Culture and Design: A New Burial Concept in a Densely Populated Metropolitan Area

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According to the traditions of the Cantonese, as well as the inhabitants of most other Chinese provinces, after one has passed away, it is believed that one's body should be laid to rest underground, and that one's spirit will live forever in another world. Due to the insufficient supply of cemeteries in Hong Kong, where the majority of the population is Cantonese, the Hong Kong government has encouraged people to use cremation, and to place the cremated ashes into the niches of columbaria. Although this method (or government policy) gradually has become more acceptable to the Hong Kong residents in the recent years, some still reject it since it contradicts Chinese traditional and cultural beliefs and preferences. In addition, although columbaria save space, they have some disadvantages and limitations. For example, the demand for niches is large and increases every year. This results in a policy that still is not sustainable, contrary to what the government claims.

This paper is based on a research and design project. It discusses cultural and social changes in Hong Kong by reviewing traditional beliefs and values of the Cantonese concerning death, illustrating the urban environment of Hong Kong, and examining how people have changed their views and preferences about burial methods. It then reviews the limitations of current burial methods, and proposes a more user-centered—that is, respectful of Hong Kong people's cultural needs and preferences—and sustainable solution: *Invisible Niche*. Finally, it discusses the possibilities and current difficulties in implementing this sustainable environmental and product design in societies similar to Hong Kong's.

Research and Design Project on Burial Methods

A research and design project was carried out in Hong Kong in 2001, and the final stage of generating design ideas was completed in 2002. Discussions with private funeral service providers and related government officers regarding the possibility of implementing the ideas have been conducted since 2002.

The project was co-supervised by designers and engineers from the School of Design and the Industrial Centre at The Hong Kong Polytechnic University. Design students from different areas, such as Design, Culture and Theory, and Environmental Design, initially were involved in the project. Their involvement served as an industrial internship with professional designers and engineers.

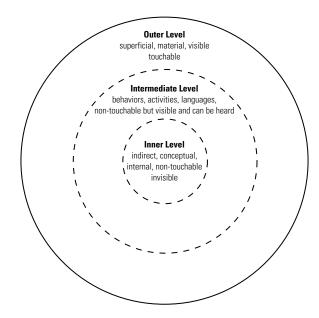
The project was stimulated by some newspaper reports on the management problems of cemeteries and columbaria in Hong Kong. For example, some descendents did not, or were unable to, care for their ancestors' graves and columbaria after several generations. There also was severe traffic congestion in burial areas on some traditional ancestor worship days (for example, the Ching Ming (Qing Ming) Festival and Chung Yeung (Chong Yang) Festival). Finally, there are few suitable sites for building new cemeteries and columbaria because of the limited amount of available land in Hong Kong and because of objections from residents to proposals to set aside land in their districts for such uses. After a background study, several site visits, and casual discussions with people visiting the graveyards and columbaria, the preliminary goal of the project was defined, that is, to improve the environmental design of current cemeteries and columbaria in Hong Kong, specifically with regard to solving problems of maintenance and congestion.

The first stage of research activities included (a) a literature review and background study of burial culture, and the development of burial policies; (b) interviews with government officials and representatives of related associations, such as those from nonprofit and commercial providers of cemetery services; and (c) field visits to public and private cemeteries and columbaria.

After the first stage of investigation, the research findings indicated that current burial policy and methods cannot satisfy the cultural needs and preferences of the people Hong Kong. In particular, the so-called better policy—cremation—is not a sustainable solution for Hong Kong's urban environment. The original project aim was then modified: to propose a user-centered—that is, respectful of the Hong Kong people's cultural needs and preferences—and sustainable solution. The original project activities continued, but the study on the spatial and temporal dimensions of Hong Kong's burial culture was extended, and an analysis of the data was presented to interested funeral service providers and government officials.

Finally, a new government policy for sustainable cemeteries and a new concept in sustainable environmental and product design, the *Invisible Niche*, was proposed. This involved putting the ashes of the deceased after cremation into degradable urns to be buried underground. The ashes will enrich the environment. After the ashes have completely decomposed, the land will be ready for more ashes. Thus, the space for cremated ashes is unlimited. The most important point is that the ashes will be underground, which is in accord with the beliefs and attitudes of the Chinese toward death. That is "Returning to the earth and being at peace."

Figure 1
Dimensions of culture.
All figures and photographs courtesy of the author.



