

Housing Project, Singapore

Mr. T.Y. Teh, who graciously allowed MIMAR to quote from his diploma thesis on the practice of Fengshui, has attempted to apply this art of placement and orientation of buildings to contemporary urban design problem. Conceived for a real site in Singapore, the guidelines he uses are intended to reintroduce continuities into the urban fabric, not of

style, of rhythm or scale but of an age-old rationality hitherto fallen into disuse or buried under superstition. What is controversial is whether or not the guidelines are useful and efficacious in a man-made geographical setting of urban fabric, when the natural topography is no longer a key factor.

— Editors

Fengshui, or geomancy as the West would have it called, is not a practice unique to the Chinese. In India, strict rules on the placement of cities and buildings are precisely laid out in the ancient Vedas and are strikingly similar to the practice of Fengshui in their basic formalism. Evidence exists too on the Islamic practice of geomancy up to the 13th century. The influence of cosmology in all these practices emphasises the importance Man places on the impact of the cosmic order upon his environment and confirms Ardalan's statement that Man's living environment is indeed most often a superimposition of cosmic and regional orders, thus placing Man very clearly in a position within his known Universe.

In areas with an absence of clear, space-defining, topographical features and in the generally anonymous urban-scape of modern cities, the application of Fengshui principles is capable of creating an artificial topography within the site through the use of built form. Besides providing the basic requirements of enclosure and security, the overlay of Fengshui's cosmological rationalism provides a cultural anchor that is almost devoid of stylistic references. It is a highly flexible orientation and formal system that accommodates vast changes in style and is capable of immense transformation.

Applied at city, building, or room levels, the practice of Fengshui can perpetuate continuity of the highest level as it is non-stylistic, existing along the plane of the philosophical or that of a belief system.

In this light, Fengshui the Chinese science of personal, communal and urban placement, appears to be thoroughly sympathetic to the abovementioned problems with the modern day built environment, capable of accommodating the eastern man's utilitarian, psychological, cultural and metaphysical requirements in his existence as moderator between Heaven and Earth.

While our western counterparts are presently engaged in rediscovering the

wisdom of formalism and are actively synthesising it to accommodate the new urban society, the time is now ripe for a parallel movement in Eastern architecture centred around the principles of the Indian Mandala, Fengshui and the like.

Site Plan

Based on the Fengshui analysis of the area, two armchair planning orders were placed within the site. One has its rear to River Valley Road thereby addressing that edge and protecting the site from malefic qi forces that originate from the north-east. The winding river course across the site enhances the overall countenance of the composition in terms of Fengshui.

