To Investigate the Sense of Emptiness in Space

To Read the Emptiness of the Han Character 閒, which Means Space

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Abstract

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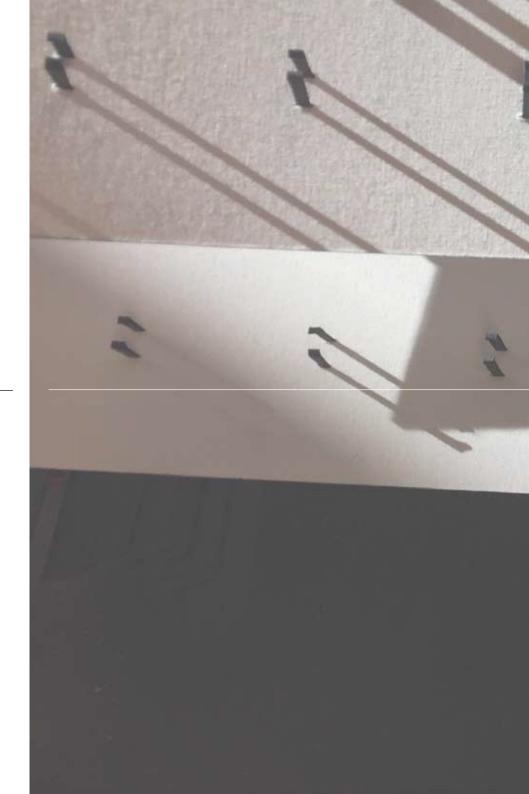
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Abstract

Emptiness can be an active notion. It is the interior element either triggering imagination in a Japanese tearoom or slowing down our perception of time. It amplifies subtle awareness of environmental conditions and slow movement in our overloaded world. Hence, this essay investigates the qualities of emptiness through principles like figure-ground relationships in order to reveal new aspects of interior architecture.

Besides, a Han character is like a drawing. It has the capacities of both describing and expressing. The compositions of several spatial Han characters such as kong 空 (emptiness) and xian 閒 (the original character of 間: space, room, moment) reveals different understandings of spatial relationships between subtle, immaterial elements—such as light, shadow, time—and human being. Therefore, transforming the meanings of spatial Han characters into space becomes one of the design methods in this project. It provides the understanding of language as well as cultural connotations through architectural and space, which is the common language shared by the human being.

Introduction _____



What can the qualities of emptiness contribute to the experience and atmosphere of interior architecture?

This research started from an image of the Japanese tearoom-in a series of posters by MUJI, a Japanese interior and household brand led by art director Kenya Hara-with nothing but the shimmering light streaming into the little space and fashioning the airy darkness. (Fig.1) It is a small, empty room. However, after a couple of seconds, some delicate moments along the streams of light start catching viewers' eyes. "A Japanese teahouse is like a small theatre. Because it is precisely the smallest cosmos, a whisper generates the greatest images." (Hara, 2011) In Hara's saying, he further pointed out the subtlety of the room has its capacity to inspire human imagination. With the aesthetics of simplicity and tranquility, emptiness in the tearoom enables people to understand the thoughts of others in creative ways. In other words, emptiness is part of the process of communication, since our imagination moves to fill in that which is missing. (Hara, 2009) It is a concept of dialogues regarding space and human being.

Immaterial, subtle feelings and connections with the environment are amplified by emptiness. In order to investigate emptiness—especially its temporary, delicate relationships with visitors and surroundings—this essay will discuss a series of case studies presenting various ways to sense, to measure, to manage emptiness and its associated elements. In addition, the method developed in this research project aims to look into the simplicity and emergence of the sense of space and reveal specific experiences contributed by the ambience of emptiness.



Fig.1 MUJI, 2005. "Teahouse" poster series. Offset printing. Art director: Kenya Hara, Photographer: Yoshihiko Ueda.

Ambience of Emptiness

background





Kong—空—Emptiness in East Asian Aesthetics

옑

Fig.2 Kong, the Han Character 空.

The Han Character 空, kong, mainly means "empty, emptiness" in Chinese. Back to its origin, this character suggests the ancient profession in charge of building and civil engineering. According to the explanation initially from Shuowen Jiezi (meaning "Explaining Graphs and Analyzing Characters"), an significant analytical Chinese dictionary from the Han dynasty, kong (空) consists of two components—穴 (cave, hole) above and I (tool, craft) inside the cave—that together indicate kong as an active notion with the scenario of crafting a space. (Fig.2) In addition, in Seal script, an ancient style of Chinese writing which was common during Late Zhou dynasty and Qin dynasty in China, the top part had been developed into a house. (Duan & Xu, 1981; Yin, 2016) Kong thus in a way represents an artificial cave or space for dwelling and an active state of the hollowness of the interior.

Otarting from investigating the spiritual concept of "emptiness" from some countries in East Asia-in this thesis, mainly China, Japan and other geographic areas sharing the Zen aestheticsthis chapter will first narrate the history and development of the notions of kong (空)—a Han character that mainly means "emptiness" in Chinese as well as in some other Asian languages like Japanese, Korean and Vietnamese-from its origin to interpretations in religions and aesthetics. (En.wiktionary.org, 2018) Combined with case studies, the following paragraphs will then outline some qualities of kong and analyze how they contribute to spatial experiences. Furthermore, the concept of horror vacui-which, associated with the manifestation of visual art and artistic crafts from such as ancient Greek and the baroque expressionism, later was used to describe the decoration covering all surfaces of the interior during the 19th century-will be introduced and discussed together with different senses of emptiness in the modern interior. (Castillo, 2005; Lidwell, Holden, & Butler, 2010; Von Bothmer, 1987)

Beyond the notion of emptiness, kong is also about being hollow, spacious, lacking substance and hence available as well as receptive. It indicates furthermore the sky, air and atmosphere. (Vividict.com, 2018) These collective definitions show multiple layers of understanding of kong as a sort of spatial condition and experience. Besides, in the discourse of Taoism, kong means emptiness and quiet. It is not meditating on nothingness; it is instead a state of receptivity. (Kramer, 2004) In Buddhist's words, it is about something used but never filled. (Schwarz, 1997) Later, these interpretations of emptiness kong with its heuristic and perceptive potentials have embodied Zen beliefs, its subtle aesthetics, in the sensibility of daily life in East Asia. (Ramírez & Ravetz, 2011) For instance, in the development of art and philosophy, not only the Japanese Teahouse but also the calligraphy and Chinese ink painting are all the results of expression and communication through emptiness. In Bai-Li Ho's painting of a daily scene nearby the river (Fig.3), the main, empty part of the drawing presents as the concept of the wide, endless river contrasting with the black pieces of the lands and the tiny boats. Then kong as a conceptualized "empty white" (空 白), a visual-spatial term describing empty space, becomes an aesthetic concept in Asian everyday life. In Nancy Walkup's view (2009), emptiness as a notion is shared by art and daily craft and becomes the source of dialogues and balance with the others. It can be further discussed in the concept of the Japanese Tearoom.



Fig.3 Bai-Li Ho, 2015. "百里輕舟之三" (Light Boats along hundreds of miles, no.3) Chinese Ink Painting.