The Spatial and Temporal Dimensions of Burial Culture

It is difficult and complicated to understand the culture(s) of a country or a group of people, because culture is related not only to physical objects but also to abstract personal beliefs, needs, wants, and preferences.¹ Talking about Chinese cultures, Xingliang He points out that culture has both a spatial and temporal dimension.² Each spatial layer of a culture represents the specific structure and characteristics of that culture at a specific point in time. If the spatial dimension is the cross-section of culture, then the temporal dimension is the longitudinal section of it. Different temporal layers illustrate different structures and characteristics of a culture in terms of time.

The spatial dimension can be further understood as three levels of structure: an outer level, an intermediate level, and an inner level. (fig. 1) Compared with the two former levels, the inner level is intangible and invisible. Although this level is difficult to understand, it can be reflected through the intermediate and outer levels of the spatial dimension.

The inner level of the spatial dimension of culture affects not only how people make decisions and "act" (the intermediate level), but also the design of physical objects and systems (the outer level). Conversely, the physical object and systems also influence and change people's behavior and ways of thinking.

Traditional Ways of Thinking of Death and the Selection of Burial Methods

Chinese (in particular, Cantonese) traditional beliefs, atitudes, and ways of thinking about death affect how most Hong Kong people select burial methods (including burial activities and physical objects). Early Chinese mostly believed that human beings were a combination of the spirit and the body.³ When one passed away, his

- Jiang-Feng Chen, Man and Heaven are One: Concepts and Chinese Cultural Traditions (Beijing: Sheng huo, du shu, san lian shu dian, 1996); Rebecca S. Y. Ng and Shirley C. Ingram, Chinese Culture in Hong Kong (Hong Kong: Asia 2000 Ltd., 1989); Han-Ming Shao, ed., Spirit of Chinese Cultures (Beijing: Shang Wu Yin Shu Guan, 2000); Kin Wai Michael Siu, "The Mid-Autumn Festival Lantern in Contemporary Hong Kong," Design Issues 14:3 (1998): 19–27; Jian-Zhong Wan, Taboos and Chinese Cultures (Beijing: Ren Min Chu Ban She, 2001).
- Xingliang He, Chinese Nature Gods and Nature-Worship (Shanghai: Sheng Huo, Du Shu, Xin Zhi San Lian Shu Dian, Shanghai, 1992).
- 3 Wei Huo, Traditional Funeral Rites and Ceremonies of China (Chengdu Shi: Sichuan Jiao Yu Chu Ban She, 1998); Li-Zhu Wang, The Study on the Ancestor Worship of Yi Tribe (Kunming Shi: Yunnan Ren Min Chu Ban She, 1995); Ji-Jun Xu and Yun-Ao He, Funeral Customs, Rites, and Ceremonies of China (Hangzhou: Zhejiang Ren Min Chu Ban She, 1991).

or her spirit remained alive. Under this concept, people thought that there should be "homes" for the spirits. This marked the origin of graves, known as "tombs" in Chinese. Most Chinese also believed that the spirit would return to the heavens, while the body would return to the earth. After the deceased person's body was buried in the ground, he or she would be rid of the misfortunes and vexations of the living world. By having a good rest under the ground, his or her spirit will be purified and return to the heavens and bless the person's descendants. Thus, most Chinese still maintain the traditional way of thinking about and referring to death: "Returning to the earth and being at peace." The importance of this way of thinking for Chinese people is reflected by how seriously they take the process of selecting places to construct tombs. The Chinese believe that the location of tombs and the direction they face will affect the fate of their descendants. For example, in the past, the Chinese believed that the construction of the emperor's tomb was a matter relating to the movement of the universe. Until now, the layout of a cemetery still is an important part of feng-shui, that is, the direction of the tombs, the pattern in which they are arranged, the situations and positions of mountains, the flow of rivers and the growth direction of trees.

