

**Dialogue with Feng Shui:
An Awareness of Chinese Traditions
in Domestic Architecture**

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SUMMARY

This thesis investigates the ideology of Feng Shui in a systematic way, revealing its fundamental spirit – the idea of harmony between human beings and the universe, seeking the essence of Feng Shui, and discussing its application in domestic architecture. The thesis consists of four major parts.

The first aims to reveal the fundamental spirit of Feng Shui. Feng Shui is examined under three headings: reviews of classical and historical literature, reviews of contemporary Feng Shui research, and reviews of the definitions of Feng Shui at various historical stages.

The second part is a case-based approach reversing the practical application of Feng Shui to distil its essence. Three models are analysed: the Four Celestial Beings, the Five Surnames House Arrangement and the Eight Houses Arrangement. These are based respectively on the use of geography, family names and member's birth year in a family in defining spatial order for domestic architecture. The importance of orientation is identified as applicable to many aspects of Chinese domestic architecture, including the selection of house location, the arrangement of exterior space, and interior design. This approach to classification provides intimate interconnections between social relations, cultural forces, and architecture.

The third part is the comparisons which involve three types of traditional architecture from other parts of the world: houses of the Haida in North America, houses of the Berbers in North Africa, and Tukanoan longhouses in Amazonia.

The fourth part seeks to apply the theory of Feng Shui to a selection of cases in Chinese domestic architecture. Two examples of contemporary house design in England and in Taiwan are analysed, showing how Feng Shui is employed in the selection of house location, exterior space arrangements, and interior design. A substantial historical example, the Forbidden City in Beijing, shows how Feng Shui left its mark on traditional Chinese architecture.

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Chapter 1

Introduction

1.1 Prologue

This thesis will explore the ideology of Feng Shui, particularly focusing on its intimate interconnections with Chinese worldview, social relations, cultural forces and theoretical application perspectives. The research is based on five perspectives: an investigation of Chinese worldviews, a study of rituals and disciplines in Chinese traditions which were adopted in Feng Shui, the analysis of models used in Feng Shui, a cross-cultural comparison, and the applications of Feng Shui.

1.2 Research Topic

This thesis discusses the idea of Feng Shui, a set of traditional Chinese architectural principles intended to determine an ideal dwelling environment for both the living and the dead. The use of Feng Shui has been applied by the Chinese for millennia (Needham, 1956)¹. Feng Shui is regarded as an exclusive Chinese cultural achievement and experience. The use of Feng Shui has left its mark on various types of traditional Chinese architecture, such as cities, e.g. the Forbidden City in Beijing (Weng and Yang, 1982)², on buildings, e.g. the Bank of China in Hong Kong

¹ Needham, Joseph (1956) *Science and Civilisation in China Vol. 2: History of Scientific Thought*. Cambridge, Cambridge University Press, pp. 350 – 363.

² The Forbidden City (紫禁城).

Weng, W. and Yang, Boda (1982) *The Palace Museum Peking*. London, Orbis Publishing Limited.

(Wiseman, 1990)³, on houses, e.g. the Lin Family Garden in Taiwan (Global Chinese Language and Culture Centre, 2002)⁴, temples, e.g. Yin Shan Si (Huwei Culture & History Workshop, 2001)⁵ and graves, e.g. Lin Hsiu-chun Tomb (Tai Min Gu Ji Zi Xun Wang, 1996)⁶. Furthermore, architecture applying Feng Shui can be found in many Far Eastern countries, such as Malaysia, Singapore, Taiwan, Japan, and Korea (He, 1996)⁷.

Feng Shui can be utilized in various ways. One is the selection of an ideal orientation. For instance, in the palace foundations in Erlitou⁸ built between 1900 B.C. to 1625 B.C., two buildings are found which were planned considering the four cardinal points (Schinz, 1996)⁹. Both building complexes are rectangular in shape and a central axis ran through a principal gate in the south towards an elevated main hall at the northern end. The buildings rectangular shape and facing to the south show the other two features of Feng Shui (Huang and Chu, 1994)¹⁰. These are the arrangement

³ Wiseman, Carter (1990) *The Architecture of I. M. Pei*. London, Thames and Hudson Limited.

⁴ The Lin Family Garden (林家花園).

The Lin Family Garden, or known as the Lin Ben Yuan Family Mansion, is a traditional Chinese architecture for dwelling, located to the northwest of Taipei Country in Pan Chiao City in Taiwan. This house was built in 1888 as part of the original Lin Ben Yuan Family Mansion.

Global Chinese Language and Culture Centre (2002) *Lin Family Garden Panchiao*. [online]. Taipei, Overseas Chinese Affairs Commission. Available from: http://edu.ocac.gov.tw/historic/05/index05_e.html [Accessed 15th May 2002].

⁵ Yin Shan Si (鄞山寺).

Yin Shan Si is a traditional Chinese temple, located to the northwest of Taipei Country in Tamshui in Taiwan. This temple was built in 1823.

Huwei Culture & History Workshop (2001) *Yin Shan Si* (The Temple of Yin Shan) [online]. Tamshui, Huwei Culture & History Workshop. Available from: <http://tamsui.yam.org.tw/tsct/tsct0008.htm> [Accessed 19th August 2001].

⁶ Lin Hsiu-chun Tomb (林秀俊墓).

Lin Hsiu-chun Tomb is a typical Chinese tomb located in Taipei, Taiwan. This tomb was built in 1774.

Tai Min Gu Ji Zi Xun Wang (1996) *Lin Hsiu-chun Mu* (Lin Hsiu-chun Tomb) [online]. Taipei, Ministry of Interior. Available from: <http://webca.moi.gov.tw/cgi-bin/saelects.asp?Xrade=a023> [Accessed 15th May 2002].

⁷ He, Xiaoxin (1996) *Fengshui: Memory, Folklore, and Identity in a Chinese Community in Manchester, UK, Traditional Dwellings and Settlements Working Paper Series*, Vol. 80, pp. 3.

⁸ Erlitou (二里头).

Erlitou is a small village in Yanshi county, south of the river Luo He and a few kilometers east of Luoyang city in China.

⁹ Schinz, Alfred (1996) *The Magic Square: Cities in Ancient China*. London, Edition Axel Menges, pp.27 – 29.

¹⁰ The excavation of Erlitou village is the first evidence showing the first palace complexes which have been found in Chinese history.

of interior and exterior space, and the placing of furniture to maintain a harmonic status. And finally, one of the most significant aspects is the application of Chi¹¹, the life energy, from heaven and earth (Lu and Blundell-Jones, 2000)¹². Chi is considered in detail on section 2.5.1.

In the late nineteenth century and early twentieth century, some missionaries, colonial administrators, travellers, traders and Sinologists began to introduce Feng Shui to westerners. However, their level of understanding could only characterise Feng Shui as a system combining half science and half superstition, with ancestral worship thrown in. After that, studies on Feng Shui were followed by sociologists, anthropologists, geographers, and historians of Chinese science. Thus, Feng Shui was interpreted from various different viewpoints, such as aesthetics, psychology, ecological significance, ritual activity, ancestor worship, lineage relation, symbolism, and religious connotations (Hwangbo, 1999; Lee, 1986; He, 1998)¹³. Some of these studies are described below.

Ernest John Eitel (1838 A.D. – 1908 A.D.) of the London Missionary Society was the first European to discuss the essence of Feng Shui. Eitel (1873) considered that Feng Shui is more than simply a system to demonstrate to the public where and when to build a house or construct a tomb¹⁴. He claimed Feng Shui was another name for natural science which not only involved a combination of religion and science but was also based on an emotional and reverential way of looking at nature. Feng Shui was discussed in terms of the following four viewpoints, i.e. the law of nature, the numerical proportions of nature, the breath of nature, and the forms and outlines of

Huang, Shi-lin and Chu, Nai-cheng (1994) *Zhong Guo Zhong Yao Kao Gu Fa Xian* (Significant Chinese Archaeology Discovery). Taipei, Shang-wu, pp.55 – 59.

¹¹ Chi (氣).

¹² Lu, Su-ju and Peter Blundell-Jones (2000) House Design by Surname in Feng Shui, *Journal of Architecture*, Vol. 5. pp. 355 – 367.

¹³ Hwangbo, Bong (1999) In Search of Alternative Traditions in Architecture – A Cross-Cultural Interdisciplinary Study. Ph.D. Thesis, The University of Sheffield, pp. 102 – 105.

Lee, Sang-hae (1986) *Feng Shui: Its Context and Meaning*. Ph.D. Thesis, Cornell University, pp. 28 – 31.

He, Xiaoxin (1998) *Fengshui: Chinese Tradition in a Manchester Context*. Ph.D. Thesis, The University of Manchester, pp. 23 – 29.

¹⁴ Eitel, Ernest J. (1873) *Feng Shui: the Science of Sacred Landscape in Old China*. London, Synergetic Press, Fourth Edition, 1984.

nature. Eitel further pointed out that nature, from the Chinese point of view, is a living-breathing organism not just a dead inanimate fabric. This idea is similar to that of the Greeks, who considered that every natural object in the universe has a living spirit.

Joseph Needham (1900 A.D. – 1995 A.D.) opened the way, in the West, to academic recognition of the scientific past of China in his encyclopaedic work *Science and Civilisation in China* (Cullen, 1999)¹⁵. Through this work, Needham (1956) defined the domain of Feng Shui and its application, in addition to discussing how Feng Shui influences residences¹⁶. Divination of future, astrology, geomancy, physiognomy, the choice of lucky and unlucky days, were part of the common background for the Chinese. Needham acknowledged Feng Shui as a kind of pseudo-science or superstitious practice, which is related to Chi and astronomy. He inferred that the aim of Feng Shui is to cooperate and harmonise with local currents of cosmic breath in adapting residences for the living and the dead. The height, form and direction of domestic architecture and its surroundings have to be considered according to Feng Shui. Inhabitants of houses and descendants of those whose bodies lay in the tombs would derive Chi of Nature from the place where they are dwelling. The force and nature of the invisible currents would be from hour to hour modified by positions of the heavenly bodies. If houses or tombs were properly adjusted, the inhabitants would derive the Chi of Nature to favour their wealth, health and happiness.

Bennett (1978) considered the essence of Feng Shui as ‘astro-ecology’ which is relevant to the relationship between living beings and celestial codes, involving astronomy and cosmography in dwelling placement¹⁷. He further claimed that the term ‘topographical siting’ or ‘siting’ which aim to locate houses and tombs, would

¹⁵ Cullen, Christopher (1999) *Joseph Needham CH FRS FBA (1900 – 1995)* [online]. London, School of Oriental and African Studies, University of London. Available from: <http://www.soas.ac.uk/Needham/Obituary> [Accessed 6th August 2001].

¹⁶ Needham, Joseph (1956) *op. cit.*, pp. 359 – 363.

¹⁷ Bennett, Steven J. (1978) *Pattern of the Sky and Earth: a Chinese Science of Applied Cosmology*, *Chinese Science*, Vol. 3, pp. 1 – 26.

represent this Chinese concept, known as Feng Shui, today. Baggs and Baggs (1996) also considered Feng Shui to be related to geomancy and astrology. Feng Shui is used to divine the forces at work in the heaven and on the earth so that humans could live in balance with them¹⁸. That location in the universe affects one's destiny is a significant concept of Feng Shui. He suggested that Feng Shui is a design tool¹⁹. If buildings are positioned in a proper location, life patterns will be in balance and harmony with nature and the universe, and furthermore, of benefit to the residents in terms of prosperity, health and equanimity.

Roszbach²⁰ (1987) referred to Feng Shui as the Chinese art of placement, of balancing and enhancing the environment²¹. The use of Feng Shui includes the layout of buildings and the arrangement of furniture in interior space which is based on principles derived from design, ecology, architecture, mysticism and common sense (Roszbach, 2000)²². Similarly, Lip²³ (1997) defined Feng Shui as the art of placement and a skill addressed to the built and natural environment, creating a balance that encourages positive flows of energy²⁴. She further stated that Feng Shui is rooted in Chinese cosmology, beliefs and culture (Lip, 1997)²⁵.

Too²⁶ (1996) expressed the idea of Chi in terms of energy lines with either auspicious or pernicious concerns. She defined Feng Shui as the art of living in

¹⁸ Sydney Baggs is an architect and environmental impact consultant. Joan Baggs has worked with him as a researcher.

Baggs, Sydney and Baggs, Joan (1996) *The Healthy House*. London, Thames & Hudson, pp. 63 – 65.

¹⁹ Baggs, Sydney, and Baggs, Joan (1996) *op. cit.*, pp. 65.

²⁰ Sarah Roszbach has written a few books and numerous articles on Feng Shui who was a Chinese translator worked with a Feng Shui specialist, Lin Yun.

²¹ Roszbach, Sarah (1987) *Interior Design with Feng Shui*. London, Random Century, Second Edition, 1996, pp. xxiii.

²² Roszbach, Sarah. (2000) *Feng Shui* [online]. USA, The Matsushita Centre for Electronic Learning. Available from: <http://mcel.pacificu.edu/as/students/fengshui/book.html> [Accessed 12th August 2001].

²³ Evelyn Lip is a trained architect and a Feng Shui consultant.

²⁴ Lip, Evelyn (1997) *What is Feng Shui*. London, Academy Editions, pp. 7.

²⁵ Lip, Evelyn (1997) *op. cit.*, pp. 12.

²⁶ Lillian Too has published numerous books on Feng Shui.

Too, Lillian. (2000) *Meet Lillian Too* [online]. Kuala Lumpur, Lillian Too Certified Consultants Institute. Available from: <http://www.lillian-too.com/meetlillian.htm> [Accessed 10th August 2001].

harmony with the earth's environment and its energy lines²⁷. The energy lines concerned are invisible and fulfilled within the natural world. Rooted in Chinese mystical beliefs, astrology, folklore and common sense, Feng Shui is a way to lead the energy lines to be auspicious and of benefit to the public (Too, 1996)²⁸.

Broadly speaking, Feng Shui is a way of examining domestic architecture for auspicious or inauspicious concerns. Feng Shui attempts to establish harmony between human beings and the universe (Wang, 1995)²⁹. In domestic architecture, Feng Shui puts special emphasis upon the relations between humans and the natural environment. If a house of the living or a tomb of the dead is well adjusted according to Feng Shui, the most harmony between residents and nature is supposed to come. This will favour the residents' and their descendants' wealth, health and happiness. On the contrary, an unfavourable siting results in negative influences to the residents and their descendants, for instance, illness, disaster, accidents and financial loss.

The content of Feng Shui mainly consists of three domains, i.e. traditional Chinese science, philosophy, and religion (Eitel, 1873; Needham, 1956; Yang, 1961; Lee, 1986; Rossbach, 1987; Bennett, 1978; Baggs and Baggs, 1996; Too, 1996; Lip, 1997; Kalton, 1998; He, 1998; Yu, 1998; Hwangbo, 1999). As for Chinese science, it includes the applications of geography, mathematics and astronomy. Concerning philosophy, it involves Neo-Confucianism³⁰, Taoism³¹, and the Yin Yang School³².

²⁷ Too, Lillian (1996) *The Complete Illustrated Guide to Feng Shui*. Great Britain, Element Books Limited, pp. 6.

²⁸ Too, Lillian (1996) *op. cit.*, pp. 12.

²⁹ Wang, Fukun (1995) The Traditional Philosophical Framework of Fengshui Theory. In: Wang, Q. (ed.) *Feng Shui Li Lun Yan Jiu Yi* (The Research of Feng Shui Theory Vol. 1). Taipei, Di-jing, pp. 1 – 29.

³⁰ Kalton (1998) claims that Neo-Confucianism is the synthesis of Taoist cosmology and Buddhist spirituality around the core of Confucian concern with society and government, a synthesis which predominated in the intellectual and spiritual life of China, Korea, and Japan prior to the modern period. Kalton, Margaret C. (1998) *Confucianism and Neo-Confucianism*. [online]. Washington, Michael C. Kalton. Available from: <http://faculty.washington.edu/mkalton/NeoConfucianism.htm> [Accessed 13th September 2001].

³¹ According to *the Collins Cobuild English Dictionary* (1995), Taoism is a Chinese religious philosophy which believes that people should lead a simple honest life and not interfere with the course of natural events.

Sinclair, John *et al.* (1995) *The Collins Cobuild English Dictionary*. Great Britain, Harper Collins Publishers, pp. 1707.

Regarding religion, it is influenced by Taoism and Buddhism, along with divination and superstition. After this brief introduction of what Feng Shui is, the next section will review the historical literature of Feng Shui and related research work.

1.3 Motivation

More and more recent works, such as Rapoport (1969)³³, Douglas (1973)³⁴, Rykwert (1988)³⁵, Waterson (1990)³⁶, Kent (1990)³⁷, Pearson (1994)³⁸, Carsten and Hugh-Jones (1995)³⁹, Baggs and Baggs (1996)⁴⁰ and Hancock and Faiia (1998)⁴¹, have chosen to focus upon domestic architecture as a key institution central to an understanding of how social relations are organized. Designs for domestic architecture involve more than a shelter chosen for technical functions alone, but also take considerations on the quality of life and experience offered when dwelling (Blundell-Jones, 1999)⁴². This experience is closely related to the worldviews of its inhabitants or creators and their sense of place. One significant value behind most historical approaches is that one can learn from the past. Examination of the past may provide us with some clues for improving domestic architecture today. In modern industrial societies, the process of

³² Needham (1954) claims that Yin Yang School (or the School of Naturalists) is a kind of Chinese thought of dualism searching for the attainment in human life of perfect balance between the two principles, i.e. Yin and Yang.

Needham, Joseph (1954) *Science and Civilisation in China Vol. 1: Introductory Orientations*. Cambridge, Cambridge University Press, pp. 152.

³³ Rapoport, Amos (1969) *House Form and Culture*. New Jersey, Prentice-Hall.

³⁴ Douglas, Mary (1973) *Rules and Meanings: the Anthropology of Everyday Knowledge*. London, Penguin.

³⁵ Rykwert, Joseph (1976) *The Idea of a Town: The Anthropology of Urban Form in Rome, Italy and the Ancient World*. Massachusetts, The MIT Press, 1999.

³⁶ Waterson, Roxana (1990) *The Living House: An Anthropology of Architecture in South-East Asia*. Oxford, Oxford University Press.

³⁷ Kent, Susan (1990) *Domestic Architecture and the Use of Space*. Cambridge, Cambridge University Press.

³⁸ Pearson, David (1994) *Earth to Spirit: In Search of Natural Architecture*. London, Gaia Books.

³⁹ Carsten, Janet and Hugh-Jones, Stephen (ed.) (1995) *About the House*. Cambridge, Cambridge University Press.

⁴⁰ Baggs, Sydney and Baggs, Joan (1996) *The Healthy House*. London, Thames & Hudson.

⁴¹ Hancock, Graham and Faiia, Santha (1998) *Heaven's Mirror*. England, USA, Australia, Canada, and New Zealand, Penguin Books, 1999.

⁴² Blundell-Jones, Peter (1999) *Hugo Häring: The Organic Versus the Geometric*. London, Edition Axel Menges, pp. 150 – 151.

developing an architecture has reached such an extreme that buildings isolate human beings inside vast territories with artificial climates, within which we might pass our whole lives without ever considering what the outside environment is like. Among the animist peoples of the Chinese world, however, human beings still participate in nature and are considered to be influenced by the movement or orientation of other elements in nature (e.g. stars, rivers, or mountains). Domestic architecture, like everything else in the environment, is seen as sharing in the life force which animates the universe. By applying Feng Shui to domestic architecture, the Chinese create their sense of place and reflect their worldviews. This leads to an increasing awareness of Chinese architectural principles – Feng Shui.

The study of Feng Shui has been increasingly emphasised in modern research. These studies mainly focus on two domains. One domain defines Feng Shui as a type of Chinese traditional custom, which particularly dedicated to the practical use of Feng Shui in domestic architecture. Researchers of this school are Yates (1868)⁴³, Eitel (1873)⁴⁴, Needham (1956)⁴⁵, Lee (1986)⁴⁶, Han (1994; 1995)⁴⁷, Wang (1995; 1995)⁴⁸, Cao (1996; 1996)⁴⁹, Lip (1979, 1995, 1997)⁵⁰, Chiou and Krishnamurti (1997)⁵¹, Chen

⁴³ Yates, M. (1868) Ancestral Worship and Feng-shui, *Chinese Recorder and Missionary Journal*, Vol. 1, pp. 23 – 28.

⁴⁴ Eitel, Ernest J. (1873) *Feng Shui: the Science of Sacred Landscape in Old China*. London, Synergetic Press, Fourth Edition, 1984.

⁴⁵ Needham, Joseph (1956) *Science and Civilisation in China Vol. 2: History of Scientific Thought*. Cambridge, Cambridge University Press.

⁴⁶ Lee, Sang-hae (1986) *Feng Shui: Its Context and Meaning*. Ph.D. Thesis, Cornell University.

⁴⁷ Han, Ke-zong (1994) *Zhong Guo Gu Dai De Huan Jing Gui Hua Yi Shu: Feng Shui (The Art of Ancient Chinese Environmental Arrangement: Feng Shui)*, *Zao Yuan Ji Kan (Guarding Quarterly Publication)*, June, No.16, pp.105-109.

Han, Ke-zong (1995) *Jing Guan Feng Shui Li Lun Ji Chu (The Fundamental Theory of Feng Shui in Landscape)*. Taipei, Di-jing.

⁴⁸ Wang, Qiheng (ed.) (1995) *Feng Shui Li Lun Yan Jiu Yi (The Research of Feng Shui Theory Vol. 1)*. Taipei, Di-jing.

Wang, Qiheng (ed.) (1995) *Feng Shui Li Lun Yan Jiu Er (The Research of Feng Shui Theory Vol. 2)*. Taipei, Di-jing.

⁴⁹ Cao, Luo-yi (1996) *Shu Zhong Jia Wu Feng Shui Shu De Xing Bie Quan Shi (Various Sexual Meanings of Feng Shui House)*, *Xing Bie Yu Kong Jian Yan Jiu Shi Tong Xun (Bulletin of Gender and Space Research Institute)*, December, No. 3, pp. 165 – 178.

Cao, Luo-yi (1996) *Feng Shui: Chuan Tong Huan Jing Lun Shu Yu Kong Jian Shi Jian De Ren Shi Yu Pi Pan (Feng Shui: To Recognise and Criticise of Traditional Environment and Space)*. Master Dissertation, The National Taiwan University.

⁵⁰ Lip, Evelyn (1979) *Chinese Geomancy*. Singapore, Times Books International.

(1997)⁵², Xu (1998)⁵³, Ai (1998)⁵⁴, He (1998)⁵⁵ and Yi (1999)⁵⁶. Their research raises two difficulties, (1) that various ways of applying Feng Shui could be in conflict due to being based on different Feng Shui doctrines; and (2) there are a large number of abstruse terms which are difficult to make sense of, such as *I Ching* (Book of Changes), Chi (the life energy), Yin Yang, Wu Xing (the Five Elements), Ba Kua⁵⁷ (The Eight Kuas), Luo Shu and He Tu (two types of the Magic Square)⁵⁸. This complex background makes it difficult to pin down the essence of Feng Shui.

The other domain attempts to explain Feng Shui within the confines of western scientific thought, which treats Feng Shui as an environmental science, regardless of other aspects affecting its formation, such as philosophy, aesthetics, or sociology. Researchers in this doctrine are Huang (1996, 1998, 1999)⁵⁹, Mei and Bai (1995)⁶⁰. However, Feng Shui and science are rooted in two different category systems created by the Chinese and western world respectively. The fit of Feng Shui within science would only be able to explain a part of the effects of applying Feng Shui,

Lip, Evelyn (1995) *Feng Shui: Environments of Power: A Study of Chinese Architecture*. London, Academy Editions.

Lip, Evelyn (1997) *What is Feng Shui*. London, Academy Editions.

⁵¹ Chiou, S. C. and Krishnamurti, R. (1997) Unravelling Feng-shui, *Environment and Planning B-Planning & Design*, Vol. 24, No. 4, pp. 549 – 572.

⁵² Chen, Jian-jun (1997) *Zhong Guo Gu Dai Jian Zhu Yu Zhou Yi Zhe Xue* (Ancient Chinese Architecture and Philosophy of I Ching). Taipei, Shu-hsing.

⁵³ Xu, P. (1998) Feng-shui Models Structured Traditional Beijing Courtyard Houses, *Journal of Architectural and Planning Research*, Vol. 15, No. 4, pp. 271 – 282.

⁵⁴ Ai, Ding-zeng (1998) *Feng Shui Gou Chen* (Abstruse Feng Shui). Taipei, Tien-yuan Cheng-shi.

