

## Adjusting Religious Practices to Different House Forms in Singapore

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### Summary

Studies of residential resettlement tend to emphasize the economic and social psychological hardship faced by the affected households. The actual behavioural adjustments to the new house forms upon resettlement remain neglected topics of research. The present essay examines the symbolic and behavioural adjustments that each of the three major ethnic groups in Singapore have made when they were resettled from ethnically specific house forms to standardized high-rise flats. Prior to resettlement, each ethnic group has developed its own house form in which the group's beliefs are encoded. The geomantic belief system and the hierarchical organization of the family of the Chinese combine to produce a strong emphasis on formal symmetry in the building's facade and layout. The Malays, as a result of Islamic injunction against gender mixing, emphasize gender segregation between non family members in the layout of their houses. Finally, the Hindu Indians' cosmological concern with "purity" is expressed in a spatial arrangement of the house that maintains both functional and gender segregation. The standardized high-rise flat eliminates all these particularistic layouts. However, this does not mean automatically the demise of the belief systems. Instead, each group seeks ingeniously to invent new ways, both spatial and symbolic behavioural, to preserve the major elements of its own belief system within the standardized space allocated to all. Generally, it appears that symbolic elements that are by definition abstract are more readily accommodated into the new house than behavioural ones.

### Résumé

Les études portant sur les problèmes de relogement forcé tendent à souligner les difficultés économiques et socio-psychologiques des habitants. En revanche, on néglige généralement l'étude des modifications du comportement que les nouveaux logements provoquent. Cet article examine les ajustements symboliques et les adaptations du comportement que chacun des trois groupes ethniques majeurs à Singapour ont dû faire lorsqu'ils ont été déplacés des maisons ethniquement spécifiques à des immeubles standardisés. Dans leur première habitation, les habitants de chaque groupe avaient pu développer leur propre forme d'habitat où les croyances du groupe étaient également encodées. Le système de croyance géomancique ainsi que l'organisation hiérarchique de la famille chez les Chinois se combinent pour mettre très fortement l'accent sur la symétrie formelle tant du plan que de la façade. Les Malais, pour répondre à l'injonction islamique d'éviter la promiscuité des sexes, mettent l'accent dans leurs

plans d'habitations sur la ségrégation sexuelle entre les personnes qui ne sont pas de la même famille. Enfin, les indiens Hindus, avec leur préoccupation cosmologique concernant la pureté, l'expriment spatialement dans une maison qui maintient une ségrégation tant sexuelle que fonctionnelle. L'immeuble standardisé élimine tous ces plans caractéristiques. Ceci n'a toutefois pas comme conséquence automatique l'abandon des systèmes de croyances. Au contraire, chaque groupe s'ingénie à trouver de nouvelles façons, tant spatiales que par le comportement symbolique, de préserver les éléments les plus importants de son propre système de croyances à l'intérieur de l'espace standardisé qui lui est alloué. Il apparaît de façon générale que les éléments symboliques qui sont par définition abstraits sont plus facilement intégrés dans le nouveau logement que les éléments relatifs au comportement.

## Introduction

Under conditions of rapid urbanization, especially in Third World nations, the tearing down of existing communities for new development is inevitable \*. Hence issues attending the process of resettling the affected individuals are of both lay and professional concern. Much of the literature on resettlement tends to be focused on two issues, namely (i) the economics of resettlement, including the economic hardship faced by the affected individuals and households, as these are often from lower income groups, and (ii) the social and psychological aspects of the loss of established homes and communities due to resettlement <sup>1</sup>.

Curiously, one obvious aspect of the resettlement process remains under-investigated; that is, the resulting changes in house forms. Often, it means changing from culturally inherited house forms built with indigenous material and indigenous architectural idioms to some form of standardized structure of modern building material. Since this change is overlooked so, too, is the resultant change in culturally conditioned behaviour and expressions that are embedded in the house forms themselves. Consequently, a major aspect of behavioural adjustments of the affected individuals to the new environment is neglected.

Using the data gathered in Singapore, a land scarce island nation which has seen unprecedented urbanization in the last twenty-five years and has had to replace much of the pre-independence established residential communities and housing of its various ethnic groups by standardized high-rise apartments, this essay will investigate precisely the changes identified above and in so doing, hopefully, stimulate comparative interests in the illumination of related issues.

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<sup>1</sup> A convenient reference to this body of literature is the special issue: Residential Mobility: Theory, Research and Policy, *Journal of Social Issues*, 38(3), 1982.

## 2. Resettlement and Public Housing

A massive public housing programme to house a rapidly growing population that was already living in either extremely congested urban areas or in unsanitary semi-rural impermanent houses was initiated by the Singapore government as soon as self-government from British colonial office was secured in 1959. The task for implementing this programme was transferred from the colonial housing agency to the Housing and Development Board (HDB), a statutory board established in 1960, under the direct supervision of the Minister of National Development. The HDB undertakes every aspect of the implementation, from land clearance to planning, all architectural and engineering works and finally, to the overall routine maintenance of all buildings and supportive facilities upon completion and occupation. Only the actual construction of the buildings is undertaken by contractors.

The successful implementation of the ambitious programme is reflected in the fact that up to 85 percent of the total population of 2.6 million people are housed in more than 500'000 dwelling flats in high-rise, high-density housing estates and in relatively self-sufficient new towns. Of all the public housing residents, more than 75 percent own the flats in which they reside. Realistic, sensible or otherwise, the government's professed aim is to achieve 100 percent home ownership by the end of the century. Detailed accounts of the HDB's activities, including its architectural achievements, are readily available, and there is hence no need to further belabour the points of its success (Wong & Yeh, 1985; Chua, 1985).

Almost every step of the construction of public housing is unavoidably preceded by the clearance and resettlement of established settlements. The resettlement process is facilitated by the enactment of the Land Acquisition Act which gives the government the right to compulsorily acquire any land that is deemed to be necessary for any public project or private project as the case may be, if the latter were deemed to be in the national interest. A detailed account of the entire resettlement process is not germane to the present discussion (Gamer, 1972; Wong and Yeh, 1985: 305-334), but one point needs to be noted: significantly, the attitudes of the individuals affected by resettlement have, through the twenty-five years of housing programme thus far, changed from active resistance to that of general acceptance, albeit with concerns for the increases in financial costs that relocation from "squatter" housing to high-rise flats necessarily incur. This important attitudinal change which greatly facilitates the resettlement process can be attributed to three primary factors: (i) financial compensation has greatly increased over the years to reflect the general economic growth; (ii) the general improvements in the physical and environmental conditions of public housing estates compared to the squatter areas, this is particularly important for the younger generation who views the unsanitary conditions negatively, and (iii) an increasing realization and acceptance of the inevitability of high-rise living for all Singaporeans, and that resettlement is necessary from the national interest point of view (Chua, *et al.*, 1985).