A Room of Emptiness: the Japanese Tearoom

Regarding the development of the idea of emptiness in the discourse of interior architecture, we can start with the history of the Japanese tearoom before introducing its notion of emptiness. In ancient times, from the Bronze Age to the birth of absolute monarchy, throughout most of the cultural histories of eastern and western countries, people celebrated power by placing complicated patterns on objects. Thus, designs were once the expression of power relationships in the communities that produced them. (Hara, 2009) While authority figures regarded ornamental works as the symbol of power to control, the Japanese tea ceremony, which takes place in an almost empty space, becomes an alternative source of imagination through the void. It enables people to understand the other's thoughts in creative ways. In other words, emptiness is a part of the process of communication, since our imagination moves to fill in what is missing. (Hara, 2009) Imagination is like the light glimmering in the small chamber-as an immaterial, invisible interior texture reflecting variegated patterns on the ingenuity between the host and the guest. (Fig. 1) Combined with the qualities of emptiness, this notion later contributed to the origin of the Japanese aesthetics of simplicity and tranquility.

The emptiness of a space opens up our sense of hollowness and silence. It is the airy medium that surrounds our bodies, behaviors, attention. It is an invisible element affecting our spatial experience. For instance, in a Japanese tearoom, the minimalistic ritual of preparation for the tea ceremony stimulates our imagination of shading the "whiteness" of our environment. While the host merely spreads petals of sakura-the name of Japanese cherry blossom as a metaphor for the ephemeral nature of life—around a container full of water, he or she then places the guest under the imaginative sakura tree in full bloom. (Hara, 2011; Lee, 1995) Or, in a Tokonoma, when there is a vase with long green twigs and an empty wall behind it, people start imagining tree branches extending into the sky. (Fig.4) Both examples, according to Hara's diagram of Japanese tearoom, respond to how the principles of preparation are associated with the imagination in an interior space. (Fig.5) Due to the sparse ornamentation and changing method of decoration by the host-as two principles suggested by Kakuzo Okakura-a tearoom is vivid and left for the guest to imagine and to complete the entirety. (Benfey, 2004)



Fig.4 Tokonoma (床の間), as a built-in recessed space in a Japanese reception room—in which items for artistic and natural appreciation are displayed—presents unique expressions and messages from the host. (Wikipedia contributors, 2018)

Whiteness, imaginativeness and flexibility of changes, these spatial features are contributed by the receptiveness of emptiness. Kong here, as a state of mind, dissolves in the air, merges with the atmosphere among of the room, and links our imagination to the interior of the space. Therefore, the empty part of a tearoom becomes a stage for people's fantasy. Within the interior of a small Japanese drawing room, the emptiness is

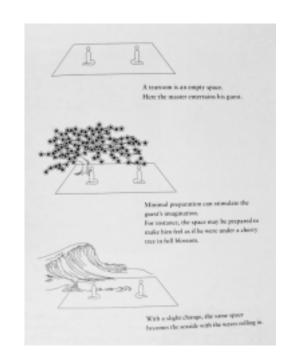


Fig.5 Principles of preparation creating images in a Japanese tearoom, Figure from 'Designing Design' by Kenya Hara, 2011.

activated and engaged by the host and the guest inside. The emptiness, as a miniature of a theatre, evokes our imagination as well as creating distinct relations between people and people, people and objects, people and space, and finally humans and nature.

Another Sensibility: Receptivity to Emptiness

The character for "white" (白) occurs within the Japanese compound for "emptiness" (空白), a connection that ultimately forced me to investigate the meaning of emptiness in terms of its relation to white. (Kenya Hara, 2009)

In order to investigate the concept of kong, Japanese designer Kenya Hara looks into the quality of the emptiness through the lens of materiality-whiteness. In his book Shiro, Hara (2009) attempts to investigate an entity called "white" in order to locate those resources of sensitivity that are posited by his own culture, the Japanese aesthetic that highly produces simplicity and subtlety. Here, white is not merely white color. It is instead the receptivity that senses white and enables people to understand the words like "tranquility" and "emptiness," which are related to the nothingness of kong in Tao and Zen aesthetics. (Hara, 2011) Zen is a practice which "enables us to drop our preconceptions" and thereby to act and to respond to unprecedented situations. In other words, Taoism and Zen disciplines deal with subtle and conventional things without following established rules. The intuitive Zen aesthetics guide people to their open mind and sensitive awareness. It is like the Tao-which seems to do nothing but actually keeps highly receptive. (Le Guin, 1998; Ramírez & Ravetz, 2011) Then, if we train ourselves

for the sense of whiteness, we become sensitive and therefore more receptive to subtle parameters—such as sound, smell, light and shadow—a series of stimuli contributing to creating the atmosphere of emptiness.

As a designer, Hara pondered the term "emptiness" while refining the qualities of Japanese cultural communication. In his observation, successful communication depends on how well we listen, rather than how well we push our opinions on the person in front of us. People have therefore conceptualized communication techniques using terms like the "empty vessel" to communicate with each other. (Hara, 2009) Besides, the concept of emptiness can be found in a temple, a small garden and especially a teahouse. All of them indicate various layers of communications with God, nature, the environment, objects and human beings through the notion of emptiness.

The Empty Vessel and the Crystal Goblet

In Beatrice Ward's (1955) essay about the invisibility of typography, the ideal demonstration of the deep, shimmering wine should be with a crystal goblet which is thin as a bubble. In her words, the invisible glass vessel—with all details calculated to reveal rather than to hide what it contains—is the transparent metaphor for typography. Designers craft the shape of each character with simple lines, achieve the transparent printing, reduce the weight of the design as well as the fear from the reader. (Ward, 1955)

Designers create the almost transparent fonts for the viewer to enjoy reading and to immerse in the slowness of the delicate craftsmanship. The invisible typography design becomes miniature printed matter as every little container on the pages holding the reader's mind. Hence, the idea of the empty vessel turns into an ideal shape which designers aim to achieve. Its transparency and emptiness allow the viewer to build up close relationships with the contents, and to immerse without any interference from the design. As we know how the notion of the crystal vessel takes place on a booklet, can we bring it to space on human or even bigger scales?

Two Approaches to the Modern Interior: Attraction and Revulsion to the Emptiness

> A tearoom is a small theatre. There is no pretentious fixture... Precisely because it is the smallest cosmos, a whisper generates the greatest images. (Kenya Hara, 2011)

In Hara's description above, the qualities of silence, emptiness and few preparations in a tearoom evoke the capacities of imagination, creation and communication. In addition, he explained this concept of the Japanese modern interior in the context of a new type of society that arose after the collapse of the absolute power during the past century and a half. Everyone became free to choose a way to dwell and be aware of the beauty of simple objects. (Hara, 2009) As Japanese aesthetics at the middle of Muromachi period (1336-1573) started exploring values of simplicity, presenting in its little, empty space, both the host and the guest are performers engaging their domestic realm actively and poetically.