⁵⁵ He, Xiaoxin (1998) *Fengshui: Chinese Tradition in a Manchester Context*. Ph.D. Thesis, The University of Manchester.

⁵⁶ Yi, Ting, et al. (1999) *Zhong Guo Feng Shui Yu Jian Zhu Yan Jiu* (Geomancy and the selection in architecture placement in ancient China). Taipei, Yi-shu-chai.

⁵⁷ Ba Kua is also translated as Pa Kua or Ba Gua.

⁵⁸ *I Ching* (易經); Yin Yang (陰陽); Wu Xing (五行); Ba Kua (八卦); Luo Shu (洛書); He Tu (河圖).

⁵⁹ Huang, You-zhi (1996) Feng Shui and Environment: Graveyard. *Journal of Environmental Technology Education*, June, No. 10, pp. 54 – 70.

Huang, You-zhi (1998) The study of traditional Feng Shui idea and modern environmental protection, *Bulletin of Kao Hsiung Teacher's University*, No. 9, pp. 303 – 324.

Huang, You-zhi (1999) *Chuan Tong Feng Shui Guan Nian Yu Xian Dai Huan Jing Bao Hu Zhi Yan Jiu* (The Study of Traditional Feng Shui Idea and Modern Environmental Protection), *Taiwan She Hui Wen Ti Yan Jiu Xue Shu Yan Tao Hui* (Proceedings of the 1999 Conference of Taiwan's Social Problem Research held at Institute of Sociology Academia Sinica) [online], Taipei, 29th December 1999. Available from: http://itst.ios.sinica.edu.tw/sp/cspr_paper/huang_you_zhi.htm [Accessed 25th April 2001].

⁶⁰ Mei, Danyu and Bai, Ziping (1995) Ecology, the Intention of Fengshui Environment and Architectural Design – Introduction of the Scheme of Design of Ecological Residential Buildings. In: Wang, Q. (ed.) *Feng Shui Li Lun Yan Jiu Yi* (The Research of Feng Shui Theory Vol. 1). Taipei, Di-jing, pp. 49 – 65.

however, concentrating on problems which can be measured or for which cortical data can be collected. This may lead to ignorance of the all other facets that Feng Shui really implies. Furthermore, most traditional research methods, such as the questionnaire, the field study or the scientific experiment, only could explain how Feng Shui has been applied today, without allowing the spirit of Feng Shui to be presented. Hwangbo (1999) noticed that the value of Feng Shui was as an architectural discipline for the ancient Chinese to create an ideal built environment, involving diverse subjects, including traditional science, religion, cosmology, architecture and divination⁶¹. He pointed out that based on the different classification systems between East and West, different modes of thinking about the built environment have been presented. Architecture as an autonomous subject in East Asia is only about a century old, however, the use of Feng Shui by the Chinese is more than four thousands years old. He asserted that the experience of living in the universe with a sense of harmony might be of benefit in many ways only if one believes in that world-system and its classification system. This point of view reflects the reason why the Chinese strongly believed in and used Feng Shui for so many years.

Therefore, both of these two domains are in danger of causing modern western-educated people to misunderstand Feng Shui as only superstitious nonsense or false science.

This research will avoid exaggerated claims for Feng Shui and will attempt to dispel some of the conventional western wisdom and oversimplifications which it attracts. This thesis will focus on Feng Shui study with an attempt to investigate it in a systematic way, seeking the essence of Feng Shui, and revealing the fundamental spirit – the harmony between human beings and the world, through the investigation of domestic architecture. Very little work has been done from the point of view adopted here, and this study must be exploratory. This exploration will reveal the know-how and general conceptual framework of Feng Shui. In many fields which mention the topic of Feng Shui for domestic architecture, it is either neglected or

⁶¹ Hwangbo, Bong (1999) *op. cit.*, pp. 7 – 8.

treated as secondary. Following theoretical and practical investigations, the possible outcome of this thesis will be: to reveal the influence of Chinese traditions and ancient worldviews on Feng Shui; to expose the role of Feng Shui in domestic architecture; to detect the underlying meaning of Feng Shui for human beings; and to examine the value of readopting Feng Shui today.

1.4 Research Task

To understand the fundamental spirit and value of Feng Shui, as well as its contribution to architecture, this thesis provides a step-by-step approach to explore Feng Shui which divides into the following four domains.

1. Reviews the employment of Chinese traditions in Feng Shui.

This review, in brief, will include a detailed review of literature written in Chinese and English. By means of this investigation, Feng Shui's origin and its historical background will be described. This thesis discusses most of the original documents written in the old Chinese language related to Feng Shui, and furthermore classifies these documents into five groups according to their contents and applications. Further, this task explores the development and evolution of Feng Shui, dated back to four thousand years ago. Five significant Chinese concepts will be addressed, i.e. Chi, Yin Yang, the Five Elements, the Eight Kuas, and the Chinese worldview⁶².

2. Investigates the key models used in Feng Shui.

Feng Shui provides many theoretical and systematic perspectives on the importance of orientation. The idea of orientation could apply to many aspects of domestic architecture including the selection of house location, exterior space arrangement, and interior design, such as spatial organisation for bedrooms, living rooms, study rooms, kitchens and toilets, as well as the placement or dimension of doors, windows and furniture. Three significant models relating to this orientation selection are the main

⁶² Chi (氣); Yin Yang (陰陽).

focus in this research, i.e. the Four Celestial Beings, the Five Surnames House Arrangement and the Eight Houses Arrangement, which are respectively based on the use of geography, family names and member's birth year in a family in relation to spatial order in domestic architecture.

Considering the Four Celestial Beings, the selection of an ideal site is determined by shapes and heights of surrounding hills and watercourses. Based on the system of Four Celestial Beings, four traditional celestial animals – Azure Dragon, White Tiger, Crimson Phoenix, and Black Turtle, determine the desired environment of the site for each cardinal orientation. The concept of the Four Celestial Beings is originally derived from Twenty-eight Constellations (sitting in Twenty-eight Mansions) in the sky, and thus reflects the influence of heaven.

According to the Five Surnames House Arrangement, the selection of an ideal orientation when designing a house is based on the classification of family names. Based on the system of Five Notes, a traditional Chinese phonetics, all Chinese family names could be classified into five classes, i.e. Gong, Shang, Jue, Zhi and Yu⁶³. Each class of family name has its specific ideal orientation selection for spatial arrangement and furniture placement. The underlying principles of this theory will be revealed.

The Eight Houses Arrangement classifies people and domestic architecture. The idea of this theory is the use of a person's birth year for selecting orientation when designing a house. The Eight Kuas provides a link between the classification of people and that of domestic architecture, according to this theory. Both people and domestic architecture are divided into eight groups and so fitted into one of the Eight Kuas. Eight types of diagram display eight kinds of placements of nine stars in eight orientations.

3. Analysis of domestic architectural practices based on Feng Shui.

This theme gets involved in the investigation of Chinese domestic architectural

⁶³Gong (宮); Shang (商); Jue (角); Zhi (徽); Yu (羽).

practices. It will apply many aspects including the selection of house location, exterior space arrangement, and interior design, such as space organisation for bedrooms, living rooms, study rooms, kitchens and toilets, as well as the placement or dimension of doors, windows and furniture. Several case studies will be carefully selected in a number of diverse areas where Feng Shui has been applied. Three design cases will be examined:

- a. Palace Design Case: The Forbidden City of Beijing.
- b. Contemporary House Design Case in England.
- c. Contemporary House Design Case in Taiwan.

The investigation of architectural applications, could help in determining guidelines for application to Chinese domestic architecture, leading to applications that are more reasonable and appropriate.

4. Cultural Comparison.

The differences between types of domestic architecture in different areas are evidence of differences in culture, rituals, ways of life, social organisation, climates, landscapes, and materials and technology available. The similarities are evidence not only of areas where some or all of these factors have coincided, but also of a possible basic constancy in human needs, desires and worldview. With regard to the close relationship between human beings, houses and the universe, the need for cross-cultural studies and comparisons is based on two reasons, which will help us to examine the value of readapting Feng Shui today. First, different cultures influence various types of house form and settlement pattern in the world. This study will provide a wide range of information to show how the worldviews of human beings influence their house designs. Second, comparisons of these types can offer insight into the basic nature of shelter and dwelling, of the design process and the meaning of basic needs. This investigation will reveal that all these types of domestic architecture tend toward a state of balance with nature rather than dominating it, which further reinforces its superiority over the grand design tradition as a topic of study for the

relation of the built environment to human beings and nature.

Many other cultures have more or less similar ways to express their viewpoints in classifying and arranging things in nature and in relation to human beings, so as to express their specific message. These can be used to not only validate the idea and key principles found in this thesis, but to provide a revised way of thinking for modern architecture. This provides a significant direction for improvement for future architecture development.

1.5 Organisation of the Thesis

The introduction in this chapter provides the research framework, and guides the development of thesis.

Chapter 2 reviews the literature on the achievement of Chinese civilisation in architecture - Feng Shui. First, this chapter explores four terms, i.e. Feng Shui, Kan Yu, Xing Fa and Di Li in describing the scope of Feng Shui⁶⁴. This is followed by a review of literatures relevant to Feng Shui, including the classical and historical literature in addition to contemporary Feng Shui research works. The spirit of Feng Shui is explored. Chi, Yin Yang, Tai Ji Tu Shuo, and Tian Ren He Yi are described in detail⁶⁵.

Chapter 3 aims to show how the principles of Feng Shui have been influenced by and applied to Chinese astronomy. Based on the observation of celestial phenomena, a special connection between humans and the universe is used to determine orientation for spatial order in domestic architecture. The concepts of Four Celestial Beings and Twenty-eight Constellations, used for identifying orientations in Feng Shui, are the main focus of this chapter. Chinese astronomy reveals features different from western astronomy, and these differences are identified in detail.

⁶⁴ Feng Shui (風水); Kan Yu (堪輿); Xing Fa (形法); Di Li (地理).

⁶⁵ Tai Ji Tu Shuo (太極圖說); Tian Ren He Yi (天人合一).

Chapter 4 reviews one special Feng Shui model for the selection of auspicious orientations for house elements such as the main entrance, kitchen, or bedrooms, based on the classification of surnames. Investigation of original references and historical literature reveals that this model has been mentioned, but never analysed in detail. Four significant Feng Shui concepts forming the theoretical aspect of the model have been revealed. These four concepts are the Five Elements, the Magic Square, the concept of centrality and the layout of the Chinese courtyard house.

Chapter 5 reviews another Feng Shui model – the Eight Houses Arrangement for determining spatial order in domestic architecture. Investigation of original references and related literature revealed that these works lack detailed analysis of the spirit behind this model. The objective of this chapter is to distil the fundamental concepts of this model. Four principles distilled from this model are classification, mappings, harmony, and regulations.

Chapter 6 demonstrates a typical example, the case study of a palace design case (the Forbidden City in Beijing). This would reveal how Feng Shui has been used in domestic architecture with royal families.

Chapter 7 investigates several types of domestic architecture in early cultures. It attempts to find out how human beings conceive the world within different cultures, and how the use of cosmology has been presented in architecture.

Chapter 8 shows two case studies designed by applying Feng Shui. These two case studies contain one contemporary house design in England and another house design in Taiwan. By investigating these two design cases, this would reveal how Feng Shui could be used in contemporary domestic architecture.

Chapter 9 sums up the study of this thesis, and describes the major tasks for future continuation of this research.

Chapter 2 ---

Approach to Feng Shui

2.1 Introduction

This chapter aims to explore the spirit of Feng Shui. Section 2.2 expresses terms used in describing the scope of Feng Shui, and introduces the objectives and territory in which Feng Shui was involved. Four major terms, i.e. Feng Shui, Kan Yu, Xing Fa and Di Li, present areas in which Feng Shui is involved combinations of these areas, forming the scope of Feng Shui as currently known. Section 2.3 reviews literature relevant to Feng Shui, focusing on classical as well as historical references. Three major Chinese official encyclopaedias covering most of the Feng Shui classical texts are detailed. Section 2.4 describes contemporary Feng Shui research, and section 2.5 describes the essence and vision of the Chinese worldview.

2.2 The Definition of Feng Shui

In Classical Chinese literature, Feng Shui is not the only term used to present the idea of obtaining a favourable siting and orientation for dwelling, for both the living and the dead, and spatial arrangements for both interior and exterior. Shi (1995) addressed several other terms which have been used instead of Feng Shui, such as Kan Yu, Xing

Fa, Di Li, Qing Nang, Qing Wu, Pu Zhai, Xiang Zhai, Tu Zhai and Yin Yang¹.

A broader investigation of the use of these terms should help us clarify the spirit of Feng Shui and its domain. This section reviews four main terms, i.e. Feng Shui, Kan Yu, Xing Fa and Di Li, which are still used nowadays. Our investigation will focus mainly on the following three issues: the meaning of each term in literature, the historical reference materials and the use of the term.

Feng Shui:

Literally, Feng Shui contains two words, Feng means wind, and Shui stands for water. Wind and water are two types of natural phenomena in the world, but are also understood as two types of Chi circulating in the universe. According to *the Oxford Dictionary of Difficult Words* (2001), Feng Shui is a system of laws considered to govern spatial arrangement and orientation in relation to the flow of energy (Chi), and whose favourable or unfavourable effects are taken into account when siting and designing buildings and their surroundings and furnishings². According to *the Cambridge International Dictionary of English* (2000), Feng Shui is defined as ‘a Chinese philosophy which states that the position of buildings and the arrangement of furniture and objects within a home influence the health, wealth and feelings of the people who live there’³.

¹ Kan Yu (堪輿), Xing Fa (形法), Di Li (地理), Qing Nang (青囊), Qing Wu (青烏), Pu Zhai (卜宅), Xiang Zhai (相宅), Tu Zhai (圖宅) and Yin Yang (陰陽).

Shi, Zhen (1995) *The Textual Research of the Ancient Codes and Records of Feng Shui*. In: Wang, Qiheng (ed.) *Feng Shui Li Lun Yan Jiu Er* (The Research of Feng Shui Theory Vol. 2). Taipei, Di-jing, pp. 13 – 31.

² Jewell, Elizabeth J. et al. (ed.) (2001) *The Oxford Dictionary of Difficult Words*. New York, Oxford University Press, pp. 173.

³ Cambridge University Press (2000) *The Cambridge International Dictionary of English* [online]. Cambridge, Cambridge University Press. Available from: http://dictionary.cambridge.org/define.asp?key=feng.shui*1+0 [Accessed 16th September 2001].

Zang Shu (Book of Burial) is the first literature which includes the term Feng Shui. The author Guo (about 276 A.D. – 324 A.D.) illustrated the essence of Feng Shui and how to apply Feng Shui for establishing a graveyard (Guo, the Jin Dynasty)⁴. The essence of Feng Shui is based on the idea that Chi is the life force or vital energy of the universe, which is circulated in the earth, in the atmosphere and within our bodies. Chi links humans with the natural environment. From Guo's viewpoint, 'to calm wind and acquire water' are two fundamental requirements for an ideal place of dwelling. Guo mentioned that 'Chi will be scattered with wind and coagulated by water; ancestral wise person attempted to accumulate the Chi in a circulating condition in a place. This is known as Feng Shui (Guo, the Jin Dynasty)⁵.' Feng Shui is thus seen as manner by which to reach this target.

Kan Yu:

Kan Yu is the alternative term for Feng Shui. According to *the Chinese Dictionary* (1998), Kan Yu is the term for heaven and earth⁶. Literally, Kan Yu means observation of changes in natural phenomena on the heaven and earth. The term Kan Yu was probably first mentioned by Liu, An (179 B.C. – 122 B.C.) in a book called *Huai Nan Zi* (Book of the Prince of Huai Nan). Liu cited Kan Yu as 'Kan Yu Xu Xing'⁷ which means the natural law working within the heaven and the earth (Wang, 1998)⁸. From Liu's viewpoint, Kan Yu will be influenced by Yue Jian⁹ (the monthly ordinances¹⁰);

⁴ Guo, Pu (The Jin Dynasty) *Zang Shu* (Book of Burial). In: Ji, Yun *et al.* (ed.) (1782) *Jing Yin Wen Yuan Ge Si Ku Qvan Shu 808* (Complete Library of the Four Treasuries Vol. 808). Taipei, Taiwan Shang-wu, reprinted in 1983, pp. 11 – 38.

⁵ 氣乘風則散, 界水則止, 古人聚之使不散, 行之使有止, 故謂之風水.

Guo, Pu (The Jin Dynasty) *op. cit.*, pp. 15.

⁶ Li, Dian-kui *et al.* (ed.). (1998) *Guo Yu Ci Dian* (The Chinese Dictionary) [online]. Taipei, Jiao Yu Bu Tui Xing Wei Yuan Hui (Mandarin Promotion Council, Ministry of Education). Available from: <http://www.edu.tw/clc/dict/> [Accessed 25th September 2001].

⁷ Kan Yu Xu Xing (堪輿徐行).

⁸ Wang, Ji-ru (1998) *Huai Nan Zi Yi Zhu* (An Exposition of Huai Nan Zi). Taipei, Jian-an, pp. 101.

⁹ Yue Jian (月建).

some monthly ordinances refer to dissonance while the other monthly ordinances refer to harmony; dissonance indicates inauspiciousness and harmony indicates auspiciousness. Xu, Shen¹¹ (around 58 A.D. – 147 A.D.) explained Kan as the natural law of the heaven, while Yu was seen as the natural law of the earth. Kan Yu thus refers to a general term of the natural law existing in the heaven and the earth (Shi, 1995)¹².

Kan Yu has been used as the title of a book. According to ancestral literature called *Zhou Li*¹³ annotated by Zheng, Xuan¹⁴ (around 127 A.D. – 200 A.D.) who was a great Confucianist in the Eastern Han Period (25 A.D. – 220 A.D.), Zheng considered Kan Yu as a book concerned with the divination of the earth through the means of astrology (Shi, 1995)¹⁵. The orbit of Wood Star (the planet Jupiter in modern astronomy) is divided into twelve sections, so to accord with it, territory on the ground must be divided into twelve sections. Each sector of the orbit of Jupiter corresponds to one section on the ground. The movement of natural phenomena in the sky implies different omens from heaven for auspicious or inauspicious concerns. From Zheng's viewpoint, Kan Yu makes a link between heaven, human beings and the earth. It contains a variety of information on how the ancients understood the universe. Changes of natural phenomena were taken to indicate different omens relating to auspiciousness or inauspiciousness. Thus, Kan Yu relates to an art of divination involving auspicious or inauspicious concerns.

¹⁰ The Chinese lunar calendar divides a year into twelve months by duodecimal cycle. Monthly ordinances refer to the time to establish of each month.

¹¹ Xu, Shen (許慎) was an ancestral classicist and linguistics (specialist of study writing).

Sino Art Net (1998) *Xu Shen*. [online]. Sino-art. Available from: <http://www.sino-art.com/document/glossary/big5/txsh1.html> [Accessed 10th September 2001].

¹² Shi, Zhen (1995) *op. cit.*, pp. 15.

¹³ Zhou Li (周禮).

¹⁴ Zheng, Xuan (鄭玄).

¹⁵ Shi, Zhen (1995) *op. cit.*, pp. 15.

According to an ancestral document called Yang Xiong Chuan¹⁶ in *Han Shu* (Book of Han), the relation between Kan Yu and domestic architecture was proposed by Meng (Meng, Kang¹⁷) who was an ancient scholar in the Three Kingdoms Period (220 A.D. – 265 A.D.) (Ban, the Han Dynasty)¹⁸. Meng claimed that Kan Yu was the name of a god who designed a book called *Tu Zhai Shu* (Book of House Illustration)¹⁹. This book illustrated principles and regulations for spatial arrangement in houses. The use of Kan Yu as the name for spatial arrangement in houses also memorialises the god Kan Yu. The term Kan Yu has been used in the title of several ancestral books, for instance, *Kan Yu Jin Kui* (Golden Box of Geomancy)²⁰, *Kan Yu Jing* (Book of Geomancy) and *Kan Yu Man Xing* (Agreeable Geomantic Aphorisms)²¹. In general, Kan Yu focuses on an abstract understanding of the connection between human beings and the natural world, including heaven and earth. It applies numerous ideas of Chinese astronomy to come up with the ideal spatial arrangement for dwelling.

Xing Fa:

Literally, Xing refers to terrains and Fa refers to regulations or laws. Xing Fa mainly focuses on observation of natural environment or landscape including mountains and watercourses surrounding the dwelling place. The concept of Xing Fa considers the factor that will influence the circulation of Chi within the dwelling place. These factors include shape, orientation and location. Various formats of spatial arrangement considered as ideal are also shown in the book.

¹⁶ Yang Xiong Chuan (揚雄傳).

¹⁷ Meng, Kang (孟康).

¹⁸ Ban, Gu (ed.) (The Han Dynasty) *Han Shu Juan Ba Shi Qi Yang Xiong Chuan Di Wu Shi Qi* (Han Shu Vol.87 Yang Xiong Chuan No. 57) [online]. Taipei, Yu Hsu Working Studio. Available from: <http://163.14.134.40/terry55/S2/101.txt> [Accessed 16th August 2001].

¹⁹ Tu Zhai Shu (圖宅書).

²⁰ *Kan Yu Jin Kui* (Golden Box of Geomancy) was mentioned by Ban, Gu (about 32 A.D. – 92 A.D.) in the bibliography of the *Qian Han Shu* (Book of the Early Han Dynasty). However, this book has long been lost.

²¹ *Kan Yu Jin Ku* (勘輿金匱); *Kan Yu Jing* (勘輿經); *Kan Yu Man Xing* (勘輿漫興).

Considering Xing Fa, four significant issues, i.e. Long (the Dragon), Xue (the Chamber), Sha (the Hills) and Shui (the Water) will influence a domestic environment²². Long (the Dragon) refers to mountains. Xue (the Chamber) is the ideal place for dwelling, where it is surrounded by mountains. Sha (the Hills) refers to mounds or hills. Shui (the Water) stands for a watercourse flowing in this area. In another work of literature called *Shan Ling Zhuang Yi*²³ (Versions of Mountains' Forms), the author Zhu, Xi²⁴ (around 1130A.D. – 1200A.D.) claimed that an investigation of surrounding mountains (Long) is the first task when seeking an ideal location for dwelling (Xue) (Shi, 1995)²⁵.

In *Zhong Fu*²⁶ (Book of Tombs), the author Zhang, Heng²⁷ (around 78 A.D. – 139 A.D.) pointed out that an investigation of the natural environment is needed when designing a tomb. According to Zhang, in considering the site for a tomb, one needs to examine the form, height, distance, orientation and location of mountains, hills, forests, and watercourses in the natural environment. Different types of spatial arrangement for mountains, hills, forests, or watercourses are believed to generate different sorts of environments for Chi circulating in the space. According to *Da Tang Hsin Yu*²⁸ (Great Tang's Writtern Records), a work of ancient literature describing the history of the

²² Long (龍); Xue (穴); Sha (砂); Shui (水).

²³ *Shan Ling Zhuang Yi* (山陵狀議).

²⁴ Zhu, Xi (朱熹) was a great Chinese philosopher of Neo-Confucianism in Sung Dynasty. While borrowing heavily from Buddhism, his new metaphysics reinvigorated Confucianism.

Yen, Duen-his (1998) *Chu Hsi* [online]. Noogenesis. Available from:

http://www.noogenesis.com/hsi/Chu_Hsi.html [Accessed 8th September 2001].

²⁵ Shi, Zhen. (1995) *op. cit.*, pp. 19.

²⁶ *Zhong Fu* (塚賦).

²⁷ Zhang, Heng (張衡) was a Chinese poet, mathematician, astronomer, geographer and scientist who invented the seismograph in 132 A.D. He also built an armillary sphere with horizon and meridian rings, and realized that natural phenomena were not caused by the supernatural. He understood that the Earth was spherical, and that the Moon was lit by the Sun, revolved around the Earth, and was eclipsed by the Earth's shadow. He explained the shortening/lengthening of days, and invented the grid system in cartography.

O'Connor, J. and Robertson E. (2001) *Zhang Heng* [online]. Scotland, School of Mathematics and Statistics, University of St Andrews. Available from: <http://www-history.mcs.st-andrews.ac.uk/history/Mathematicians/Heng.html> [Accessed 12th September 2001].

²⁸ *Da Tang Hsin Yu* (大唐新語).