Prior to relocation into high-rise flats the two major ethnic groupings, namely Chinese and Malays, tended to live in architecturally distinct houses, each reflecting the social, cultural and religious values of the respective groups. Significantly, although constituting up to eight percent of the total population, and often concentrating in certain districts close to their places of employments, the Indians in Singapore did not develop their own ethnically distinct architecture. Among the many possible rea-

sons is the fact that until after the Second World War, family formation among Indians, though not entirely absent, was not in significant numbers. Indian men who came to seek employment in Singapore lived largely in dormitories at the place of employment or in the quarters provided. Those who did form families appeared to have adapted themselves into existing house forms (Siddique & Puru Shotum, 1982). For example, in a village in the northern part of the island there is still a high concentration of Indians because this village is close to the naval base which provided substantial employment opportunities for them, especially before the British withdrawal from the base in 1968. The houses in which they live are similar in layout to those of the Chinese houses described below. However, the rationale behind the ways in which the house is used is different from that of the Chinese. It is this difference that will be documented.

The exclusive ethnic settlements have been dispersed as a result of HDB's first-come-first-served allocation procedure and of the government's explicit policy goal of physical ethnic integration while maintaining each group's cultural identity. As to ethnic architecture, there are only a sprinkling left, replaced by standardized flats in high-rise buildings. Indeed, the heritage lost in the process has spurred the HDB to develop a Malay "kampong" - a village - in a traditionally Malay area.

With the above introduction, we are now able to get to the main concern of this essay, i.e. adaptations to changes in house forms. It will proceed with a description of the typical layout of Chinese houses and its cultural significance; this will be followed by a discussion of the variation of its use by Hindu Indians. A similar discussion will be devoted to the Malays, and finally, a description of the standardized HDB flat and the cultural adjustments that each group has made as a result of the changes in the layout of the house will conclude the essay.

### 3. The Semi-Rural Chinese House

Kohl, an observer who traced the development of Chinese architecture in Malaysia and Singapore, suggests that, "satisfied with their fitness of purpose, serviceability, and aesthetics, the Chinese have not altered their architectural forms, with architecture becoming more a rule of thumb than an art after the Tang dynasty". One consequence of this is that the "plan of a house and of a temple may be identical, and the use of buildings may change from temple to home or school quite easily" (Kohl, 1984). Significantly, this architectural continuity not only cut across time, but also survived the transplanting from its origin to new environment. Hence, a general description of the Chinese house applies not only to those from whence the Chinese immigrants to Singapore came but also to those built in the new environment by the very same immigrants.

A general description of a Chinese house is as follows: ideally, a Chinese building should have a symmetrical plan oriented on an axis that runs "north-south" metaphorically because the "south" does not necessarily refer to the compass south, but rather that which is determined by a geomancer. Buildings face and open to this "south" to capture the positive, warmth-oriented *Yang*; whereas the "north" is constituted by a solid wall to deflect the negative, cold *Yin*. The roofs and extending eaves are supported by a truss system resting on pillars. The intervals between the pillars are known as "bays". A building is often enclosed on three sides with the bays facing "south"; this open side, paralleling the roof, forms the facade of the building.

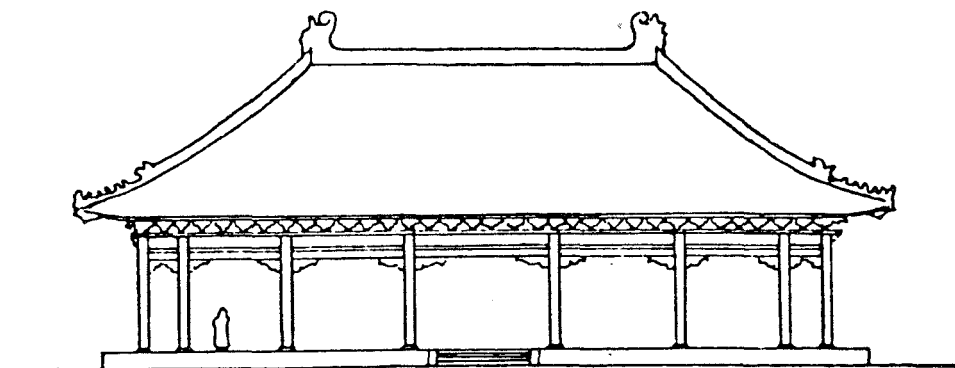


Fig. 1a Typical Ming or Ching hall with seven bays (Source: Kohl, 1984, 39)  
Salle caractéristique de l'époque Ming ou Ching avec sept travées



Fig. 1b Typical semi-rural Chinese house in Singapore  
Maison chinoise semi-rurale typique à Singapour

In the Singapore context, instead of establishing a geomancy-south, houses pragmatically simply face the laneways or roads. The bays with their extended eaves are often half-fenced in to form a verandah. This appears to be a tropical adaptation resembling the verandah of a Malay house, which is indigenous to the region (Figure 1).

In the layout of the house, the main entrance is centrally placed in the open facade and leads directly and immediately into the square or rectangular "reception" or "ancestral" hall. Immediately facing the door is the altar, upon which are placed the Gods worshipped by the households, represented either by paintings or wooden sculptures<sup>2</sup>. Photographs or tablets of ancestors are placed to the left of the Gods, generally on a separate altar. Again centrally placed below the altar is often a square table used for setting up sacrificial foods on ritual occasions. Other functional rooms surround the three closed sides of the hall.

The overall impression is one of symmetry.

There are substantial variations to the distribution of the functional rooms. For example, bedrooms may be found on the left and right sides of the hall, while the kitchen and dining space are placed behind the wall facing the main entrance. Alternatively, bedrooms may surround the hall and the kitchen is housed in an extension to, or in a completely separate structure to the side or behind, the main house. The distribution is largely dependent on the wealth of the inhabitants and hence the size of the house itself. The following plans drawn from different locations illustrate both the symmetry and the variations of distribution of the functional rooms (Figure 2).

A rigid symmetry of layout maintained whenever possible is, of course, culturally and socially significant. I shall offer two non-mutually exclusive plausible accounts of its significance. The first which may be termed cultural explanation relates to what could be called the underlying philosophy of buildings in Chinese culture as expressed in and through the concepts and practices of geomancy. A succinct statement that specifically addressed the relations between geomancy and buildings is given by the late, eminent anthropologist of Chinese society, Maurice Freedman. He suggests:

It is very important to grasp the idea that in the Chinese view a building is not simply something that sits upon the ground to serve as a convenient site for human activity. It is an intervention in the universe; and that universe is composed of the physical environment and men and the relationships among men. Men are bonded to the physical environment, working good or ill upon it and being done good or ill to by it. Moreover, when a man puts up a building he inserts something into the landscape and between him and his neighbours. It follows that risks attend his enterprise and he must take precautions. The physical universe is alive with forces that, on the one side, can be shaped and brought fruitfully to bear on a dwelling and those who live in it, and, on the other side, can by oversight or mismanagement be made to react disastrously. But the very

<sup>2</sup> The Gods worshipped by the Chinese vary from place to place, even from household to household. For examples of the different Gods worshipped by a Malaysian Chinese community, see Newell (1962). A more general discussion on Chinese religion and temple architecture is given by Kohl (1984, 83-129).