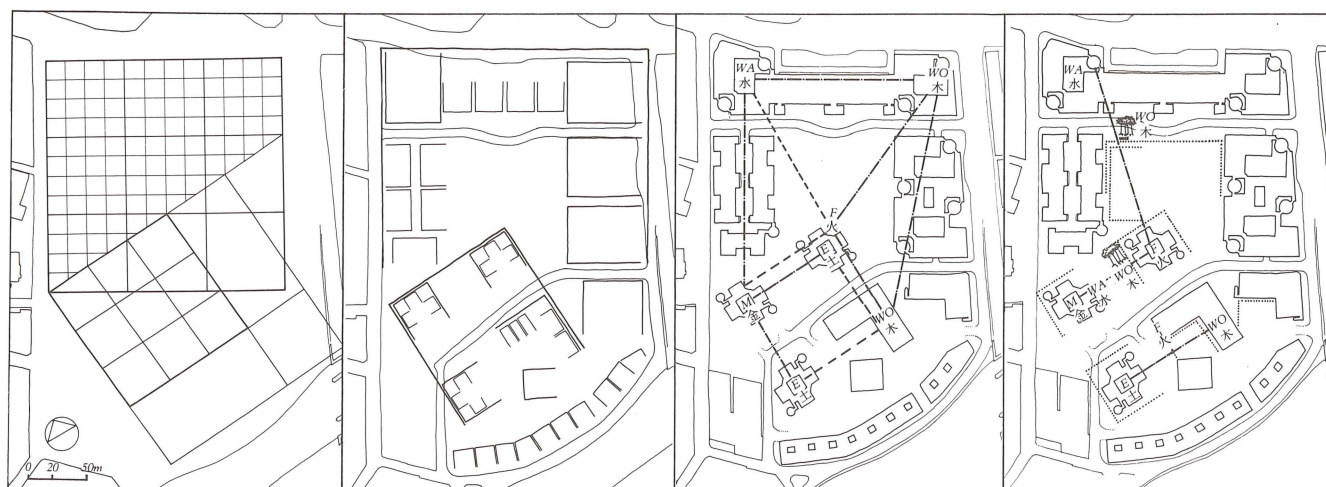
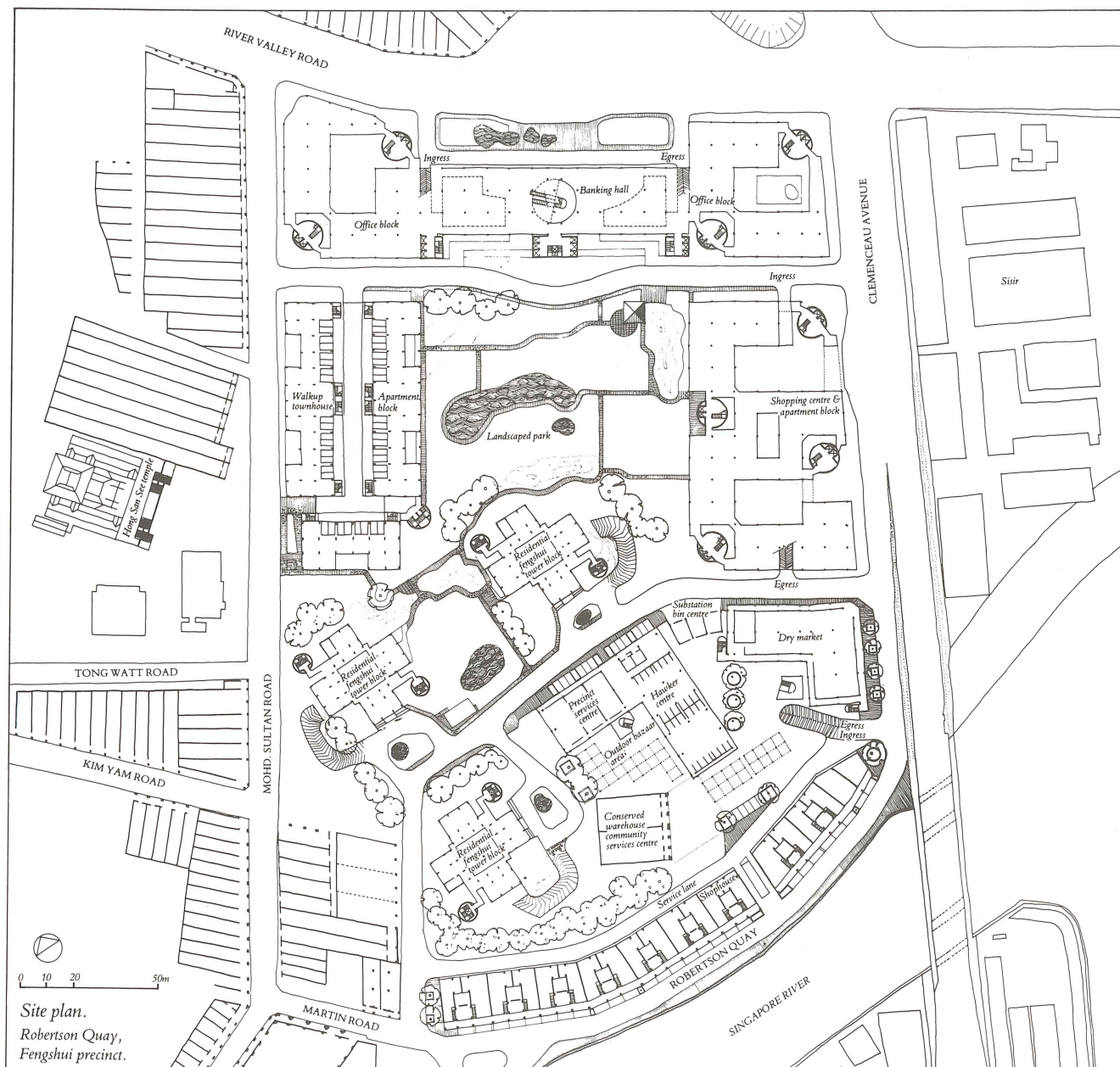
The other addresses the river edge, is oriented north-south and therefore takes on the most preferred position according to the tenets of Fengshui.

Both armchairs are abstracted in the form of the 3 × 3 square Lo-shu grid which is based on multiples of 430mm. This is considered the basic desirable Fengshui dimension. This module is predominant in the larger armchair. A grid of 8.17m, based on this dimension, is arrived at primarily to provide the parking facilities for the retail, commercial and office uses in the area. The north-south Fengshui grid is in turn geometrically related to the larger armchair, thereby maintaining the graphic relationship throughout the entire composition.