Tang Dynasty, Tang Xuan Zong²⁹ (around 713 A.D. – 756 A.D.), a Chinese Emperor in the Tang Dynasty (618 A.D. – 907 A.D.), selected the location of his tomb through an observation of the natural environment nearby (Liu, the Tang Dynasty)³⁰. In relation to the site of the tomb, the surrounding mountains look like the form ‘Long Pan Feng Xiang³¹’. Literally, Long and Feng are two celestial animals, the dragon and the phoenix. The words Pan and Xiang describe the postures of the two animals. Thus, Long Pan Feng Xiang means an entrenched dragon and a flying phoenix, which produce a beautiful terrain. If mountains surrounding a site form an entrenched dragon and flying phoenix, this terrain is considered auspicious for a tomb.

More generally, Xing Fa focuses on ways of observing the natural environment in order to produce an ideal environment for dwelling, and this was also applied by the Chinese Emperor for siting royal tombs. Based on observations of the natural environment, Xing Fa reveals the link between human beings and the natural environment, as well as showing how this link could be used in domestic architecture.

Di Li:

Literally, Di means the earth and Li stands for principles. Di Li means geography relating to the natural environment or terrain on the earth. The term Di Li occurs in *I Ching* (Book of Changes). It describes how by observing Tian Wen³² (astronomy) from

²⁹ Tang Xuan Zong (唐玄宗) was regarded as a perfect prince in culture, courage, and wisdom. He was a talented musician and great patron of music. He reduced the number of civil-service examination officials, began massive building projects, especially on the Great Canal connecting the Yellow and the Yangtze rivers that had been built by the Sui, and generally increased the wealth and power of the court. His capital, at Chang-an, became incredibly wealthy and a flowering of Chinese culture, such as had never been seen before, concentrated itself in this capital city during the decades of his rule.

Hooker, Richard (1996) *The People: Cultures in America* [online]. USA, Washington State University. Available from: <http://www.wsu.edu/~dee/CULAMRCA/BEGIN.HTM> [Accessed 26th April 2002].

³⁰ Liu, Su (The Tang Dynasty). *Da Tang Hsin Yu* (Great Tang's Writtern Records). Taipei, Yi-wen, reprinted in 1965.

³¹ Long Pan Feng Xiang (龍盤鳳翔).

³² Tian Wen (天文).

the sky and Di Li (geography) on the ground, the natural law of the universe is presented. According to an ancestral document called *Guan Zi Xing Shi Jie*³³ (Clarification of Terrain in the Book of Guan Zi), human beings have to obey the natural law in the universe including Tian Dao (the natural law of heaven) and Di Li (the natural law of earth). If humans were to resist Tian Dao and defy Di Li, they would not derive any benefit from the universe (Shi, 1995)³⁴. According to another ancient document called *Tai Zu Xun*³⁵ in the book of *Huai Nan Zi*, the study of Di Li of the earth is the basis to establish the standard of measurement (Wang, 1998)³⁶.

Some western scholars, such as Needham (1956), use the term ‘geomancy’ as a translation of Feng Shui in English. In *the Oxford English Dictionary* (1989), geomancy is defined as ‘the art of divination by means of signs derived from the earth, as by the figure assumed by a handful of earth thrown down upon some surface. Hence, usually, divination by means of lines or figures formed by jotting down on paper a number of dots at random (Simpson and Weiner, 1989)³⁷. Needham (1956) defined geomancy as the art of adapting the residences of the living and the dead so as to cooperate and harmonise with the local currents of the cosmic breath³⁸.

From this point of view, an intimate connection between Di Li (geography) and spatial arrangement of dwelling has been drawn, which is the basis of Feng Shui. The term Di Li has been used as a part of the title in several books, for instance, *Da*

³³ *Guan Zi Xing Shi Jie* (管子形勢解).

³⁴ Shi, Zhen (1995) *op. cit.*, pp. 13 – 31.

³⁵ *Tai Zu Xun* (泰族訓).

³⁶ 俯視地理, 以制度量.

Wang, Ji-ru (1998) *op. cit.*, pp. 759.

³⁷ Simpson, John and Weiner, Edmund (ed.) (1989) *The Oxford English Dictionary, Vol. VI*. Oxford, Clarendon Press, Second Edition, pp. 461.

³⁸ Needham, Joseph (1956) *Science and Civilisation in China Vol. 2: History of Scientific Thought*. Cambridge, Cambridge University Press, pp. 359.

Tang Di Li Jing (Book of Di Li in Tang Dynasty), *Di Li Zheng Zong* (Orthodoxy of Di Li), and *Di Li Da Cheng* (The Great Achievement of Di Li)³⁹.

Summary of Terms Connected with Feng Shui:

Feng Shui is represented or measured within a worldview dominated by Chi, believed to be the life force or vital energy of the universe. Two types of natural phenomena affecting Chi are scattering by wind or coagulation by water. Therefore, improvement of the amount or quality of Chi circulating in a place, a building, or whatever is a determinant for its idealness. Kan Yu represents the natural law governing the heaven and the earth. Movement of stars in the sky is the key concept, implying different omens from heaven. Numerous ideas in Chinese astronomy were linked with Kan Yu and transformed into a representation in architecture or in selection of sites and spatial arrangements for dwelling. Xing Fa involves an observation of natural environment or landscape, such as mountains and watercourse, with key factors of shape, size, and relative location. Combinations of these factors decide the ideal location for architecture. Shi (1995) reports that Xing Fa and Kan Yu were two schools of Feng Shui in the Han Dynasty (206 B.C. – 220 A.D.)⁴⁰. Kan Yu emphasises an abstract understanding of the connection between human beings and the natural world. By contrast, Xing Fa focuses upon practical observation of natural environment around the place for dwelling. Di Li is close in method and belief to Xing Fa, but with a more detailed attention to terrain on the earth. Di Li is sometimes translated by the term 'geomancy' in English. To summarise, the scope of Feng Shui is composed of the area of Feng Shui, Xing Fa, Kan Yu, and Di Li.

³⁹ Da Tang Di Li Jing (大唐地理經); Di Li Zheng Zong (地理正宗); Di Li Da Cheng (地理大成).

⁴⁰ Shi, Zhen (1995) *op. cit.*, pp. 18.

2.3 Review of the Classical Documents

Three major Chinese official encyclopaedias cover most of the Feng Shui classical texts, i.e. *Yong Le Da Dian*, *Si Ku Qvan Shu* and *Gu Jin Tu Shu Ji Cheng*⁴¹. *Yong Le Da Dian* (Vast Documents of the Yong Le Era) is a great ancient Chinese encyclopaedia of the Ming Dynasty (1368 A.D. – 1644 A.D.). The Chinese Emperor Ming Chengzu gave the order to Xie (Xie, Jin) and many other scholars to edit this encyclopaedia in 1403⁴². The first manuscript was made in 1404, which was called *Wen Xian Da Cheng*⁴³ (Great Collection of Documents). A further compilation was completed in 1408. The contents of *Yong Le Da Dian* include twenty-two thousand, eight hundred and seventy-seven texts classified into six parts, which constitute eleven thousand and ninety-five volumes, though many volumes were lost in fires. The content covers ancient philosophy, history, literature, religion, mathematics, technology, agriculture, divination and so on. Many texts involved in city planning are relevant to Feng Shui. Furthermore, the remaining volumes were destroyed or taken away by the foreign troops who entered Beijing during the Boxer Rebellion in 1900. Less than four hundred volumes are left today existing around the world (National Palace Museum, 2002)⁴⁴.

Gu Jin Tu Shu Ji Cheng (Chrestomathy of Ancient and Modern Illustrations and Writings) is another ancient Chinese encyclopaedia commissioned by the Chinese Emperor Kangxi⁴⁵. The first manuscript was edited by Chen⁴⁶ in 1706. Later, another Chinese Emperor Yongzheng⁴⁷ commissioned Jiang⁴⁸ to re-edit this encyclopaedia in

⁴¹ *Yong Le Da Dian* (永樂大典); *Si Ku Qvan Shu* (四庫全書); *Gu Jin Tu Shu Ji Cheng* (古今圖書集成).

⁴² Ming Chengzu (明成祖); Xie, Jin (解縉).

⁴³ *Wen Xian Da Cheng* (文獻大成).

⁴⁴ National Palace Museum (2002) *Yung-lo Ta-tien* [online]. Taipei, National Palace Museum. Available from: <http://www.npm.gov.tw/english/collections/painting4.htm> [Accessed 10th March 2002].

⁴⁵ Kangxi (康熙).

⁴⁶ Chen, Meng-lei (陳夢雷).

⁴⁷ Yongzheng (雍正).

⁴⁸ Jiang, Ting-xi (蔣廷錫).

1726. It contains about ten thousand texts divided into six parts with thirty-two sections classified into six thousand one hundred and seventeen categories. Feng Shui texts occur in the part on Natural Studies, the section on Art and the category on Kan Yu (Chen, 1726)⁴⁹. These texts include such examples as *Huang Di Zhai Jing* (The Yellow Emperor's Classic of Dwelling), *Qing Wu Xing Sheng Zang Jing* (Mr. Qing Wu's Book of Burial), *Guan Shi Di Li Zhi Meng* (Mr. Guan's Geometrical Instruction), *Guo Pu Gu Ben Zang Jing* (Guo Pu's Old Book of Burial), *Yang Yun Song Shi Er Zhang Fa* (Yang Yun Song's Twelve Burial Instructions), *Liu Ji Kan Yu Man Xing* (Liu Ji's Kan Yu Talks), *Yang Zhai Shi Shu* (Ten Books of Houses), *Wang Chong Lun Heng* (Wang Chong's Critical Essays) and so on⁵⁰.

Si Ku Qvan Shu (Complete Library of the Four Treasuries) is a vast manuscript collection commissioned by the Chinese Emperor Qianlong⁵¹ edited from 1773 and completed in 1782. *Si Ku Qvan Shu* was originally intended to reform lost works from *Yong Le Da Dian*. It comprises over thirty-four thousand titles bound in more than thirty-six thousand volumes. The contents of this great collection include four principal parts with forty-four categories covering Chinese philosophy, history, literary art, politics, society, economy, military, law, medicine, astronomy, geography, mathematics, biology, agriculture, divination and so on. More than one edition of *Si Ku Qvan Shu* has been made. *Jing Yin Wen Yuan Ge Si Ku Qvan Shu*⁵² is one principal edition existing today. Many Feng Shui classical texts fall into the category of the art

⁴⁹ Chen, Meng-lei et al. (1726) *Gu Jin Tu Shu Ji Cheng Bo Wu Hui Bian Yi Shu Dian* (Chrestomathy of Illustrations and Writings Ancient and Modern, Part of Natural Studies, Section of Art). Taipei, Dingwen, reprinted in 1988.

⁵⁰ *Huang Di Zhai Jing* (黃帝宅經); *Qing Wu Xing Sheng Zang Jing* (青烏先生葬經); *Guan Shi Di Li Zhi Meng* (管氏地理指蒙); *Guo Pu Gu Ben Zang Jing* (郭璞古本葬經); *Yang Yun Song Shi Er Zhang Fa* (楊筠松十二葬法); *Liu Ji Kan Yu Man Xing* (劉基堪輿漫興); *Yang Zhai Shi Shu* (陽宅十書); *Wang Chong Lun Heng* (王充論衡).

⁵¹ Qianlong (乾隆).

⁵² *Jing Yin Wen Yuan Ge Si Ku Qvan Shu* (景印文淵閣四庫全書).

of divination (Ji, 1782)⁵³. These texts include such as *Zhai Jing* (Book of Houses), *Zang Shu* (Book of Burial), *Han Long Jing* (Book of Challenging the Dragon), *Qing Nang Xu* (Preface to the Azure Satchel Classic), *Qing Nang Ao Yu* (Delving into the Azure Satchel Classic), *Tian Yu Jing* (Book of Heavenly Jade), *Ling Cheng Jing Yi* (Essence of Spiritual City) and so on⁵⁴.

Apart from the documents shown in these encyclopaedias, there are numbers of documents relevant to Feng Shui, such as *Yang Zhai San Yao* (Three Principles for Houses), *Ba Zhai Ming Jing* (Bright Mirror of Eight Houses Arrangement), *Ying Zao Fa Shi* (Treatise on Construction Rules), *Lu Ban Jing* (Book of Lu Ban for Carpenters), *Yang Zhai Da Cheng* (Grand Compendium of Houses), *Jin Guang Dou Lin Jing* (Book of the Big Dipper Casting its Golden Light), *Huai Nan Zi* (Book of the Prince of Huai Nan), *Tao Te Ching*⁵⁵ (Book of the Way of Virtue) and so on⁵⁶.

From the contents of these documents, the classical Feng Shui texts can be classified into five categories.

Category 1: Texts about the fundamental concept of Feng Shui

To establish the fundamental concept of Feng Shui, several significant concepts, such as Tao, Chi, Yin Yang, the Five Elements, and the Eight Kuas have been explained in detail. These concepts are the basis of ancient Chinese cosmology. Classical books involved in this category are such as *I Ching* (Book of Changes), *Huai Nan Zi* (Book of the Prince of Huai Nan) or *Tao Te Ching* (Book of the Way and Virtue).

⁵³ Ji, Yun *et al.* (ed.) (1782) *Jing Yin Wen Yuan Ge Si Ku Qvan Shu 808* (Complete Library of the Four Treasuries Vol. 808). Taipei: Taiwan Shang-wu, reprinted in 1983.

⁵⁴ *Zhai Jing* (宅經); *Zang Shu* (葬書); *Han Long Jing* (撼龍經); *Qing Nang Ao Yu* (青囊奧語); *Tian Yu Jing* (天玉經); *Ling Cheng Jing Yi* (靈城精義).

⁵⁵ *Tao Te Ching* is also translated as *Dao De Jing*.

⁵⁶ *Yang Zhai San Yao* (陽宅三要); *Ba Zhai Ming Jing* (八宅明鏡); *Ying Zao Fa Shi* (營造法式); *Lu Ban Jing* (魯班經); *Yang Zhai Da Cheng* (陽宅大成); *Jin Guang Dou Lin Jing* (金光斗臨經); *Huai Nan Zi* (淮南子); *Tao Te Ching* (道德經).

I Ching (Book of Changes) was first written in about 3,000 B.C. derived from ancient oral traditions. The origin of *I Ching* (Book of Changes) is dated back to a prehistoric period in legend. It is supposed to have been created by a mysterious saint called Fuxi who invented patterns of the Eight Kuas (Xu, 1993)⁵⁷. The Eight Kuas are symbols composed of broken or unbroken bars in sequence, which contains Chien (☰), Tui (☷), Li (☲), Chen (☳), Hsun (☴), Kan (☵), Ken (☶) and Kun (☷). This is discussed further in Chapter 5.

Literately, I means changes or permutations and Ching stands for books. The contents of *I Ching*, embodying traditional Chinese cosmology, record how the Eight Kuas evolved into Sixty-four Kuas (or known as sixty-four hexagrams). Based on the concept of Yin Yang, each hexagram of the sixty-four hexagrams, or each Kua of the Eight Kuas, represents a particular quality of object, such as natural phenomena, time, action or attitude. According to Abrahan (1999), the sixty-four hexagrams were first mentioned in the Xia Kingdom (2183 B.C. – 1751 B.C.)⁵⁸. The sixty-four hexagrams can be used in the yarrow oracle as a method of divination. To the ancient Chinese, yarrow was a sacred plant. Centuries later, Wen Wang⁵⁹ of the Zhou Dynasty (1111 B.C. – 221 B.C.) wrote divination texts for the sixty-four hexagrams and arranged them in the present order. His son, Zhou Gong⁶⁰, added a commentary to each hexagram. This commentary is known as Hsiang Chuan⁶¹, meaning the image of hexagrams.

⁵⁷ Fuxi (伏羲).

Xu, Zi-hong (annot.) (1993) *Zhou I* (Book of Changes). Taipei, Di-qiu, pp. 1 – 19.

⁵⁸ Abrahan, Ralph H. (1999) Chapter 1. *Legendary History of the I Ching. Commentaries on the I Ching* [online]. Available from: <http://www.yarrowstalk.com/iching/ch1.html> [Accessed 6th March 2002].

⁵⁹ Wen Wang (文王).

⁶⁰ Zhou Gong (周公).

⁶¹ Hsiang Chuan (象傳).

A further extensive commentary of *I Ching* (Book of Changes) is discussed by Confucius (551 B.C. – 479 B.C.) in the document called *Shi Yi*⁶², known as Ten Wings. Literately, Shi means ten and Yi stands for wings. Ten Wings includes an explanation of the meanings of the sixty-four hexagrams. The content of Ten Wings (*Shi Yi*) is the essential part of *I Ching* (Book of Changes) transforming the sixty-four hexagrams from divination texts into a philosophical masterpiece. Generally, *I Ching* (Book of Changes) views the universe as a well-coordinated system, in which the process of changes never ceases. It presents interactions between human beings, phenomena and the universe based on natural principles and sequences. The use of sixty-four hexagrams reveals a type of ancestral classification system. This classification system provides a clue for humans to comprehend the natural law with the purpose of predicting the future.

Tao Te Ching (Book of the Way of Virtue) is the sacred text of Taoism written by Lao Zi⁶³ probably in the sixth century B.C., about the same time as Buddha introduced Dharma in India and Pythagoras interpreted mathematics and philosophy in Greece. Lao Zi is a respected name for a great philosopher called Li, Er⁶⁴ in the late Spring and Autumn Period (770 B.C. – 403 B.C.). Confucius had consulted Lao Zi. Lao Zi was also respected as a religious leader when Zhang (Zhang, Ling⁶⁵) established Taoism in the late Eastern Han Period (25 A.D. – 220 A.D.). *Tao Te Ching* (Book of the Way of Virtue) comprising eighty-one chapters, is the principal text of Taoism, providing wisdom on Tao, Chi, Yin Yang, and the Five Elements applied to the art of living (Wu, 1961; Zhang and Bi, 1994)⁶⁶. The content of *Tao Te*

⁶² *Shi Yi* (十翼).

⁶³ Lao Zi (老子).

⁶⁴ Li, Er (李耳).

⁶⁵ Zhang, Ling (張陵).

⁶⁶ Wu, John, C. H. (trans.) (1961) *Tao The Ching: Lao Tzu*. USA, Barnes & Noble Books, 1997.

Zhang, Jing-zhi and Bi, Qi-cai (1994) *Lao Zi Zhuan Zai Ban Qian Yan* (Forward of the Second Edition for the Book of Lao Zi) [online]. Taiwan, Silencer Library Enterprises. Available from: <http://www.angelibrary.com/real/lzz/000.htm> [Accessed 8th March 2002].

Ching (Book of the Way of Virtue) covers ancient Chinese philosophy, history, literature, political thought, cosmology and scientific thought.

Literately, Tao means the way, Te stands for virtue and Ching, as mentioned, represents the book. Henricks (1993) explains Tao as the Mother in nature. Tao in a sense is like a great womb. All things emerge from the Tao in creation as babies emerge from their mother. Tao is the Way and further refers to an energy or power which is constantly on the move, inwardly pushing each thing to develop and grow in a certain way, that is in accordance with its true nature. The Way in things is generally what Taoists mean by Te, virtue. Lao Zi uses virtue in two different ways. First, it means the life-energy in things; in other places it seems to mean virtue in the sense of morality. In this way it is used by the Confucians (Henrickes, 1993)⁶⁷. In summary, *Tao Te Ching* (Book of the Way of Virtue) is a brief, poetic contemplation on Tao, or the Way, a practical statement of life's most enigmatic truths.

Huai Nan Zi (Book of the Prince of Huai Nan) was written by Liu (Liu, An⁶⁸) and other scholars in the Western Han Period (206 B.C. – 9 A.D.). Liu, An (179 B.C. – 122 B.C.), a member of the imperial clan, dedicated his life to scholarship and spiritual philosophy, and his book is a classic of ancient Chinese literature. He described how ancient Chinese thinkers came to see their world in the Han Dynasty (206 B.C. – 220 A.D.). *Huai Nan Zi* (Book of the Prince of Huai Nan) is the principal work of literature presenting Liu's speculation (Lau and Ames, 1998; Lu, 1998)⁶⁹. According to *Han Shu* (Book of Han), *Huai Nan Zi* (Book of the Prince of Huai Nan) was divided into two parts, i.e. the inner part and the outer part. The outer part contained thirty-three chapters, including various sayings. However, this part was lost

⁶⁷ Henricks, Robert G. (trans.) (1993) *Te-tao Ching*. New York, Random House, pp. xxiii.

⁶⁸ Liu, An (劉安).

⁶⁹ Lau, D. C. and Ames, Roger T. (trans.) (1998) *Yuan Dao: Tracing Dao to Its Source*. USA, Ballantine Books, pp. 3 – 6.

Lu, Kai (1998) *Shen Xian Tao Jia: Huai Nan Zi* (Immortal Taoism: Huai Nan Zi). Taipei, Shih-pao Wen-hua, pp. 3 – 27.

in history. The surviving text is the inner part. The surviving text *Xin Kan Huai Nan Hong Lie Jie*⁷⁰ (New Imprint of the Grand and Illuminable Explication of Huai Nan Zi) is preserved in the National Palace Museum in Taiwan (National Palace Museum, 2002)⁷¹. The inner part was originally called Hong Lie by Liu, An (Lu, 1998)⁷². According to the preface written by Kao (Kao, You), the word Hong refers to grand and broad while Lie stands for luminosity and enlightenment. The inner part contains twenty-one chapters including illustrations of Tao, Yin Yang and Taoist arts mixed with some Confucian thought. Each chapter in *Huai Nan Zi* (Book of the Prince of Huai Nan) focuses on one subject or discusses one theme, such as military matters, astronomy, geography, meteorology and cosmology.

Several chapters in *Huai Nan Zi* (Book of the Prince of Huai Nan) are relevant to Feng Shui. For example, Yuan Tao Xun⁷³ (Explanation of Tracing Tao to Its Source) is the chapter explaining the meaning of Tao and its source (Wang, 1998)⁷⁴. It claims that Tao is the source of Chi generating phenomena in the world, and is invisible. According to Yuan Tao Xun, ‘Tao covers the heaven and the earth, stretches across the four quarters (i.e. left, right, front and back) of the universe and generates the eight orientations (i.e. east, west, south, north, southeast, southwest, northeast and northwest) of the firmament. There is no boundary to its height, and its depth is impenetrable⁷⁵’. Tao is the invisible way or power relevant to the natural law, which forms the basis of the Chinese cosmology.

⁷⁰ *Xin Kan Huai Nan Hong Lie Jie* (新刊淮南鴻烈解).

⁷¹ National Palace Museum (2002) *New Imprint of the Grand and Illuminable Explication of Huai Nan Zi* [online]. Taipei, National Palace Museum. Available from: <http://www.npm.gov.tw/english/collections/t037.htm> [Accessed 10th March 2002].

⁷² Lu, Kai (1998) *op. cit.*, pp. 27 – 28.

⁷³ Yuan Tao Xun (原道訓).

⁷⁴ Wang, Ji-ru (1998) *op. cit.*, pp. 1 – 34.

⁷⁵ 夫道者, 覆天載地, 廓四方, 析八極, 高不可際, 深不可測.

The other chapter called Tian Wen Xun⁷⁶ (Explanation of Astronomy) discusses changes of Yin Yang in accordance with ancestral Chinese astronomy (Wang, 1998)⁷⁷. It claims that ‘heaven is round and earth is square⁷⁸; heaven is developed first and earth is constructed later⁷⁹; Yin Yang is generated from the Chi of heaven and the Chi of earth when heaven and earth interacted and met; Yin Yang generates the Chi and as it develops into four seasons; four seasons spread out the Chi and disseminate it to all living things around the world⁸⁰’. Several ancient Chinese specific terms for various subjects, such as astronomy, music or geography, are based on Yin Yang. Examples are the Five Planets⁸¹, the Five Notes⁸², the Twenty-eight Constellations⁸³, the Eight Monsoons⁸⁴ or the Twenty-four Seasonal Changes⁸⁵.

The chapter Ten Wen Xua proposes a network connecting all visible or invisible things around the world. For example, heaven and the body of a human being are connected according to ancient Chinese philosophy (Wang, 1998)⁸⁶. It claimed that ‘heaven has nine levels; similarly, the body of a human being has nine orifices. Heaven has four seasons governing twelve months; similarly, the body of a human

⁷⁶ Tian Wen Xun (天文訓).

⁷⁷ Wang, Ji-ru (1998) *op. cit.*, pp. 65 – 109.

⁷⁸ 天道曰圓，地道曰方。

⁷⁹ 天先成而地後定。

⁸⁰ 天地之襲精爲陰陽，陰陽之專精爲四時，四時之散精爲萬物。

⁸¹ The Five Planets are Mercury, Venus, Mars, Jupiter, and Saturn called, Water star, Metal star, Fire star, Wood star, and Earth star respectively.

⁸² The Five Notes are Jue, Zhi, Gong, Shang and Yu.