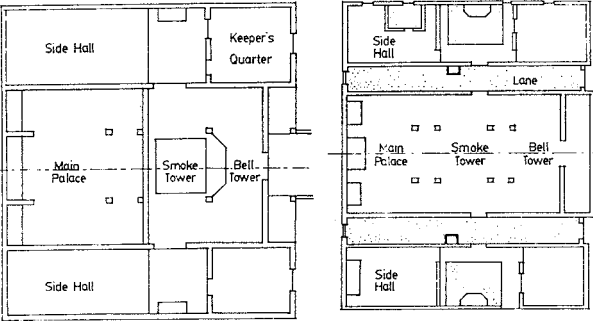


Fig. 2a Common floor plans of Malaysian Chinese temples (source: Kohl, 1984, 92)  
Plans d'étage communs de temples malais

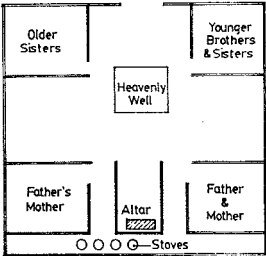


Fig. 2b Shop-house floor plan in Southern China (source: Newell, 1962, 102)  
Plan du rez-de-chaussée d'une maison-magasin dans le sud de la Chine

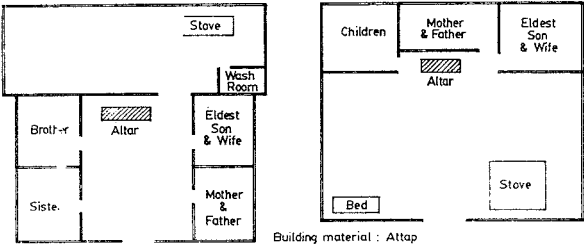


Fig. 2c Floor plans of rural Chinese houses in Malaysia (source: Newell, 1962, 102)  
Plans d'étage de maisons rurales chinoises en Malaisie

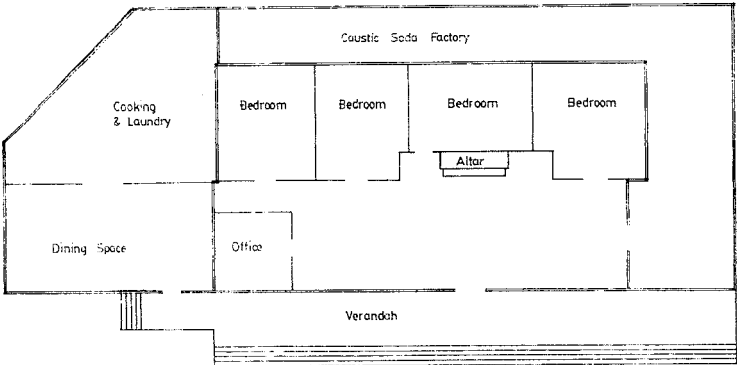


Fig. 2d Floor plan of a Chinese house-cum-factory in Singapore  
Plan d'étage d'une maison-usine chinoise à Singapour

act of siting or constructing a house to one's own advantage may be to the detriment of others. Modifications in the landscape reverberate. So that, in principle, every act of construction disturbs a complex balance of forces within a system made up of nature and society, and it must be made to produce a new balance of forces lest evil follow (Freedman, 1979, 318).

Given the above belief, Freedman suggests that, "buildings are culture in a special sense; what men make for themselves in their construction may be a challenge to the natural world, and *feng-shui* (geomancy) shows both the risks attending that challenge and the means of minimizing them" (Freedman, 1979, 331). The practice of geomancy involves first the selection of a site and establishing the proper orientation of the building within the selected site. The intent is to avoid evil or bad luck and conversely to ensure health and fortune to the family in the future. If such preventive measures were not possible as in instances in which the building was already erected, and the inhabitants had suffered a serious set-back, or a series of them, then elements of the structure may be corrected or realigned to alter the *feng-shui* and hopefully turn the apparent ill-fortune around. Instead of correcting the structural elements, a priest may be engaged to ritually appease the evil spirits. This shows the close link between geomancy and Chinese religion and in many instances the geomancer and the priest are one (Freedman, 1979, 322-325).

In brief, the two primary elements in Chinese metaphysics are the complementary opposites of *yin* and *yang*. That these are complementary and not antagonistic forces is significant because movements between the forces are aimed at achieving a balance rather than the domination or even elimination of each other. This balance of the forces is mediated by the five elements of Fire, Water, Wood, Metal and Earth. Hence natural elements such as mountains, rivers, forests or even a single tree are elements to be considered in the assessment of a site.

Optimally, the siting of the building should take into account all the natural elements found therein, and when necessary and possible, some of the elements rearranged, for example, the planting of trees or digging of wells. However, practically this is not always possible; indeed it was generally impossible for landless immigrants who have had to build their impermanent houses wherever they could. As mentioned earlier, Chinese houses in Singapore tend to simply face the immediate circulation ways. While details of the site's geomancy characteristics may have to be forfeited, the balance of the *yin* and *yang* can nevertheless be encoded and given material expression in the very building itself. Hence, the stress on symmetry in the houses.

The second explanation for the symmetrical layout relates to the structure of the Chinese family. It is now common place to suggest that the traditional Chinese family is rigidly hierarchical in its apportioning of authority. "One of severe subordination of the sons and of correlative authority on the part of the father" (Freedman, 1979, 236). This hierarchical structure is culturally encoded in the norms of familial relations, of course. But one should also expect other cultural artifacts to carry it symbolically. It is my contention, therefore, that the symmetry of the Chinese house is an architectural-spatial encoding of the hierarchical order of the family structure. The reason is that a symmetrical layout plan allows for the ease of locating a "centre" in the house. This centre, a symbolic rather than actually spatial centre, is precisely the space occupied by the altar.



This symbolic centre is simultaneously the centre and seat of authority of the household. It enables the family to install the head of the family at a precise space in the reception hall, that is, the space immediately in front of the altar. Thus, on every ritual occasion when deferential gestures rendered to the elders are to be performed, the elders are always seated either immediately in front of the altar or immediately at its two sides.

Significantly, this emplacement of the head at the symbolic centre, with the subordinates distributed to the left and right sides, is standardized in every formal occasion of co-presence of the head and his subordinates. This is reflected in the stylized arrangements of all the different levels of the dynastic Chinese courts, culminating in the Emperor's audience with his officials. This reflects yet another common place observation about Chinese family, that it is a microcosm of the society at large; the Emperor is thus the structural equivalent of the father. If the above interpretation is plausible, then one may thus conclude that it is because of the ease with which the symmetrical layout facilitates the locating of a formal symbolic centre that it is adopted by the Chinese.

A conceptual point may now be made. It is commonly the case that with the hierarchical authority structure goes the corresponding unequal distribution of power. However, it should never be assumed as a matter of course. In the case of the Chinese family, the father's ability to exercise effective control, i.e. his power over the subordinates, declines gradually to nearly nil from the point the son marries till the father's own retirement and he becomes financially dependent on the son. This pattern is especially common among the lower income urban Chinese families. Nevertheless, the father's symbolic position as the head of the family can continue to be honoured by the younger generation. Thus in the interpretive reading of the Chinese house, it is to the symbolic universe of the "idealized" family structure that we refer and not to the actual ongoing dynamics of shifting authority and responsibility among the family members.

From the symbolic universe of the Chinese house, I will now turn to that of the Tamil Hindu Indians.

#### 4. The Indian House

As mentioned earlier, the Indians do not develop their own residential architectural form. From our observations at a village with a high concentration of Tamil Hindu Indians, they appear to have accommodated themselves to the layout of the Chinese house described earlier<sup>3</sup>. However, significant differences exist in the way the house is used by a Hindu family. To understand the way it is used, one needs to have only a very general understanding of the Hindu's concern with purity and pollution in their everyday life.

