

## Spatial Dynamism of Public Voids: A case study of shared social spaces in Singapore's residential estates.



Fig.1 Void Deck Space (Our SG, 2016)

The void deck is a shared public space which exists underneath the equivalent of a council housing estate in Singapore (Fig.1). It is shown that an estimated 80% of people in the country live in these apartment blocks (Estimated Singapore Resident Population in HDB Flats-Data.gov.sg, 2020). Therefore, a majority of Singaporeans would have to pass through these shared spaces everyday. The unique thing about these public “void” spaces would be its name, pertaining to the lack of assigned usage on a day to day basis where its function depends on temporary social purposes. For example, it could be a place where neighbors gathered to play chess, or for children to repurpose into a playground to play soccer or skateboard. Alternatively, it can also be a place of ritual, being temporarily converted into a wedding stage or a funeral site, inviting strangers, friends of residence or people who would not be at that space to take part in these strongly programmed routines. Therefore, I am proposing to look at this space through the concept of correspondence models where spatial and transpatial solidarities overlap in order to observe the phenomenon of spatial dynamism which occurs within these types of spaces as a result of social reappropriation.



Fig.2 Activity Space (Our SG, 2016)

The spatial correspondence model originates from the theory of constructing social interfaces through a building's constructs. Buildings enable the ordering of user categories between inhabitants and visitors of the building. The former's identity inscribed into the building form and control while the latter, being controlled by buildings. Buildings are mechanisms of generating constraining patterns of encounter and avoidance resulting in a system called an interface (Hillier et al., 1984). However, in void spaces, the relationships of people using or passing through it are temporary. Meaning that any point, either residents, relatives or strangers may be considered inhabitants or visitors of the space depending on assigned usage. There are two mechanisms of relationships within spaces, suggested to be spatial solidarities, based on proximity, and transpatial solidarities, based on kinship, affiliation, profession or interests (Hillier & Hanson, 1984; Sailer & Penn, 2009). In this context, the spatial layouts are dynamic, meaning that the degree the spatial layout realizes spatial and transpatial solidarities between residents and temporary users of the space is constantly in flux.

Correspondence models are used to define spatial and transpatial relationships, where encounters resulting from physical proximity are reinforced by transpatial solidarities. In residential estates, there is a social policy that states that every residential community must be made up of different races in a given proportion. However, due to the majority of Singaporeans being ethnically Chinese, there is an 84-87% allocation of flats to inhabitants of Chinese ethnicity (Ethnic Integration Policy and SPR Quota - Housing & Development Board (HDB), 2020). Furthermore, there is a combined income cap of \$7000 - \$14,000 SGD per month per family (HDB Flat - Housing & Development Board (HDB), 2020). Therefore, it can be said that the communities are of similar socioeconomic background. Due to these factors, the voids in their original state as a transient pedestrian path predominantly act as spaces with correspondence models where communities are uniformed.

On the other hand, non-correspondence models are spaces that allow transpatial solidarities to overcome spatial boundaries. In a normal scenario, correspondence models are characterised

by local strength, exclusivity, hierarchies and pronounced boundaries whereas a non-correspondence system thrives on openness, equality, inclusivity and global strength. (Sailer, Thomas 2019)



Fig 3. Malay Wedding (Our SG, 2016)