⁸³ The Twenty-eight Constellations are Jiao, Kang, Di, Fang, Xin, Wei, Ji, Kui, Lou, Wei, Mao, Bi, Zui, Can, Nan Dou, Niu, Nu, Xu, Wei, Shi, Bi, Jing, Gui, Liu, Xing, Zhang, Yi and Zhen.

⁸⁴ The Eight Monsoons are Tiao Feng, Ming Shu Feng, Qing Ming Feng, Jing Ming Feng, Liang Feng, Chang He Feng, Bu Zhou Feng and Guang Mo Feng.

⁸⁵ The Twenty-four Seasonal Changes are Li Chun (Beginning of Spring), Yu Shui (Rain Water), Jing Zhe (Waking of Insects), Chun Fen (Spring Equinox), Qing Ming (Pure Brightness), Gu Yu (Grain Rain), Li Xia (Beginning of Summer), Xiao Man (Grain Full), Mang Zhong (Grain in Ear), Xia Zhi (Summer Solstice), Xiao Shu (Slight Heat), Da Shu (Great Heat), Li Qiu (Beginning of Autumn), Chu Shu (Limit of Heat), Bai Lu (White Dew), Qiu Fen (Autumn Equinox), Han Lu (Cold Dew), Shuang Jiang (Descent of Frost), Li Dong (Beginning of Winter), Xiao Xue (Slight Snow), Da Xue (Great Snow), Dong Zhi (Winter Solstice), Xiao Han (Slight Cold) and Da Han (Great Cold).

⁸⁶ Wang, Ji-ru (1998) *op. cit.*, pp. 103.

being has four limbs governing twelve articulates. Heaven has twelve months governing three hundred and sixty days; similarly, the body of a human being has three hundred and sixty joints⁸⁷.

Generally, the text of *Huai Nan Zi* (Book of the Prince of Huai Nan) presents a unique classification system made by the ancient Chinese to order the universe. This unique classified system provides a very different perspective from the modern scientific viewpoint. The classification system, understood as the network existing connecting all visible or invisible things in the world, is the basis of ancient Chinese philosophy.

Category 2: Texts about ways of arranging spatial order for the house

This category of texts provides ways of arranging spatial order for houses. The auspiciousness or inauspiciousness of houses is decided by arrangement of rooms in relation with their designated functions. Different figures of layout indicate different connotations. Some figures denote auspiciousness and others signify inauspiciousness. Nevertheless, orientations are used for more than identifying directions, for they belong to a classified system correlated with other issues, such as events, seasons, natural phenomena, family members or the human body, as mentioned above. The use of orientation for arrangement of layout thus has been set up. Many texts demonstrate principles of arrangement of layout. Examples are *Huang Di Zhai Jing* (the Yellow Emperor's Classic of Dwelling), *Yang Zhai Shi Shu* (Ten Books of Houses), *Yang Zhai San Yao* (Three Principles for Houses), *Yang Zhai Da Cheng* (Grand Compendium of Houses) and *Ba Zhai Ming Jing* (Bright Mirror of Eight Houses Arrangement).

Huang Di Zhai Jing (the Yellow Emperor's Book of Houses) is the first text of the category of Kan Yu in *Gu Jin Tu Shu Ji Cheng* (Chrestomathy of Ancient and

⁸⁷ 天有九重，人亦有九竅；天有四時以制十二月，人亦有四肢以使十二節；天有十二月以制三百六十日，人亦有十二肢以使三百六十節。

Modern Illustrations and Writings).⁸⁸ This text is called *Zhai Jing* (Book of Houses) in *Si Ku Qvan Shu* (Complete Library of the Four Treasuries).⁸⁹ According to the preface of *Zhai Jing* (Book of Houses), Ji (1978) claimed that this text was written by Huang Di, a mysterious Chinese Emperor in legend.⁹⁰ However, the detailed date of this text and the real author are unclear. Generally, *Huang Di Zhai Jing* (the Yellow Emperor's Book of Houses) focuses on three considerations in designing a house. These considerations are the examination of the site, the orientation for spatial arrangement of uses and the consideration of the appropriate time for initiating house construction. These considerations aim to establish an ideal environment for a house, in which Yin Yang is believed to be in balance. To reinforce the importance of houses to human beings, *Huang Di Zhai Jing* (the Yellow Emperor's Book of Houses) claims that 'a house is the pivot of Yin Yang and is correlated with human relations'⁹¹. It also clearly pinpoints the conditions for auspiciousness and inauspiciousness. Five auspicious conditions are listed below⁹².

1. The house is small but accommodates reasonably large numbers of residents;
2. A large house has a reasonably small main entrance;

⁸⁸ Avon (1726) *Huang Di Zhai Jing* (The Yellow Emperor's Book of Houses). In: Chen, Meng-lei *et al.* (1726) *Gu Jin Tu Shu Ji Cheng Bo Wu Hui Bian Yi Shu Dian* (Chrestomathy of Illustrations and Writings Ancient and Modern, Part of Natural Studies, Section of Art). Taipei, Ding-wen, reprinted in 1988, pp. 6724 – 6727.

⁸⁹ Avon (1782) *Zhai Jing* (Book of Houses). In: Ji, Yun *et al.* (ed.) (1782) *Jing Yin Wen Yuan Ge Si Ku Qvan Shu 808* (Complete Library of the Four Treasuries Vol. 808). Taipei, Taiwan Shang-wu, reprinted in 1983, pp. 1 – 10.

⁹⁰ Ji, Yun *et al.* (1782) The Preface of *Zhai Jing*. In: Ji, Yun *et al.* (ed.) *Jing Yin Wen Yuan Ge Si Ku Qvan Shu 808* (Complete Library of the Four Treasuries Vol. 808). Taipei, Taiwan Shang-wu, reprinted in 1983, pp. 1 – 2.

⁹¹ 夫宅者乃陰陽之樞紐人倫之軌模。

Avon (1726) *Huang Di Zhai Jing* (The Yellow Emperor's Book of Houses). In: Chen, Meng-lei *et al.* (1726) *Gu Jin Tu Shu Ji Cheng Bo Wu Hui Bian Yi Shu Dian* (Chrestomathy of Illustrations and Writings Ancient and Modern, Part of Natural Studies, Section of Art). Taipei, Ding-wen, reprinted in 1988, pp. 6724.

⁹² Avon (1782) *Zhai Jing* (Book of Houses). In: Ji, Yun *et al.* (ed.) (1782) *Jing Yin Wen Yuan Ge Si Ku Qvan Shu 808* (Complete Library of the Four Treasuries Vol. 808). Taipei, Taiwan Shang-wu, reprinted in 1983, pp. 4.

3. The outer wall is unbroken;
4. The house is small with many animals;
5. There is a gutter flowing at the southeast of the house.

Five inauspicious conditions are also presented.

1. The house is large but only accommodates few residents;
2. The main entrance is large but the interior space of the house is small;
3. The outer wall is damaged and is not maintained in a good condition;
4. The well and the cooking range inside the house are not placed in suitable locations;
5. The house is small with few buildings around located in a vast garden.

Furthermore, *Huang Di Zhai Jing* (the Yellow Emperor's Book of Houses) proposes that a house is analogous to a human body. It claims that 'a house uses the form of the land implying a whole human body; a spring of water flowing inside the house connotes human blood circulation; the land of the house means human skin and flesh; grass and plants growing on the land implies human hair; the house stands for the clothes of a human; doors and windows of the house represents the cap and sash of human dress. If all these items are well considered, the house performs in a steady circumstance, which brings the most auspiciousness⁹³'. The relation between the human body and the house is clearly presented.

In summary, *Huang Di Zhai Jing* (the Yellow Emperor's Book of Houses) expresses the intimate relation between humans, houses and the universe. By living in a suitable house in harmony with Yin and Yang, a person could find his or her suitable location in the universe for dwelling. The house satisfies not only the human being's

⁹³ 宅以形勢爲身體以泉水爲血脈以土地爲皮肉以草木爲毛髮以舍屋爲衣服以門戶爲冠帶若得如斯是事儼雅乃爲上吉。

Zhai Jing (Book of Burial). In: Ji, Yun *et al.* (ed.) (1782) *Jing Yin Wen Yuan Ge Si Ku Qvan Shu* 808 (Complete Library of the Four Treasuries Vol. 808). Taipei, Taiwan Shang-wu, reprinted in 1983, pp. 5.

physical requirements but also psychological needs. That is to say, a person finds his or her mechanism of living in harmony with the universe.

Yang Zhai Shi Shu (Ten Books of Houses) was written by Wang (Wang, Jun-rong) in 1590⁹⁴. This text contains ten chapters classified into four volumes. Each chapter discusses one specific topic for examining houses. Generally, *Yang Zhai Shi Shu* (Ten Books of Houses) considers four territories, i.e. Xing Fa (Rules of Shape), Li Fa (Rules of Principle), Ri Fa (Rules of Date) and Fu Zhen (Incantation)⁹⁵. Xing Fa (Rules of Shape) demonstrates various diagrams to examine each house shape and its spatial arrangement so as to identify auspiciousness or inauspiciousness. For example, the chapter *Lun Zhai Wai Xing Di Yi*⁹⁶ (Discussion of House Exterior Shape Number One) illustrates many diagrams to present different meanings of various shapes of house plans, or different spatial arrangements surrounding houses.

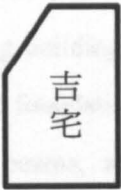




Table 2-1 shows some examples of various shapes of house plans. These five examples are derived from *Yang Zhai Shi Shu* (Ten Books of Houses) in *Gu Jin Tu Shu Ji Cheng Bo Wu Hui Bian Yi Shu Dian* (Chrestomathy of Illustrations and Writings Ancient and Modern, Part of Natural Studies, Section of Art). This table shows the original diagrams on the left hand side of the table while the detailed explanations are presented on the right hand side. The front is always top in a plan.

⁹⁴ Wang, Jun-rong (1590) *Yang Zhai Shi Shu* (Ten Books of Houses). In: Chen, Meng-lei *et al.* (1726) *Gu Jin Tu Shu Ji Cheng Bo Wu Hui Bian Yi Shu Dian* (Chrestomathy of Illustrations and Writings Ancient and Modern, Part of Natural Studies, Section of Art). Taipei, Ding-wen, reprinted in 1988, pp. 7004 – 7043.

⁹⁵ Xing Fa (形法); Li Fa (理法); Ri Fa (日法); Fu Zhen (符鎮).

⁹⁶ *Lun Zhai Wai Xing Di Yi* (論宅外形第一).

Table 2- 1 Examples of various shapes for house plan in Yang Zhai Shi Shu (Ten Books of Houses).

Original Diagram	Explanation
	<p>Auspicious house (two letters described in the centre of the diagram).</p> <p>Meaning: The left hand side of the house is shorter than the right hand side. This house is auspicious to accommodate people who have noble characters. This house would bring prosperity and richness to the family. However, this family might have few male descendants.</p>
	<p>Auspicious house (two letters described in the centre of the diagram).</p> <p>Meaning: This house plan is suitable for accommodating saints or common people. The residents will be rich and their descendants will be officials in the government to honour the family.</p>
	<p>Inauspicious house (two letters described in the centre of the diagram).</p> <p>Meaning: The right hand side of the house is shorter than the left hand side. This house is not suitable for accommodation. The residents would find it difficult to make a fortune and would have few members. The descendants would be foolish. The family would have property in the beginning but lose everything at the end.</p>
	<p>The narrow front of the house is auspicious (four letters described in the centre of the diagram).</p> <p>Meaning: The front end of the house plan is narrow but the rear is wide, which is stable. This shape implies wealth, well social position and comfort. The family living in the house will have many descendants and be rich.</p>
	<p>The wide front of the house is inauspicious (four letters described in the centre of the diagram).</p> <p>Meaning: The front end of the house plan is wider than the rear end. This shape of a house is similar to a coffin. The family living inside would often feel uncomfortable. The residents will sorrow and lament for their lost fortune and family members.</p>

In addition, Li Fa (Rules of Principle) involves classifying humans into eight groups based on each person's birth year in order to identify each person's auspicious

and inauspicious orientations. It also refers to ways of placing the cooking range and the doors. Different sets of numbers refer to different meanings which indicate either auspiciousness or inauspiciousness. Ri Fa (Rules of Date) considers date of construction as a determinant for auspiciousness or inauspiciousness. Many dates during building a house have to be considered, such as the date for establishing the house foundation, the date for starting the house construction, the date for putting up roof beams, and so on. Fu Zhen (Incantation) presents various illustrations of incantations to guard houses and the residents living inside. These incantations are very close to divination.

Basically, the use of orientation in *Yang Zhai Shi Shu* (Ten Books of Houses) can be divided into three types of orientation system in a nested series, i.e. four orientations, eight orientations and twenty-four orientations. The four orientations are called as Azure Dragon, White Tiger, Black Turtle and Crimson Phoenix, which are four celestial animals. These four celestial animals are also four categories of constellation in the sky. The use of four celestial animals is a way for human beings to link their understanding of the universe with their domestic environment. Each one represents one of the four cardinal orientations, i.e. Azure Dragon for the east or the left hand side; White Tiger for the west or the right hand side; Black Turtle for the north or the rear; Crimson Phoenix for the south or the front. The eight orientations correlate with the Eight Kuas. Each orientation is presented as one of the Eight Kuas and corresponds to either one of the four cardinal orientations or the four sub-cardinal orientations. The eight orientations can be further developed to the twenty-four orientations. Each orientation is presented as a character derived from the Eight Kuas, Tian Gan (the Heavenly Stems) and Di Zhi (the Earthly Branches)⁹⁷. The details of the eight orientations and the twenty-four orientations will be discussed in Chapter 4.

⁹⁷ Tian Gan (天干); Di Zhi (地支).

Yang Zhai San Yao (Three Principles for Houses) is another ancestral text written by Chao, Ting-tung⁹⁸ in 1744. This text points out the main door, the master bedroom and the cooking range as the three major items to determine Feng Shui in a house. The main door is the most significant item, which is the principal gate to absorb Chi into a house. The second prioritised item is the master bedroom. The master bedroom is the room to accommodate the householder. The third determinant item is the cooking range. The cooking range is an object for cooking food which implies bringing energy to the family. In addition, people are classified into two groups, the East-four group and the West-four group. The details of the two groups will be discussed in Chapter 5. Generally, if the three items are placed in suitable locations to satisfy the householder's Eight Kuas of Person, the house is auspicious for the family. If on the contrary the three items are placed in unsuitable locations, the house is inauspicious to the family. Ways to identify the house for auspiciousness or inauspiciousness are described below.

1. The three items, i.e. the main door, the master bedroom and the cooking range, are all placed in suitable locations, which means the most auspiciousness.
2. Two of the three items are placed in suitable locations, which means the second auspiciousness.
3. One of the three items is placed in a suitable location in correspondence with the Eight Kuas of Person for the householder, which means that the house is all right for accommodating the family.
4. If all of the three items are placed in unsuitable locations, which means inauspiciousness.
5. Detailed ways of arranging the house if the Eight Kuas of Person for the householder and his wife are different.

⁹⁸ Chao, Ting-tung (趙廷棟).

The balance of Yin and Yang is the fundamental concept of *Yang Zhai San Yao* (Three Principles for Houses). Male is considered as the attribute of Yang while female is the attribute of Yin. An ideal spatial arrangement for a house should consider both the Eight Kuas of Person for the couple. If the couple do not belong to the same Eight Kuas of Person, the placement of the three items should be so that two items follow the Eight Kuas of Person for the householder, and the remaining one follows the Eight Kuas of Person for the spouse. For example, if the householder belongs to the category of Hsun and his wife belongs to Kun, they have different Eight Kuas of Person. The householder takes responsibility for earning money for the family. His spouse is a housewife. Since the Eight Kuas of Person for the householder belongs to the category of Hsun, the main door could be placed to the north which implies enhancing his business career. The master bedroom could be placed to the east which implies an increase in his life. The cooking range could be located in the east which implies burning the inauspicious Chi at this location. The switch of the cooking range should face the west, the orientation of Medicine to the housewife. If the housewife cooks, this action not only aims to cook food for the family but also implies creating nutrition for the whole family.

To sum up, texts of this category classify hundreds of ways to review the house and its environment. These documents describe various factors of the natural environment surrounding the house, such as mountains or rivers; orientations and locations of roads; shapes and locations of the site and buildings. For instance, if the location of the house is near tombs, it will cause an inauspicious influence according to Feng Shui. Furthermore, these texts provide ways to decide orientations for auspiciousness or inauspiciousness. The use of the classification system is the fundamental concept according to the texts of this category. Houses and people are classified into eight groups in accordance with the Eight Kuas. The Eight Kuas is further classified into two categories, the East-four group and the West-four group. Each orientation has a different meaning in a different category system, either

auspicious or inauspicious. The detail of how these categories work is discussed in Chapter 5.

Category 3: Ways to examine geographical features

This category provides ways to examine geographical features, i.e. mountains and rivers, in the natural environment. Different layouts of mountains and rivers present different meanings. Various diagrams showing these layouts have been presented. The texts are such as *Han Long Jing* (Book of Challenging the Dragon), *Guan Shi Di Li Zhi Meng* (Mr. Guan's Geometrical Instruction), *Shui Long Jing* (Book of Watercourse and Dragon), *Ling Cheng Jing Yi* (Essence of Spiritual City) and so on.

Take *Guan Shi Di Li Zhi Meng* (Mr. Guan's Geometrical Instruction) as an example. This text was written by Guan, Lu in the Three Kingdoms Period (220 A.D. – 265 A.D.). This text contains ten chapters. Each chapter focuses on one specific topic for examining the layout of the natural environment, based on concepts of Tao, Chi, Yin Yang and the Five Elements. Guan points out that heaven, earth and human beings are three components creating the world. He claimed that 'Yin and Yang is the way to create heaven. Soft and Solid is the way to build up the earth. Benevolence and righteousness is the way to form human beings'. Guan (the Three Kingdoms Period) claimed that 'each human being is created by the Five Earths through the action of Chi. If the Chi ceases, the human being will be dead. The body will return to burial under the Five Earths. This is the cycle of return⁹⁹'. The use of the Five Elements is the fundamental concept considered by Guan. The Five Elements is taken as the basis of a type of classification system to analyse numerous things in the world, such as the form of mountains, the layout of watercourses, and so on. By

⁹⁹ 人由五土而生氣之用也氣息而死必歸藏於五土返本還元之道也。

Guan, Lu (The Three Kingdoms Period) *Guan Shi Di Li Zhi Meng* (Mr. Guan's Geometrical Instruction). In: Chen, Meng-lei *et al.* (1726) *Gu Jin Tu Shu Ji Cheng Bo Wu Hui Bian Yi Shu Dian* (Chrestomathy of Illustrations and Writings Ancient and Modern, Part of Natural Studies, Section of Art). Taipei, Dingwen, reprinted in 1988, pp. 6774.

examining these things according to the Five Elements, auspiciousness and inauspiciousness are revealed.

Generally, texts in this category focus on examining the environment surrounding a house, which is related to the domain of landscape. This category is not discussed in detail in this thesis.

Category 4: Ways to arrange an ideal layout for graveyards

This category emphasises the selection of graveyards. It aims to arrange an ideal layout for graveyards, a type of house for the dead. These texts focus not only on the spirit of Yin and Yang, the Five Elements, and the harmony between human beings and heaven, but also on the environment, orientations and the arrangement of the graveyards. The texts are such as *Zang Shu* (Book of Burial), *Qing Wu Xing Sheng Zang Jing* (Mr. Qing Wu's Book of Burial) or *Zhong Fu* (Book of Tombs).

Zang Shu (Book of Burial) is the first work known to bring the idea of Feng Shui into the selection of graveyards. This book was believed to be written by Guo (Guo, Pu) in the Jin Dynasty (265 A.D. – 420 A.D.). However, the authenticity of the authorship of this text has not been proven. *Zhong Fu* (Book of Tombs) was written by Zhang, Heng (around 78 A.D. – 139 A.D.). This text provides a similar perspective on the importance of designing a tomb. Again, the details of selecting graveyards based on the idea of Feng Shui are not considered in this thesis.

Category 5: Other texts relevant to Feng Shui

The other texts not classified in the four categories are sorted into this category. These texts include *Ying Zao Fa Shi* (Treatise on Architectural Methods) and *Lu Ban Jing* (the Carpenter's Classic)¹⁰⁰. *Ying Zao Fa Shi* (Treatise on Architectural Methods),

¹⁰⁰ *Ying Zao Fa Shi* (營造法式); *Lu Ban Jing* (魯班經).

written by Li (Li, Xie¹⁰¹) in 1100 A.D., is the first manuscript recording Chinese building practices, including site selection, structural elements, and construction methods of Chinese architecture. This book comprises thirty-four chapters. The first two chapters introduce forty-nine methods of construction derived from ancient literary sources. Chapter three to sixteen present construction methods for various structural elements. Chapters twenty-six to twenty-eight discuss the quantity of materials needed for buildings and ways for mixing up these materials. Chapters twenty-nine to thirty-four cover demonstration of plans, elevations of buildings, and construction details.

According to *Ying Zao Fa Shi* (Treatise on Architectural Methods), a modular system called the Cai-Fen Zhi (the Cai-Fen System) governs the scales and proportions of buildings¹⁰². Cai and Fen are the standard units for measurement¹⁰³. Each unit Cai consists of 15 Fen. A single standard area unit, called Dan Cai, is 15×10 Fen, and a full standard area unit, called Zu Cai, is 21×10 Fen¹⁰⁴. The use of Dan Cai and Zu Cai provide a standard proportion for structural elements of a building. There are eight levels of proportions that can be used in different scales of structural elements, as shown in Figure 2-1 (Hwangbo, 1999)¹⁰⁵. To the ancient Chinese, the size and structure of buildings have to conform to the social status of the house owner. Thus, this modular system provides an efficient and standard method when designing a building (Hwangbo, 1999)¹⁰⁶.

¹⁰¹ Li, Xie (李械).

¹⁰² Cai-Fen Zhi (材份制).

¹⁰³ Cai (材); Fen (分).

¹⁰⁴ Dan Cai (單材); Zu Cai (足材).

¹⁰⁵ Hwangbo, Bong (1999) *op. cit.*, pp. 98.

¹⁰⁶ Hwangbo, Bong (1999) *op. cit.*, pp. 95 – 98.

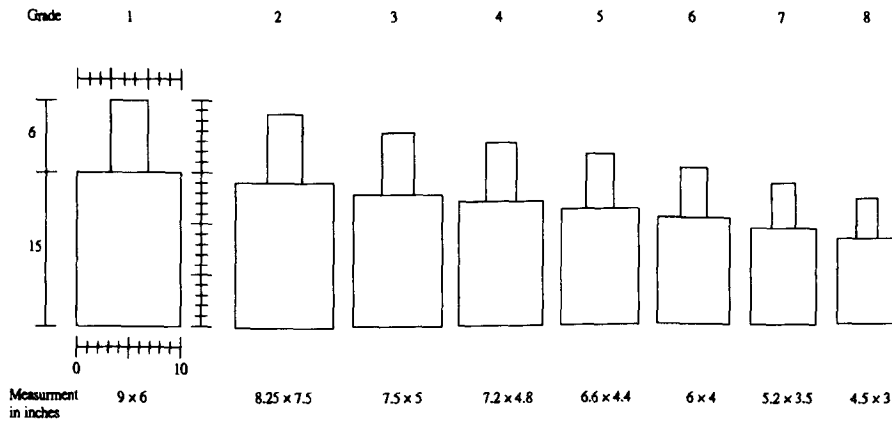


Figure 2- 1 The eight levels of proportions of the Cai-Fen System.

(Source: Hwangbo, B., 1999)

Lu Ban Jing (the Carpenter's Classic) illustrates significant architectural characteristics in terms of Feng Shui. This book is written by Gongshu, Ban who came from the State of Lu, hence, his other name is Lu, Ban. He is regarded as the greatest of all the tutelary deities of artisans (Needham, 1965)¹⁰⁷. This book is regarded as the handbook for builders, specifies exact dimensions and styles for various types of buildings and furniture. An L-shaped ruler made by timber, the Carpenter's Square, is presented. The Carpenter's Square, called Qu Chi (the Bent Ruler) or Lu Ban Chi (the Ruler of Lu Ban) in Chinese, is designed for carpenters to judge whether a specific dimension would be auspicious or inauspicious¹⁰⁸. Two-foot rulers are introduced in *Lu Ban Jing*, as shown in Figure 2-2 (Hwangbo, 1999)¹⁰⁹. The first foot ruler is composed of nine sectors indicated by colours, i.e., white, black, blue, green, yellow, white, red, white, and purple in sequence. Colours white and purple indicate

¹⁰⁷ Gongshu, Ban (公輸班).