In the Hindu religious system, purity of castes and avoidance of contamination by other castes has been generalized to an overall concern with "purity" and its polar opposite concept "pollution" (Douglas, 1966, 147). Pollution is divided into two forms: permanent and impermanent pollutions. Permanent pollution is ascribed to a person by virtue of birth in a high or low strata and cannot be removed by purification.

<sup>3</sup> The Tamils are used as illustrative examples because they constitute the majority of the Indian population in Singapore.

According to a Singapore Indian sociologist, "migration and cosmopolitanism had altered the (Singapore) Indians mind to such an extent that 'untouchability' has been replaced with tolerance and understanding", and that "distance-maintenance between different castes, because of their birth into that particular caste, is a forgotten phenomenon" (Mani, 1977, 60-61). Indeed, their routine employment demands require them to mingle with individuals of all castes, thus providing no possibility to observe the necessary distance. The consequence is that purity and pollution related practices have become constricted from an all encompassing world view. They have taken a domestic turn and are now largely focussed on the home and in very personal relations. At this level, it is the impermanent pollutions that arise from the normal functions of daily living and can be removed by ritual purification that have become objects of concern. These concerns greatly influence the use of the house.

Although using the same layout, the Hindus in direct opposition to the Chinese geomantic preference for a "south" facing house would want to avoid facing south as this is the direction of death. The preferred orientation is east-west as the first ray of sun at daybreak is invested with a purification function; such is the orientation of all Hindu temples in Singapore. However, much like the Chinese, their preference is not easily realized; so pragmatically the house simply faces the road. In the more religiously knowledgeable, the furniture in the house is arranged in the east-west direction, but this is not commonly observed.

Upon entering the house, the layout of a centrally placed rectangular sitting room flanked by bedrooms is readily recognizable; however, no altar or religious artifacts are to be found, with the single exception that in some families, a pictorial icon of a Hindu deity or some dried palm leaves hang above the main door. The icons of deities, pictorial or sculptural, tend to be placed in a separate room away from immediate view. How much space is devoted to the deities varies from an entire room being designated as the prayer room exclusively to a simple cabinet with curtains or doors, placed in a cluttered store room. Obviously the quantum of space is quite irrelevant.

However, the non-visibility is intentional. In Hinduism, polluted persons are barred from ready relations with God and fellow believers. They are not allowed to perform acts of worship and must keep their distance from others lest their polluted state contaminates the latter and prevents them from worship. The icon is the material manifestation of God, and to the devotee even to look upon or to approach it is a sacred act in itself (Matics, 1981). So, in order to avoid defilement of the sacred by pollution contracted by household members in their daily life, the deities are kept safely at a distance and closeted from view, lest inadvertent polluted eyes cast upon them or a polluted body rubs against them.

A common source of impermanent pollution within the household is bodily emissions, such as saliva, menstrual blood, feces, urine and semen. Every visit to the toilet is an act of pollution. Even love-making is a polluting act. Most of these impermanent pollutions can be removed by simple washing with water as an act of purification or with a simple prayer or both. As these biological functions are unavoidable, the deities must be protected from them. In terms of layout of the house, avoidance can be better maintained if all washing and toilet facilities are kept in a separate structure and away from the main house. Ritual purification by washing can be performed prior to stepping into the house proper. The separation of toilet facilities in the Hindu Indian house, as in the Chinese house, is more than a question of general hygiene, it is part and parcel of the religious practice.

If bodily emission is polluting, conversely food must be pure. This is logically consistent because food is ingested and becomes part of the self, and contamination will hence pollute the self. To ensure purity even the preparation of food must be safeguarded. The kitchen must therefore be maintained as a sanctum of purity. In village India, no caste permits any individuals other than close relatives of the same caste to enter the kitchen. Here again, the clear separation of the kitchen from other functional space helps to maintain its ritual purity. Indeed, in more spacious houses in the Singapore village, we observed that the area for washing utensils is placed at a great distance from the cooking area proper (Figure 3) because utensils having been contaminated by handling and worst of all by saliva must not be allowed to pollute the kitchen.

Now as menstrual blood is considered polluting, women during menstruation should be exempted from the kitchen, if there were others who can take over the cooking. In fact they should be exempted from all normal activities, not even eye contact with men lest they contaminate the latter. In India, menstruating women have to spend a ritually determined number of days completely outside the house. This is not observed in Singapore; menstruating women must maintain certain ritual purification practices in the house, such as a bath in the morning and one in the evening and avoid the prayer room or space for three to seven days. At a generalized level, all women between puberty and menopause are in a sense in a state of ritual pollution. Hence in larger, multi-family Hindu households, except for married couples, gender segregation of sleeping spaces is maintained where space permits.

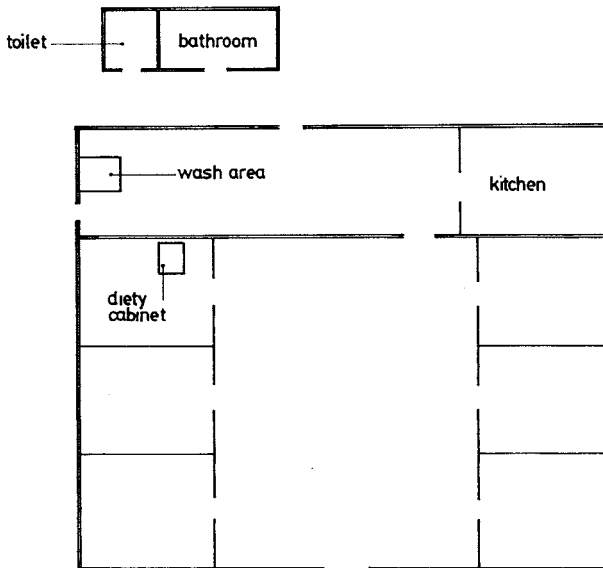


Fig. 3 An Indian house (not to scale)  
Une maison indienne (pas à l'échelle)

Finally, the separation of all the washing and toilet space in a separate structure from the main house also facilitates the avoidance of impermanent pollutions that are derived from outside the house. The best illustration concerns the attendance of a funeral. Death is considered a highly polluting event. "Proximity to death imperils a person from the supernatural sphere and disables him in the social sphere. Funeral rites are directed towards restoring all those who have been so imperilled and disabled to a condition of relative purity, of social safety and normality" (Mani, 1977, 92). The elaborate rituals apply to the bereaved family, those who attend the funeral are required to only conduct a simple washing purification. After attending a funeral, upon returning, a Hindu must go straight to the bathroom, take a bath and wash all the apparels before entering the house itself; that is he must enter only in a purified state. This is only the more particularistic case of purification before entering the house; generally, a more orthodox Hindu would wash at least his feet after having been out before re-entering the house. The separation of the washroom/toilet clearly facilitates the avoidance of pollution.

In contrast to the symbol laden Chinese house and Indian purification rituals, the Malay house is consciously behaviourally determined.

## 5. The Malay House

The Malay house may be said to be one of the indigenous architecture of South-east Asia. Although there are regional differences, the houses found in Malaysia and Singapore can, nevertheless, be given a general description <sup>4</sup>.