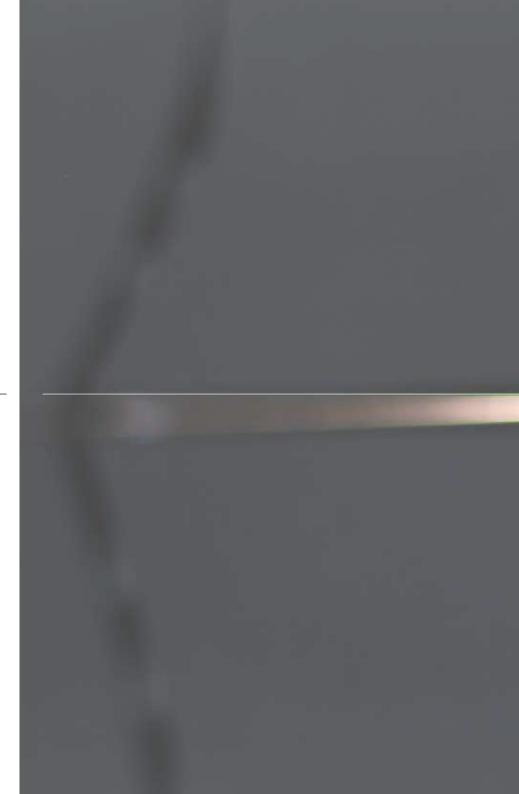
In the Western context, there are different notions of emptiness and absence. The term horror vacui, meaning "the fear of emptiness" from Latin, regards the desire to fill empty spaces with information or objects. It is notably associated with the Italian-born critic Mario Praz, who used the term to describe the cluttered interior design of the Victorian age (1837-1901). (Fig.6) (Lidwell, Holden, & Butler, 2010) However, when the concept is also cited earlier in Baroque decorative expression, it is contrasted with simplicity a means of balancing situations. Castillo (2005) describes that especially within superabundant environments such as churches or palaces, an empty wall, in contrast, provokes the horror of its emptiness. Then, horror vacui may be taken as a more fundamental feeling of attraction or revulsion of the idea of absence based on the pre-setting of the space. (Castillo, 2005) Viewing the structure of interior design, people usually see a tendency to accumulate, to fill and to close off a space. (Baudrillard, 1988) However, they might not recognize the pre-condition of the space which influences their perception and decisions. Following this thread, this essay will look into the qualities of a basic pre-condition of the interior—its emptiness—which allows its dweller to understand, to interpret and then to develop spatial relationships with the emptiness.

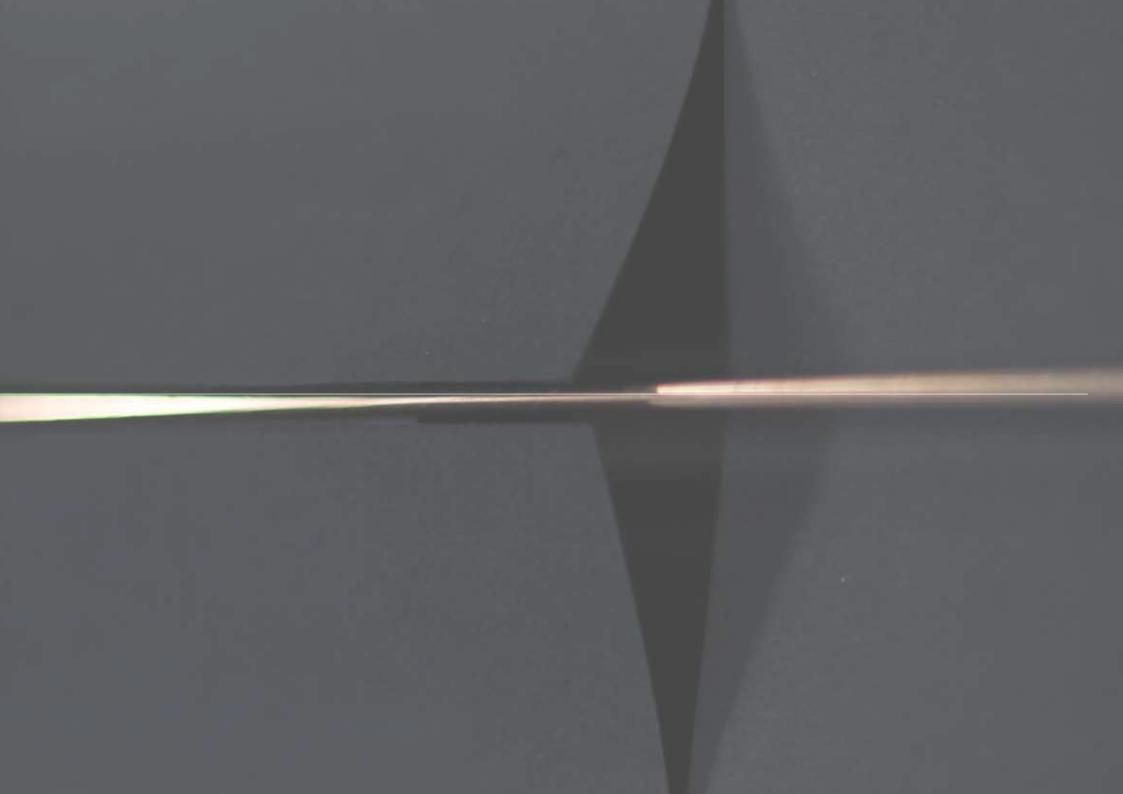


Fig.6 "Mrs Leoni's Parlor", 1894, part of a series of NYC interiors by Byron.

Slowness in Emptiness

literature review





Humans are slow. Meanwhile, they have the ability to understand messages in subtle ways, draw conclusions and give rise to meaning. However, the increasing speed and volume of data processing shape new informative environments, which surpass the level of human comprehension. (Pais, 2016; Schrader, 2016) In the digitalized realm which more and more takes parts of contemporary life, as our minds are not able to process all streams of information, we get overwhelmed and lose our receptivity and facility for knowledge. Besides, people need to live and balance themselves between the rhythm of every individual and the rhythm of nature while following the main movement imposed by technology, capitalism, urbanization and modernization. (Cresswell, 2010; Cresswell, 2013) Such an increasing pace is leading human being into a precarious, disconnected and unsustainable path. (Pais & Strauss, 2016)

> We may be equally moved by something evoked by our memory or imagination as by an actual experience. (Juhani Pallasmaa, 2009)

Slow Movement in Emptiness

Emptiness and whiteness, rather than overload of communication and information, as pre-conditions of the environment start a slow journey for human exploration, which follows the mind. A white canvas allows people to concentrate and create, while a chaotic, filled environment speeds up your viewing and understanding arbitrarily. As a slow movement emerges during the experience of emptiness, people start to perceive the world in different tempos, reflecting their thoughts and setting the stage for imagination. In addition, contemplation becomes an alternative way of understanding and interpretation. To sum up, slow engagement embraces the variety of speed, scales and perspectives to perceive deeper and know about the world more fully. (Pais & Strauss, 2016)

Slowness of Architecture

Practices with a sense of slowness indicate a different pace for sustainability. "It is a cultural revolution against the notion that faster is always better." (Honoré, 2004) Slowness proposes doing things at a proper speed and being able to recognize ourselves as part of larger systems. It is an understanding of being interdependent and connected with the surroundings. (Strauss, 2015) [You] realize you have slowed down just to be in that building; you're in wonder, awe, you're pulled through the space, usually by light, and you're changed ... It causes you to pause and be present. (ml Robles, 2015)

Architects investigate the slowness of architecture in various aspects. Robles' ideal architecture is one that allows visitors to slow down their steps, explore and then get aware of themselves. Besides, in Peter Zumthor's Therme Vals, time is suspended for bathers. While using light and darkness as main interior elements, Zumthor designed the winding path as the negative space leading to certain views throughout the whole building. Then, with subtle senses aroused by immersing steam, moving water, texture of stone walls, sliver of light, remaining darkness and saturated warmness, the negative area, serves as an empty pathway for wandering, discovering, defining. (Fig.7) (Glenn, 2015) As Zumthor said, "everyone is looking for a path of their own."