Needham, Joseph (1965) *Science and Civilisation in China Vol. 4: Physics and Physical Technology. - Part 2: Physics and Physical Technology*. Cambridge, Cambridge University Press, pp. 44 – 46.

¹⁰⁸ Qu Chi (曲尺); Lu Ban Chi (魯班尺).

¹⁰⁹ Ruitenbeck, Klaas (1993) *Carpentry and Building in Late Imperial China: A Study of the Fifteenth-Century Carpenter's Manual Lu Ban Jing*. Netherlands.

Hwangbo, Bong (1999) *op. cit.*, pp. 91 – 95.

auspicious aspects. Other colours, black, blue, green, yellow and red, stand for inauspicious aspects. The other foot ruler is composed of eight sectors with eight different inscriptions on it, i.e., Wealth, Illness, Separation, Justice, Office, Plunder, Harm and the Main Position in sequence. Each sector has its specific use and can be further divided into four sections. For example, the sector Main Position is to determine the ideal dimension when designing the dimension of the main entrance, and the sector Illness for the toilet.

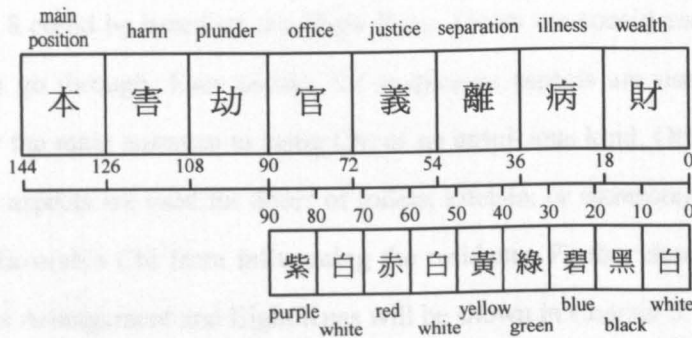


Figure 2-2 Foot-Ruler as illustrated in Lu Ban Jing.

(Source: Hwangbo, B., 1999)

The foot ruler of eight sectors is nowadays more popular and is used by contemporary Feng Shui specialists. Detailed principles of applying the eight sectors are described below (Wu Sheng Wu Shu Wei Kai Chuang, 2001)¹¹⁰.

Wealth: for the dimension of doors with auspiciousness.

Illness: for the suitable dimension of toilets.

Separation: for the dimension of doors with inauspiciousness.

Justice: auspicious dimension for doors, especially for the door of kitchen.

But it is an inauspicious dimension for doors in a corridor.

¹¹⁰ Wu Sheng Wu Shu Wei Kai Chuang (2001) *Ding Lan Chi Fa Yu Men Gong Chi Fa* (The Use of Ding Lan Chi and Lu Ban Chi). [online]. Taiwan, Wu Sheng Wu Shu Wei Kai Chuang Ltd. Available from: http://www.8z.com.tw/wind/lesson_05.htm [Accessed 12th July 2002].

Office: inauspicious dimension for main entrance. However, it is auspicious for doors to bedrooms.

Plunder: for the dimension of the main entrance with inauspiciousness.

Harm: for the dimension of doors inside the house with inauspiciousness.

The Main Position: the most auspicious dimension for the main entrance.

Features using number 8 as its sectors, including four for auspicious aspects and four for inauspicious aspects, shows similarity to the Eight Houses Arrangement. The number 8 could be based on the Eight Kuas. Doors are considered the entrances that Chi can go through. Four sectors for auspicious aspects are used for doors of bedrooms or the main entrance to bring Chi of an auspicious kind. Other sectors with inauspicious aspects are used for doors of toilets, kitchen, or storerooms. This implies blocking unfavorable Chi from influencing the residents. Further descriptions on the Eight Houses Arrangement and Eight Kuas will be shown in Chapter 5.

Figure 2-3 shows an example of Lu Ban Chi (the Ruler of Lu Ban) used today. It has been designed as a tape blade showing four types of scale systems from top layer to bottom layer. The first layer at the top shows the dimension system of the British-Metric Graduation. The second layer shows the use of Lu Ban Chi (the Ruler of Lu Ban), including the eight different sectors and a further four sections followed by each sector. The eight sectors are marked as squares filled by colour red or black. Inscriptions for auspicious aspects are marked in red and inauspicious aspects in black for both sectors and sections. The third layer shows the use of Ding Lan Chi (the Ruler of Ding lan), another type of dimension system, which is used for measuring structural elements of domestic architecture or furniture for the dead, such as tombs or table for placing ancestral tablets. The dimension system displayed at the bottom is the standard dimension system of the Metric Graduation.

(A) An example of the tape blade of Lu Ban Chi (the Ruler of Lu Ban).



(B) The details of dimensions showing on the tape blade.

Figure 2- 3 The tape blade of Lu Ban Chi (the Ruler of Lu Ban).

2.4 Contemporary Feng Shui Research

This section includes the elucidation of Feng Shui and its relation to Chinese traditional architecture from various perspectives. These perspectives include the understanding of traditional Chinese architecture, the application of traditional Chinese cosmology, the influence of Chinese culture, ritual, religion or mathematics, and its role in racial or social relationship. Furthermore, there are a few studies focusing on the historical development of Feng Shui, such as Chen (1994), Han (1994; 1995), Wang (1995) and Yi (1999)¹¹¹. Most of the studies from Feng Shui specialists present mere applications of Feng Shui, but lack theoretical and logical references,

¹¹¹ Chen, Jian-jun and Kong, Shang-pu (1994) *Feng Shui Yu Jian Zhu* (Feng Shui and Architecture). Taipei, Shu-hsing.

Han, Ke-zong (1994) *Zhong Guo Gu Dai De Huan Jing Gui Hua Yi Shu: Feng Shui* (The Art of Ancient Chinese Environmental Arrangement: Feng Shui). *Zao Yuan Ji Kan* (Guarding Quarterly Publication), June, No. 16, pp. 105 – 109.

Han, Ke-zong (1995) *Jing Guan Feng Shui Li Lun Ji Chu* (The Fundamental Theory of Feng Shui in Landscape). Taipei, Di-jing.

Wang, Qiheng (ed.) (1995) *Feng Shui Li Lun Yan Jiu Yi* (The Research of Feng Shui Theory Vol. 1). Taipei, Di-jing.

Yi, Ting *et al.* (1999) *Zhong Guo Feng Shui Yu Jian Zhu Yan Jiu* (Geomancy and the selection in architecture placement in ancient China). Taipei, Yi-shu-chai.

such as Chen (1998), Zeng (1996), Feiyun (1994), Han (1993) and Li (1992)¹¹². These works remain uncomfortably close to divination and superstition.

From a scientific viewpoint, Eitel (1873) mentioned that Feng Shui is the recognition of the uniformity and universality of the operation of natural laws¹¹³. Despite accepting the rational portion of Feng Shui, Eitel criticised the superstitious elements and, furthermore, denies its future.

Needham (1956) recognised the fact that Feng Shui comprised the intangible aspects of Chinese architecture¹¹⁴. Feng Shui is the oldest reference to geomagnetic doctrine in the selection of suitable sites for buildings and fortifications. Although Needham considered Feng Shui in terms of pseudo-science, the application of this system is truly embodied in outstanding achievements of ancient Chinese mathematics – the Magic Square, He Tu and Luo Shu¹¹⁵. These will be explained in Chapter 4.

Rapoport (1969) discussed the close relationship of man, nature and house in the physical world¹¹⁶. This notion presents a similar idea to ‘Tian Ren He Yi’. He pointed out two notions affecting the house form in many cultures, they are the spirit of the house and ritual orientation. The house is regarded as a microcosm which is influenced by social-cultural forces. Ritual orientation of the house is a function of

¹¹² Chen, Sheng-xiong (1998) *Yu Yang Zhai Da Shi De Dui Hua* (Discussion with Feng Shui Master). Taipei, Ying-chuan Tang.

Zeng, Liang-chao (1996) *Yi Xue Yang Zhai* (Medical Science for Houses). Taipei, Shu-hsing.

Feiyun, Shanjen (1994) *Xuan Ji Li Zhai Kan Hao Feng Shui* (Ways to Select Good Feng Shui Houses). Taipei, Shih-pao Wen-hua.

Han, Yu-mo (1993) *Taiwan Feng Shui Ji Jin* (Taiwan Feng Shui Collection of Choice Specimens). Taipei, Wu-ling.

Li, Ren-kui (1992) *Li Ren-kui Tan Feng Shui* (Talking about Feng Shui by Li, Ren-kui). Taipei, Shih-pao Wen-hua.

¹¹³ Eitel, Ernest J. (1873) *Feng Shui: the Science of Sacred Landscape in Old China*. London, Synergetic Press, Fourth Edition, 1984.

¹¹⁴ Needham, Joseph (1956) *op. cit.*, pp. 359 – 363.

¹¹⁵ He Tu (河圖); Luo Shu (洛書).

¹¹⁶ Rapoport, Amos (1969) *House Form and Culture*. New Jersey, Prentice-Hall.

cultural and religious attitudes rather than material factors. Rapoport introduces Feng Shui as a system closely relating to the whole culture and following the rules of geomancy as they existed in Chinese architecture. It is also the key to govern the orientation of settlements and houses, the layout of rooms and the placement of furniture inside the house. Furthermore, he notices that some common situations of the misunderstanding of Feng Shui are the supernatural forces believed to cause good fortune in some Chinese societies.

Michael Saos has spent much time in the Taoist monasteries of China, Hong Kong, Taiwan and Tibet, exploring the rituals, texts, and teachings of Taoism¹¹⁷. Saos (1978) gave a brief introduction of the Magic Square, based on three perspectives, i.e. the popular, the Confucian, and the Taoist traditions¹¹⁸.

Lee (1986) focused on the foundation and historical development of Feng Shui¹¹⁹. He claimed that Feng Shui considered as a superstition or divination was a misunderstanding in the viewpoint of some westerners. In his opinion, Feng Shui theory is the controlling principle of planning dwellings resting on the idea that heavenly principles and rules can be manifested in the physical world. His work presents the basic structure of Feng Shui in the Chinese world, but lacks the details of operation of the numerical system, and the variety of combinations and exchanges of the Five Elements, He Tu, Luo Shu, and Ba Kua.

Crump (1990) noticed the importance of the remarkable Chinese invention in their numerical system: the Magic Squares¹²⁰. The Magic Square is related to *I Ching* (Book of Changes), which implies an understanding of binary numbers so foreshadowing the principle. The utilisation of binary numbers in *I Ching* (Book of

¹¹⁷ Michael Saos is a professor emeritus of the University of Hawaii and a noted Taoist scholar.

¹¹⁸ Saos, Michael (1978) 'What is Ho-Tu', *History of Religions*, Vol. 17, pp. 399 – 416.

¹¹⁹ Lee, Sang-hae (1986) *Feng Shui: Its Context and Meaning*. Ph.D. Thesis, Cornell University.

¹²⁰ Crump, Thomas (1990) *The Anthropology of Numbers*. Cambridge, Cambridge University Press.

Changes) is also related to computers, established by von Neumann, which also work with binary numbers, that is the same codes represent both the numerical input and calculations imposed upon it by the program. Furthermore, he claims that the co-ordination of the Five Elements, Yin and Yang, and Eight Kuas is based on the cosmology and ethnoscience of the ancient Chinese.

Chen (1994; 1997) intended to reveal the nature of Feng Shui based on a scientific viewpoint. Chen (1994) attempted to discuss the origin of Feng Shui and its further development¹²¹. Based on historical background and philosophical influence, this book intends to define the intimate relationship between Feng Shui and architecture. Based on the similar point of view, in the Chinese ancient architecture and the philosophy of *I Ching* (Book of Changes), Chen (1997) intends to discuss how the philosophy of *I Ching* (Book of Changes) is connected with Feng Shui, and how this connection would influence the ancient Chinese architecture¹²². These two books provide an overview of the theory of Feng Shui and how its applications operate in domestic architecture. In general, Chen's research presents the theory of Feng Shui as used in domestic architecture or city planning. The use of Eight Kuas, the Magic Square and the Feng Shui compass in spatial arrangement are shown. However, because of the scientific point of view, the nature of Feng Shui and the way Feng Shui influences human beings are not sufficiently presented in detail. Thus, Feng Shui here is related to a rural cultural experience.

Schinz (1996) presents the historical development of Chinese architecture and city planning¹²³. Schinz noticed that the structure of this planning follows the holy field concept - the Magic Square which is derived from He Tu and Luo Shu. He

¹²¹ Chen, Jian-jun and Kong, Shang-pu (1994) *Feng Shui Yu Jian Zhu* (Feng Shui and Architecture). Taipei, Shu-hsing.

¹²² Chen, Jian-jun (1997) *Zhong Guo Gu Dai Jian Zhu Yu Zhou Yi Zhe Xue* (Ancient Chinese Architecture and Philosophy of I Ching). Taipei, Shu-hsing.

¹²³ Schinz, Alfred (1996) *The Magic Square: Cities in Ancient China*. London, Edition Axel Menges.

mentions the importance of numerical application and the balance of Yin and Yang in Chinese architecture. He also reviews the development of city planning in China which follows the principle of the Magic Square.

Tsai (1996) focused on how Feng Shui was used in graveyards, i.e. the domestic architecture for the dead¹²⁴. Tsai presented Long (mountains), Sha (hills), Shui (water), Xiang (direction) and Xue (site) as the five significant elements in space for a graveyard¹²⁵. He further introduced two principle systems in traditional Feng Shui theory, i.e. Luan Tou and Li Chi¹²⁶. The system of Luan Tou contains two branches focusing on the observation of the natural environment. One of the two branches aims to correlate the topography of the site with types of animals or celestial beings. The other branch aims to create an ideal site in order to conserve wind and to guide water so that human beings can receive benefit. The system of Li Chi focuses on operating a Feng Shui compass and cooperating with orientation, numbers and time. However, Tsai's research only reveals some ways of applying Feng Shui, without a clear explanation of why or how these systems are founded.

Huang (1999) discussed the idea and nature of Feng Shui in order to search for the possibility of applying it to promote modern environmental protection¹²⁷. He divided the study of Feng Shui into two categories, Environmental Feng Shui and Folk Feng Shui. The Environmental Feng Shui pays attention to an examination of topography based on observing the natural environment. The Folk Feng Shui

¹²⁴ Tsai, Sui (1996) Mu Yuan Feng Shui De Li Xiang Jie Gou (The Reasonable Structure of Feng Shui on Graveyards). *Zhong Guo Di Li Xue Hui Hui Kan* (Bulletin of the Geographical Society of China), July, No. 24, pp. 75 – 104.

¹²⁵ Long (龍); Sha (砂); Xiang (向); Xue (穴).

¹²⁶ Luan Tou (巒頭); Li Chi (理氣).

¹²⁷ Huang, You-zhi (1999) Chuan Tong Feng Shui Guan Nian Yu Xian Dai Huan Jing Bao Hu Zhi Yan Jiu (The Study of Traditional Feng Shui Idea and Modern Environmental Protection). *Taiwan She Hui Wen Ti Yan Jiu Xue Shu Yan Tao Hui* (Proceedings of the 1999 Conference of Taiwan's Social Problem Research held at Institute of Sociology Academia Sinica) [online], Taipei, 29th December 1999. Available from: http://itst.ios.sinica.edu.tw/sp/cspr_paper/huang_you_zhi.htm [Accessed 25th April 2001].

considers divination which intends to satisfy human psychological needs. This classification system produces four unsolved problems. First, the Folk Feng Shui would not be able to elucidate how orientation has been used in domestic architecture. Second, Huang's research only focuses on technical use of Feng Shui, and lacks further investigation into the nature of Feng Shui. Third, this research denies the value of Folk Feng Shui and lacks a study of how and why Folk Feng Shui is used to influence the public. Fourth, Huang only emphasises the value of Environment Feng Shui. He designed a questionnaire asking the public the value of Feng Shui before the full study of Feng Shui has been done and promoted to them. This questionnaire can only reflect the public's blindness to an understanding of Feng Shui and would lead us to a misunderstanding of its nature and value.

Lu (1999) divided the historical development of Feng Shui into three main periods¹²⁸. The first period is the time before the Eastern Han Period (ca. 25 A.D.). In this period, Feng Shui involves the use of traditional science and geography. The second period is the time between Three Kingdoms Period (ca. 220 A.D.) and the early of Ming Dynasty (around 1368 A.D.). This period is a transformation period for Feng Shui. The last period is the time after the Ming Dynasty (1368 A.D. – 1644 A.D.). At this time, Feng Shui covers divination. This reflects how Feng Shui has progressed from a study of natural environment and geography in the early time and further developed into a study of social environmental psychology. However, Lu's research focused on a contribution of Feng Shui in environmental geography and attempted to eliminate the superstitious part of Feng Shui. He denied the value of applying 'metaphysics' (such as the Five Elements and Eight Kuas). However, he did

¹²⁸ Lu, Ying-chung (1999) Based on the development progress of Feng Shui to criticize the superstitious used in Feng Shui. *Proceedings of the 1999 5th Conference of Science History held at Institute of Modern History* [online]. Taipei. Available from: <http://www.thinkerstar.com/ufolu/essays/fengshui/feng-0.html> [Accessed 16th April 2001].

not present a new theory that would be able to explain the full content and the spirit of Feng Shui.

Some studies of Feng Shui focuses on the practical applications of Feng Shui, such as Too (1996)¹²⁹, Rossbach (1983; 1984; 1987)¹³⁰, and Lip (1979; 1995; 1997)¹³¹. These books focus on the practice of Feng Shui and the design and orientation of buildings. For example, Lip (1979) examined the application of orientation, colour, and numbers in the Forbidden City from the viewpoint of Feng Shui¹³². In addition, she offered a manner to assess Feng Shui for buildings, even assessing some classical buildings in the west with reference to Feng Shui. In general, their works classify some general principles and practice of living in harmony with the natural and man-made environment, and the general examination of Eight Kuas for the house and its residents according to Feng Shui. However, the principle of these studies still merely involves divination for bringing good fortune or prosperity.

2.5 Chinese Worldview and its Essence

2.5.1 Chi

Chi has been explained in terms of various viewpoints. It can be explained in relation

¹²⁹ Too, Lillian (1996) *The complete illustrated guide to Feng Shui*. Great Britain, Element Books Limited.

¹³⁰ Rossbach, Sarah (1983). *Feng Shui: The Chinese Art of Placement*. New York, E. P. Dutton, Inc.

Rossbach, Sarah (1984) *Feng Shui*. London, Hutchinson.

Rossbach, Sarah (1987) *Interior Design with Feng Shui*. London, Random Century, reprinted in 1996, 2nd edition.

¹³¹ Lip, Evelyn (1979) *Chinese Geomancy*. Singapore, Times Books international.

Lip, Evelyn (1997) *What is Feng Shui*. London, Academy Editions.

Lip, Evelyn (1995) *Feng Shui: Environments of Power: A Study of Chinese Architecture*. London, Academy Editions.

¹³² Lip, Evelyn (1979) *op cit.*

to the energy of life. Chi, or sometimes translated as Qi, has been elucidated as a life force, internal energy or as matter on the verge of becoming energy or energy at the point of materializing (Kaptchuk, 1983)¹³³. According to *the Encyclopaedia of Eastern Philosophy and Religion* (1989), Qi as the vital energy, the life force, the cosmic spirit that pervades and enlivens all things and is therefore synonymous with primordial energy¹³⁴. Chi can be further explained as a matter of Chinese belief. According to *the Oxford Dictionary of Difficult Words* (2001), Chi as the circulating life force whose existence and properties are the basis of much Chinese philosophy and medicine¹³⁵. According to *the American Heritage Dictionary of the English Language* (2000), Chi is the vital force believed in Taoism and other Chinese thought to be inherent in all things. The unimpeded circulation of Chi and a balance of its negative and positive forms in the body are held to be essential to good health in traditional Chinese medicine¹³⁶. To further explore the ideal of Chi, the following paragraphs describe the meanings of Chi, by linking Chi with various issues.

Chi and Traditional Chinese Medicine:

In traditional Chinese medicine, Chi flows through the body in channels, known as Jing Luo¹³⁷ or meridians, in a similar way to blood flowing through the veins. Chi is responsible for all of the human body's movements and processes, whether voluntary or involuntary. This includes physical and mental activities, involuntary movements (such as breathing, heartbeat etc.) and growth. If the flow of Chi in the channels of a human body is smooth, neither too active nor too dormant, the person is in balance, and thus will live harmoniously. If the flow of Chi in the channels is obstructed or

¹³³ Kaptchuk, Ted (1983) *The Web that has No Weaver*. New York, Congdon and Weed Ltd., pp. 35.

¹³⁴ Schuhmacher, Stephan and Woerner, Goert (ed.) (1989) *op. cit.*, pp. 69.

¹³⁵ Hobson, Archie (ed.) (2001) *The Oxford Dictionary of Difficult Words*. New York, Oxford University Press, pp. 70.

¹³⁶ Pickett, Joseph P. (ed.) (2000) *The American Heritage Dictionary of the English Language*. Houghton Mifflin Co., fourth edition, pp. 320.

¹³⁷ Jing Luo (經絡).

blocked, illness or discomfort somewhere in the body may result.

Acupuncture is a kind of non-surgical cure for therapeutic purposes or a means to relieve pain or produce regional anaesthesia. This treatment is used by treating the sick person with very thin needles inserted in special points of the body on the meridians through which Chi is considered to flow. Moxibustion is a method of warming an acupuncture point by burning the herb mugwort over it to treat diseases or to produce analgesia. Other methods to keep the body healthy are practices such as Tai Ji Quan and Qi Gong¹³⁸. Tai Ji Quan is an internal Chinese martial art that provides gentle, healthy exercise for the whole body. It applies slow rhythmic body movements and circular movements with breath control. Qi Gong, which focuses on mind and body, is a discipline whose practice allows human beings to gain control over the life force that courses through their bodies. These practices have lasted over two thousand years in traditional Chinese medicine, intending to increase the efficiency of Chi flowing through the entire body.

Traditional Chinese Philosophies Involved in Chi:

Chi is a central concept in all of Chinese culture. There are several different schools discussing Chi from various disciplines since the early Han Dynasty (ca. 200 B.C.), such as Taoist, Yin Yang School, Neo-Confucianism, astrology, sociology, religion, aesthetics and geography. Take Taoism as an example. Taoists believe that the world was created out of chaos, and out of that chaos emerged both Yin and Yang. Yin can be seen as the restful or dark side of things, where there is a lesser flow of Chi. Yang is the energised, bright side of things, where Chi flows excessively. When the Yin and the Yang are balanced, there is a harmony, and Chi will flow smoothly.

¹³⁸ Tai Ji Quan (太極拳); Qi Gong (氣功).

Neo-Confucianism is the fusion of Taoist cosmology and Buddhist spirituality to reinterpret the core of Confucianism with intellectual and spiritual expectations. Lee (1986) claimed that the growth of Neo-Confucianism has had great influence on the consolidation of Feng Shui¹³⁹. Neo-Confucianism grew during the Sung Dynasty (960 A.D. – 1279 A.D.) under several philosophers, such as Zhou, Dun-yi (1017 A.D. – 1073 A.D.), Shao, Yong (1011 A.D. – 1077 A.D.), Zhang, Zai (1020 A.D. – 1077 A.D.), Cheng, Hao (1032 A.D. – 1085 A.D.) and Cheng, Yi (1033 A.D. – 1107 A.D.)¹⁴⁰. Later, Zhu, Xi¹⁴¹ (1130 A.D. – 1200 A.D.) synthesised the rather disparate contributions of these earlier thinkers into a coherent vision (Lee, 1986)¹⁴². Zhu, Xi (1130 A.D. – 1200 A.D.) was a great philosopher of the Neo-Confucianism in the Southern Sung Period (1127 A.D. – 1279 A.D.). He helped to establish Neo-Confucianism as the orthodox way of thinking for the ancient Chinese and had a strong influence on Chinese religions including Taoism and Buddhism, and traditional philosophy (Needham, 1956)¹⁴³. We can take Tai Ji Tu Shuo (The Clarification of the Supreme Pole Diagram) as an example. This diagram made by Zhou, Dun-yi (the Northern Sung Period) is a significant symbol based on the concepts of Tao, Chi, Yin Yang and the Five Elements to present a Chinese worldview.

Chi and Li:

Chi (material force) and Li¹⁴⁴ (principle) are fundamental concepts for Neo-Confucianism. Zhang, Zai (1020 A.D. – 1077 A.D.) interpreted Chi as a material force. Zhu, Xi (1130 A.D. – 1200 A.D.) interpreted Chi as a kind of axis, which is a terminal in technical terms, to principles of the whole and the individual. In addition, Cheng,

¹³⁹ Lee, Sang-hae (1986) *op. cit.*, pp. 114.