Without exception, they are built on stilts and have pitched roofs. The pitched roofs are clearly functional in tropical climate. "The steep pitch permits rapid removal of rain water and creates a high sloping ceiling ideal for inducing air movement, ventilation and the escape of hot air - hence comfort" (Sudin, 1981, 57). The simplistic common conception of the stilts is that they prevent flooding. Yet if this were the primary reason, the Chinese who live side by side with the Malays would have adopted the system of stilts rather than continue to build their houses squarely on the ground. A more sensible reason appears to be related to comfort also; the raised floors provide better ventilation for the entire house too (Figure 4). To further dispel the misconception regarding flood avoidance, it should be noted that it is not uncommon to find that the space below the floor is boxed in by wooden curtain walls to secure more accommodation room. Often, the only room that is not on stilts is the kitchen, the reasons appear to be largely functional.

The house itself is divided into two parts, sometimes three, each with its distinct usage. The two basic parts are the *rumah ibu* (main house) and the *dapur* (the kitchen area). The third component, if it exists, is the *serambi* (the verandah) in which casual



Fig. 4 Ventilation  
Ventilation

<sup>4</sup> For technically detailed descriptions of the Malay house, see Hilton (1953) and Sheppard (1969).

guests are received, this component may also contain an enclosed area for formal reception called the *anjung*. The *anjung* is the front and the *dapur* the back of the house and each has its separate doorway. The multiple entries are culturally significant, as will be seen later.

The components may be housed under a single roof or in three separate but linked structures. It depends largely on the wealth and the social status of the owner. In fact the house may be built in different stages. "Poor families would initially construct the *dapur* to serve all family needs. As the family's circumstance improves, the *rumah ibu*, and sometimes the *anjung* is added. Otherwise the *anjung* is added as a third stage, this being of better materials, constructional standard and finish (Sudin, 1981, 62). The three components are built at different levels with the *rumah ibu* sitting higher than the *serambi*, and the *dapur* at the lowest, even on the ground. The layout is open-plan, the functions of the space change with its activities. For example, eating space may be readily converted into sleeping space by introduction of sleeping mats. However, partitions for bedrooms are commonly found (Figure 5).

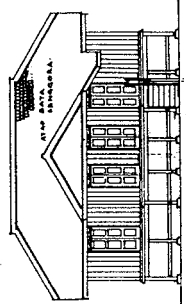
In contrast to the Chinese house, the Malay house is quite devoid of religious symbolism. The Malays are Muslims. In Islam there is only one significant geographical location, that is Mecca. Prayers must be offered in the direction of Mecca but may be conducted, *in principle*, anywhere a devotee finds himself or herself. Thus, although the house is used by Malays as a place for prayers, especially for the women, it itself is not invested with religious symbolic values. In some instances, the house may itself be oriented towards Mecca, but conventionally in a Malay village the orientation of the houses and their relation to each other are quite random (Evers, 1978).

Religion, nevertheless, does exert itself in the layout of the house. Islam imposes a strict segregation of the sexes. *Khalwat* - the close proximity between two individuals of marriage potential - is a punishable offence; religious officers actively bring such cases to court in Malaysia. This taboo against the co-presence of two individuals of different gender is ideally generalized to the practice of strict gender segregation between non-family members. This religiously determined behaviour is facilitated by the spatial separation of the house. It explains largely why even the most modest of houses are separated into the *rumah ibu* for the men and the *dapur* for the women. The separation is further facilitated by separate entries for the different genders, so much so that the two can avoid all contacts. The different social status attributed to the two sexes are also encoded in the different levels of the components; the *dapur* is the lowest and the *rumah ibu* the highest. Routinely among the family members, the gender segregation need not be maintained, but on all ceremonial occasion, rigid separation is required.

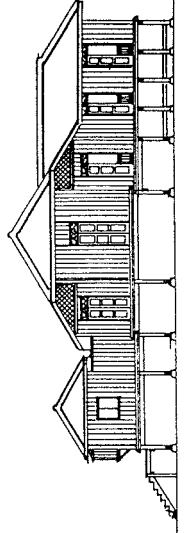
It should be apparent that the *serambi/anjung* component is yet another feature that helps to maintain gender segregation. It further shields the family members from others. Generally, the female guests are received in the *dapur* directly and the men in the *serambi*, especially casual guests.

So in contrast to the Chinese house that encodes a symbolic universe in both religious and social structural terms in its layout, but enforces no behavioural restriction, no symbolic universe is to be read from a Malay house. However, the latter's layout both determines and is determined by the actual behaviour of the users. The Hindu house, of course, constraints behaviour in order to maintain symbolic purity. With such fundamental differences, different patterns of adaptation should be expected when these ethnic groups are resettled into standardized public housing flats.

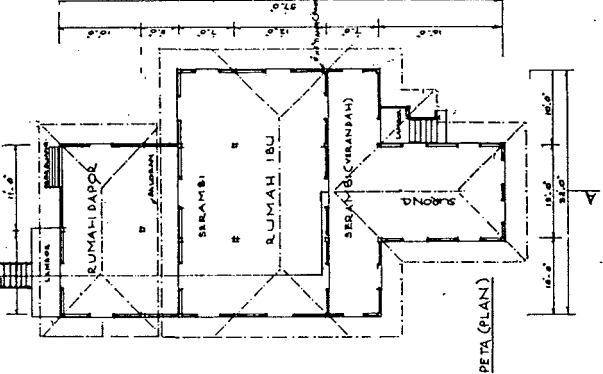
PLAN RUMAH LIMAS BUNGKUS  
ANGGARAN CECALIS  $\frac{1}{8}$  DAN  $\frac{1}{4}$



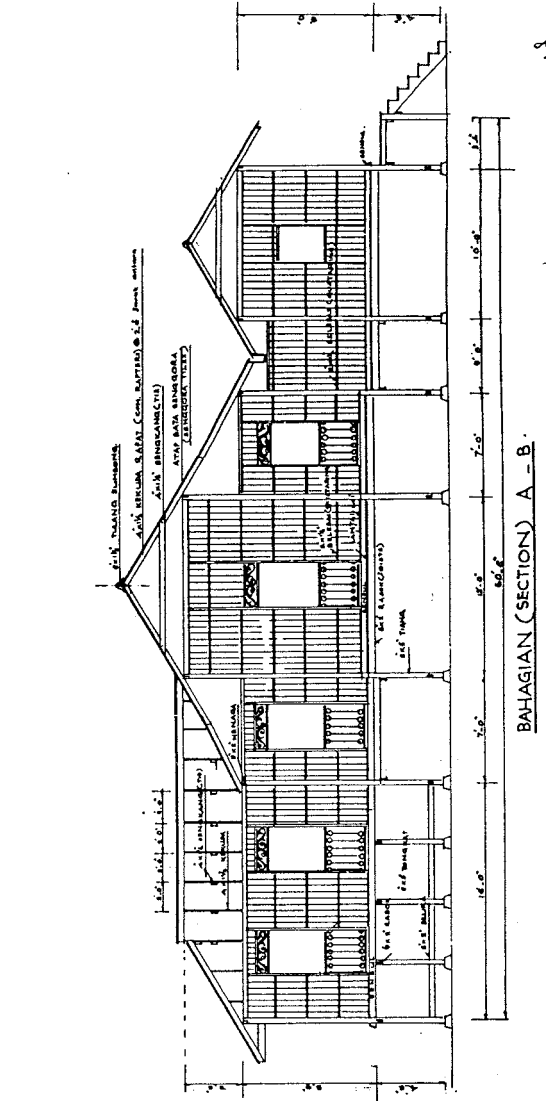
PEMANDANGAN HADAPAN (FRONT ELEVATION)



