative studies. The facilities of the crematorium are chose from various available references and selectively chosen to accommodate every desired output.

RESULTS AND DISCUSSION

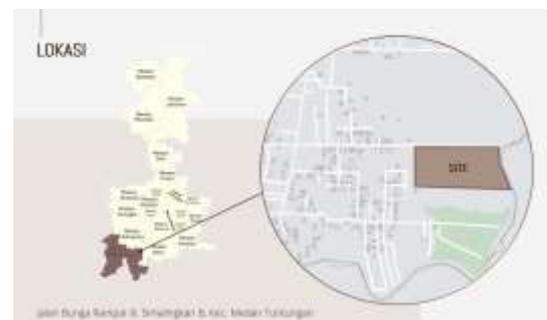


Figure 1 Location, 2021
Source: Author's documentation ($3^{\circ}30'02.8''N$
 $98^{\circ}39'12.6''E$)

Karunia Memorial Park and Crematorium is located at Jalan Bunga

Rampai III, Simalingkar B, Kecamatan Medan Tuntungan. It is designed on 3,8 hectares of land with 70% building base coefficient, 15% green base coefficient and 3 meters of building border from Jalan Bunga Rampai III. The site is side by side with the Deli River, that was chose because of the *feng shui* principle: leaning on the mountain and facing the sea. This location is considered to be the most suitable place for anything and very positive [9]. The form of the main building is inspired by the number eight. The number eight itself is considered the lucky number because it is a 八 (bā) that has a homophone with the word prosperity 发 (fā) [10]. Not only the meaning behind the number eight but also the round shape itself has a meaning as the symbol of happiness or trouble-free life. The composition of the big and small circular mass also represents the yin and yang.

Concept



Figure 2 Homophone, 2021
Source: Author's documentation



Figure 3 Site Plan, 2021
Source: Author's documentation



Figure 4 Ground Plan, 2021
Source: Author's documentation

Not only the location and the building mass that are influenced by the *feng shui* but also the materials used in the building have resembled *feng shui* five elements: water, wood, fire, soil, and metal. These elements are used in *feng shui* practice and are known as the basic elements that form the universe. It is believed that if these five elements reach their balance, they will establish harmony.

The water element resembles the Deli River along with the site and the koi fish pond in the middle of the building as a form of the courtyard. A natural cooling system throughout the building and a resemblance of peace is not only the reason why the pond was built. In the middle of the courtyard, a statue of 大願地藏菩薩 (Dàyuàn Dìzàng Púsà), the Bodhisatta is in

charge of the afterlife under a Bodhi Tree. Along the round pond, a circular ramp was designed to symbolize the journey to the afterlife.



Figure 5 Courtyard, 2021
Source: Author's documentation

Wood elements resemble the burial area and main building exterior. Karunia Memorial Park and Crematorium prohibit the procedure of conventional burial methods with coffins because it aims to be the first green burial in Indonesia. The usage of Capsula Mundi is to replace the coffin. Capsula Mundi is an egg-shaped pod made of biodegradable material [11]. Either the bodies or ashes is placed inside the pod for burial. The bodies are placed in the pod in a fetal position before the burial. The Capsula then will be buried as a seed on earth. A tree is chosen by the relatives, and the deceased will be planted on the top. It serves as a memorial for the departed as the legacy for posterity and the earth's future. Instead of the cold grey landscape nowadays, this practice will grow into a vibrant woodland or forest of memories.



Figure 6 Capsula Mundi, 2020
Source: Capsula Mundi (capsulamundi.it)

Facade

For the building exterior, wood pattern concrete is used to construct a sustainable and low-cost finishing. The use of wood and concrete itself is very common in contemporary design to build up the heavenly ambiance. Plastic webbing is combined with concrete to originate a better airflow and natural lighting. The used plastic webbing is the product of Byoliving, a webbing manufacturer. The used plastic for the webbing is a recycled transparent plastic that is webbed in the shape of Tionghoa's God and Goddess of the afterlife to form its silhouette. The purpose itself is to educate the visitors.

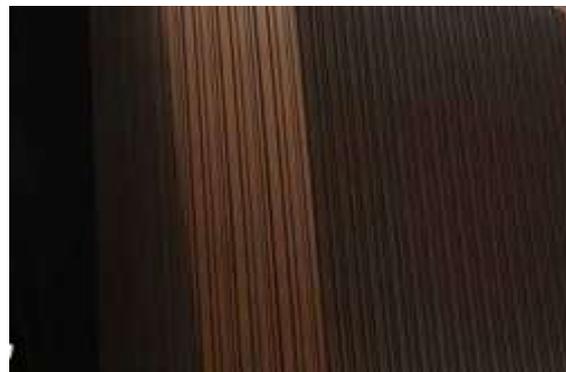


Figure 7 Wood Pattern Concrete, 2015
Source: Conwood (conwood.co.id)

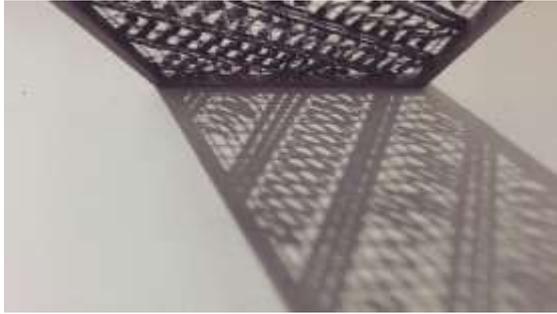


Figure 8 Webbing Silhouette Concept, 2017
Source: Byo Living (byoliving.com)



Figure 9 Main Building Facade, 2021
Source: Author's documentation



Figure 10 Common Building Facade, 2021
Source: Author's documentation



Figure 11 Cremation Building Facade, 2021
Source: Author's documentation

The fire element resembles the cremation oven. In conventional cremation,

an oven where the main resource is gas or wood is very dangerous for the environment as it produces a lot of air pollution. Focusing on the environmentally friendly method, Karunia Memorial Park and Crematorium presents an eclectic-based cremation oven that does not produce any emissions into the air.