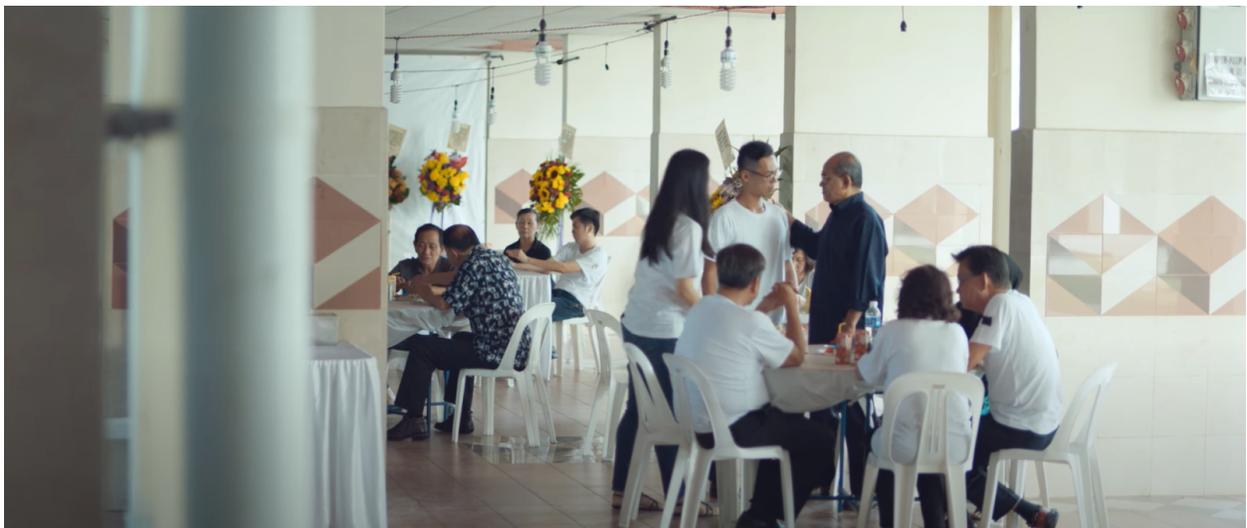


Fig.4 Chinese Funeral (Our SG, 2016)

However, these void spaces provide an interesting case where the situation is reversed. It serves as a correspondence model when acting as open public spaces with weak boundaries. When this is reversed in scenarios where the space is transformed to serve particular rituals and activities, it turns into a non-correspondence space with exclusivity, hierarchies and pronounced boundaries. This is most evident during weddings or funerals (Fig.3 and 4) where the space is organized according to the couple's ritualistic beliefs. Usually tables and assigned seating is provided along with catered food and a stage for the married couple to stand on. This takes up large portions of the void deck where a social boundary is formed between the

wedding space and the external common circulation areas. Although the spatial properties are similar to what would normally be found in correspondence spaces, the void deck becomes non-correspondence due to the fact that these weddings bring in family, friends and often times neighbors all coming from different cultural and socio-economic backgrounds, while also bringing “strangers” into the originally rather homogeneous public void spaces. The ritual additionally, functions as a programmed event which takes over an otherwise unprogrammed space bringing different people into temporary proximity who would otherwise be spatially segregated turning this into a case of negative correspondence (Sailer, Thomas 2019).

In this study of the void deck, one can observe the extreme dynamism and potentials of this spatial yet transpatial space (Hillier, Hanson 1984) where this space is reappropriated for different purposes with the same configuration, constantly in flux between its correspondence and non-correspondence models. In addition, this space is also one where strong programme counter-intuitively support non-correspondence when normally, weak programmes and non-correspondence are expected to operate with spatial integration.

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## The British Library and its “Sense of Belonging”

Through my study of The British Library, I will look at the relationship visitors have with its architecture which has been designed to invite visitors' to create their own sense of belonging (MacCormac, 2004). This spatial “sense of belonging” can be characterized by visitors being presented with choices which let them temporarily inhabit the space. In the social logic of space (Hillier & Hanson, 1984), inhabitants are described to be people who are in control of the social logic of the building whereas visitors have fleeting presence without necessarily having social control of spaces. Of course these two identities exist on a scale of inhabiting and visiting; therefore what I am suggesting by this sense of belonging would be visitors with a choice of how much social control of spaces they wish to have within the British Library.