PEMANDANGAN MERUSOK (SIDE ELEVATION)



PETA (PLAN)



BAHAGIAN (SECTION) A - B

Fig. 5 A Malay house (source: Sheppard, 1969)  
Maison malaise

## 6. The HDB Flat

From 1961 to 1984, more than 200'000 "squatters" were resettled to make way for both private and public developments (Wong and Yeh, 1985, 316-17). Apart from those who already own property and are thus excluded by rule from purchasing or renting public housing, the affected households with negligible exceptions opt for resettlement in public housing flats. The general impact of resettlement is adequately documented and can be so summarized: First, resettlement adds to nuclearization of families in that multi-family households tend to split into nuclear families, each owning their own flats. Second, it inevitably disrupts established friendship and kinship networks, but there is evidence that new social networks are established in a relatively short period when affected families from the same locale are resettled in close proximity within a housing estate (Chua *et al.*, 1985, 368-72). Finally, the affected households tend to face greater financial constraints even though they do not generally suffer hardship or substantial reduction of income as a result of resettlement; the increased constraints result from the substantially higher standing household expenditure like mortgage, conservancy charge and higher utilities bill.

In designing the flat itself, keeping costs low and optimization of space utilization are stringently maintained by the HDB. Hence standardized flats in prototypes of 1, 2, 3, 4 and 5 room flats, in which the 1 and 2 rooms are almost exclusively for rent and the rest for purchase by public housing applicants. The flats are built as a bare shell with cement rendered floors and hollow block walls without plastering. Renovations are carried out by the residents themselves according to their tastes and budgets, which in effect reduces the monotony of the standardized floor plans (Figure 6).

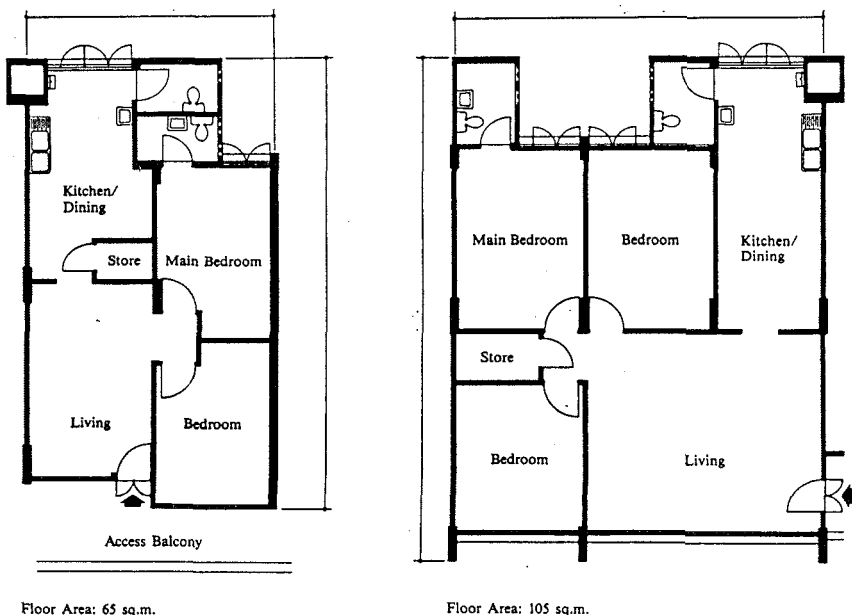


Fig. 6 Prototype layout for 3 and 4-room flats (source: HDB, Annual Report, 1984, 185)  
Plan typique de logements à trois et quatre chambres

In the layout, minimum dimensions that meet the needs of the residents are maintained. Accordingly, the width of the smallest bedroom is no less than 2.88 meters, sufficient space for the bed and circulation. The width of the living room is no less than 3 meters to accommodate furniture and circulation. Bathroom/toilets are standardized according to the use of the different fixtures. As an overwhelming majority of the resettled population move into either 3 or 4-room flats, I shall limit the following discussion to these flat types.

The layout of the HDB flat is asymmetrical, due to the constraints imposed by block design. Two adjacent units are mirror images of each other, divided by the common wall they share. As can be seen from the plans of the 3 and 4-room flats, the only entrance to the flat is asymmetrically placed with reference to the living room itself, i.e. it is placed against one edge of the room rather than centrally. Immediately next to the door is the window. These two plus a bit of wall space constitute the "facade" of the flat. It is to these standardized flats that the three ethnic groups must adjust their symbolic and actual behaviours.

## 7. Chinese Adjustments

Obviously in the layout of the flat, the strive for symmetry for the entire living room cannot be obtained. Adjustments will have to be made if the symbolic universe of the Chinese household is to be maintained. So they are in the following manner:

Just as in the traditional house, the end wall of the living room is the focus and this is where the altar is to be placed. In the case of the 3-room flat, the entrance to the kitchen/dining area is often centrally located. The rationale here is to allow kitchen necessities, such as cabinets, store, refrigerator and a simple dining set to be placed on both sides of the room, leaving a central circulation path. However, with this arrangement, the walls on both sides of the kitchen entrance become too narrow for the installation of the altar. Consequently, Chinese residents commonly shift the kitchen entrance to either the left or the right, whichever is convenient, according to the particular plan of the flat that a family finds themselves. With this shift the end wall is significantly increased and the altar is then installed centrally against it. The space in front of it is kept free of furniture as much as possible. In the 4-room flat that has a larger living room, the width of the end wall is generally sufficient without shifting the doorway, yet such shifts are not uncommon.

In this adjustment, it appears that the residents have conceptually, and even arguably perceptually, reduced the space of the living room by an area the width of the main entrance that runs the entire length of the room to the end wall. A symmetry is then strived for in the remaining rectangular space. It is as if the actual asymmetrical layout of the living room due to the position of the main entrance is perceptually and conceptually suspended in order that symmetry may be maintained.

One variation to the conventional placement of the front entrance should be noted. In some flats, especially the end units of a block, the entrance is placed at the side. Now, side entrance houses are not uncommon in China, it is often so placed intentionally to make it "difficult" for evil spirits to gain entry to the house. In this instance, the "conceptually reduced space" is determined by the circulation path that extends from the kitchen door to the front wall of the flat. Not surprisingly, the place at which the altar is placed corresponds to that found in a side-entrance Chinese house (Figure 7).