Figure 102 Electric Cremator, 2017
Source: DFW Europe (dfweurope.com)

Meanwhile, the soil and metal elements resemble the used soil for the burial and the used metal as the detailing for the facade or interior furniture. These five elements are well implemented in the building to establish a harmonious and sublimation environment for visitors. Not only be able to sublimate the public, but the educational purpose is also the main focus to give back to the society. Various Tionghoa God and Goddess related to death statues are arranged around the burial area.

Landscape



Figure 13 Burial Area Statues, 2021
Source: Author's documentation

The afterlife status figures located around the burial area consist of Yan Luo Wang 閻羅王-The Afterlife Judge, Pan Guan-Yang, Luo Wang's assistant and prosecutor, Hei Bai Wu Chang 黑白無常-Spirit Escorter afterlife guard, Niu Tou Ma Mian 牛頭馬面-Grim Reapers and Meng Po 孟婆-Afterlife Tea Maker. Each of these statues is placed at every entrance, and it is built in the center of the burial area where the larger one of Yan Luo Wang statue located. The placement of each statue is arranged based on the order in which the deceased will meet. Firstly, after the death, Nio Tou Ma Mian will come and will escort to the afterlife to meet Hei Bai Wu Chang before meeting Yang Luo Wang and his Pan Guans.



Figure 14 Burial Area, 2021
Source: Author's documentation

Interior

The interiors of the building are mostly filled with concrete, white marble,

and wood. The three materials are commonly used in contemporary design to create a heavenly and peaceful ambiance. For the columbarium, where the transparent plastic webbing replaced some walls, natural light that enters the building throughout the webbing holes creates a beautiful atmosphere combined with the marble flooring.



Figure 14 Columbarium, 2021
Source: Author's documentation

CONCLUSION

After further analysis and observation towards land shortages and environmental problems. Karunia Memorial Park and Crematorium located at Jalan Bunga Rampai III, Kecamatan Medan Tuntungan, this project focuses to introduce the green burial and cremation and the Tionghoa culture to society as the solution of land shortages and environmental problems. The culture is not only about the rituals or Tionghoa's God and Goddess but also about trying to sublimate everyone and understand the meaning behind the rituals and ceremonies. For the deceased, choosing Karunia Memorial Park is the way to contribute more to the world and to be remembered in very different and respectful ways.

ACKNOWLEDGMENT

This research was made to solve land shortage and environmental problems.

This research aims not only at the environmental goals but also its effect on people spiritually. This research was also made with the help of my supervisor Mr. Rudolf Sitorus for the guide and help during the research and design process.

REFERENCES

- [1] Badan Pengembangan dan Pembinaan Bahasa. 2015. *Harimau mati meninggalkan belang, gajah mati meninggalkan gading, manusia mati meninggalkan nama*. Jakarta: Kementerian Pendidikan dan Kebudayaan.
- [2] 2016. *Current Biology*. Amsterdam: Elsevier Ltd.
- [3] Fournier, Elizabeth. 2018. *The Green Burial Guidebook: Everything You Need to Plan an Affordable, Environmentally Friendly Burial*. Novato, California: New World Library.
- [4] Subdirektorat Statistik Demografi. 2013. *Proyeksi Penduduk Indonesia*. Jakarta: Badan Pusat Statistik, Jakarta-Indonesia
- [5] Vasanty, Puspa (2004). Prof. Dr. Koentjaraningrat, ed. "Kebudayaan Orang Tionghoa Di Indonesia", *Manusia Dan Kebudayaan Di Indonesia*. Penerbit Djambatan. hlm. hal. 359. ISBN 979-428-510-2.
- [6] Subdirektorat Statistik Demografi. 2013. *Proyeksi Penduduk Indonesia*. Jakarta: Badan Pusat Statistik, Jakarta-Indonesia
- [7] Leo Suryadinata, Evi Nurvidya Arifin, Aris Ananta, Indonesia's Population: ethnicity and religion in a changing political landscape, Institute of Southeast Asian Studies, 2003.
- [8] Bruun, Ole (2008). *An Introduction to Feng Shui*. Cambridge University Press.
- [9] Mulyono, Grace (2015) *Adaptation Of Fengshui Based On Windflow On Shop Houses In Medan City Indonesia*. International Journal of Engineering and Technology, 5 (7, Jul). pp. 447-453. ISSN 2049-3444
- [10] Dong, Xiawei, and Kewen Lu. "Lucky Number Effect on Chinese Marriage."
- [11] Bretzel, Raoul. 2018. *Capsula Mundi: Life Never Stops*. J Soail Sci Plant Health 2:2. Italia
- [12] Hwangbo, A. B. (1999). A new millennium and feng shui. *The Journal of Architecture*, 4(2), 191-198.
- [13] Wang, Y. (2012). A comprehension of Feng-shui and its relevance to landscape architecture.
- [14] Butler-Biggs, J. (1999). *Feng Shui in 10 simple lessons*. Watson-Guptill Publications.
- [15] Zillnate, George; Coffey, Vaughan. (2012). Project Culture in the Chinese Construction Industry: Perceptions of Contractors. *Australasian Journal of Construction Economics and Building*.