This sense of belonging through social control can be analyzed through the theory of spatial programming proposed by Hillier (Hillier, 1996). This refers to the spatial dimensions of this organization which has been programmed in advance in order to structure social interfaces which occur, generated through the movement pattern of users. In strongly programmed spaces, there are fewer chance encounters as the spaces usually have very specific roles assigned to them. In weakly programmed spaces, there is a higher probability of chance encounters between people due to a distribution of activities without specific purpose in that given space. In Sailer's research on the British Library (Sailer, 2015), results suggest that the British Library shows both strong and weak programming where movement flows did not entirely follow spatial configuration. The interface of the building was constructed to keep people apart and large variations in user activities existed in some parts of the library, pointing towards strong programming. However, certain activities showed significant differences in local and global visibility patterns which illustrates weak programming. Therefore, there is a choice for visitors to use different types of spaces, giving them social control.



Fig 1. Balconies



Fig 2. Outdoor Courtyard

Additionally, there are different visitor spaces in the British Library, affording them a choice of visibility. There are different rooms with different levels of programming, collectively termed “reading rooms” which provide different levels of visibility and lines of sight to different areas of

the library as seen in Fig 1. There are also open areas with cafes or seating available for people to read or engage in a wider range of activities in the outdoor courtyard in Fig 2 without intruding on the silence in internal library spaces - all with varying levels of visual access, noise and privacy. In Sailer's research (Sailer, 2015), it also addresses patterns of visual access within the library where paths give visitors different levels of openness and enclosure, thus publicness and privacy.