Figur

Léger

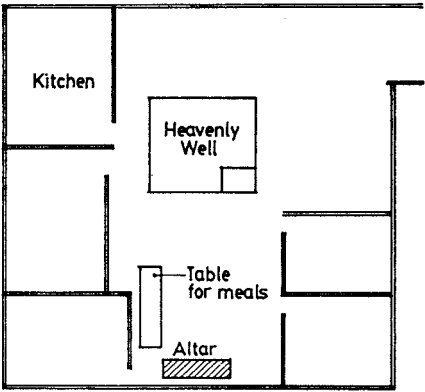
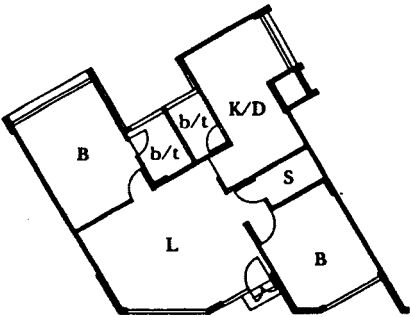


Fig. 7 Side-entrance of a Chinese peasant house (source: Newell, 1962, 102)  
Entrée latérale d'une maison de paysans chinois



3-Room Model 'A'  
Area: 75 m<sup>2</sup>



3-Room Variation  
(Low Rise)

Fig. 8 Irregular layout and block design (source: Wong and Yeh, 1985, 74, 64)  
Plans irréguliers et disposition d'ensemble

As the above argument, like all interpretive arguments, can only claim a status of plausibility, its reasonableness will be strengthened by counterfactual cases. One such case is the rejection of irregularly shaped living rooms by potential HDB residents, especially the more elderly and more inclined to abide by the elements of Chinese religious beliefs. The HDB, in the interest of avoiding monotony in view of the vast quantity of blocks it builds, varies the design of the blocks themselves. This often results in creating some flats that are irregular in layout. While the irregularity may appeal to the contemporary minded, they are unacceptable to the traditionals (Figure 8). Hence, we come across cases in which residents rejected such flats on the ground that an appropriate place for the altar cannot be found.

## 8. Hindu Indian Adjustments

In contrast to the Chinese's search for a central point to locate the altar so that the deities could face the front of the flat, the Hindu Indians have no problems at all in siting their deities. In instances where a storeroom is provided in the standardized flat, this is often converted into the prayer room where all religious artifacts are kept and the door shut to avoid all contamination. Where the storeroom is not available, a corner of the house either in the sitting room or more commonly in a bedroom is set out for the cabinet that houses the deities, with curtains drawn till prayer time. If room is available and consequently there is gender segregation in the allocation of bedrooms, with all the males in one room and females in another and married couples in their own, then the religious artifacts are kept in the male room, for it would be recalled that females between puberty and menopause are in a state of ritual pollution. However, such segregation is not necessary in young nuclear households.

An interesting result follows from the gender segregation based on the twin concept of purity/pollution. In flats where one room is designated as the "master" bedroom because of the convenience of the attached bathroom/toilet, this room tends to be allocated to the female precisely because of the polluting proximity of the toilet and its compatibility with the ascribed ritual status of the women. Here is an inversion of the symbolic order of spatial significance ascribed by the professional architect. What is for the latter the more important bedroom is occupied by the lower status individuals among the users.

The first potential obstacle that an Indian Hindu family faces in a public housing flat is its orientation. Given the tropical climate of Singapore, housing blocks are built, as much as the site permits, in a South-facing orientation. This is, of course, the inauspicious direction of death for the Hindus. But as mentioned, Singapore Hindus have pragmatically accepted the forfeiture of this orientation question by simply facing their houses towards the street. Hence it appears that little issue is made of South-facing orientation. Unfortunately, we do not have statistical data to verify whether non-South-facing blocks of flats are more popular with the Hindu Indians.

The greatest adjustments take place in the kitchen area and they largely arise from the fact that the common bathroom/toilet is placed at the end of the kitchen with its door opening directly into the kitchen. Given the Hindu belief system, this arrangement is tantamount to creating a permanent state of pollution for it brings together two diametrically opposed elements which must be absolutely kept apart in their symbolic universe into constant, immediate and unavoidable contact. The ritual purity of the kitchen can no longer be maintained absolutely. First, because it is close to the

primary household source of pollution, the toilet. Second, it is no longer out of bound to non-kin because every visitor must track through it in order to use the wash-room. Finally, it is constantly subjected to contamination from the outside because any householder coming in from the outside must first pass through the kitchen in order to wash themselves, i.e. contamination has already occurred before the necessary ritual purification.

There are a number of ways in which this unavoidable mixing of antagonistically opposed elements are handled to maintain a sense of symbolic purity. The first and entirely spatial means is to rearrange the kitchen and bathroom/toilet layout by changing the door of the latter to face away from the kitchen. Some older public housing flats do have this arrangement. If this were not possible, and this is commonly the case, then a symbolic screen can be erected in front of the toilet door to render it out-of-sight. Second, more drastic but actually easier to manage in the end, is to completely forfeit the kitchen as a space of sanctified purity. The purity of food is transferred exclusively to the preparation processes themselves and to the utensils used, ignoring the larger spatial context of the kitchen itself. This is quite easily acceptable because of the purity of food. To ensure the purity of the utensils, separate sets are kept. One set is used for mundane uses and thus less concerned about absolute purity and another set is to be used only for ritual occasions when purity is to be stringently observed (Mani, 1977, 118).

Finally, as to the contamination brought in from contacts in the outside world, these are largely ignored except those contaminations that carry an explicitly high symbolic load, such as death. For example, when a member of the household returns from attending a funeral, a small container of water is handed to him before he enters the house so that he can pour or sprinkle the water on himself and, in so doing, symbolically purify himself before he enters the house and heads directly for the washroom for the full bath and changes out of polluted clothes.

## 9. Malay Adjustments

Whereas the Chinese and the Hindu Indians have to accommodate their symbolic universe in the HDB flat through symbolic means, the Malays have to make actual behavioural adjustments in the same flat. As stated earlier, gender segregation is a strenuously maintained Malay social norm. The Malay house with its multiple entrances and its spatial segregation into the *serambi*, the *rumah ibu* and the *dapur* is structured to enable the segregation to be maintained with ease. In the two-room deep 3 and 4-room HDB flats, the kitchen is separated from the living room only by a dividing wall, no solid door is provided for the kitchen entrance. Beaded curtains are often installed to signal a partition; a symbolic gesture because one can still see the activities in the kitchen clearly. The multiple entrances that ensured the avoidance of gender contact are gone, replaced by the single main entrance, women must track through the living room to reach the kitchen. Hence in the HDB flat gender contact is inevitable, yet the norm of segregation has to be maintained. Some illustrations of the behavioural adjustments can be gleaned from observing the *kenduri*.

The *kenduri* is a village-based or neighbourhood-based ritual occasion in which neighbours gather at a particular house to help the household offer prayers to bless or commemorate a particular event, such as house-warming, circumcision of a child or the hundredth day after a funeral. Conventionally, both women and men are invited,

although only the men are engaged in the offering of prayers (Fraser, 1985). After the prayers, food is offered by the household in appreciation of neighbours' help. After the food, there is a general conversation session among the participants and certain issues of mutual concerns are covered before the occasion comes to a close. A number of behavioural adjustments have been made by the Malays as a result of living in HDB flat.

