

**Shinkenchiku Residential Design Competition**

Xiao Wang

20178701

“It is generally thought that the plan is a means for describing lifestyle.”<sup>1</sup> This challenge of the perception of life provides also the problem of how life is shaped and formed through the hands of an architect. A plan defines lifestyle through the separation and distinction between functions and rituals of everyday life. In a plan, walls become the most common objects used for separation. However, the barriers created by the many walls become various interferences with the relationships and interactions of human beings. A house is a dwelling in which people gather and commune. Within a family, interactions are important, yet the lifestyle of the current society create a pace, which does not allow for much interaction in general. The multiplicity of walls within our society creates isolation between people, even among the closeness of family and friends.

The “planless” house seeks to remove the common “separations” of a house, however, still maintaining various degrees of privacy for the different functions of a house. This requires for a design that is open, yet defined. It needs to allow for various degrees of interactions yet still provide a distinction between functions and spaces within a house. The optical stair illusion created by Escher provides a great conceptual example of house one may achieve some of these ideas. Though this may not be plausible within reality, it provides many inspirations regarding

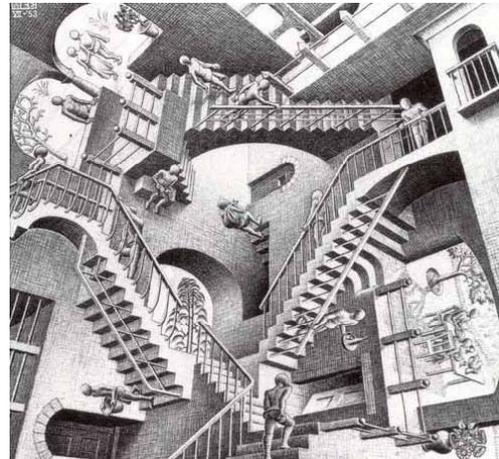


Image 1 - "Relativity" - Escher

spatial relationships and interactions. As different space in the image overlap and collide into each other, different kinds of interactions are created. As one space looks onto another, which is below, a third different space is able to walk direction onto this space. Privacy is also created as one space overlaps another completely, allowing for no views onto each other and no direct interactions. The most interesting idea that can be taken out of this image, is that although this

---

<sup>1</sup> Shinkenchiku Competition Introduction – <http://www.japan-architect.co.jp/english/5info/topics/skcompe2006/index.html>

space is able to create different ways of interaction, it uses almost no walls, except for exterior, and is relatively open and free. The “walls” here are the stairs and the floor plates, which provides a certain freedom. The design of the planless house provides the space with various degrees of interactions depending on the occupancy and functions of the spaces.

To understand each of these interactions and moves in the building, one must not only examine it from a plan view, but rather a sectional view, to understand the different measures taken. A study such as this can be seen in the work of Katsuhiko Miyamoto’s SoHo. This building also uses no walls but rather floors to separate its spaces. Through the study of the section, one can understand the openness of the design and what it allows on the level of interaction. The spaces are open onto its adjacent space, allowing for no barrier to separate the space. The stairs and height differences however act as a threshold onto the next space, clearly identifying the change of program, space and function.

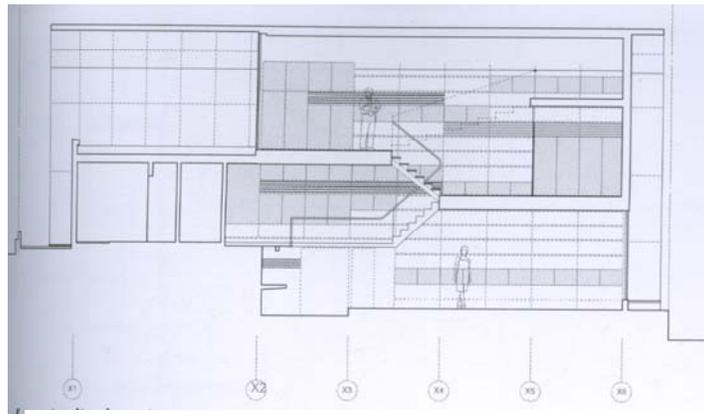


Image 2 Section - SoHo - Katsuhiko Miyamoto

Through various studies of similar designs and buildings, three main ways of interactions are found: direct, selective and indirect. Walls in buildings often eliminate direct interactions and create barriers between different spaces. The shifting planes however allow for these three ways of interactions to all occur through different configurations and forms. By understanding these three ways of interaction, one can start to separate and distinguish the relationships between the various programs in a house and how they interact with each other. In the design, the preliminary concept displays the different program within the house and how they interact with each other.