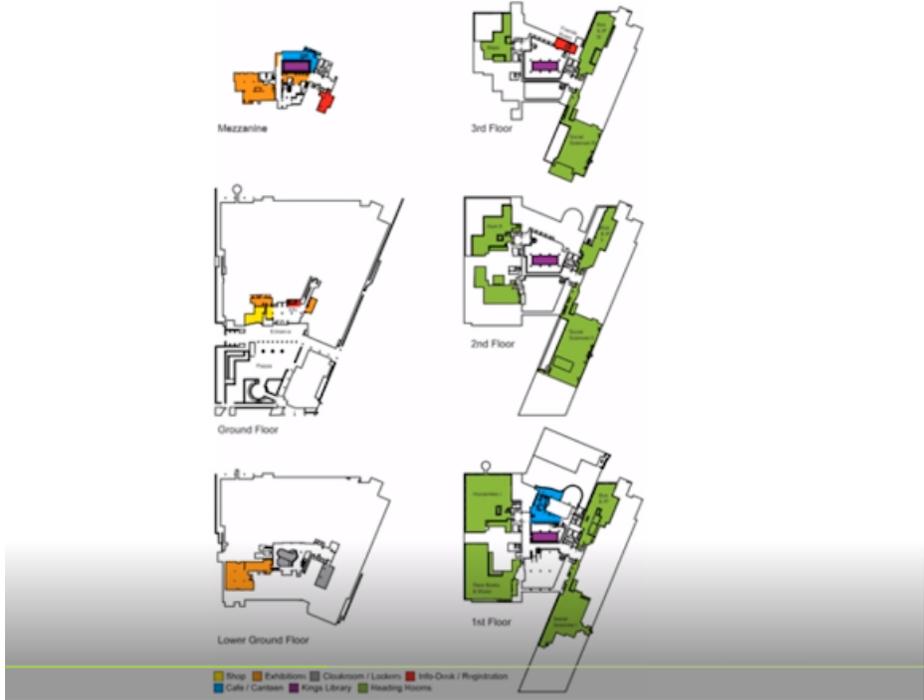


Fig 3. Floorplan

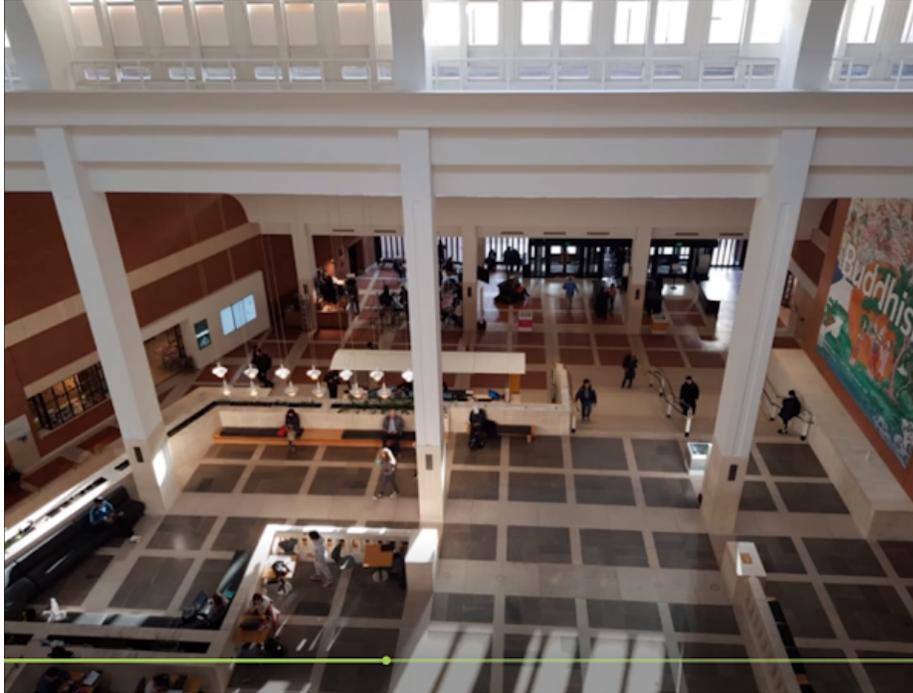


Fig 4. Atrium

Fig 3 shows a floorplan of the library indicating a wide range of spaces dispersed around the central atrium. The depth of these spaces can be said to increase the higher up one goes in the library, where the floor plan also indicates an increased number of segregated rooms from the central corridor. This means that visitors are presented with many choices on where they wish to go from the central atrium of the ground floor. It can be seen that the atrium acts as a D space where visitors have choices in their movement path which determine their visitor experience, and eventually destination (Hillier and Penn, 1991). However, as you move to deeper areas on the upper levels, you have more type A and B spaces where it is either a dead end or have limited access points, indicating increased depth and privacy, limiting the number of chance encounters.

Therefore, by examining the spatial programming through movement, visibility and access, the British Library can be seen to achieve its goal of letting visitors choose their own sense of belonging when they are presented a myriad of choices which determine their social experience within various pockets of spaces, easily finding a space in which they wish to temporarily 'inhabit'.

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## The sea has become a river? The post-covid loss of tellable spaces.

The idea of the visitor exhibition spaces being referred to as a sea was taken from the works of Alan Penn, Maximo Martinez and Maia Lemlij's, where they analyzed the organizational structure of the British Museum. (Penn, Martinez and Lemlij, 2007) In their studies of the museum's back of house spaces, they likened the various back of house departments as islands within the global spatial structure of the museum. This is because the museum was separated into public and private spaces where the two areas are extremely segregated spatially, while being highly locally integrated.

This is achieved as they form islands of locally accessible space within curatorial departments that are linked to adjacent departments by weakly programmed routes through museum space. The visitor space of the British Museum (pre-covid) functioned as a sea which bridged their different curatorial departments together. Majority of the exhibit areas can be said to have D type spatial configurations (Hillier & Hanson, 1984), this means that they are connected to two or more circulation paths, giving visitors the choice to move about freely between these curatorial divisions, making their movement choices through the space the main factor which frames their visitor experience.

This is because the museum exhibition areas were organized to be 'Tellable Spaces'. This means that the spatial layout and object placement were curated to contextualize objects within its historical period and geographic region. The objects were selected by the museum's curatorial team while the exhibition and education staff framed them through programs of exhibitions and educational experiences, following an analysis by Basil Bernstein (Bernstein, 1977). Visitor experiences were largely framed through architecture which structured their paths through these Tellable Spaces as spatial layouts place the objects in relation to its surrounding visual field which changes as the visitor walks about. Tellable Spaces made up the organizational culture of the British Museum (Schein, 1990), this means that museum objects and their contexts are organized to be learned through the visitor's movement through spaces in a non-linear way. While the curatorial departments may be organized chronologically or in some categoric way, due to the flexibility of visitor movement through the sea of spaces, their visitor experience is informed through their movement patterns leading to different framing of objects and contextualization they would encounter.