Fig.7 Peter Zumthor, Therme Vals, Graubunden Canton, Switzerland, 1996. The eight-centimeter-wide gaps introduce slivers of natural light into the interior. Photographer: Fernando Guerra. Source: archdaily.com.

Dietmar Steiner (1997) described the extreme slowness in Zumthor's works as a consequence of incredible exactitude. With his precise planning and measurement, all immaterial tension and relationships—with sensual qualities of light, shadow, sounds, scent, temperature and humidity—weave together and create the tranquility within the whole architecture. Here, emptiness in between strengthens the relationships between the space and the spectator. Then, architecture—according to Zumthor's metaphysical silence—serves as a live expression of inner impressions and connections to the spatial and temporal environment. (Saieh, 2010; Smiljkovic, 2015) You can't plan emptiness, but you can draw its boundaries, and so empty comes to life. (Peter Zumthor, 1998)



Fig.8 Peter Zumthor, Kolumba Art Museum, Cologne, Germany, 2007. Image source: Arc Street Journal.

The slow movement serves as a strategy leading people to rethinking about things taken as granted nowadays. (Schalit, 2009) For instance, from a slow perspective, time becomes less a luxurious commodity. (Pais, 2016) Time turns back to an immaterial substance in our daily life and presents as light and shadow in an interior space. Slow practices for a new sense of time are associated with the open mind and new awareness from Zen beliefs. (Ramírez & Ravetz, 2011) Then it is possible that a space can generate such slow experience in a sense of kong. At the same time, the ambience of emptiness allows people to recuperate and retrieve our subtle connections between the surroundings and our inner selves.

Slow Encounter: Measuring Emptiness

Rhythm—of music, poetry, dance, gymnastics, work, etc.—indicates a sense of measuring. (Lefebvre, 2004) Then, if emptiness is measurable in a slow pace, can it derive a new tempo of gestures dealing with our current realities?

Architecture is an immersive container where people wander and develop an understanding of it. To engage is to read

Fig.9

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the rhythm of poetry between space, environment and people around. Words can limit understanding. (Blaisse & Cronin, 2016) But imagination of words—the power of poetry—does not limit but bridge communications between individuals and the environment in which dialogues happen. In her project Breathing Sphere, designer Maria Blaisse explores and visualizes forms of languages. In the performance, dancers interacted with what emerged from the form of the bamboo object. (Blaisse & Cronin, 2016) They investigated the qualities of emptiness in the space between each other, bodies and object, performance and environment. It was a slow but active engagement. (Fig.9)



A still from 'Moving Meshes' by Jellie Dekker, capturing the dancer in the 'pas de deux' with Breathing Sphere by Maria Blaisse, 2008. Image courtesy of Maria Blaisse, source: Slow Research Lab.

Bodies, like the spectators in an immersive architecture, are the receptors of messages from the surroundings. Another case is Marie Cool's performing art which is defined by various standards, industrial norms and their associated behaviors. Merging with the immaterial attribute of the environment, her slow execution as a slow resistance breaks the frames of the regular production system and becomes a new form of analogy. (Fig.10&11) (De Croix, 2018)



Fig.10 Marie Cool Fabio Balducci, Untitled, 2008, sheet of paper A4, lights. Video: 1 min 16. Collection MoMA, New York



Fig.11 Marie Cool Fabio Balducci, Untitled. Opening in the wall, light, 2006 courtesy gli artisti e Marcelle Alix, Paris

These minimal slow gestures, from large to small scales, engage not only with the empty space but with the subtle, stimulating factors around it. It also regards to the specific moment that one can tell the part being filled and the part remaining empty. These conditions define the depth, the length and the strength, all ever-changing, of the space. For the receptors, the available space becomes—in Marie Cool's performance, an instrument responding to the space—a pool serving of encounters/dialogues and a container holding visitors in memories and imagination. It allows the reflection from the individuals in temporary or continuous but ever-changing forms.



Fig.12 Rachel Whiteread, Untitled (One Hundred Spaces), 1995. Resin. Pinault Collection. Photograph taken in the exhibition "Rachel Whiteread" at Tate Britain, London, 2017–18. Photographer: Joe Humphrys.

Last but not least, in Rachel Whiteread's casting pieces, the slowness becomes still with the visualizing technique indicating the past of using. She captures domestic memories through casting the negative spaces around the objects—such as the undersides of chairs (Fig.12), the interior of a bathtub, and even the indoor part of a house. The texture of a model, as an imprinted and encoded skin, picks up muffled contours, dents or stains, indicates its real and imagined histories, perfect and imperfect act of using, visible and invisible movements from past behaviors. All negative presences turn into collective pieces as solid gestures and personalities from the artist and the users, both are the owners. While her reference point is always human, these parcels captures her and the viewers' memories inside the interior of interior objects. (Curiger, 2010; Searle, 2017; Whiteread, 2010)

Research Question



Traditional objects and space were the mediators of a real relationship or a directly experienced situation. Their substance and form bore the clear imprint of the conscious or unconscious dynamic of that relationship. (Jean Baudrillard, 1988)

Interior furnishing once played a role of mediating and interweaving our relationships with the environment and other dwellers. Considering emptiness as part of the interior composition, this essay proposes three questions: • What can the qualities of emptiness—mainly inspired by Zen Aesthetics and its simplicity and whiteness which leads to imagination and contemplation—contribute to the experience and atmosphere of interior architecture?

• In order to consider the attributes of emptiness as element of interior design, how to understand—to sense, to measure, to manage—emptiness better through the idea of the figureground relationship?

• How can we measure the emptiness at a slow pace—in order to generate new experience and relationships in a space? Then the immersive experience becomes a way to encounter a sense of slowness and further perceive qualities of emptiness in space/environment.

The following chapters will first investigate cases in a sense measuring emptiness through figure and ground, negative and positive relationships. Then, the chapter of the methodology will introduce the Han character 闻—with its original meaning about the emergence of a interior space—as a design tool excavating the ambience of emptiness in interior architecture design. All chapters will be discussing the sense of emptiness from different aspects.

Measuring the Emptiness

literature review





One aspect of designing the interior atmosphere is dealing with the alternation between intimacy and distance. (Baudrillard, 1988) Emptiness—with the capacity for tolerance—allows us to experiment with the relations between composing elements and humans to be free, spontaneous, interchangeable, or possible in every distance, like a series of impromptus playing with figure-ground relationships—visual perceptions of considering elements as either the figure or the ground.