The three levels of the spatial dimension of traditional burial culture can be understood, as follows:

Table 1

Three levels of the spatial dimension of traditional burial culture

Inner level

Beliefs and preferences:

- Human beings are a combination of the spirit and the body
- When a person dies, his or her spirit remains alive
- When a person dies, his or her body should be laid underground to rest, and his or her spirit will live forever in another world
- After the deceased person's body is buried in the ground, he or she will be rid of the misfortunes and vexations of the world: "Returning to the earth and being at peace"
- · Proper burial is a sign of respect for the deceased
- By having a good rest under the ground, the deceased's spirit will be purified, return to the sky (heaven), and bless the descendants

The location and direction of a tomb affects the fate of the deceased person's descendants

Intermediate level

Behavior and activities:

- The deceased is buried in the ground.
- Serious consideration is taken when selecting places to construct the tomb, taking into account, for example, the direction in which the tombs face, the arrangement and pattern of the tombs, the positions of mountains, the flow of rivers, and the growth direction of trees

Outer level

Physical design objects and systems:

- · Cemeteries (tombs)
- Constructions of the tombs
- Physical objects used in the funeral rites, and routine offerings (for example, in special festivals and memorial days)

Changes in Social Needs and Culture

As mentioned above, culture has a temporal dimension. This means that the three levels of the spatial dimension of a culture will change over time. In Hong Kong, as in many modern cities on the Chinese mainland, underground burial has become very expensive, and is inconsistent with the needs of urban development because space is limited in dense urban areas. In order to save space in the building of cemeteries and to reduce construction and maintenance fees, the government has encouraged people to adopt an alternative method: cremation, followed by placing the ashes into the niches of columbaria. Although this government policy received a fairly negative response at first, this method in fact has become increasingly acceptable to the people of Hong Kong. Moreover, under the influence of modern culture, many people (especially the younger generation) want to simplify the traditionally very complicated burial process (funeral rites) in order to minimize the inconvenience it involves. According to interviews, one of the key preferences and concerns of respondents in handling burial activities is "convenience." Thus, cremation, niches, and columbaria have become common and appear to be well accepted in terms of method and designs.

Figure 2 illustrates the influences and changes in the burial culture of Hong Kong. The modern way of life and other external factors have affected the traditional burial culture (that is, all three levels of the spatial dimension). The influences and their changes are continuous transformations: the outer level influences the intermediate and inner levels continuously, and vice versa. For example, social changes (modern urban life) caused people to change their prefer-

continuous changes in three dimensions of the spatial dimension

Burial Culture

Population, insufficient graves dense

Figure 2

ences to the "simple" and "convenient" (the inner level), and more and more Hong Kong people accept and prefer it. Further, burial activities have become simpler, and this has led to an increased acceptance of the methods of cremation and placing the cremated ashes into the niches of columbaria. In addition, the increasing influence of new foreign and local cultures (for example, lifestyles, religions, and new knowledge) and external factors (constraints and changes in the economy and in lifestyles) continuously accelerate these changes and reinforce the results. The details are shown in the following table:

| Table 2 | |
|--|--|
| Changes in the three levels of the spatial dimension of burial culture | |
| Inner level | New beliefs and preferences: Urban lifestyles and needs: busy, simple, efficient, convenient; for example, accessible location of cemetery or columbarium Human relations: individualism or isolation Economic concerns Relatively low status of senior relatives Intermediate level |
| Intermediate level | Key changes in behavior and activities according to changes in the inner level: Cremation Simple funeral rites Relatively less consideration of traditional customs and routines |
| Outer level | Key changes in physical design objects and systems according to the changes in the intermediate and inner levels: Niches Columbaria Objects used in simple funeral rites |

Areas Not Satisfied

In Table 2, the intermediate and outer levels of the spatial dimension of burial culture are modified according to the changes at the inner level. It is clear that these changes have been widespread across Hong Kong during the past several decades. Some people, especially members of the young generation, do not like the traditional burial method of laying a relative's body under the ground. They prefer to follow the current government policy. However, these changes at the intermediate and outer levels of the spatial dimension of burial culture do not represent satisfaction and settlement at the inner level. Some people point out that the choice is one "between a rock and a hard place."

In fact, land is the most expensive commodity in Hong Kong. It is too expensive for ordinary people to buy private land for a grave nowadays. Most of the time, people expect the government to provide cemeteries. (The cost also is very high compared with that for a niche in a columbarium. Sometimes people have to

wait a long time, and many of the cemeteries are located far away from urban areas. For the past few decades, the amount of land that they government has provided for cemeteries has decreased rapidly. Even those prepared to endure the delay and long distances involved in using the traditional underground burial method are required, according to the new government policy concerning public cemeteries, to remove the remains from the ground (that is, dig out the bones and put them in urns) no longer than seven years after the date of the burial. This policy makes people feel that it is complicated, inconvenient, and troublesome to select the traditional underground burial method. Moreover, some people believe that removing the deceased's remains from the ground after burial is impolite and disrespectful. Furthermore, if there are any customary or feng-shui mistakes that are made during the digging out process, this may cause misfortune. Thus, many people prefer to select the cremation method—not because they really prefer to do it, but because they have no other reasonable choice. Therefore, the changes mentioned above do not mean that the inner level of the spatial dimension of burial culture has been totally replaced or erased. In fact, the beliefs and preferences (for example, "Returning to the earth and being at peace") listed in Table 1 have not been satisfied.