¹⁴⁰ Zhou, Dun-yi (周敦頤); Shao, Yong (邵雍); Zhang, Zai (張載); Cheng, Hao (程顥); Cheng, Yi (程頤).

¹⁴¹ Zhu, Xi (朱熹).

¹⁴² Lee, Sang-hae (1986) *op. cit.*, pp. 114 – 124.

¹⁴³ Needham, Joseph (1956) *op. cit.*, pp. 458.

¹⁴⁴ Li (理).

Hao (1032 A.D. – 1085 A.D.) and Cheng, Yi (1033 A.D. – 1107 A.D.) interpreted Li as principle which is one but with manifestations that are many. Zhu, Xi (1130 A.D. – 1200 A.D.) interpreted Li as the condensed form of solid matter by aggregation of the universal material force. From Zhu's viewpoint, the relationship between Li and Chi is that Li is the substance (known as Ti¹⁴⁵) and Chi is the function (known as Yong¹⁴⁶). That is to say, Chi is the basic material from which concrete things are produced, and to which Li supplies the pattern of form (Lee, 1986)¹⁴⁷.

Chi and the Breath of Nature:

Chi was interpreted as the Breath of Nature by Eitel (1873)¹⁴⁸. He claimed that Nature is considered by the Chinese to be a living, breathing organism. The Breath of Nature, which is omnipresent between heaven and earth, and in every live being in the world, is the spiritual energy of the male and female principles. These male and female principles constitute the beginning of things. If the principles disperse, this causes decay, dissolution and death. Sometimes, these principles will again unite and commence reproduction without intermission after their termination. Take a human being for example. If the Breath of Nature gets exhausted within a human body, the time has come for the person's death, and the unrefined part of his animal soul will descend and return to the earth. Meanwhile, the superior part of his spiritual nature will diffuse and expand throughout the world.

Chi and Tao:

Needham (1956) explains 'Tao is the Way; not the right way of life within human

¹⁴⁵ Ti (體).

¹⁴⁶ Yong (用).

¹⁴⁷ Lee, Sang-hae (1986) *op. cit.*, pp. 117 – 119.

¹⁴⁸ Eitel, Ernest J. (1873) *Feng Shui: the Science of Sacred Landscape in Old China*. London, Synergetic Press, fourth edition, 1984, pp. 37 – 44.

society, but the way in which the universe worked¹⁴⁹. The Chinese considered that there is a rule reflecting the natural law, which is called Tao. In Chinese natural philosophy and cosmology, human beings and the natural environment are influenced by Tao, which is involved in the eternal principle of heavenly and earthly harmony. This rule applies to the way human beings live on the earth, and the way the earth is influenced by the weather and astronomical movements, for weather and astronomical movement are motivated by Tao. For instance, the mutations of seasons, the exchanges of day and night, and the regulation for human beings all follow the rules of Tao.

According to *Tao Te Ching* (Book of the Way of Virtue), the author Lao Zi (the Spring and Autumn Period, 770 B.C. – 403 B.C.) claimed that the spirit of Tao is connected to the world. He claimed that ‘there was something undefined and yet complete in itself; born before heaven and earth; silent and boundless; standing alone without change; yet pervading all without fail; it may be regarded as the Mother of the world; I do not know its name; I style it Tao (Wu, 1961)¹⁵⁰. Human beings follow the ways of the earth; the earth follows the ways of heaven; heaven follows the ways of Tao; Tao follows its own ways (Wu, 1961)¹⁵¹. Tao gave birth to One; One gave birth to Two; Two gave birth to Three; Three gave birth to all the myriad things; all the myriad things carry the Chi of Yin on their backs and hold the Chi of Yang in their embrace; deriving their vital harmony from the proper blending of the two vital Chi (Wu, 1961)¹⁵²’.

Briefly, Tao is an invisible ruler existing in the environment. Tao does not belong to heaven or to earth, for it existed before the creation of heaven and the earth. Tao is regarded as the Mother of the world and is the name of the chaos mixing Chi. This chaos is considered as an invisible unit, known as the One. The One is full of Chi.

¹⁴⁹ Needham, Joseph (1956) *op. cit.*, pp. 36.

¹⁵⁰ Wu, John, C. H. (1961) *Tao The Ching: Lao Tzu*. USA, Barnes & Noble Books, 1997, pp. 50 – 51.

¹⁵¹ Wu, John, C. H. (1961) *op. cit.*, pp. 50 – 51.

¹⁵² Wu, John, C. H. (1961) *op. cit.*, pp. 86 – 87.

The Chi of chaos then produces two divisions, known as the Two. The Two are the Chi of Yin and the Chi of Yang. The Chi of Yin and the Chi of Yang further produce the Three, which is the starting point for the Eight Kuas. The Three stands for Kua, the basic symbol of the Eight Kuas. The different combinations of the Kua are the basis from which a myriad of things comes. Thus, the Three, is the basis to progress the myriad things in the world (the meanings and applications of the Eight Kuas are shown in Chapter 6). Thus numbers gains a qualitative significance.

Chi and Yin Yang:

The Taoist concept of Yin and Yang is crucial to the understanding of Chinese medicine, art and philosophy. The concept of Yin, regarded as female, is associated with earth, cold, rest, passivity, darkness, interiority, downwardness, inwardness and decrease. Likewise, the opposite principle, Yang, is regarded as male, and associated with heaven, heat, movement and activity, excitement, vigour, light, exteriority, upward, outward and increase. These philosophical concepts are seen as polar opposites and are used to explain how things relate to one another and to the universe in general. Yin and Yang is a way of thinking in which all things are seen as one part of the whole. Nothing can exist by itself isolated from the other entity. It is the interaction of these two forces that lies behind all natural phenomena.

From Lao Zi's viewpoint, the Chi of Yin and the Chi of Yang are the basis of the world order according to the traditional Chinese worldview (Wu, 1961)¹⁵³. Chi corresponds to the life force and energy in the world, which is known to have two characters. These two characters are represented as the Chi of Yin and the Chi of Yang. The Chinese considered that these two types of Chi are situated in harmony, and thus the world would follow its order. If on the contrary, the Chi of Yin and the Chi of

¹⁵³ Wu, John, C. H. (1961) *op. cit.*, pp. 86 – 87.

Yang are disorderly, it would bring chaos to the world. According to *Guo Yu* (the Discourses of the States), Bo Yang Fu, an ancestral nobleman, claimed that ‘the Zhou Dynasty (1111 B.C. – 221 B.C.) is going to decline; the Chi of heaven and earth is disorderly; if the Chi is disorderly, it indicates that the public will rebel, for the Chi of Yang is stagnant without consumption, while the Chi of Yin is constricted without evaporation. This causes earthquakes (Wei, the Three Kingdoms Period)¹⁵⁴’. Earthquakes were inauspicious omens to the ancient Chinese. The Chi of Yin and the Chi of Yang were seen as influencing the natural phenomena in the world. This influence would reflect on the social order of human beings. The Chi thus closely connects heaven, earth and human beings. Only the balance of the Chi of Yin and the Chi of Yang can create a harmonic status within the world.

Chi and the Chinese Meteorology:

Chi is a ceaseless permutation of expansion and contraction in the world. According to *Zang Shu* (Book of Burial), Guo (the Jin Dynasty, 265 A.D. – 420 A.D.) claimed that ‘Chi of Yin Yang will belch forth and turn into wind; will rise above and turn into cloud; will fall down and turn into rain; will move in the earth and turn into a life-force¹⁵⁵’.

In the atmosphere, Chi shows various conditions and six types, known as the Six Chi, i.e. Cold, Heat, Dryness, Moisture, Wind and Fire. The Six Chi cooperates with the Five Planets, the Five Elements (see Chapter 5 for further explanations), and the Twenty-four Solar Divisions to build up the Chinese concept of meteorology. For example, if Chi cooperates with the element Wood and planet Jupiter, it will produce

¹⁵⁴*Guo Yu* (國語); Bo Yang Fu (伯陽父).

周將亡矣，夫天地之氣，不失其序，若過其序，民亂之也。陽伏而不能出，陰迫而不能蒸，于是有地震。
Wei, Zhao (annot.) (Three Kingdoms Period) *Guo Yu* (The Discourses of the States) [online]. Available from: <http://members.tripod.com/~laogt/document/guoyu.html> [Accessed 11th May 2002].

¹⁵⁵ 夫陰陽之氣，噫而爲風，升而爲雲，降而爲雨，行乎地中而爲生氣。

Guo, Pu (the Jin Dynasty) *op. cit.*, pp. 16.

rain. If Chi cooperates with the element Metal and planet Venus, it will produce fine weather and rain. If Chi cooperates with the element Fire and planet Mars, it will produce heat. If Chi cooperates with the element Water and planet Mercury, it will produce cold. If Chi cooperates with the element Earth and planet Saturn, it will produce wind (Eitel, 1873)¹⁵⁶.

Chi and Feng Shui:

Chi has been treated as a determinant to decide a person's conditions for dwelling within Feng Shui. Many scholars have pointed out the intimate relationship between Chi and Feng Shui. According to *Zang Shu* (Book of Burial), Guo (the Jin Dynasty, 265 A.D. – 420 A.D.) claimed that 'Chi will be scattered with wind and coagulated by water; ancestral wise person attempted to accumulate the Chi in a circulating condition in a place. This is known as Feng Shui¹⁵⁷'. From Guo's viewpoint, an ideal location for dwelling is to 'Cang Feng De Shui¹⁵⁸', which means accumulate wind and acquire water. Guo (the Jin Dynasty, 265 A.D. – 420 A.D.) claimed that 'to acquire water is of the most importance according to Feng Shui. Accumulating wind is the second priority¹⁵⁹'. Therefore, a site nearby a river and surrounded by mountains explains the style of this environment. The different shapes of composition by the river and mountains will cause a variety of Feng Shui environment.

In addition, the relation of Chi and Feng Shui is a concern in Neo-Confucianism. Lee (1986) claimed how the concepts Li and Chi correspond to the natural environment, and how Li and Chi are interpreted in accordance with Feng Shui¹⁶⁰. In Feng Shui, the topographical layout of mountains can be interpreted as

¹⁵⁶ Eitel, Ernest J. (1873) *op. cit.*, pp. 39.

¹⁵⁷ Guo, Pu (the Jin Dynasty) *op. cit.*, pp. 15.

¹⁵⁸ 藏風得水.

¹⁵⁹ Cang Feng De Shui (風水之法, 得水爲上, 藏風次之).

Guo, Pu (the Jin Dynasty) *op. cit.*, pp. 14 – 15.

¹⁶⁰ Lee, Sang-hae (1986) *op. cit.*, pp. 120 – 121.

Dragon Vein. The layout of the Dragon Vein replicates the layout of buildings surrounding the courtyard in a house. Both layouts of Dragon Vein and buildings involve a physical pattern of forms. This is under the domain of substance, known as Ti. As mentioned above, Li and Ti are related. Thus, layouts of Dragon Vein and buildings both lie under the concern of Li. Furthermore, Yong discusses the action of searching for an ideal Feng Shui location and establishing the construction for a house. This concept emphasises a functional perspective, which centres on the involvement of Chi. This interpretation reveals how concepts of Li and Chi are used in Feng Shui.

According to *Huang Di Zhai Jing* (the Yellow Emperor's Book of House), a house is the pivot of Yin Yang; Yang could rule only if Yang corresponds with Yin; Yin could rule only if Yin corresponds with Yang¹⁶¹. A house can be ideal for dwelling only if the Chi of Yin and the Chi of Yang remain in a harmonic status to bring the most prosperity to residents. The intimate relationship between Chi, Yin Yang and the house is thus established.

2.5.2 Clarification of the Supreme Pole Diagram

Tai Ji Tu Shuo¹⁶² (Clarification of the Supreme Pole Diagram) presents a simplified version of the Chinese world-view. This diagram is the foundation of Neo-Confucian cosmology based on considerations of Tao, Chi, Yin Yang and the Five Elements. This diagram was originally made by Zhou, Dun-yi (1017 A.D. – 1073 A.D.) and further interpreted by Zhu, Xi (1130 A.D. – 1200 A.D.). Zhou, Xi has written a moral interpretation of each sentence from the *I Ching* (Book of Changes) representing a

¹⁶¹ Avon (1726) *Huang Di Zhai Jing* (The Yellow Emperor's Book of Houses). In: Chen, Meng-lei *et al.* (1726) *Gu Jin Tu Shu Ji Cheng Bo Wu Hui Bian Yi Shu Dian* (Chrestomathy of Illustrations and Writings Ancient and Modern, Part of Natural Studies, Section of Art). Taipei, Ding-wen, reprinted in 1988, pp. 6724.

¹⁶² Tai Ji Tu Shuo (太極圖說).

way of mind, systematic moral values and duty to parents, elders and the state (Karcher, 2000)¹⁶³.

According to one version of *Dao Tong* (the Succession to the Way) given by Zhu (1130 A.D. – 1200 A.D.), Zhou, Dun-yi (1017 A.D. – 1073 A.D.) was a Confucian Sage following Mencius, another great Confucian Sage. Zhou (1017 A.D. – 1073 A.D.) was a great philosopher of Neo-Confucianism, who exerted a determinate influence on Cheng, Hao (1032 A.D. – 1085 A.D.) and Cheng, Yi (1033 A.D. – 1107 A.D.), two great philosophers who were Zhou's nephews. Furthermore, Zhu derived significant parts of his system of thoughts and practices from Zhou. Thus Zhou, Dun-yi (1017 A.D. – 1073 A.D.) is known as the pioneer of the Cheng-Zhu school, which dominated Chinese philosophy for over 700 years.

Figure 2-4 shows the diagram of Tai Ji Tu Shuo (Clarification of the Supreme Pole Diagram), which illustrates the path of evolution from the ultimateless through the great ultimate, Yin Yang, and Five Elements to myriad things (Needham, 1956)¹⁶⁴. This diagram comprises five stages from the top to bottom, which involves concepts of Wu Ji (No Pole or Ultimate), Tai Ji (Supreme Ultimate or Supreme Pole), Wu Xing (the Five Elements), Chien and Kun to express the way to create male and female, and all phenomena in the world¹⁶⁵.

¹⁶³ Karcher, Stephen (2000) *Ta Chuan: The Great Treatise*. New York, St. Marin's Press, pp. 37.

¹⁶⁴ Needham, Joseph (1956) *op. cit.*, pp. 461.

¹⁶⁵ Wu Ji (無極); Tai Ji (太極); Wu Xing (五行); Chien (乾); Kun (坤).

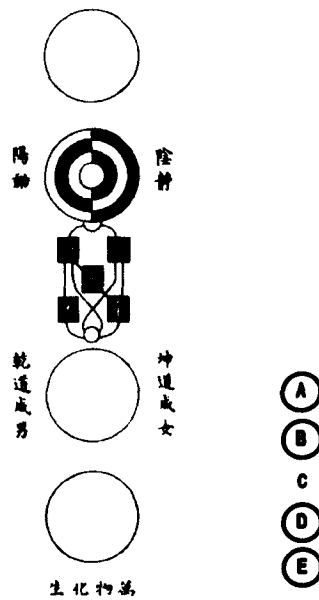


Figure 2- 4 Tai Ji Tu Shuo (Clarification of the Supreme Pole Diagram).

(Source: Needham, J., 1956)

Stage A (top): This stage is drawn as a circle with the inner part empty, in contrast with the fullness of stage B, Tai Ji. According to Zhu, stage A is interpreted as a phase ‘Wu Ji Er Tai Ji’ (Chen, 1973)¹⁶⁶. The term Wu Ji derived from *Tao Te Ching* (Book of the Way of Virtue) is the original state of the universe in which yin and yang are not separated but are combined and mixed together (Chen, 1973)¹⁶⁷. It is translated as No Pole or Ultimate. This concept is more related to Taoist philosophy. The state Wu Ji further develops to Tai Ji.

According to *the Encyclopaedia of Eastern Philosophy and Religion* (1989), the term Tai Ji means the supreme ultimate and the primordial ground of being from which everything arises¹⁶⁸. Tai Ji is usually translated as Supreme Ultimate or Supreme

¹⁶⁶ Wu Ji Er Tai Ji (無極而太極).

Chen, Li-fu *et al.* (trans.) (1973) *Zhong Guo Zhi Ke Xue Yu Wen Ming Di San Ce* (Science and Civilisation in China Vol. 3). Taipei, Taiwan Shang-wu, pp. 184.

¹⁶⁷ Chen, Li-fu *et al.* (trans.) (1973) *op. cit.*, pp. 188 – 189.

¹⁶⁸ Schuhmacher, Stephan and Woerner, Goert (ed.) (1989) *The Encyclopaedia of Eastern Philosophy and Religion: Buddhism, Taoism, Zen, Hinduism*. Boston and Massachusetts, Shambhala Publications, pp. 346.

Pole. However, neither term conveys the true meaning that Zhu and Zhou intend to present due to the linguistic barrier. Therefore, the terms of Tai Ji cannot be explained by simply reasoning about the terms Supreme Ultimate and Supreme Pole. In Neo-Confucianism, the world is considered as an organism. Ji is the centre of this organism. Zhu (1130 A.D. – 1200 A.D.) represented Tai Ji as the snuffing of a candle (Chen, 1973)¹⁶⁹.

Stage B: This diagram consists of several semi-circles left either white or black. Two Chinese characters placed on the right hand side in Figure 2-4 are Yin Jing, which means the Yin is quiescence. Two characters placed on the left hand side are Yang Dong¹⁷⁰, which means the Yang is movement. According to Zhu (1130 A.D. – 1200 A.D.), ‘the Yang manifests itself in motion if Tai Ji moves. When this motion reaches its limit, it is followed by Yin which is manifested in stillness. In turn when stillness has reached its limit there is a return to movement. In this way, movement and stillness, Yin and Yang take turns, each becoming the source of the other (Chen, 1973)¹⁷¹. Needham (1956) explains that ‘the Supreme Pole moves and produces the Yang. When the movement has reached its limit, rest (ensues). Resting, the Supreme Pole produces the Yin. When the rest has reached its limit, there is a return to motion. Motion and rest alternate, each being the root of the other. The Yin and Yang take up their appointed functions, and so the Two Forces (Yin Yang) are established (Needham, 1956)¹⁷².

Stage C: The third section is called Wu Xing¹⁷³, known as the Five Elements. These are the five fundamental groups of substances in the world. Jochim (1986) claimed that the elemental phases of all natural processes are represented by the five

¹⁶⁹ Chen, Li-fu *et al.* (trans.) (1973) *op. cit.*, pp. 190.

¹⁷⁰ Yang Dong (陽動)

¹⁷¹ 太極動而生陽. 動極而靜. 靜而生陰. 靜極復動. 一動一靜. 互為其根.

Chen, Li-fu *et al.* (trans.) (1973) *op. cit.*, pp. 184.

¹⁷² Needham, Joseph (1956) *op. cit.*, pp. 461.

¹⁷³ Wu Xing (五行). Wu Xing is also translated as Wu Hsing.

terms Wood, Fire, Earth, Metal, and Water¹⁷⁴. All phenomena in the world can be examined from this theoretical viewpoint. The theory of the Five Elements is applied not only to the macrocosm but also to human beings. Within the Five Elements, there is a cyclic relationship containing a productive cycle and a destructive cycle. The destructive cycle obeys the following rule – Wood destroys Earth, Earth destroys Water, Water destroys Fire, Fire destroys Metal and Metal destroys Wood. The productive cycle follows the opposite rule that Wood gives rise to Fire, Fire gives rise to Earth, Earth gives rise to Metal, Metal gives rise to Water and Water gives rise to Wood. The details of the Five Elements will be introduced in Chapter 5.

According to the diagram of Tai Ji Tu Shuo (The Clarification of the Supreme Pole Diagram), the interaction of Yin and Yang produces the Five Elements of Metal, Wood, Water, Fire and Earth. Water is predominantly Yin and therefore is placed on the right hand side near the Yin. Fire is predominantly Yang and is placed on the left hand side near the Yang. According to the productive cycle, Wood produces Fire. Wood is also placed on the left hand side under Fire. Similarly, Metal produces Water. Metal is placed on the right hand side under Water. Earth is of mixed nature, which is fixed in the centre. The crossed lines in Figure 2-4 connect Tai Ji to the Five Elements, illustrating the development of the Five Elements from Yin Yang. A small circle below the Five Elements which joins to them by four lines again represents the point where Wu Ji unites (Needham, 1956; Chen, 1973)¹⁷⁵.

Stage D: This stage shows how male and female are created. A circular drawing with the inner part empty is placed at the centre. In Figure 2-4, four Chinese letters on the right hand side are 'Kun Dao Cheng Nu¹⁷⁶', which means female is created from the way of Kun. Four letters on the left-hand side are Chien Dao Cheng

¹⁷⁴ Jochim, Christian (1986) *Chinese Religions*. New Jersey, Prentice-Hall Inc., pp. 192.

¹⁷⁵ Needham, Joseph (1956) *op. cit.*, pp. 463.

Chen, Li-fu *et al.* (trans.) (1973) *op. cit.*, pp. 188 – 190.

¹⁷⁶ Kun Dao Cheng Nu (坤道成女).

Nan¹⁷⁷, which means male is created from the way of Chien. According to *I Ching* (Book of Changes), Chien is related to heaven and Kun is related to the earth. Thus, the way that male and female are created is related to heaven and earth.

Stage E: This stage shows how all phenomena in the world are created. A circular drawing with empty centre is placed at the middle. The four letters placed at the bottom are ‘Wan Wu Hua Sheng¹⁷⁸’, which means creation of all phenomena in the world. This is the last of the diagrams derived from the stage D, which represents the birth of all phenomena in the world caused by the interaction of the male and female principles. All phenomena return to the unity of Tai Ji in the end.

2.5.3 The Union of Human Beings and Heaven

Feng Shui, as mentioned above, combines two words. Feng stands for wind and Shui stands for water. Wind and water are two types of phenomena in the world. The aim of Feng Shui is to create an ideal dwelling to fuse the existence of human beings with the natural environment, ideally existing in a dynamic state of balance and harmony. In classical Chinese literature, this essence is known as ‘Tian Ren He Yi’ (Yi, 1999; Wang, 1995)¹⁷⁹.

Literally, Tian means heaven. It implies a natural environment surrounding human beings in the world, which includes various visible and invisible objects, for instance, in the physical aspect - climate, site, water, plants, earth and wind. Ren stands for human beings. He means combination or union. Yi means the one. In brief,

¹⁷⁷ Chien Dao Cheng Nan (乾道成男).

¹⁷⁸ Wan Wu Hua Sheng (萬物化生).

¹⁷⁹ Tian Ren He Yi (天人合一).

Yi, Ting *et al.* (1999) *op. cit.*, pp. 53 – 59.

Wang, Fukun (1995) *The Traditional Philosophical Framework of Fengshui Theory*. In: Wang, Q. (ed.) *Feng Shui Li Lun Yan Jiu Yi* (The Research of Feng Shui Theory Vol. 1). Taipei, Di-jing, pp. 1.

Tian Ren He Yi therefore means the union of human beings and heaven. This notion stands for the coexisting relations between people and their natural environment. It could be explained as an abstract entity which unites human beings with their surroundings. Inside this entity is a cyclical process showing how human beings are transformed into parts of the world. For example, the natural environment provides all of the nutrition that human beings need. When human beings die, their bodies will form other materials existing in the natural environment.

The connection between heaven, earth and human beings is the fundamental concept in constructing *I Ching* (Book of Changes), which is mainly concerned with changes of Yin and Yang leading to the Eight Kuas (the eight trigrams) and the Sixty-four Kuas (the sixty-four hexagrams). According to *Ta Cuhan* (the Great Treatise), an ancient Taoist work to interpret *I Ching* (Book of Changes), 'Change is broad, great and complete in an everyday way. It has the Way of Heaven in it. It has the Way of Humanity in it. It has the Way of Earth in it. Change brings the Three Powers together and doubles them to make the six places. The six places embody nothing other than the Way of the Three Powers (Karcher, 2000)¹⁸⁰. Heaven, human beings and the earth are three natural powers in the world which are called San Cai¹⁸¹ meaning the three geniuses¹⁸². These three natural powers are the three fundamental determinants to compose each figure, called Kua, in the Eight Kuas. The Eight Kuas are eight figures, which are neither letters nor numbers nor Chinese characters, but are nevertheless symbolic, spatial and numerical. The eight types exhausted the possibilities or relationship in full and broken bar. Each has three lines which can be either broken or unbroken lying horizontally in a row from bottom to top. Figure 2-5 shows the Kua of Tui as an example. The first line placed at the bottom represents the earth. The middle line stands for human beings. The third line placed on the top means heaven. Thus,

¹⁸⁰ Karcher, Stephen (2000) *op. cit.*, pp. 148 – 149.