Image 3 – SoHo - Katsuhiko Miyamoto

Public spaces within a house such as the living room and the dining room can allow for and require public usage for guests. The differences in elevation of these spaces are smaller to allow for verbal and visual interactions between these spaces. Activities often travel from one room to another flowingly.

The small set of stairs and minor change in height signify a more of a change in activity, mood, or can serve as a change from informal to formal. It doesn't provide a spatial separation, as there is no need for such spaces to be separated since one often flows into the other.

Some spaces are in need of privacy, however, not all the time. The overlap and height allow for selective interactions. The spaces below cannot interact with the spaces above freely. Yet, if needed, the spaces above can interact with the spaces below. An example of this is Waro Kishi's House in Shimogamo. In the Space, there is enough height difference to allow for a person below to understand the existence of a space above, yet not be able to freely interact with the space above as there is a lack of visual interaction. However, a person above is able to



Image 4 - House in Shimogamo – Waro Kishi

freely interact with the person below, yet still be able to maintain his own visual privacy in time needed. Other sensual things such as sound, and smell can also travel through the space directly from one to another. In the design of the house, the study located above the living room and dining room is one of such space. The study is often a private space, yet, when guests appear, it may become a space that requires some interactions. Hence, this becomes a perfect space for such kind of interactions.

Some spaces require privacy or have no direct visual relationship with one another. The direct overlap of two planes allow for privacy between the two spaces. Even when spaces and voids are in existence, the height between the



Image 5 - Pulitzer  
Foundation for the Arts

Tadao Ando

two spaces is too great to allow for direct contact. However, odours and sound can still travel through allowing for indirect interactions between the spaces. The example in the picture shows a hallway above another circulation path below. Because one path is overlapping the other directly, there is no interaction to between the spaces until one enters the open area. The space below, may even be unaware of the existence of the space above if not for the double height space next to it. In the design of the house, the bedroom is seen as the most private space in the house. Its setback from the opening in the study floor, as well as its elevation allows for no visual with the living room below. It overlaps the dining room and kitchen, hence creating a solid barrier between the two spaces. It is completely separated from the public spaces in the house.

Rather than using recto-linear shapes, the design uses Triangular and trapezoidal shapes. Triangular planes are the simplest, and purest geometry, which allows for this various different degrees of interaction to occur on one plane. The triangles collide into and overlap onto each other to create different conditions of spaces both positive and negative, and different volumes creating distinction between spaces and function. By examining projects mentioned from above, one can analyze that there is a lack of multiplicity of degrees of interactions within one plane without bringing in complex recto-linear shapes for example in the House in Shimogamo. The floor had to project outwards in order for it to allow interactions with partially the space below. Another example is also in the section of SoHo. The spaces are rectangular planes and such, can only provide either direct interactions or indirect interactions. The triangular planes when overlapping or colliding into each other, can allow for multiple ways of interactions with the spaces around them. This way, one can also create both private and public space on the same plane without the additions of walls as barriers.

The exterior cladding of the planless house is to reflect the interior, with angular planes, which collide into each other. This not only provides in elevation a sample of what is occurring in the plan, but also allows interesting positions of openings and angles that create different moments of communication between



Image 6 – Pavilion at the Serpentine Gallery – Toyo Ito

the interior and the exterior. The inspiration of this is taken from Tadao Ando's Pavilion. The different shapes and openings create a hide-and-seek feeling within the building, protecting what is private and making visible what is public to the surrounding.

The planless house is not just a different idea of building, but also a different idea of the everyday lifestyle of its occupants. The design seeks to break down the barrier and problems created by the physical walls of the house as well as the psychological walls created by fast movements of society. The removal of walls and barriers allow for a much more open and flowing relationships between the different functions of everyday life. The design allows for various degrees of interactions to occur within the house, yet still allows for separation of the private and public in a house. Through the removal of the barriers between the interactions of the space does the space become a planless house.

## **Bibliography**

"The Official M.C. Escher Website".(2006) copyright M. C Escher Company B.V..

<http://www.mcescher.com/>

"Waro Kishi + K. Associates/Architects". (2006)Copyright Waro Kishi + K. Associates/Architects.

[http://199.236.117.156/k.associates/en/03\\_works/residence/residence.php?id=14](http://199.236.117.156/k.associates/en/03_works/residence/residence.php?id=14)

Miyamoto, Katsuhiko. (2003) "SoHo". GA houses. vol 74. 76-77

Miyamoto, Katsuhiko. (2003) "SoHo". GA houses. vol 77. 72-77

"archiweb.cz – Pulitzer Foundation for the Arts".(2006) Tadao Ando.

<http://www.archiweb.cz/buildings.php?type=arch&action=show&id=634>

"Toyo Ito". Copyright Toyo Ito.(2006) [http://www.c-channel.com/c00088/index\\_en.html](http://www.c-channel.com/c00088/index_en.html)