As the abstract attributes of emptiness cannot be measured or defined by common tools, this chapter would like to introduce a series of approaches for investigating the qualities of emptiness through matters of form, sound, photography which consists of light, darkness and time. The following cases concern not merely the empty parts but its relations to slight, temporary elements within or around. These relationships then make possible contributions to our awareness of emptiness and capacities to immerse in as well as to deal with the ambience of emptiness.

Figure and Ground—Positive and Negative Space

Air, considered 'empty', exists as the negative presence in the configuration of interior relationships. The negative space is 'the ground' in the sense of Gestalt theories—developed by German psychologists in the 1920s—of visual perception. Precisely speaking, it is the figure-ground relationship, one of Gestalt principles, asserting that people separate stimuli into either figure elements (foreground) or ground elements (background). Generally the emptiness, as an undifferentiated ground having no clear shape and location, outlines the silhouette of the figure which catches our focus first. (Beardslee & Wertheimer, 1958; Lidwell, Holden, & Butler, 2010)

We perceive a figure in relation to the surroundings. However, a black shape on a black field becomes invisible. Without separation and contrast, the form disappears. Negative and positive space cannot be perceived without each other. Besides, as visual designers seek the balance and even counterbalance between figure and ground, "creating figure-ground tension or ambiguity adds energy to an image or mark. Even subtle ambiguity can invigorate the end result and shift its direction and impact." (Lupton & Phillips, 2015) Designers try to balance the negative and positive areas in the design of logotypes, symbols, typography, etc, to enhance its appeal. Thus, the figure-ground relationship influences our visual experience in a constructive way. Moreover, with an unstable, ambiguous relationship, the interpretation of elements as figure or ground alternate. (Vecera, Vogel & Woodman, 2002) In Fig.13, regarding three types of figure-ground relationship, a stable one displays the figure clearly set off against the ground; a reversible one expresses equal attractions from the figure and ground in an alternate relationship; an ambiguous one blurs our focus between the figure and ground enmeshed with each other. (Lupton & Phillips, 2015)



Fig.13 Three types of figure-ground relationship: stable, reversible, ambiguous (from left to right.) Image source: Graphic Design: The New Basics, published in 2008.

Artists, designers and photographers play with the ambiguous figure-ground relationship via visual as well as spatial approaches. They churn and interweave negative and positive elements, subject and background, form and space to create tension in between. For instance, in her piece Type the Sky, Lisa Reinermann spots and presents the alphabet outlined by the contours of shaded buildings against the clear sky. (Fig.14&15) It shows an open-eye experience during a daily walk on the street and redefines our attention to the sky, once shapeless, volumes of buildings and their composition. As we train ourselves to play with and reverse the relationship between figure and ground, we might develop a fresh recognition of the ground, the negative space, the emptiness.



Fig14&15 Type the Sky, Lisa Rienermann, 2007.

The figure-ground relationship can be demonstrated within an auditory environment as well. The interval silence within a melody, the breathing moments during a reading, they are like the gap between facades. They give a tempo to your journey which is not necessarily linear but rhythmic. General speaking, "in a time-based media, the insertion and distribution of space across time affect our perception and pacing." (Lupton & Phillips, 2015) Both composers and designers realize the "ground" influence of our experience in various sensory environments. As Malcolm Grear's saying,

> The form of an object is not more important than the form of the space surrounding it. All things exist in interaction with other things. In music, are the separations between notes less important than the notes themselves?



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Fig.16 John Cage, 4'33", 1952. Author's own instruction of the piece. The musical term "tacet" is Latin, meaning "(it) is silent," also known as a rest. Definition source: Merriam-Webster Dictionary. Image source: www.gearslutz.com.

In the title of this work is the book length is shown of one of the period works. A first state of the period of the one of the period works, the state of the period backgo at parts by charge of the state of the state backgo at parts by charge of the state of the s

Listening to Silence: Presence & Absence of Sound as Emptiness

Silence can be a means to explore the figureground relation to emptiness. In John Cage's 4'33", silence becomes the subject. (Fig.16) The absence of composed sound is the composition's main melody. However, the four minutes and thirty-three seconds of 'silence' allow the audience to pay more attention to the incidental sounds in the environment of the performance. (Hill, 2006) At that moment, the figure-ground relationship between the silence—supposed to be the subject—and the small incidents becomes ambiguous. Which is the figure and which is the ground? Silence, as emptiness, turns perceivable while heightening the awareness of all senses and elements involved in the whole environment. Besides, the authorship is shared with the audience in this work. (Hill, 2006) Engaging through imagination and corporeal perception then becomes the connection to Cage's piece of silence. It is similar to the immersive situation of emptiness in a Japanese tearoom. Therefore, the intention of subtle incorporation with both visual and aural sensations might lead to the experience of sensing emptiness.

Another example about the presence of sound as emptiness is one of the sound works by artist and musician Max Neuhaus. He creates sound installations which install auditory elements in specific spaces. (Neuhaus, 1994) Regarding his sound installation such as Time square—it presents a mysterious drone from a machine resonating and drifting through the subway gates below—in New York, Neuhaus (1977) said, "The sound isn't the work. [...] I use sound as a means to generate a perception of place." (Reilly, 2013) In other words, sound makes the space of silence perceivable even it is shapeless in the public area. (Hill, 2006) The electric sound amplifying itself in the space underground outlines the position of this originally ignored site. While accumulation is a sense of lacking, emptiness is rather a sense of raising sensitivity to the incidental. Those minor elements stimulate human senses of a bare site, silence, or emptiness. Namely, subtle "figures" and empty "ground" fashion each other. It is like the statement, which Yehuda Safran (1994) was saying, about Neuhaus' drawings, "[They] take note of a site. ... [They] are relatively small in scale, somewhat like landscape drawings, small in relation to the large project they are part of." The installation as an investigation of Time Square shows a distinct type of figure-ground relationship—between minor aural figures and major spatial ground—composed in a soft, airy and delicate drawing as a miniature landscape, here a soundscape. (Fig.17,18&19)

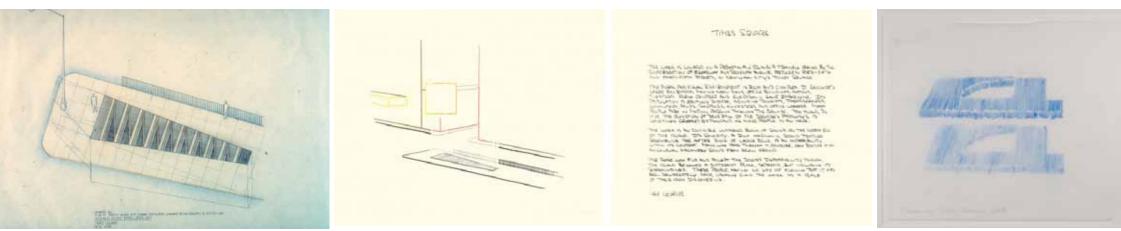


Fig. 17&18 Drawings of Max Neuhaus' Time Square, 1977-1992; reinstated in 2002 as a permanent sound installation. New York. Fig. 19 Max Neuhaus, Drawing Study, Shading, Spatial Interlock, Three to One, 1992, Colored pencil on paper (4 sheets), 9 3/8 x 11 3/4 inches, MNE9208 (1 of 4.) Lawrence Markey Inc.