¹⁸¹ San Cai (三才).

¹⁸² Guo, Jian-xun and Huang, Jun-lang (trans.) (1996) *op. cit.*, pp. 19 – 23.

each symbol unites notions of heaven, human beings and the earth. This idea is taken further in the Sixty-four Kuas (the sixty-four hexagrams).

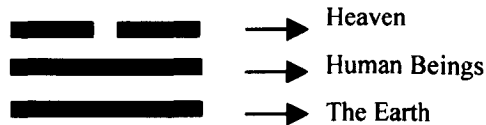


Figure 2- 5 The Kua of Tui from the Eight Kuas.

The combination of two Kuas from the Eight Kuas in a vertical direction allows for sixty-four possible combinations, called the Sixty-four Kuas (the sixty-four hexagrams). Each combination thus contains six lines either broken or unbroken, which can be divided into three sections to represent heaven, the earth and human beings. Figure 2-6 shows the Kua of Tai, which combines Chien at the bottom and Kun at the top. The two lines placed at the bottom represent the earth. The two lines placed at the middle stand for human beings. The two lines placed at the top represent heaven. This example shows how the connection between the three realms of heavens, human beings and earth are indicated.



Figure 2- 6 The Kua of Tai from the Sixty-four Kuas.

Karcher (2000) claims that the relationship between heaven, the earth and human beings is represented by a turtle, happily swimming in the fertile waters of chaos¹⁸³. The upper shell of the turtle is the overarching heaven above, and the lower shell is the flat earth beneath. Human beings are the soft flesh in between. The three

¹⁸³ Karcher, Stephen (2000) *op. cit.*, pp. 50.

natural powers of heaven, earth and human beings are intimate and united as one complete unit. To the Chinese, the turtle is a sacred animal being a medium to bring celestial omens in traditional divination. The turtle shell used in divination by the ancient Chinese can be dated back to the Three Kingdom (1751 B.C. – 1111 B.C.). The turtle shell was burned in a fire to create cracks. These cracks were treated as omens from heaven for the ancestors to predict the future (Chen, 1997)¹⁸⁴.

2.6 Conclusion

The purpose of this chapter is to provide a guideline on understanding Feng Shui in various aspects, including the review of Chinese classical documents and contemporary literature, exploring Chi in relation to various issues including traditional Chinese medicine, Li, nature, Tao, Yin Yang, Chinese meteorology, and Feng Shui, as well as describing the Chinese worldview evolving various stages from the ultimateless through the great ultimate, Yin Yang, and the Five Elements to a myriad things. Finally, the essence of Feng Shui, i.e. Tian Ren He Yi was also explained in detail.

¹⁸⁴ Chen, Jian-jun (1997) *op. cit.*, pp. 4.

Chapter 3

Awareness of Chinese Astronomy: Ideal Feng Shui Environment

3.1 Introduction

This chapter reviews one Feng Shui model for locating a house position in the natural environment, based on the concept of Four Celestial Beings. Investigation of original references and historical literature reveal that Four Celestial Beings has been mentioned in Feng Shui frequently, but there is a lack of further clarification on how the concept of Four Celestial Beings was related to astronomy. Based on the idea that architecture was a microcosm for the ancients, astronomy used to be a significant theme for traditional architecture (Hancock and Faiia, 1998)¹. The concepts of Four Celestial Beings and Twenty-eight Constellations, which have been used for identifying orientations in Feng Shui, are the main focus of this chapter. Also, the idea of the Chinese compass representing the understanding of astronomy is described.

3.2 Ideal Feng Shui Environment

According to Feng Shui, an ideal environment for dwelling, often described as an armchair with a protective formation, has hills surrounding four sides of the place, i.e.

¹ Hancock, Graham and Faiia, Santha (1998) *Heaven's Mirror*. England, USA, Australia, Canada, New Zealand, Penguin Books, 1999, pp. x.

left, right, rear, and front. The ideal place for dwelling is located in the central area, which is an open space with watercourse in front. As mentioned in *Zhang Shu* (Book of Burial), the author Guo (the Jin Dynasty) referred to an ideal Feng Shui environment for its four cardinal directions². Each direction has its ideal form of landscape, which should be ‘bending head’ to the orientation of Black Turtle, ‘flying and dancing’ to the Crimson Phoenix, ‘undulating’ to the Azure Dragon, and ‘well tamed’ to the White Tiger³.

Hills in the orientation of Black Turtle called Xuan Wu should decrease in height gradually. This shape is similar to the bending head of a turtle. Hills in the orientation of Crimson Phoenix called Zhu Que should be extended gracefully, which looks like a bird flapping its wings. In the orientation of Azure Dragon called Qing Long, hills should be stretch over a long distance and undulate. This shape is related to the appearance of a dragon. The tiger is an animal of fierce character and might be dangerous to humans. Hills in the orientation of White Tiger called Bai Hu should be submissive, which looks like a well-tamed tiger⁴.

Figure 3-1 shows the fundamental concept of an ideal Feng Shui environment. This diagram was redrawn by the author according to drawings made by Shang (1995) and Chen (1997)⁵. The natural environment could be divided into several sections. The Central Site, called Xue⁶, is the most ideal location for dwelling, which is an area surrounded by mountains and a river. The mountains described in Figure 3-1 are

² Guo, Pu (The Jin Dynasty) ‘Zang Shu (The Book of Burial)’. In: Ji, Yun *et al.* (ed.) (1782) *Jing Yin Wen Yuan Ge Si Ku Qian Shu 808* (Complete Library of the Four Treasuries Vol. 808). Taipei, Taiwan Shang-wu, reprinted in 1983, pp. 11 – 38.

³ The Chinese original text is 玄武垂頭, 朱雀翔舞, 青龍蜿蜒, 白虎馴頰.

⁴ Xuan Wu (玄武); Zhu Que (朱雀); Qing Long (青龍); Bai Hu (白虎).

⁵ Zhu Shan (主山); Shao-zu Shan (少祖山); Zu Shan (祖山); Hu Shan (護山); An Shan (案山); Chao Shan (朝山); Shui Kou Shan (水口山).

Shang, Kuo (1995) ‘Zhong Guo Feng Shui Ge Ju De Gou Cheng, Sheng Tai Huan Jing Yu Jing Guan (China’s Pattern of Feng Shui its Formation, Relationship to Environment and Landscaping)’. In: Wang, Q. (ed.) *Feng Shui Li Lun Yan Jiu Er* (The Research of Feng Shui Theory Vol. 2). Taipei, Di-jing, pp. 33.

Chen, Jian-jun (1997) *Zhong Guo Gu Dai Jian Zhu Yu Zhou Yi Zhe Xue* (Ancient Chinese Architecture and Philosophy of I Ching). Taipei, Shu-hsing, pp. 132.

⁶ Xue (穴).

designated several parts. The Principal Mountains, called Zhu Shan, are located in the north of the Central Site. The Near Original Mountains, called Shao-zu Shan, are behind Zhu Shan at the north. The Far Original Mountains, called Zu Shan, are located at the north of the Near Original Mountains. The three types of mountains, i.e. the Principal Mountains, the Near Original Mountains and the Far Original Mountains, are functioning as a barrier to protect against wind blowing from the north. Beside the Central Site are placed mountains to the left hand side, called Azure Dragon and mountains to the right hand side, called White Tiger, functioning as fences blocking malign evening sun glare. The Protecting Mountains, called Hu Shan, are located between Zu Shan and Azure Dragon, as well as between Zu Shan and White Tiger. The Desk Mountains, called An Shan, are hills near the central site at the south. The Pilgrimage Mountains, called the Chao Shan, are hills in the south of the Desk Mountains. The Water Gate Mountains, called Shui Kou Shan, is located at the outlet of the river at the southeast (Shang, 1995; Chen, 1997)⁷.

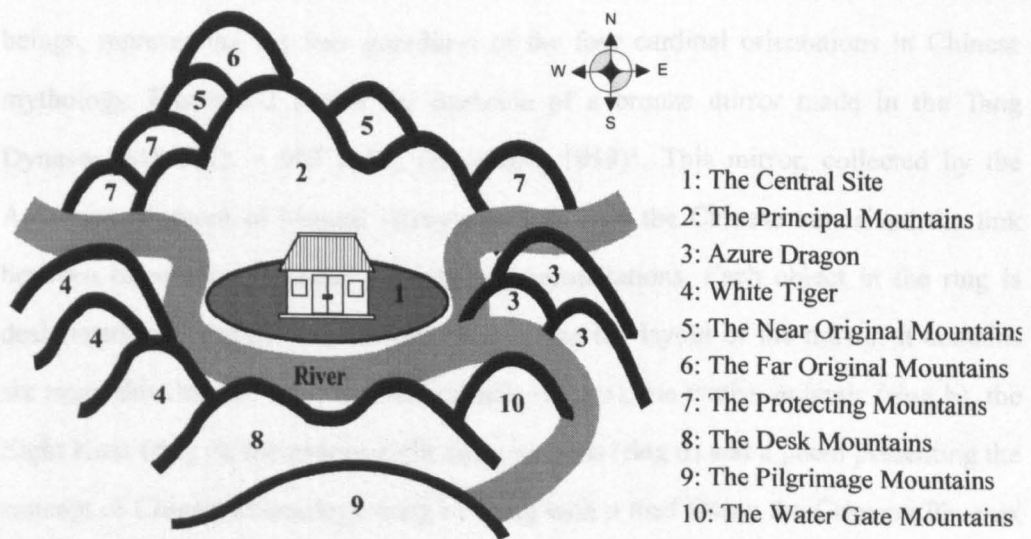


Figure 3- 1 Conception of an ideal Feng Shui environment.

(Source: Shang, K., 1995; Chen, J., 1997; redrawn by the author)

⁷ Zhu Shan (主山); Shao-zu Shan (少祖山); Zu Shan (祖山); Hu Shan (護山); An Shan (案山); Chao Shan (朝山); Shui Kou Shan (水口山).

Shang, Kuo (1995) *op. cit.*, pp. 33.

Chen, Jian-jun (1997) *op. cit.*, pp. 132.

The Central Site is placed by the sides of the river, which is typically ideal for residents to thrive in water. The river flow within these mountains should be clean and flowing, functioning as a tube bringing in water and Chi (the life energy) into this area. Clean water implies the quality of the Chi is pure. Flowing water implies the status of the Chi is movement and vitality.

Concerning spatial arrangement, the ideal Feng Shui environment reveals how the Chinese build an image showing how human beings and the natural environment could reside in harmony. This arrangement involves not only humans' physical needs, but satisfies their psychical requirements. Four celestial beings used are responsive for directing orientations.

3.3 Four Celestial Beings

Azure Dragon, White Tiger, Crimson Phoenix and Black Turtle are the four celestial beings, representing the four guardians of the four cardinal orientations in Chinese mythology. Figure 3-2 shows the backside of a bronze mirror made in the Tang Dynasty (618 A.D. – 907 A.D.) (Needham, 1959)⁸. This mirror, collected by the American Museum of Natural History, reveals how the Chinese conceived the link between orientation, celestial animals and constellations. Each object in the ring is designated to a specific orientation. Considering the layout of the mirror, it contains six rings showing the four celestial animals (ring a), the twelve animals (ring b), the Eight Kuas (ring c), the twenty-eight constellations (ring d) and a poem presenting the concept of Chinese cosmology (ring e) along with a toad facing the Crimson Phoenix at the centre.

⁸ Needham, Joseph (1959) *Science and Civilisation in China Vol. 3: Mathematics and the Sciences of the Heavens and the Earth*. Cambridge, Cambridge University Press, pp. 249.



Figure 3- 2 The Chinese bronze mirror.

(Source: Needham, J., 1959)

The twelve animals (ring b) from the south anticlockwise are rat, buffalo, tiger, hare, dragon, snake, horse, goat, monkey, cock, dog and pig. Ring c shows patterns of the Eight Kuas. Each one indicates one specific orientation, i.e. Chien (☰) is oriented northwest; Kan (☵), north; Ken (☶), northeast, Chen (☳), east; Hsun (☴), southeast; Li (☲), south; Kun (☷), southwest; and Tui (☱), west. Details of the Twenty-eight Constellations (ring d) will be disused later.

According to Needham (1959), the ancient poem (ring e) described that '(this mirror) has the virtue of Chang-keng (the Evening Star, Hesperus, Venus), and the essence of the White Tiger (symbol of the Western Palace). The mutual endowments of Yin and Yang (are present in it). The mysterious spirituality of Mountains and Rivers (is fulfilled in it). With due observance of the regularities of the Heavens. And due regard to the tranquillity of Earth. The Eight Trigrams are exhibited upon it. And the Five Elements disposed in order on it. Let none of the hundred spiritual beings hide their face from it. Let none of the myriad things withhold their reflection from it.

Whoever possesses this mirror and treasures it. Will meet with good fortune and achieve exalted rank (Needham, 1959)⁹.

Each celestial being is related to one cardinal point. Figure 3-3 shows the use of four celestial beings on ancient eaves tiles, called Wa-dan¹⁰, which were found in an Chinese ancient city called Chan-an city in the Han Dynasty (206 B.C. – 220 A.D.) (Yi, 1999)¹¹. Wa-dan is a type of ancient eaves tile used on the end of the roof in traditional Chinese architecture. The shape of Wa-dan is normally round or semicircle, decorated by different types of patterns or words on the end. Each Wa-dan is a cylinder with a nineteen-centimetre diameter. On the end of each cylinder is carved one celestial being.

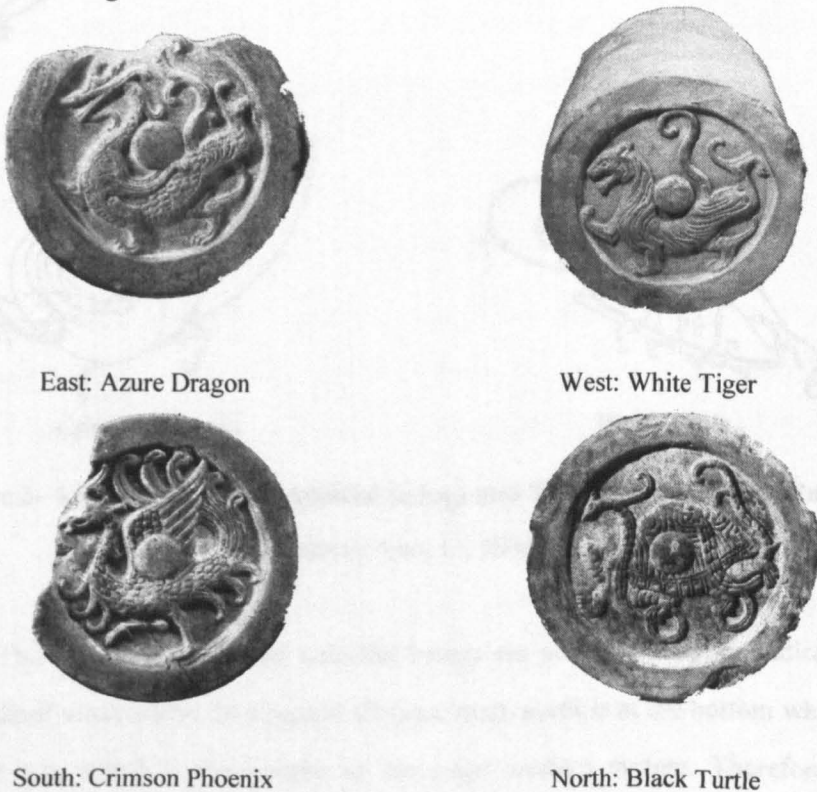


Figure 3- 3 Showing four celestial beings on ancient eaves tile.

(Source: Yi, T. *et al.*, 1999)

⁹ Needham, Joseph. (1959) *op. cit.*, PP.249.

¹⁰ Wa-dan (瓦當).

¹¹ Yi, Ting *et al.* (1999) *Zhong Guo Feng Shui Yu Jian Zhu Yan Jiu* (Geomancy and the selection in architecture placement in ancient China). Taipei, Yi-shu-chai, pp. 32.

In principle, each celestial being also includes seven of the twenty-eight constellations. Figure 3-4 shows a diagram made by Gao in the book *Xing Xiang Tong Jian* (Commentary of Astronomy) (Gao, 1933)¹². It details the way the four celestial beings have been made from the twenty-eight constellations. Azure Dragon was made from the seven constellations of the east part, White Tiger from the west part, Crimson Phoenix from the south part and Black Turtle from the north part.

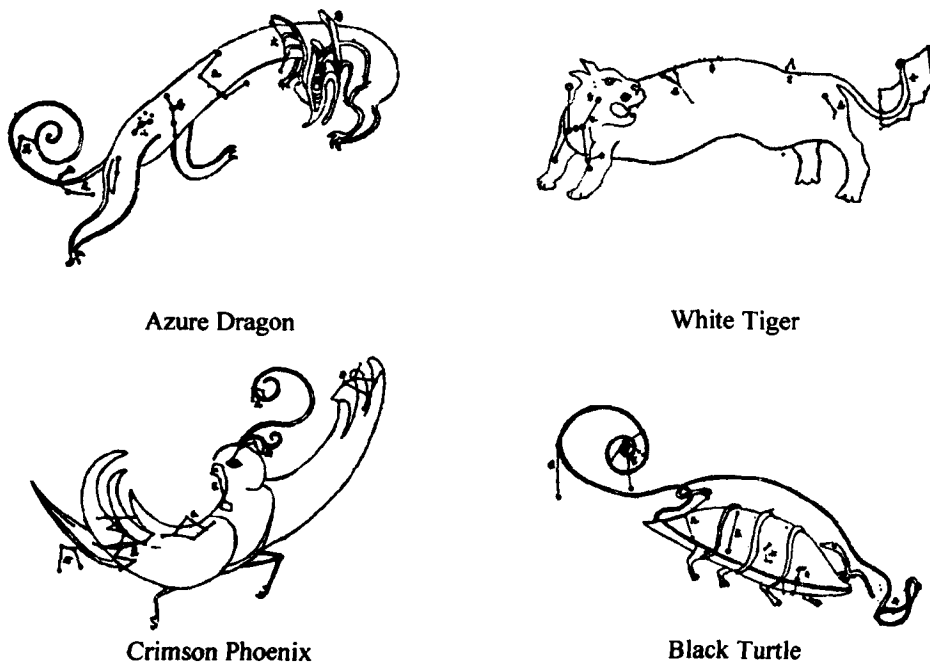


Figure 3- 4 Drawing of four celestial beings and Twenty-eight Constellations.

(Source: Gao, L., 1933)

The names of these four celestial beings are general terms for indicating the four cardinal orientations. In a typical Chinese map, north is at the bottom while south is at the top, which is the reverse of the usual western system. Therefore, Azure Dragon is on the left-hand side of the Chinese map, which is east. For the same reason, White Tiger is on the right, to west; Crimson Phoenix is at the front, to south; and Black Turtle is at the back, to north.

¹² Gao, Lu (1933) *Xing Xiang Tong Jian* (Commentary of Astronomy). Nanjing, Guo Li Zhong Yang Yan Jiu Yuan Tian Wen Yan Jiu Suo (National Research Institute of Astronomy), pp. 4 – 7.

Traditionally, Azure Dragon (east) is considered to be aquatic and is responsible for water, controlling rains and springs in Chinese myth. Features of the Azure Dragon are: eye of a rabbit, belly of a snake, horns of a unicorn, mouth of a camel and back of a fish. Furthermore, it has the character of benevolence, loyalty, eternity, courage and strength.

White Tiger (west) is considered as the lord of animals on earth and the god of war, which has power, courage and vigour. Features of White Tiger are: a round head, long tail, sharp teeth, beard above the lip, strong limbs and pointed claw. The tiger-jade ornament was reserved for commanders of armies used by the Chinese.

Diagrams of dragon and tiger are also shown on some ancient graves. One example is a symbolic pattern, which was found on the ground of an ancient grave about six thousand years old, where diagrams of dragon and tiger are also displayed (Huang and Zhu, 1994; Yi, 1999)¹³. Four skeletons have been found in a chamber of the grave, as shown in Figure 3-5 (a) (Yi, 1999)¹⁴. The master, a middle-aged male, was placed in the centre of the chamber. Beside his skeleton were placed diagrams of dragon and tiger made with clam shells, as shown in Figure 3-5 (b). The dragon was placed on the right-hand side of the skeleton while the tiger was on the left-hand side. Both heads of dragon and tiger faced north, which is the opposite direction to the human's skull. The back of the dragon faces west and that of the tiger, east. According to this evidence, the use of celestial beings and orientations by the Chinese could be dated back six thousand years. The Chinese believed in an intimate connection between celestial beings, orientation and humans. This connection is further applied to their domestic architecture, both for the living and for the dead.

¹³ This diagram was found from an ancient grave in Pu-yang city of He-nan county, Chian, in 1987. Huang, Shi-lin and Zhu, Nai-cheng (1994) *Zhong Guo Zhong Yao Kao Gu Fa Xian* (The Significant Discovery of Chinese Archeology). Taipei, Taiwan Shang-wu, pp. 26 – 28.

Yi, Ting *et al.* (1999) *op. cit.*, pp. 18 – 20.

¹⁴ Yi, Ting *et al.* (1999) *op. cit.*, pp. 19.

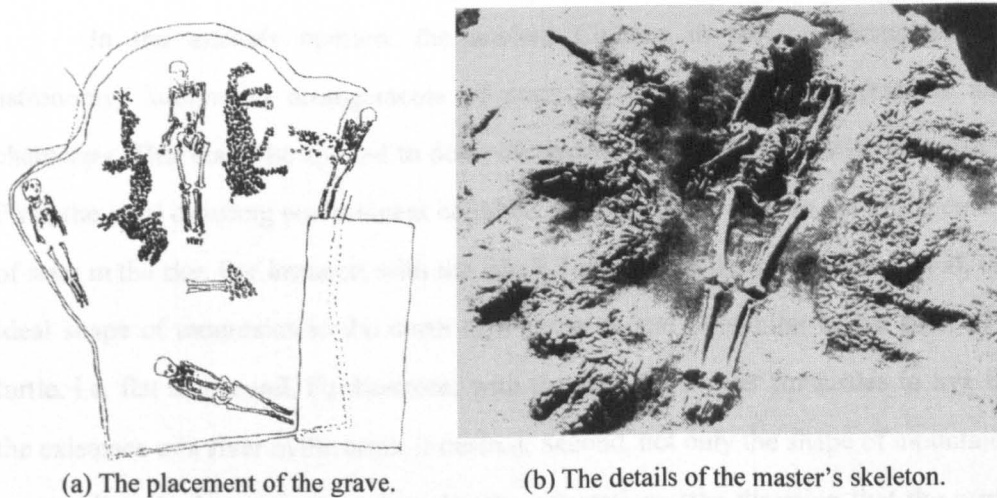


Figure 3- 5 Example of diagrams of dragon and tiger in an ancient grave.

(Source: Yi, T. *et al.*, 1999)

Crimson Phoenix (south) is portrayed as a sacred bird which symbolises feminine beauty, warmth, prosperity and peace. Features of the Crimson Phoenix are: head of a pheasant, beak of a swallow, neck of a tortoise, twelve tail feathers and plumage with five mystical colours, black, white, red, green and yellow. The Chinese had noticed that if constellations of Crimson Phoenix are visible at night in the southeast, the season is summer.

Black Turtle (north) is the celestial animal symbolizing longevity and wisdom. Features of the Black Turtle are: a long and flat body, a bulge of back, shells for both the back and the front, short four limbs, and long life. The Black Turtle has one eye situated in the middle of its body and rises to the surface once every three thousand years. In Chinese myth, the origin of the Magic Square was revealed on the shell of a sacred turtle from the Luo River when Great Yu, the first engineer-emperor of the Xia Kingdom (2183 B.C. – 1751 B.C.), was striving with flood control works (Guo, 1996; Schinz, 1996)¹⁵. The Chinese furthermore used the shell of a turtle, which represents the vault of the universe, for divination since ancient times.

¹⁵ Guo, Jian-xun and Huang, Jun-lang (trans.) (1996) *Yi Jing Du Ben* (The Study of I Ching). Taipei, San-ming, pp. 25 – 26.