First, ritualistically, ablution involving the cleansing of face, hands and feet must be done before a man enters into prayers. In the Malay house, standing pipes outside the house allows this to be conducted readily. Such is not the case in the HDB context. Two behavioural possibilities exist and both are used. The men who come to join in prayers can perform the ablution at their own house before setting forth to where the *kenduri* is held. In this case, possible contamination as a result of the journey is overlooked. Alternatively, the master bedroom's washroom, if one such is available, is used for the cleansing. Hence, it is common to find that Malay families do not use toilets in these washrooms for elimination. Here the need to track through the master bedroom is apparently of no serious concern because traces of women's existence is not significant, only co-presence is to be avoided. Using the master bedroom avoids going to the kitchen, the women's preserve. A further behavioural consequence of not using the master bedroom toilet and not tracking through the kitchen is that the men are inclined to avoid using the toilet completely for the entire duration of the *kenduri*.

Second, it is unavoidable that the women must walk past the gathering of men in the living room to reach the kitchen. To do so, a gesture has been used to symbolically veil themselves from the men. They will walk hugging the wall with a slight stoop and the right hand extended and raised above shoulder level, as if they were cutting a path through the living room. Eye contacts are avoided. This gesture puts up an imaginary division between themselves and the men in the room.

Finally, in order to avoid the awkwardness of unavoidable gender co-presence, women may simply decide not to attend the gathering. That this may in fact be happening is evinced from the observation that a *kenduri* held in HDB flats tends to be predominantly an affair for men, as compared to that in Malay villages where both genders participate, albeit in segregated activities.

## 10. The Adjustments Compared

This inquiry began with a general intent to investigate the different patterns in the use of the standardized, high-rise flat for those resettled from ethnically distinct house-forms. As it happens, the major adjustments within the flat itself have to do with religious practices. This is a significant finding for it discloses the embeddedness of religion in what is ostensibly a cosmopolitan and secular Singaporean population whose foremost preoccupation is the practical aspects of making a living in a diversified modern economy. Indeed, religion itself is often absorbed into this preoccupation: God is invoked as an ally in the occupational pursuit. The adjustments that each ethnic group makes in the standardized flats disclose the importance of religious beliefs and practices in their daily lives. Of course, the stringency with which they are maintained varies from house to house.

When the adjustments themselves are compared, three observations can be made. First, when icons either in pictorial or sculptural forms serve explicitly as the material embodiment of the deities worshipped, then, a proper place for them must be found

within the flat. Of course, what is proper is entirely dependent on the specific religion in question. Thus, motivated by the necessity to maintain purity and avoid any possible contamination, the Hindus may completely shut out their deities from view. Conversely, this will not at all be acceptable to the Chinese, whose deities must frontally face outwards, into the open, in full view of the realm they oversee and protect. The only occasion in which the deities are covered is when there is a death in the family. Then, the icons are wrapped under a sheet of red paper or cloth; red being the colour that is diametrically opposed to all the colours of bereavement, such as white, black, green and navy.

Although not part of this investigation, it should be noted that icons in the form of a picture of Christ or the crucifix are to be found in Christian households in Singapore. However, such icons have no doctrinal status. Within Protestantism, such icons are not ritually sanctified nor endowed with the status of embodiment of God and are strictly speaking not necessary at all. The absence of such icons in a Protestant home is not a religious infraction. For Catholics, the icons including a sculpture of Mary may be venerated in the house. An altar is sometimes set up for them and candles and fresh flowers are placed on it as offerings. However, no system of spatial significance is discernible. Altars can be found in various parts of the house, except in the kitchen perhaps, where space is conveniently available.

Second, where similarity of behaviour within a flat is found, the underlying religion-determined motivation and reason may not be similar at all. So, gender segregation in Muslim households is determined by the implied sexuality between individuals who are not family members; hence, it is not maintained among family members. Indeed members of the family, regardless of gender, share the same floor space in any room. The same segregation phenomenon within a Hindu family is motivated by the necessity to maintain purity both of the house and bodily. Consequently, segregation is maintained even amongst family members to the extent of isolation of female members during their periods of menstruation.

Finally, it appears from the evidence that religion-determined behaviour is simultaneously space determined. Where space permits they will be behaviourally enacted fully, such as using separate entrances for men and women in a Malay house and having separate structures for polluting and pure activities in a Hindu house. However, when spatial constraints render the full behavioural expression impossible such behaviours are not simply dropped. Instead they are transformed into symbolic acts that still express their underlying beliefs and motivations. This is entirely befitting because religion is ultimately concerned with the worlds beyond, even if it dictates some aspects of life here and now.

There is no evidence that the public housing authority in Singapore gives focussed consideration to the particularistic religious practices of its residents in its design of flats. Given its general policy of wanting to achieve ethnic integration in a plural society, and its allocation policy of first-come-first-served, it may be impossible for the HDB to take these specific practices into account without either creating ethnic enclaves or being bogged down in allocation difficulties. The same would of course not be true for any housing authority with a homogeneous ethnic population. That the practices are maintained by the Singaporeans depends on two things. First, it depends on the ingenuity of the users in both spatial sense and in mental ability to invent symbolic gestures to preserve what is significant in their life-world, especially their symbolic universe. Second, it also depends on the housing authority's flexibility

in allowing certain features of the standardized flats to be altered according to the users' needs.

## 11. End Note

What I have done in this largely descriptive essay is to identify the primary features of the traditional Chinese and the Malay house and the cultural and social activities that these forms imply, including the way the Hindu Indians use the Chinese house. Subsequently, I examined how these features are accommodated within a completely different house form. The investigation is at a stage in which generalizations about its findings cannot be drawn without substantial reservation. However, I should like to draw some tentatively abstracted points that may be conceptually and substantively useful for comparative purposes.

First, the adjustments made by all are clearly determined and necessitated by the standardized public housing flats in which they find themselves. In the process of moving from the traditional house to the flats, inevitably some of the social and cultural practices are dropped for various reasons, including the impossibility of practising the activities in the new space. Others are adapted to the new environment. An important substantive and theoretical issue would be what gets adjusted and retained, and what gets dropped. It would appear from this study that practices central to the maintenance of the culture will be retained and tailored to the new situation; as the maintenance of symmetry for the Chinese and gender segregation for the Malays and the Indians, each for their reasons. Of course, this still begs the question of how centrality of the cultural elements is to be established.

Second, it seems clear from this study that conceptually it is necessary to distinguish adjustments that are symbolic and those that are behavioural. However, it may not always be possible to make clear cut classifications of cultural elements into one or the other category. For example, the Malay women's raised hands and stooped bodies are constitutive elements of a gesture that is both behavioural and symbolic simultaneously. Nevertheless, a classificatory distinction would provide some measure of conceptual clarity and serve as a useful research tool.

Third, related to the symbolic versus behavioural adjustment classification, is the question of which set of adjustments may be executed with greater ease. From the study it would appear that purely symbolic items can be adjusted more readily because they have no direct behavioural constraints. Also, since what influence they may have is indirect and often remains in the realm of abstract belief, they may be subjected to rationalization more readily. On the other hand, purely behavioural items may be difficult to accommodate in the new environment which may prevent their practice altogether, or if practised must unavoidably change their character; such is the case of the decreasing female participation in a *kenduri*.

Clearly, the substance of the present essay cannot hope to settle the above questions. More comparative material is required. However, the need to put forward the issues is necessary not only out of theoretical interest, but also for practical reasons. It would be important for a resettlement authority to have reliable methods to anticipate and provide for the type of adjustments that may be retained, especially if they are central to the culture, thus reducing the disturbances that are unavoidable in the resettlement process.

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