Capturing Emptiness through Photography

Japanese philosopher Masao Yamamoto produced series of small images presenting real and unreal scenes. Those are like postcards as spaces containing fragments of either wonders or memories. In Yamamoto's series Nakazora—in Japanese, meaning hollowness, emptiness, blank, (mid-)air—scenes from daily life and nature present either spatial or emotional conditions regarding kong in his unique visual language. Furthermore, the subjects—natural settings, animals, human bodies and small objects depicted with the strong opposition of black or yellowish background—express themselves through Yamamoto's personal aesthetics. (Lucarelli, 2017) In his pictures, the compositions with emptiness train not merely our corporeal perception but also our receptivity of kong. (Fig.20)



#1141 137x68m/m

#1207 118x120m/m



#1071 125x80m/m



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#1073_____



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#1327 130x160m/m

Fig.20 Nakazora. Photograph series by Masao Yamamoto. Gelatin silver prints.

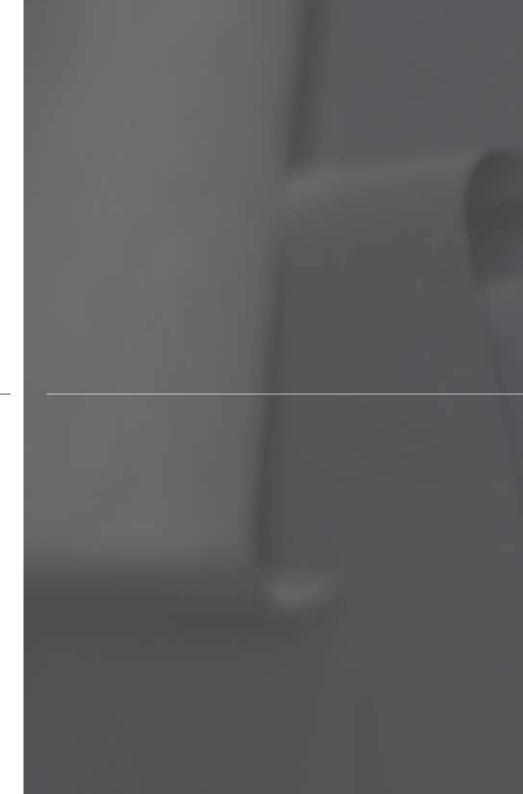
Besides, in Marina Berio's photographic pieces, the negatives are considered as intermediary moments of imaging possibility. The negative world with its reversed aspects of darkness and light, emptiness and nothingness stimulates the imagination. (Fig.21) (Berio, 2008) As the expression of darkness through photo developing reflects similar notions as the emptiness in Japanese tearoom, is it possible that new imaginative qualities of the negatives are derived from a research practice with photos? With different degrees of subtle darkness, photograph presents itself as a materialized atmosphere. In my concern, it captures the immaterial emptiness, the invisible volume. It becomes a technique to analyze space, expressing the idea of emptiness, and to extract qualities of those negative areas from the photos, from our daily surroundings.



Fig.21 Through and not 55, by Marina Berio, 2008.

Reading in Emptiness

methodology





Emptiness is the pre-condition of an interior. The physical sense of an empty space is associated with the Han character xian—which is the origin of the character for "space". According to Shuowen Jiezi, xian consists of the sign 月 (moon) in between the sign 門 (door). (Duan & Xu, 1981) It suggests the delicate moment of moonlight exactly streaming through a gap between the two parts of a double door. (Fig.22) The character denotes a room, a split or even a moment, the basic unit where an event takes place. In addition, the character fully expresses both the physical and emotional sense of a space. (Nitschke, 1993) It is a character that expresses the concept of waiting to be filled and completed in the future. 闃, then, is a drawing communicating both spatial and temporal conditions.

夙

Fig. 22 The Han character [!] — originally meaning "space" and developing other definitions later—fully expresses the spatial and temporal sense of the pre-condition of a space.

According to the research on the spatial qualities (of emptiness) from the Han character 閒 (space), its original meaning about the emergence of an interior space is exactly expressed by this graphic character. In other words, the appearance of this Han character, like a drawing, depicts its idea in a real space. (Fig.23) Thus, in order to interpret and develop a subtle sense of emptiness from the concept of the character 閒, this project introduces compound ideograms—the main type of the graph-formation principles 六書 (meaning "six writings") for Han characters—to which the character 閭 belongs—as a lens revealing the design methodology. (Dou & Dou, 2005)

Compound ideograms, also called associative compounds, have been interpreted as combining two or more pictographic signs ranging from concrete depictions of physical objects to abstract indications of orientation—to suggest a third meaning regarding the logic or the relation within the compositions. That is, in one compound ideogram, instead of being phonetic symbols, the graphs chosen for their meanings indicate the condition they set up together. They depict their relative positions, indicated functions or scenarios. (Chen & Sampson, 2013) Thus, first, their concepts are specific and spatial. Then during the evolution from a detailed, expressive drawing to a stylized character, it becomes a symbolized sign which is efficiently communicative. Secondly, a simplified ideogram still allows people to interpret further various meanings from the logic of composition presenting its symbolic relationships. A Han character is a drawing. In a metaphorical sense, during its conceptualizing process, the "figure-like" Han characters represent a kind of "semiotic ground" to its meaning. Here "a moment of moonlight streaming through the gap between a two-leaf door" is the "semiotic ground" leading to people's imagination of the "place, room, moment." Hence, shaping the character is like designing a space which allows visitors to immerse in, to experience, to interpret and eventually to connect to the environment. It furthermore considers multiple spatial aspects including momentum, regarding the change of time. The design then aims to open up an immersive journey reading in the emptiness of the Han character . People wander within the spatial elements of the character and develop their own spatial narrative while taking the trip as the chance to understand, interpret the imagination of the language. The intention of exploring the negative parts of the space is the immersive encounter with the interior and the emptiness—two together as a new spatial language. Then architecture takes the language back to its universal statement: to communicate, to imagine and to shape understanding of our environment together.