A New Concept of Burial Method

After carefully (re)considering Chinese cultural needs and social changes in Hong Kong, we have proposed a new concept of burial method, the *Invisible Niche*, to the Hong Kong government and to the people and organizations interested in providing funeral services (figures 3–6). The key idea behind this new policy and design is that, instead of placing the cremated ash into the niches of columbaria, the ashes of the deceased will be put into newly designed degradable urns, and buried underground. In this way, the ashes ultimately will enrich the environment. After the ashes have completely degraded, the land will be ready to absorb more ashes. In other words, the space for cremated ashes is unlimited.

Moreover, we have proposed that individual epitaphs be set up inside the cemetery for every deceased person. The relatives of the deceased can carry out funeral rites and mourning. Ten years (or a better proposed duration) after the burial, the individual epitaphs will be replaced by carving the name of the deceased into the monument in the cemetery, which is a sign of honor and eternity. This replacement will minimize the accumulation of epitaphs, and result in the cemetery being sustainable. Our findings indicate that, in Hong Kong, most of the later generations of descendants pay less attention to such matters, and visit their ancestors' burial places less frequently than previous ones. In addition, a significant number of the younger generation study, work, and emigrate to other countries and seldom return. When the older generation staying in Hong Kong dies, this means that there will be no one visit the ancestral burial

Figure 3



Blessings from the ancestors underneath.

According to Chinese traditional thinking, once someone has passed away, it is believed that his/the body should be laid underground to rest, and that the peeson's spirit will live forever it another world. The body will deguade and combine with nature freewest nowadays in Hong Kong due to the insufficient supply of land for graves, most of the dead are cremated and the arbate ser placed into the riches of columbariums.

eccording to research, one demand nor incress is single and is increasing every year. fidere columbariums need to be built to meet the demand. However, this is not a sustainable clutters due to the insufficient supply of land in Hong Kong and because residents object o the building of columbariums near their homes.

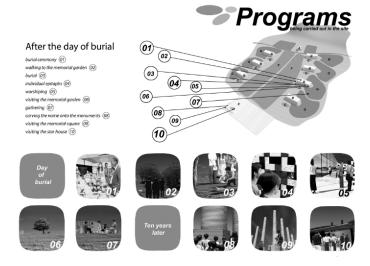
nvisible Niche:

A sustainable solution for the increasing demand for niches

"Invisible Niche" is a new concept for a cemetery. The cremated achies of the deceased would be put into a degradable um and bused underground. After the safes have clottally degraded, the land would be ready to receive more after. In the concept offers several advantages It has pare for cremated ashes is unlimited. Mich eathers will enrich the environment Furthermore, and crucially, the a shes would be buried underground in accordance with the traditional Chinese belief

Individual signifies would list set up inside the converse for every decreased points. The individual collection of the decreased content for individual signifies which is set to be contained and the content of the decreased content for individual cont

Figure 4



places and worship there. This is another reason why the number of cemeteries and columbaria lacking maintenance has increased, as indicated at the beginning of this paper. Since the government finds it difficult to trace the owners and lessees of the sites, and yet cannot neglect the need to maintain them, the government finally will be left with the burden. In addition, the proposed concept of the rite does not neglect the action of paying the highest respect to the deceased ancestors. We thereby hope to lessen the sorrow of the surviving relatives, and lead them to a more positive way of taking leave of their family members and friends.

Figure 5

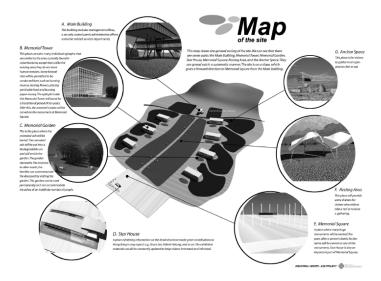


Figure 6



(Re)considering the Cultural and Social Factors in Design: Possibilities and Difficulties

As the funeral services providers and government officials that were interviewed observed, the concept of the *Invisible Niche* respects Chinese traditions and cultures. It is important and innovative in its sustainability and, in particular, is suitable for urban life in densely populated cities—cities that hunger for land. However, when we asked whether the concept could be implemented, the feedback was quite discouraging.