This, coupled with the social context of their visit to the museum (whether they are visiting with family or friends of different interests or backgrounds etc) informs their decisions on how they choose the routes to take around the museum space based on what knowledge people within their social group chooses to interact with. Therefore, experiencing the organizational culture of the museum can also be said to take social relations as a factor of how knowledge is conveyed to the visitor.

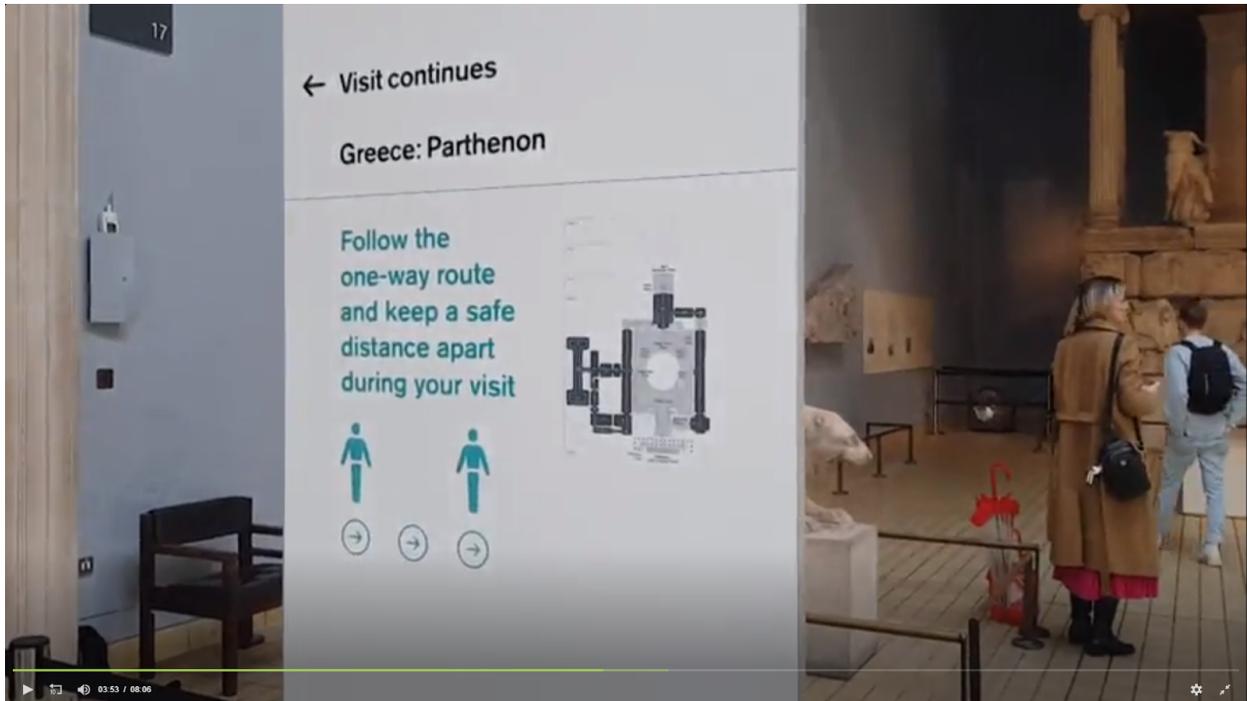


Fig 1.1 One Way Route (Sailer, 2020)