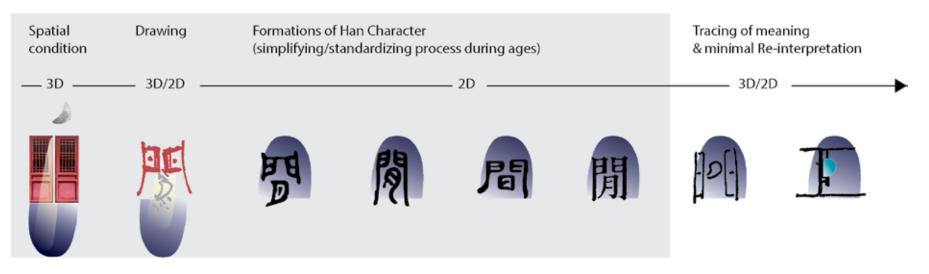
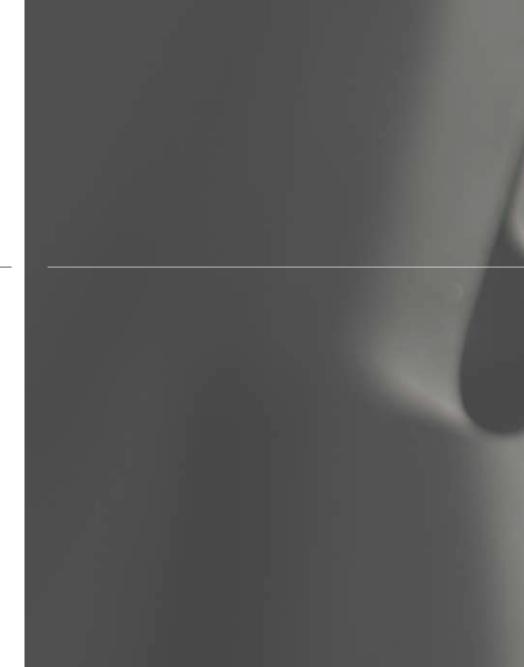


Fig.23 Developing process of the Han Character 閒. Diagram made by the author.

Design Research _____





Excavating the Senses of Emptiness

The photograph mapping is the first practice of exploring and defining a wide range of senses of emptiness. (Fig.24) The film research is about a viewer's gaze through various type of thresholds—which creates indirect viewing through gaps, slivers, holes, boxes, reflections, etc. It experiments with spatial relationships within the multiple-scale world inside, in between and outside. Both practices play with and blur boundaries between negative and positive spaces.



Fig.24 Photo analysis, senses of emptiness within negative and positive spaces. Design research process, 2018. Image by the author.

From 2D to 3D: Materializing Immersive Movements

The process of bringing the 2D character back to the 3D scale resembles drawing in space. Inspired by Alan Storey's *Draw (Machine for Drawing on Walls)*, lines and strokes can be registered as movements within an interior. (Fig.25) While moving as developing a relationship with the limits of the space, Storey's machine like an inhabitant gets familiar with the interior through the act of scribing and drawing. (Bédard, 1999) It is like a series of scribing which generates immersive movements guiding visitors to read the lines as well as the space.



Fig.25 Alan Storey, Machine for Drawing on Walls, 1984. Installation views at the Or Gallery, Vancouver, 1984. Image source: http://www.mercerunion.org/ exhibitions/objecthood-a-dichotomy/

However, apart from being drawn by a wheel with ink on a vertical surface, these lines can exist in the air within a space. This is closer to the idea of allowing visitors to immerse themselves in the drawing, the Han character. Besides, liberating the materiality of spatial drawings from ink and strokes, wall and surface starts blurring the boundary between two-dimensional and three-dimensional domains. Hence, the design process experiments with the material and immaterial crafting textures of drawings and interiors (Fig.26)—such as mirror, fabric, paper, light and shadow (Hill, 2006)—in order to create encounters with emptiness and immersive environment for reading and engaging.

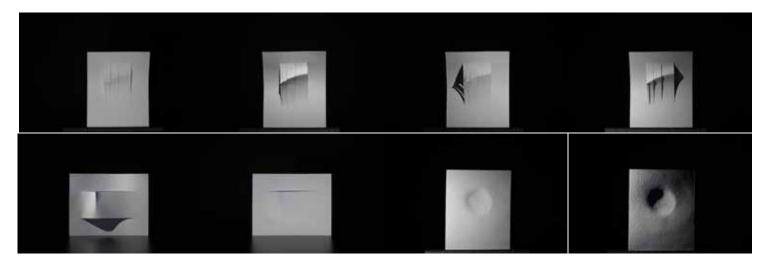


Fig.26 3D drawing exercise: shaping the light, moments, momentum. Design research process, 2018.

Fig.27 3D drawing exercise: object-image collages of Han characters. Design research process, 2018.

Transforming a character into Space

Time and rhythm are registered in interior architecture through light and shadow, or weathered material containing messages generated over months and years. Taking the empty space in between the character as the path, the project experiments mainly on the perception of light, its movement and momentum in order to develop the journey leading to the sense of emptiness derived from the concept of the Han character 閒.

While a building is encountered, approached, confronted, rather than just being a façade, it is utilized as a whole condition. It is from a slow reading of the Han character 閒 that we gain insight into the interior relationships, with not just the frame of the door but with the act of entering it. Pallasmaa (1994) wrote in his essay An Architecture of Seven Senses—proposing sense-based qualities from memory to materiality register the particularity of an architecture—that the domicile is the refuge of our body, memory and identity. Then, an architecture of language can become a way to practice intimate dialogues with the space.

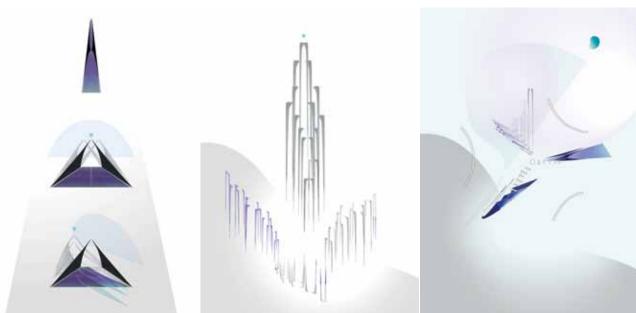


Fig.28 Architecture of language: spatial sculptures of Han character 閒. Sketch series. Design research process, 2018. Fig.29 Arch



Fig.29 Architecture of language: spatial sculptures of Han character 間. Models. Design research process, 2018.

Scenario: Dwelling in between the moon(s)

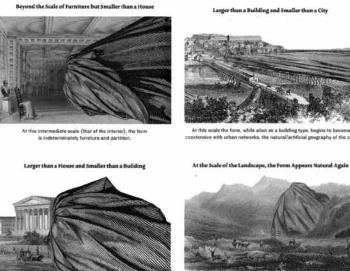
Inspired by the Han character xian (閒), the compositions of elements would like to create speculative relations/ scenario of spatial experience with senses of meanings of xian. What if a space consisting of endless doors slows you down in an immersive, imaginary world which has two moons? (Murakami, 2011)

Craft—with a deep sensitivity to the materials at hand activate hidden possibilities from the materiality. In neither a sense of blind routine of a craftsman nor a sense of systematic assembling lines, the design process would like to experiment the craftsmanship of dealing with paper. (Singleton, 2018; Vernant, 2006) Besides, the crafted details aim to link the slowness from maker's process & statement to the visitors' experience.

Regarding the notion of diagram deployment (Fig.30) in Atlas of Novel Tectonics-the impression of unconventional scales-the installation will test the spatial experience on both miniature and spatial scale. (Reiser & Umemoto, 2006)



At the scale of clothing and furniture, the form appears natural



e form approaches the scale of a small landscape feature bu runs the risk of being mimetic. At this scale domestic networks nay interact with the form in a non-normative way



ional relationships: folds appear in cloth and rock alike

Fig.30 Scales of perception. Image source: Atlas of Novel Tectonics by Reiser + Umemoto.

