# TRANSGENERATIONAL

The 11th International Arts and Design Symposium 2023

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Association of Siamese Architects under the Royal Patronage (ASA) together with the Faculty of Digital Arts, College of Design and the













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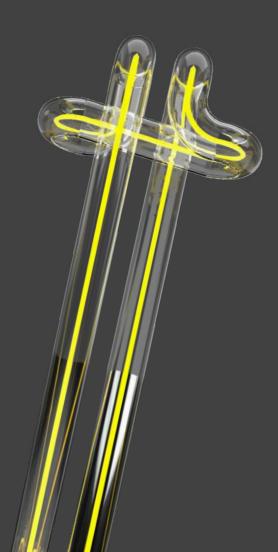
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## The Kongsi Home

Assist. Prof. Songpol Atthakorn

### Introduction:

The large extended Chinese-Thai family, "Kongsi," was highly expected to fulfill all members' needs and bring them happiness in one place. The goal of the residential project was to perform well in terms of functions, beliefs, and well-being. The proposed concept of integrating biophilic and transgenerational designs was applied to solve the multiple requirements of mixed generations.

The Kongsi home design process started with integrating the ideas of the architect, all family members, and the feng shui savant to solve the problems of different needs and preferences. The Kongsi home was designed to accommodate and fascinate all family members with the common preference of a "natural modern home." Then, the architect worked on the design and presented the schematic design. The design emphasized creating healthy living environments in the home. Finally, biophilic and transgenerational principles were listed to test and confirm home performances.

The results showed that the Kongsi home was designed according to biophilic and transgenerational design principles. The final preliminary design of the home approved by the owner is shown in a layout plan and 3D perspective drawings. The design outcome could serve the needs and satisfaction of the family. This could lead to the conclusion that biophilic and transgenerational design should be considered in the design of an extended-family home for the benefit of health and well-being.

### Objectives:

The unique Chinese-Thai extended family, which is called the Kongsi, consists of 8 different lifestyles of family members. The 12 members of the Kongsi family (ranging in age from 2 to 72 years old) prefer to spend their lives together in one residential compound connected to their family-business factory. The project site area of 2,700 square meters, adjacent to the existing factory, is to build the new transgenerational home. The Kongsi home should provide all the individual needs with common facilities to merge the old and new lifestyles. The balance between feng shui and the modern design approach is also a major concern. Moreover, the variety of aesthetic preferences to be addressed is considerably challenging.

### Process or Concept:

The design goal of the Kongsi home is to promote health and well-being for all residents. By providing accommodations and connecting them with nature, the biophilic and transgenerational design approaches are applied to home planning, spaces, forms, and landscapes. The design approach is to promote interactions among home members and to connect them with natural environments.

The design process started with learning and understanding each Kongsi member's routines and how they spend time with the whole family. The lists of all lifestyle activities are noted. Secondly, several zoning designs derived from various basic requirements and combined with architectural design approaches were presented to the Kongsi members to test their reactions and responses. A lot of discussions are arranged in the process. Thirdly, the preliminary designs for the house were reproduced several times. This stage took a lot of time to satisfy all the Kongsi members and the feng shui savant. At this stage, environmental considerations are more intensively integrated into the designs. Then, the final preliminary is presented in precision drawings and 3D perspectives, as shown in the images. The entire process took about two years to complete. Still, new requirements and changes are going into effect as time goes by.

There are three spatial concepts for the Kongsi Home. One is to create lively connections between individuals and common spaces. The design must encourage all members to interact with each other and participate in the common facilities. The second goal is to keep the balance between indoor and outdoor spaces to create semi-detached house qualities around a courtyard. Three is to harmoniously integrate various needs and complacencies into the whole. Architectural vocabulary should satisfy all ages. However, flexibility and expandability over the next 50 years should be considered.





### Techniques and Materials:

Since biophilic design concepts were applied to the Kongsi home, greenery, water features, and ecology were used for environmental aspects. All rooms have access to the gardens and pools, and there is cross-ventilation with shading. Natural earth-tone materials are applied to the floors, ceilings, terraces, roofs, and shading devices. These make the overall look of the home feel like a natural retreat.

### Conclusion:

The Kongsi home design outcome consists of multi-functional spaces in a twostory concrete structure with a total usable area of about 1,400 square meters. The design was tested against lists of biophilic and transgenerational design principles to confirm its performance. The results showed that the home design was considered well-suited to both design principles as follows:

The biophilic design was applied to achieve the connections with nature. Most spaces in the home provide connections with nature according to the biophilic design principles listed in 3 categories (Browning et al., 2014). The home members could experience all three biophilic patterns of the home environments as follows:

- Direct experience of nature: Providing multi-directional views of plants & landscapes, fountains & falling water, swimming pools, fish & dogs, daylight & sky, air & natural wind, distant vistas, and wide varieties of landscape styles.
- Indirect experience of nature: Creating and exposing the mood & tone of nature by using natural images & sculptures, wooden & stone materials, earth-tone colors, raw & rough textures of the concrete, and naturalistic patterns of trellis & screen.

### Conclusion:

• Experience of space and place: Improvising mixed cultural forms of local roofs and modern facades, multiple volumes & dimensions of spaces, free flow connections of public & private zones, transitional spaces linked between inside and outside, and clustered organization of the building's spaces & forms.

The transgenerational design was also applied to meet the needs of mixed generations. The home was designed according to the principles of transgenerational design. Since a good transgenerational home design should fulfill the 7 design principles listed by Jame Prkl (2011), the Kongsi home could adhere to the following principles:

- Safety: A universal design was carefully added to the home.
- Comfort: Passive design was considered in the design.
- Convenience: All facilities were efficiently connected.
- Ease of use: Simplicity made the spaces easy to use.
- Ergonomic fit: Human scale was considered in the design.
- Suitability: All spaces were created in response to needs.
- User value: Connections with nature are the common value.

It can be concluded that considerations of biophilic and transgenerational design principles could contribute to the creative design of an extended-family home to achieve both functional satisfaction and well-being.





### References:

Browning, W. & Ryan, C. (2020). Nature inside: A biophilic design guide. London: RIBA publishing.

Browning, W.D., Ryan, C.O., Clancy, J.O. (2014). 14 Patterns of Biophilic Design. New York: Terrapin Bright Green, LLC.

Epimakhova, T. (2016). Designing for multigenerational community: Creating a supportive environment for young and old in the U.S.A.. Thesis in the master of science architecture, Clemson university.

Pirkl, J. (2008). Transgenerational design: A heart transplant for housing. In Kohlbacher, F. & Herstatt, C. (Eds.), The silver market phenomenon (pp.141-155). NY: Springer Publishing.

Prkl, j. (2011). What is "transgenerational design?". Retrieved from https://transgenerational.org/viewpoint/transgenerational.htm.