The procedure described above illustrates the positioning of the basic Fengshui module on the site and establishes the regional order implicit in all designs with good Fengshui. Within this macro order, we can see how the module can be further manipulated through various levels of architecture.

Next, we proceed to establish the relationships between all components of the site, particularly the key corners. Undesirable relationships fall under the mutual destruction order; for example WATER destroys FIRE, FIRE destroys METAL, and WOOD destroys EARTH. Such conflicts are resolved using the physical manifestation of the elements to produce a

*Text and drawings
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Fengshui grid placement.

Fengshui model placement.

Elemental conflicts.

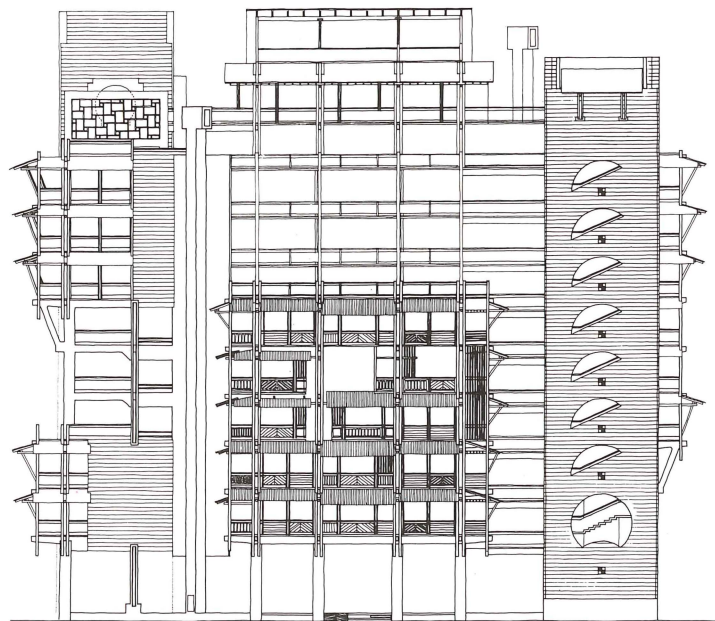
Mutual production ————
Mutual destruction - - - - -

Conceptual resolution of conflicts,
Fengshui models in landscape.

WO — WOOD WA — WATER M — METAL F — FIRE E — EARTH



Model showing Fengshui application.



compatible order, i.e. WATER to WOOD to FIRE, METAL to WATER to WOOD to FIRE, and WOOD to FIRE to EARTH. These are manifest as trees, water pools and, in the case of fire, colour.

The above take care of the essential cosmological influences at precinct level.

We now deal with the use of topography and vegetation to define other and existing armchairs within the landscape through methods described in the Fengshui guidelines.

Conceptually, they can be seen in this diagram on Fengshui models in the landscape. The placement of water pools in the fore of each armchair model completes what I would term as the formal

(i.e. with regard to the Form School) requirements for Fengshui composition on this site.

The colours which you see applied on these building blocks here represent, only conceptually, the following:

1. the colour relationships due to their positions within the site, and
2. the relationship of the orientations of facades to their respective building orientations.

Block

This residential block is one which I have chosen to develop the application of the Fengshui guidelines in greater detail.

Fengshui models have traditionally

only been applied on a single plane owing to the low-rise nature of ancient and traditional structures. The predominance of high-rise structures in dense city centres like Singapore provide the opportunity for manipulating the armchair unit vertically as a series of stacked chairs to form a larger whole.

The sub-units can take differing orientations within the whole through centralising the services and circulation in stationary cores.

In this particular block design, the armchairs take the form of 3-storey stacks which share a common deck at the lowest levels. An apparent high back is therefore created which surveys a lower common area.

The entire block is planned around the Lo-shu grid and the centre, to which the number 5 signifying completion is ascribed, is left void to function as an air and light well. This planning system, along with the armchair models in the block, make it an appropriate model for housing in the tropics due to the high porosity of the structure and the shallow depths of the units.

Circulation

The red cylindrical cores are a demonstration of the influence of the five elements at work at form, colour and material levels.

WOOD, the third stage of change, signifies movement and in this instance represents circulation. It therefore takes the form of a cylinder.

The construction material however, is EARTH (masonry) which destroys WOOD.

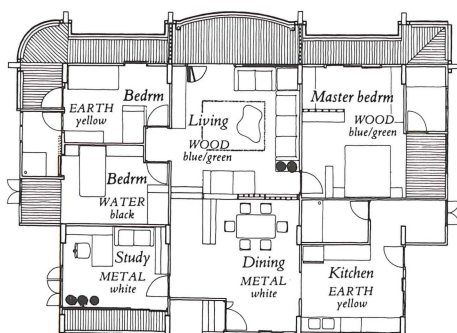
FIRE, which takes the colour red, turns the destructive sequence into a constructive one, brings about the balance.