The Han character xian (閒) both expresses itself and describes scenes representing its main and extended meanings. In the installation, the sense of emptiness allows visitors to wander in the corridor and bath in the moonlight. (Fig.31)

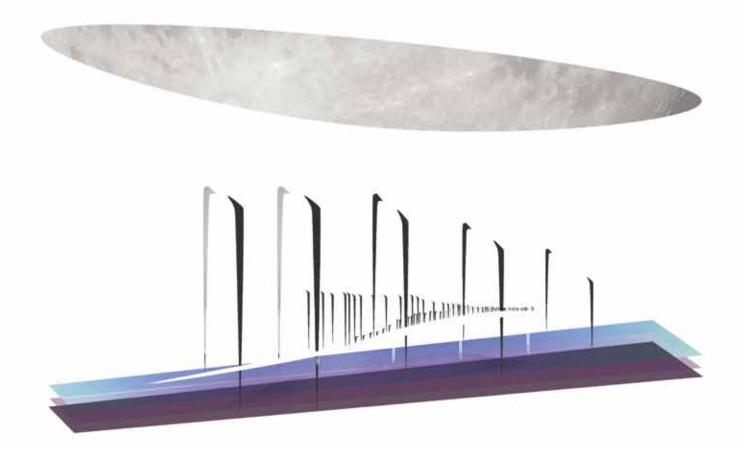
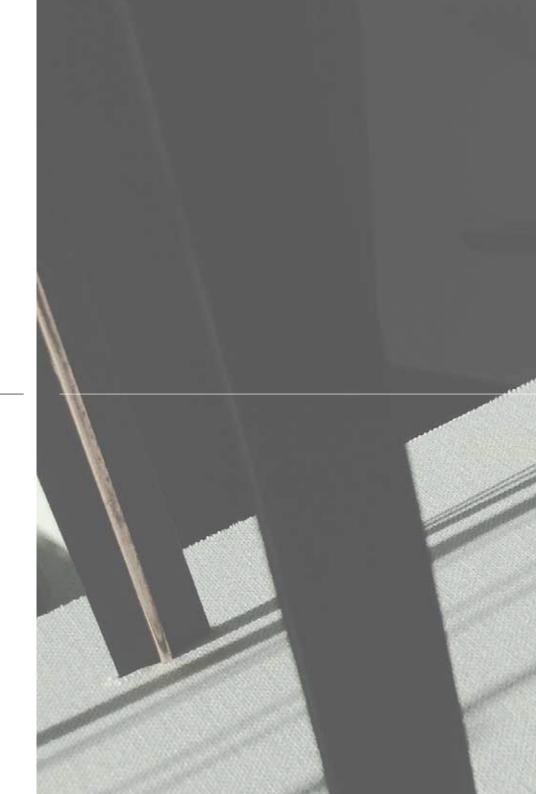
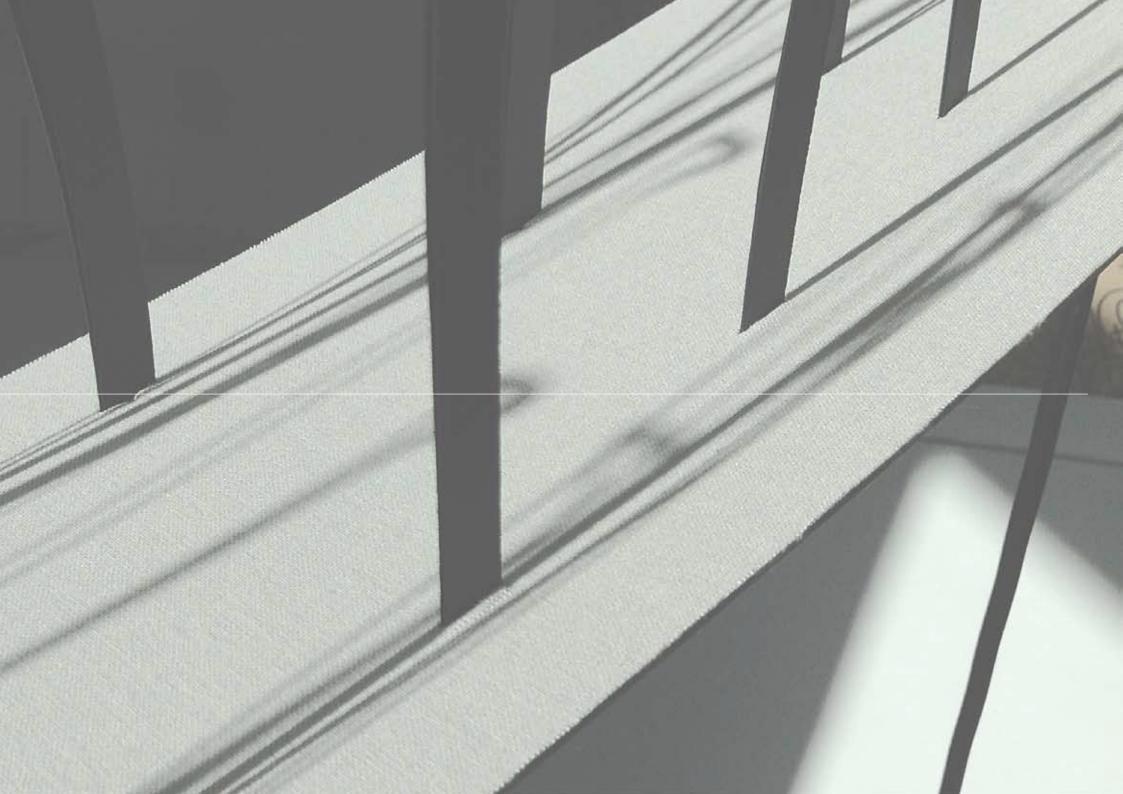


Fig.31 Drawing of the Han character 閒. *Sketches. Design research process, 2018.*

Conclusion _____





Transforming the Character into Space

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his essay started with the qualities of emptiness in a Japanese tearoom. Through various figure-ground studies and theoretical research, the topic has been revealed in practices from different domains such as design, architecture, music and performance art. Each of them indicates a new understanding of how material and immaterial factors play their roles within the sense of emptiness. They open up new perspectives, for both designers and visitors, to perceive and conceive the subtle qualities of a space. Furthermore, through the qualities of emptiness, a sense of slowness emerges and responds to a trend which investigates alternative rhythms and orientations in order to face our information-overloaded world. (Pais & Strauss, 2016) It is a global movement beyond cultures and nations.

The senses do not only mediate information for the judgment of the intellect; they are also a means of articulating sensory thoughts. (Juhani Pallasmaa, 1994)

A system of language can reflect culture, knowledge and thoughts from the groups who create and use the language. According to the one of the most important Chinese dictionary Shuowen Jiezi, we first realized kong (空, emptiness) is an active term rather than a passive notion. And then, the sense of the Han character 閒 consists of, and communicates, sensory experiences and thoughts of space. Therefore, derived from the origins of these spatial Han characters, the method in this project provides a new way to perceive the imaginative sense of Han language. Besides, while tracing the spatial context of formulation and conceptualization of the character 閒, the designer and visitor understand how to further develop their own interpretation in space. Hence, the method becomes a new tool for intertranslation-between a concept as architecture and a space as empty parts-in order to investigate the specific experience of emptiness in interior architecture.

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