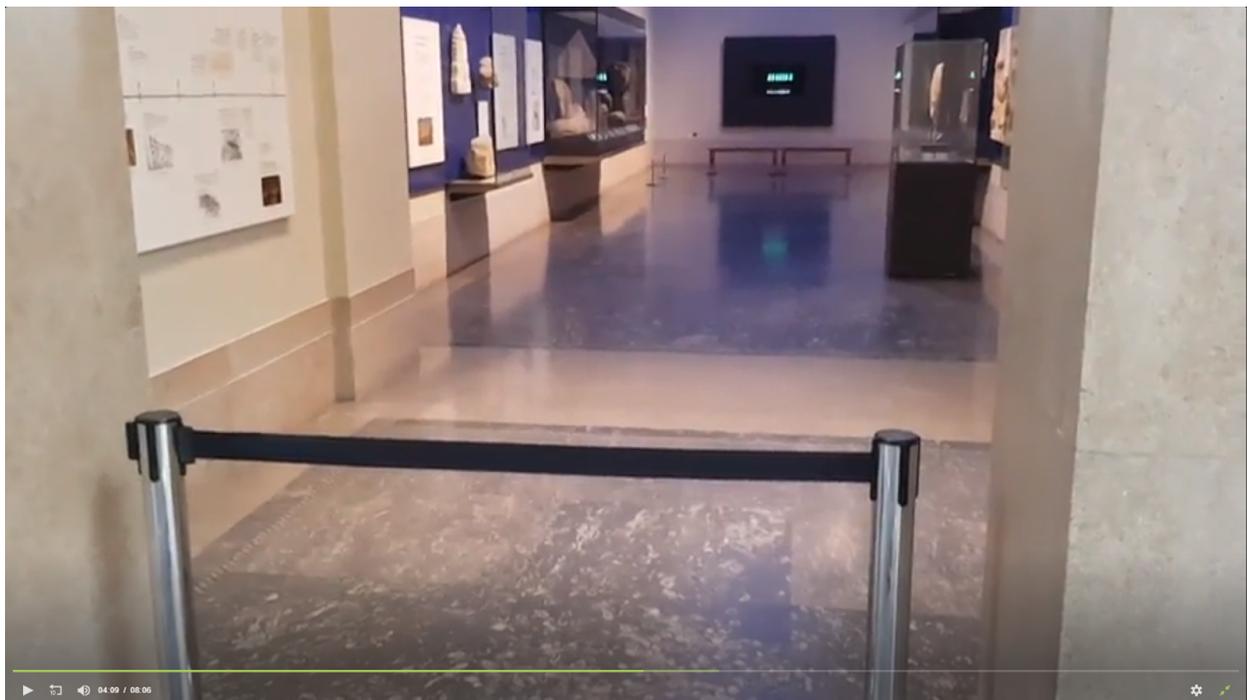


Fig 1.2 Division of Paths (Sailer, 2020)

### **How this changes post covid - no longer tellable spaces**

Now why has the sea become a river and how does this relate to visitor experience? Because of covid social distancing measures, the flexibility of visitor paths are now constrained to fixed

routes, meaning that the sea has been 'straightened out' allowing for a one way circulation. Visitors will not have the freedom to choose their educational experience and curatorial framing through different paths taken and the social context of their visit makes little differences in how they go about the space. Therefore, it can be said that the post-covid scenario is no longer 'Tellable'. The exhibition areas can be seen to be mostly C type spaces, leading the visitor experience to be sequential with strong curatorial content and less spatial encounters (Hillier and Penn, 1991). The organizational culture now matters very little due to the fact that rather than experiencing the culture through 'exploration' visitors are now fed information in a fixed order as they follow along the path which winds through specific spaces.

In conclusion, the lack of choice in visitor movement caused by the covid situation has led to the loss of tellable spaces in the British Museum. Linking this back to the intentional organization of exhibition spaces to be 'Tellable Spaces', (Penn, Martinez and Lemlij, 2007) these exhibition spaces were intentionally designed spaces which gave visitors a choice in their visitor experience and museum exploration. Therefore, the space functions more as a sea without definite lanes which people had to keep to. However, this spatial intent no longer works as the spaces have been reorganized post-covid, where partitions can be seen, refer to (Fig.1.1 and 1.2), that turns spaces into B spaces - linear routes or C spaces - fixed circulation rings which does not offer visitors a choice of route. Therefore, by turning the sea into a river, the choice of organizational culture led by the spirit of social relations and exploration becomes moot as visitors are fed through the system without utilizing the choice of spatial experience.

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