There are four basic unit types in this block design: studio, 2-bedroom, 3-bedroom and maisonette. There are variations to each, owing to differences in orientation controlled by the Lo-shu and cardinal gates.

The units are planned along the Chinese concept of up-stepping planes, which are in agreement with the cascading Fengshui world where one moves first through a public, then a semi-public and finally a private plane.

Fenestration

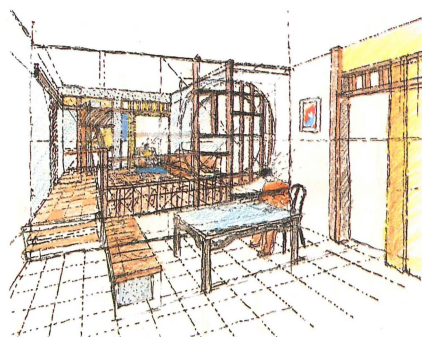
The flexible fenestration, or rather balcony system, consists of clipped steel double columns and allow flexibility in inserting the metal roof and timber floor



3 bedroom east unit layout
with elemental characteristics of rooms.



Fengshui model in furniture placement.



Interior perspective, 3 bedroom apartment.

slabs according to the varying facade combinations in each respective direction.

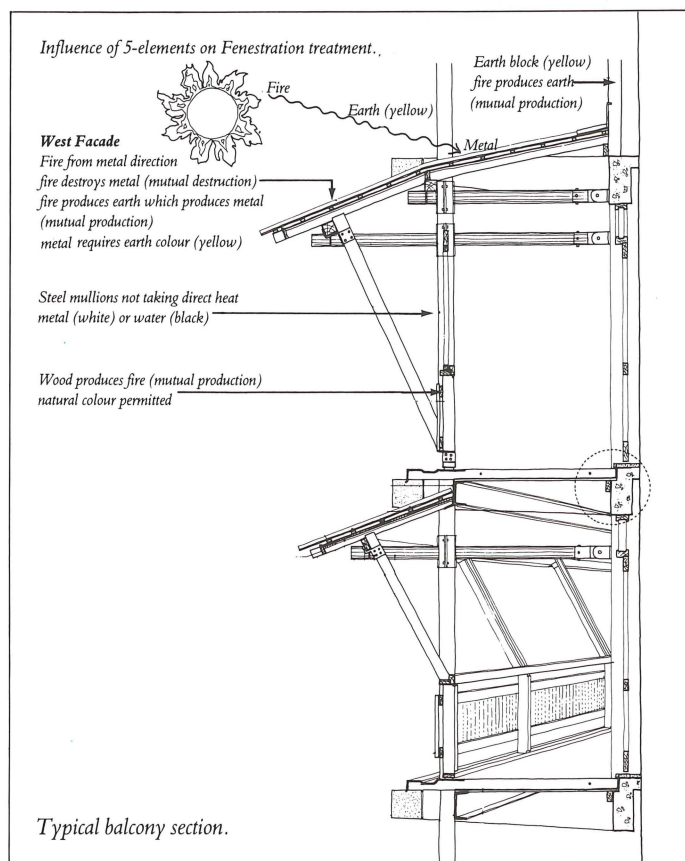
Unit

We now move on to see how the Fengshui model can be applied at the unit level.

The armchair model can express itself through the orientation and placement of furniture and the openings of rooms.

In doing so, one should keep in mind the following:

1. have a solid back and an open front, and
2. try to place the main entry in the fore, and ensure that this entry is indirect so as to maintain a sense of privacy.



This diagram shows conceptually the Fengshui model in furniture placement.

In addition, the elemental allocation of the rooms can help determine the appropriate colours or materials to be used in finishing these rooms.

Detail

In detail too, we see how FIRE (sunlight) destroys METAL (zinc roof), and how EARTH (yellow) comes in as a mediator. Also, the metal columns are permitted to take on the colour black (WATER) as METAL produces WATER.

I have yet to delve into the complex mathematics of Fengshui. Mathematics is evident in the first known use of the binary system by Man (i.e. in the Yijing).

The Fengshui model established thus far, was developed in ancient China, and, broadly speaking, applies only to its land of origin. More in-depth analysis on the philosophical basis and rationale of Fengshui may arise in guidelines specifically relevant to Singapore or to this region.

It has occurred to me that the three primary colours are present in Fengshui, along with black and white, to produce tones and hues. I therefore suspect that the colour relationships are far more subtle than has been practised in this scheme.

Teh Tien Yong, an architect, was trained at the School of Architecture, National University of Singapore. He is at present in public service.