The funeral service providers pointed out that the initial cost to a funeral service provider to implement the concept is very high. The major reason is the cost of land. They indicated that they are businessmen. If the government can subsidize the cost of land and

provide clear directions and a preference for the change, they will consider implementing the new concept. The main point they made was that the government needs to take the first step.

As for the government officials, they agreed with the funeral services providers that the proposal is a breakthrough in the sustainability of the land used for burial purposes. However, as they also pointed out, the current available lands still seem able to serve the needs of Hong Kong people (at least for now). When asked whether they have considered traditional Chinese (that is, Cantonese) cultural preferences such as "Returning to the earth and being at peace," they did not respond to the question directly. Instead, they agreed that, on the one hand, satisfying such preferences is quite important. However, they emphasized that, on the other hand, the government has spent several decades convincing Hong Kong people to use the cremation method. The method still seems quite applicable. At this stage, they do not have any long-term plans to make changes. The government also is not under great pressure or feels an urgent need to make any changes. At least, at this moment, not so many people have voiced their preferences to the degree that the government has to put the matter up for discussion and consideration, although they agreed that there is a long waiting list for gravesite applications.

In fact, when we review the general practice of the government, such a response is not strange. First of all, most policies, plans, and designs always lack a long-term view, especially when the matter under consideration is difficult to quantify. And the policies, plans, and designs regarding public matters often are conceived of in a piecemeal fashion, simply to solve immediate problems.

Today, we quantify everything. However, we seldom consider what goes into the quality of life. Harvey and Raban criticize the modernist and rationalist idea of focusing only on large-scale, metropolitan-wide, technologically rational, and efficient urban plans, but of seldom considering traditions, local histories, individual wants, needs, and fancies. In short, when we look around our city, we are seeing an unbalanced trend in which current designs aim at a high degree of (superficial) usability, but seldom consider social, cultural, and ideological satisfaction. In our current rational, functional, and developmental society, policymakers and designers seldom give serious consideration to simple but fundamental questions of everyday life if these questions and their answers are not easy to quantify.

The most unfortunate thing is that we are forced by the supposedly better or improved designs to accept something that goes against our original and fundamental (traditional and cultural) beliefs and preferences. For example, the policy discussed above, regarding "cremation and the placing the cremated ashes into the niches of columbaria" was accepted because people had no other choice. In turn it brings and misleads us to a situation in which we seldom (and seldom think to) ask: Have our initial cultural beliefs and preferences been totally changed? If not, have they been satis-

⁴ David Harvey, *The Condition of Postmodernity* (Oxford: Blackwell, 1989); Jonathan Raban, *Soft City* (London: Hamilton, 1974); see also Kin Wai Michael Siu, "A De-Historicized City Planning and Design" in Yan Chi Jackie Kwok, ed., *(Re)-Discovering Design: A Critical Consideration of the Hong Kong Culture of Design* (Hong Kong: A Better Tomorrow Workshop, 1997).

⁵ Patrick W. Jordan and William S. Green, Human Factors in Product Design: Current Practice and Future Trends (London: Taylor and Francis, 1999); and Kin Wai Michael Siu, "Chinese Red Packets: Reflecting Changes of Cultures and Relations," Popular Culture Review 11:2 (2000): 5–15.

fied? If not, why do we ourselves still accept or force other people to accept such superficial designs?

Clearly, it is too idealistic and impractical to simply maintain "traditional" things without considering new societal needs. Regarding the concept of the *Invisible Niche*, there still may be room for improvement. However, the critical points for the success of the Invisible Niche are (a) its serious (re)consideration of the Chinese way of thinking of death: "Being laid underground to rest" and "Returning to the earth and being at peace," and (b) that this design satisfies this kind of thinking. In a broader perspective, the project experience also tells us that considering traditional cultural needs and new societal needs may not necessarily involve a contradictory outcome. If we seriously try, we can achieve a win-win outcome that satisfies both kinds of need. Of course, there still is a long way to go, because our city's policymakers and designers still need time to clarify in their minds what is meant by the "quality" of life, and especially how it relates to the spatial and temporal dimensions of culture.

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