In the author's opinion, the ancient Chinese in their understanding of astronomy, interpreted arrangements of stars in terms of animals' features and characters. This could be applied to domestic architecture in the following two ways: First, the ideal dwelling environment could be decided with respect to the arrangement of stars in the sky. For instance, with the Black Turtle as the north celestial animal, the ideal shape of mountains to the north of a house should be similar to the shell of a turtle, i.e. flat and round. Furthermore, with the need for a river for turtles to live in, the existence of a river in the north is desired. Second, not only the shape of mountains surrounding the house matters, but also the orientations (the direction that the turtle faces) of the mountains need to be considered in accordance with the celestial animals.

All people have a practical need to locate themselves in relation to the night sky. There is a random pattern of dots. They have to make sense of it by projecting patterns from their experience to join the dots, as in the children's drawing game. Naturally they impose figures from their mythology giving meaning to the stars and making them memorable. Hence the Chinese celestial figures and the western zodiac, both human equally human constructs.

3.4 Historical Background

Several classical Chinese books introduce the way the ancient Chinese addressed the astronomical phenomena in the sky. According to the book *San Fu Huang Tu*, Azure Dragon, White Tiger, Black Turtle and Crimson Phoenix are four celestial beings in Chinese mythology¹⁶. In the book *Erh Ya*¹⁷, the chapter of Shih Tien (the explanation of heaven) shows that each celestial being is a drawing made by seven constellations,

Schinz, Alfred (1996) *The Magic Square: Cities in Ancient China*. London, Edition Axel Menges, pp. 25.

¹⁶ *San Fu Huang Tu* records the city planning of Chang An in the Western Han Period (206 B.C. – 9 A.D.).

¹⁷ *Erh Ya* (爾雅).

thus the four celestial beings involve twenty-eight constellations in total¹⁸. In the book *Lun Heng*¹⁹ (Critical Essays), the author Wang (the Eastern Han Period, 25 A.D. – 220 A.D.) proposed that the four celestial beings are correlated with four planets and four cardinal orientations (Yuan and Fang, 1997)²⁰. Azure Dragon (east) involves the planet Wood star (Jupiter). White Tiger (west) involves the planet Metal star (Venus). Crimson Phoenix (south) involves the planet Fire star (Mars). Black Turtle (north) involves the planet Water star (Mercury).

Ancient Chinese observations in astronomy can be dated back to the fifth century B.C. A lacquer-box (Figure 3-6 (a)) found in the 2,400 year old tomb of Marquis Yi of the Zeng State, located in a county called Suixian of Hubei Province in southern China, is the first evidence of the use of twenty-eight constellations and celestial beings in Chinese astronomy (Hubei Province Museum, 1980)²¹. The box is 82.8 mm long, 44.8 mm wide and 19.8 mm high, as shown in Figure 3-6 (b). An astronomical diagram was drawn on the cover (Figure 3-6 (c)), which shows the arrangement of twenty-eight constellations and celestial beings. Azure Dragon is placed on the left hand side, i.e. the orientation of east, moreover, White Tiger on the right, the west. The central area shows a Chinese ancient word, Dou²² (dipper), referring to the western constellation known as the Plough. In this case, the western and eastern reading of the pattern of stars seen to have coincided, or shared a common base. In principle, this astronomical diagram reveals that the ancient Chinese had a clear perspective about constellations, orientation and symbolism. The understanding of astronomy was transferred into a magical pattern and used in daily life.

¹⁸ *Erh Ya* is the first book concerned with meanings of ancient words or phrases which was written in the Warring States Period (403 B.C. – 221 B.C.).

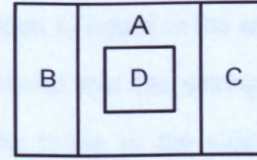
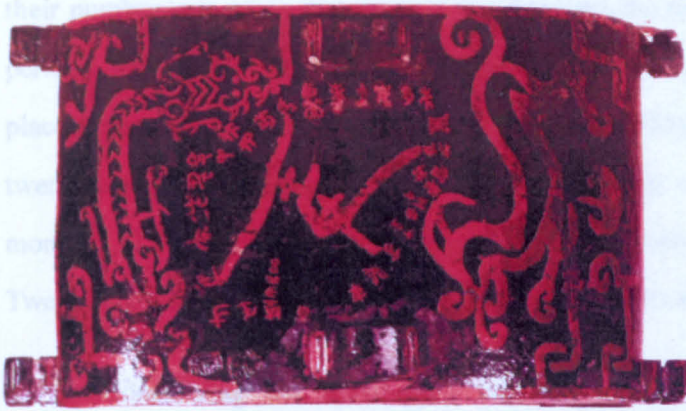
¹⁹ *Lun Heng* (論衡).

²⁰ *Lun Heng* (Critical Essays) is a Chinese classical literature of philosophy written by Wang, Chong (around 27 A.D. – 104 A.D.).

Yuan, Hua-zhong and Fang, Jia-chang (trans.) (1997) *Lun Heng* (Critical Essays). Taipei, Gu-ji, pp.235 – 236.

²¹ Hubei Province Museum (ed.) (1980) *Sui Xian Zeng Hou Yi Mu* (The Tomb of Marquis Yi of the Zeng State). Beijing, Wen-wu.

²² Dou (斗).

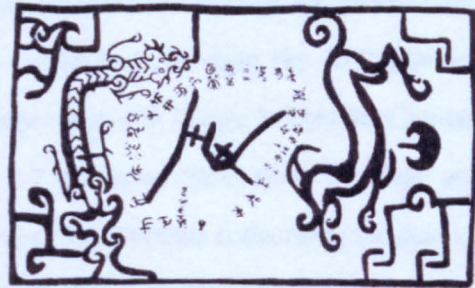


A: The order of twenty-eight constellations.
 B: Azure Dragon.
 C: White Tiger.
 D: The writing of Plough.

(a) Details of the drawing.



(b) The front view.



(c) The trace of the drawing.

Figure 3- 6 The lacquer-box with astronomical diagram.

(Source: Hubei Province Museum, 1980)

3.5 Twenty-eight Mansions and Twenty-eight Constellations

Twenty-eight Mansions, called Er Shi Ba Su²³ in Chinese, is an ancient astronomical position scale system identifying the movement of the sun, the moon and the five planets. The location of the moon is considered as a centre to compare with the position of the other objects. Stars situated near to the equator are classified into Twenty-eight Mansions. Needham (1959) claimed that the line of the mansions was a graduated scale on which the motion of the moon could be measured, and probably

²³ Er Shi Ba Su (二十八宿).

their number was an ancient compromise between the time-spans of its fundamental periods. Twenty-eight is an average number of days for the moon to return to the same place among the stars (Needham, 1959)²⁴. Chen (1985) claimed that the setting of twenty-eight with mansions related to the movement of the moon in the sidereal month is 27.32 days²⁵. The moon moves from one mansion to another every day. Thus, Twenty-eight Mansions are set for the moon in the sidereal month.

Considering the relationship between constellations and mansions, each mansion, called Su²⁶, is designated by one constellation sitting inside. For instance, Figure 3-7 shows the example of constellation comparison between the western and the Chinese systems. Figure 3-7 (a) illustrates a section of the night sky. In Figure 3-7 (b) the western constellation system is superimposed and in Figure 3-7 (c) the Chinese constellation system is superimposed. Figure 3-7 (b) shows the outlines of Virgo and its boundaries in the western constellation system. The outlines connecting the stars of constellations have been drawn as black lines. The boundaries between adjacent constellations are drawn in pink. Figure 3-7 (c) shows the constellation of Jiao in the Chinese constellation system. The black line stands for the constellation of Jiao composed of the star α Vir and ζ Vir. The constellation of Jiao is located in position f in Figure 3-2. The mansion inside which the constellation of Jiao is sitting is designated as the mansion of Jiao²⁷. The mansion of Jiao is located in position E covering around 115° to 125° in the modern constellation system.

²⁴ Needham, Joseph (1959) *op. cit.*, pp. 239.

²⁵ Chen, Zun-gui (1985) *Zhong Guo Tien Wen Xue Shi Di Er Ce* (The Chinese Astronomy History Vol. 2). Taipei, Ming-wen, pp. 51 – 53.

²⁶ Su (宿).

²⁷ The further description of the range of twenty-eight mansions please see Chen, Zun-gui (1985) *op. cit.* pp. 62 – 72.

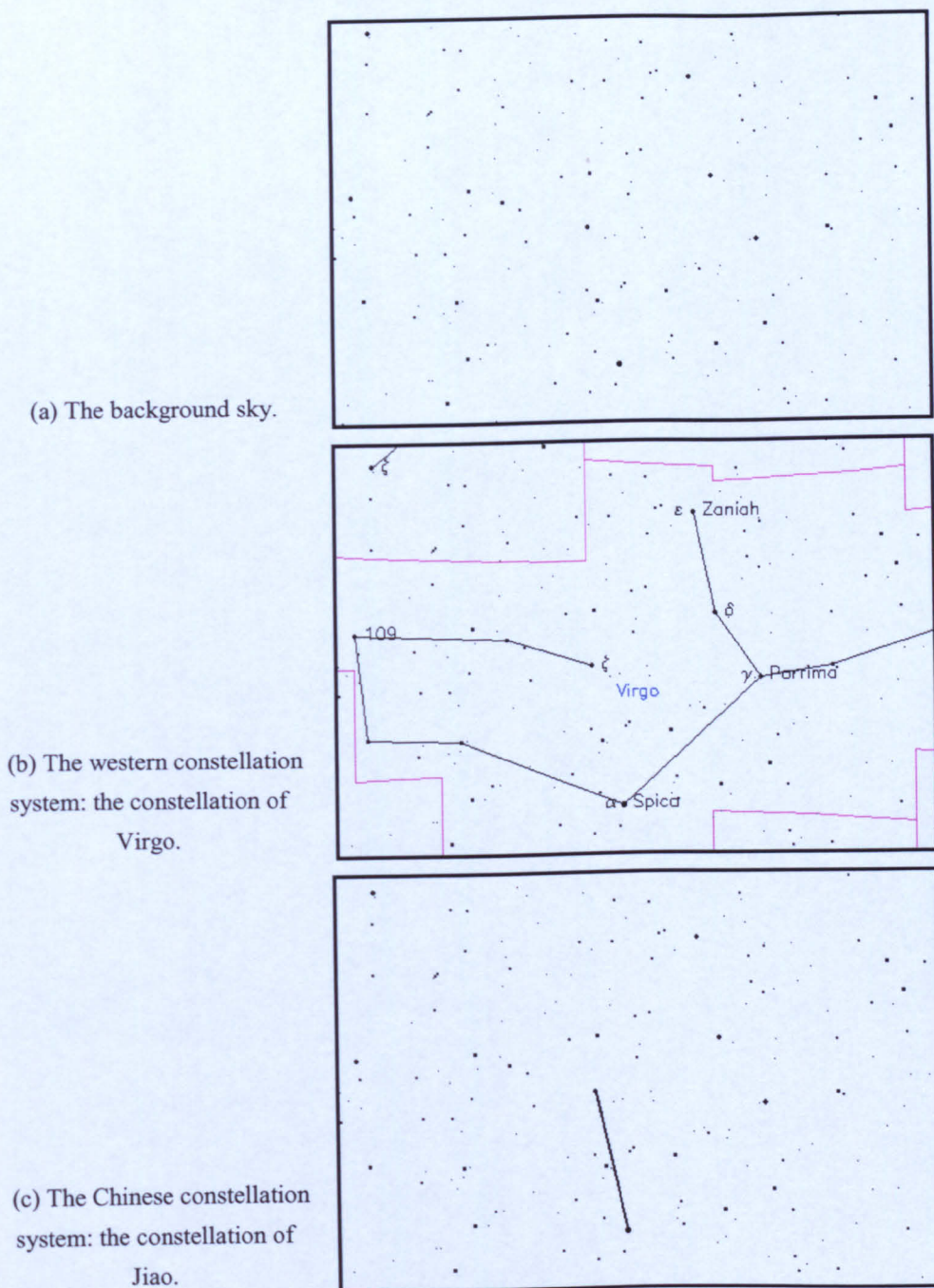


Figure 3- 7 Example of constellation comparison between the Chinese and the western system.

Table 3-1 details the twenty-eight constellations (Needham, 1959)²⁸. In principle, the Twenty-eight Constellations are classified into four groups according to

²⁸ Needham, Joseph (1959) op. cit., pp. 234 – 237.

the position of each constellation in the sky. Every group contains seven constellations so as to connect with the four celestial beings. Azure Dragon stands for the seven constellations located in the east, i.e. Jiao, Kang, Ti, Fang, Xin, Wei and Ji. White Tiger stands for the constellations of west, i.e. Kui, Lou, Wei, Mao, Bi, Zui and Can. Black Turtle stands for the constellations of north, i.e. Nan Dou, Niu, Nu, Xu, Wei, Shi and Bi. Crimson Phoenix stands for the constellations of south, i.e. Jing, Gui, Liu, Xing, Zhang, Yi and Zhen. Each constellation has one determinative star with a few other stars, ranging from 2 to 22.

Table 3- 1 The list of Twenty-eight Constellations.

(Source: Needham, J., 1959)

Celestial beings	Twenty-eight Constellations				
	Name		Meaning	Determinative star	No. of stars
Azure Dragon	Jiao	角	Horn	α Vir	2
	Kang	亢	Neck	κ Vir	4
	Di	氐	Root	α^2 Lib	4
	Fang	房	Room	π Sco	4
	Xin	心	Heart	σ Sco	3
	Wei	尾	Tail	μ^1 Sco	9
	Ji	箕	Winnowing- basket	γ Sag	4
Black Turtle	Nan Dou	南斗	Southern dipper	φ Sag	6
	Niu	牛	Ox (Herd boy)	β Cap	6
	Nu	女	Girl (Serving- maid)	ε Aqu	4
	Xu	虛	Emptiness	β Aqu	2
	Wei	危	Rooftop	α Aqu	3
	Shi	室	Encampment	α Peg	2
	Bi	壁	Wall	γ Peg	2
White Tiger	Kui	奎	Legs	η And	16
	Lou	婁	Bond	β Ari	3
	Wei	胃	Stomach	4I Ari	3
	Mao	昴	Hairy head	η Tau	7
	Bi	畢	Net	ε Tau	8
	Zui	觜	Beak	λ^1 Ori	3
	Can	參	Three stars	ζ Ori	10
Crimson Phoenix	Jing	井	Well	μ Gem	8
	Gui	鬼	Ghosts	θ Can	4
	Liu	柳	Willow	δ Hyd	8
	Xing	星	Star	α Hyd	7
	Zhang	張	Extended net	μ Hyd	6
	Yi	翼	Wings	α Cra	22
	Zhen	軫	Chariot	γ Cor	4

3.6 The Chinese Compass

To illustrate the idea of Twenty-eight Constellations, one significant Feng Shui instrument - the Chinese compass called Luo Pan²⁹, needs to be introduced. The Chinese was the first civilisation to understand and utilize directive properties in magnetic substances, making use of magnetic compasses for more than 1000 years before their introduction to Europeans in the late twelfth century (Needham, 1962)³⁰. The invention of the Chinese compass has an intimate connection with Feng Shui (Needham, 1962)³¹.

Figure 3-8 shows a typical style of Chinese compass. This compass consists of two major sections, a square base and a dial plate. Within the circular dial plate, there can be up to forty concentric rings with various divisions surrounding the plate and a magnetic south-pointing needle sitting in the centre (Lee, 1986)³². Each ring indicates different specific meanings and correlates with orientation on the compass, which involves Chinese philosophy, geometry and astronomy. For instance, one of the many rings is related to Eight Kuas, another ring is related to the Five Elements³³ and so on. The Twenty-eight Mansions are located around the outer ring of the dial plate. The Chinese designated that each mansion covers a certain range of degrees with its specific orientation. The covering degrees of a mansion are different from one to another.

²⁹ Luo Pan (羅盤).

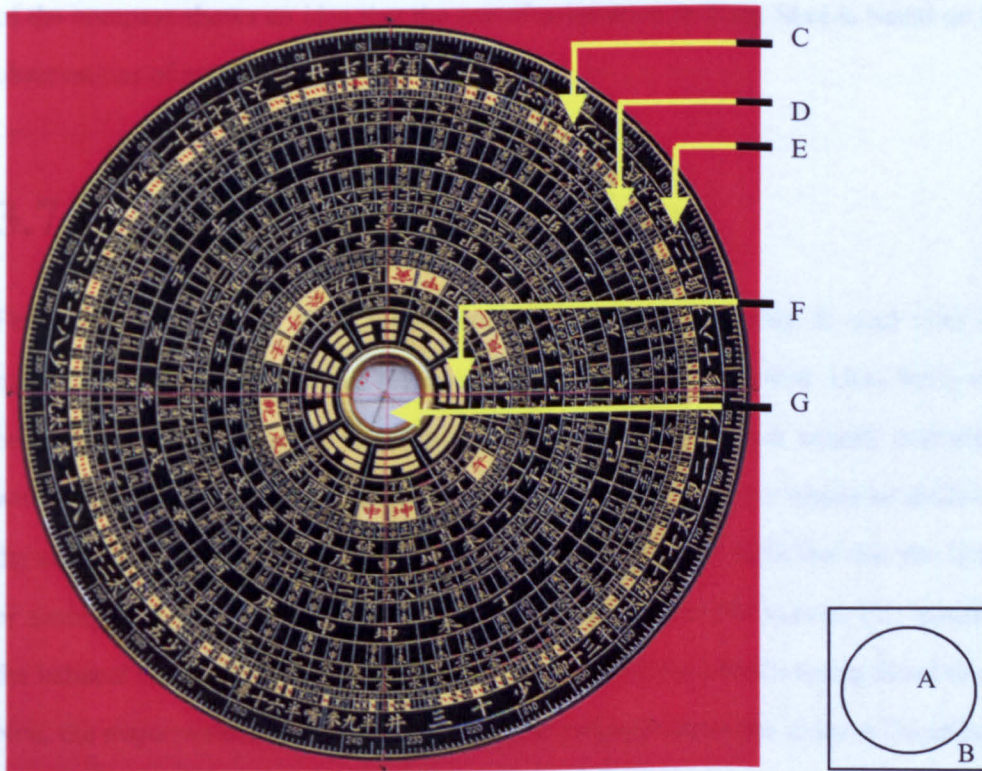
³⁰ Needham, Joseph (1962) *Science and civilisation in China Vol.4: Physics and physical technology - Part 1: Physics*. Cambridge, Cambridge University Press, pp. 229.

³¹ Needham, Joseph (1962) *op. cit.* pp. 239.

³² Lee, Sang-hae (1986) *Feng Shui: Its Context and Meaning*. Ph.D. Thesis, Cornell University, pp. 199.

³³ The Five Elements, called Wu Xing in Chinese, are the five fundamental groups of substance of the world, which are Water, Fire, Wood, Metal, and Earth. The details of the Five Elements will be discussed in Chapter 5.

Chinese cosmology. The way of locating the Twenty-eight Mansions at the equinox



- A: The circular plate / heaven.
- B: The square base plate/ earth.
- C: The ring of Twenty-eight Mansions.
- D: The ring of the Five Elements.
- E: The mansion of Jiao.
- F: The ring of Eight Kuas.
- G: The compass needle.

Figure 3- 8 The Chinese compass.

Pointing to south is the feature of the Chinese compass, which contrasts most obviously with the modern compass. Two threads run across the centre of the dial plate and are parallel to the sides of the square base. These two threads are used to determine the alignment of the walls of a building. The square base of the compass symbolises the earth which is square and stable, while the circular dial plate symbolises the heaven that is circular and in movement (Needham, 1956)³⁴. These two ideas reflect the Chinese view of the world-structure. The Chinese compass, in view of that, means more than just helping with orientation, furthermore it contains ideas of

³⁴ Needham, Joseph (1956) *Science and Civilisation in China Vol. 2: History of Scientific Thought*. Cambridge, Cambridge University Press, pp. 268 – 269.

Chinese cosmology. The way of locating the Twenty-eight Mansions at the outer ring of the compass shows an idea that the use of orientation in Feng Shui is based on the observations of astronomy.

3.7 Constellation Comparison

Feng Shui reveals how the Chinese conceive the world, aiming to deal with the harmony between humans and the universe in architecture. Similar ideas have also been shown in other ancient civilisations. For instance, Egypt was equally concerned with an image of heaven. All the formulas working in the universe would be shifted to the earth (Hancock and Faiia, 1998)³⁵. The ancient Egyptians believed that the rising or setting of stars indicated different significant omens from the heaven. For instance, the heliacal rising of Sirius was a celestial omen indicating a forthcoming flood of the Nile, the major watercourse, which had a great influence upon the citizens (Needham, 1959)³⁶. This omen was therefore significant to the ancients. Besides, constellations were used in relation to the sunrise in order to identify the cycle of astrological ages (Hancock and Faiia, 1998)³⁷. Different rising points of the sun on specific days, i.e. spring equinox, summer solstice, autumn equinox and winter solstice, would stand for different ages.

In architecture, the ancient Egyptian furthermore expressed their comprehension of astronomy in the pyramids (Hancock and Faiia, 1998)³⁸. Considering orientation, the pyramids are oriented north, south, east and west. The cardinal orientations were used as criteria when setting up the pyramids. The layout of the pyramids, including dimensions and orientation, was based on some specific concerns in order to duplicate the position of celestial phenomenon in heaven.

³⁵ Hancock, Graham and Faiia, Santha (1998) *op. cit.*, pp. 89.

³⁶ Needham, Joseph (1959) *op. cit.*, pp. 229.

³⁷ Hancock, Graham and Faiia, Santha (1998) *op. cit.*, pp. 60 – 61.

³⁸ Hancock, Graham and Faiia, Santha (1998) *op. cit.*, pp. 94 – 99.

The use of constellations in astronomy is a significant feature to identify the position of stars in the sky. The way constellations were classified originates from the Ancient Babylonians, who started to map the stars in the sky. Several geometrical patterns were created and correlated with celestial beings. According to the ancient archives in the Library of Ashurbanipal, the Babylonians were one ancient civilisation that believed in the importance of investigating astronomy (Kidger, 2001)³⁹. The Babylonian astronomical records, written in the Sumerian language, cover a wide range of astronomical observations⁴⁰. In 150 A.D., the Greek scientist Ptolemy (85 A.D. – 165 A.D.) published a book, known by its Arabic name, *The Almagest*, which contains a summary of Greek astronomical knowledge, including a catalogue of 1022 stars, arranged into 48 constellations. These 48 constellations formed the basis for our modern constellation system. From 1922, the International Astronomical Union (IAU), started assigning names to celestial objects and features on those objects, and officially adopted the list of 88 constellations in 1930 (Lawton, 1995; Graver, 2001)⁴¹.

Unlike the Babylonian, the Chinese astronomy was developed independently and created as a special astronomical system mapping the sky. Needham (1959) claimed that Chinese astronomy shows the most persistent and accurate observations of celestial phenomena anywhere in the world before the Arabs⁴². For nearly three thousand years, astronomy operated as an official government service. The official astronomers were organised in a government department, the Astronomical Bureau (Needham, 1959)⁴³.

³⁹ The Library of Ashurbanipal was set up during the reign of King Ashurbanipal (668 B.C. – 628 B.C.), which was an important archive located in the city of Ninevah.

Kidger, Mark (2001) *Chinese and the Babylonians Observations* [online]. Available from: <http://www.iac.es/galeria/mrk/Chinese.html> [Accessed 13th September 2001].

⁴⁰ The Sumerian, the even more ancient precursor of Babylonian tongue, had died as a language one thousand years before the time that the great Library of Ashurbanipal was established.

⁴¹ Lawton, Chris (1995) *The Night Sky* [online]. Available from: <http://homepages.tcp.co.uk/~carling/astro1.html> [Accessed 25th November 2001].

Graver, Paul (2001) *Constellation and Star Names* [online]. Available from: <http://freespace.virgin.net/pggraver.m1ccz/astronames.html> [Accessed 26th May 2001].

⁴² Needham, Joseph (1959) *op. cit.*, pp. 171.

⁴³ Needham, Joseph (1959) *op. cit.*, pp. 190 – 191.

In Chinese history, the way to map the stars dates from around the fourth century B.C. (Needham, 1959)⁴⁴. Three astronomers, Shi (Shi, Shen), Gan (Gan, De) and Wu (Wu, Xian) are regarded as the pioneers in mapping the stars during the Warring States Period (403 B.C. – 221 B.C.)⁴⁵. *Tian Wen* (Astronomy) and *Tian Wen Xing Chan* (Astronomical Star Prognostication) are two original books referred to the star list. Wu, Xian is the one who drew the first star-catalogue (Needham, 1959)⁴⁶. According to ideas of the three pioneers, another astronomer, Chen (Chen Zhuo)⁴⁷ made a star map which comprises 283 constellations and 1464 stars during the Three Kingdoms Period (220 A.D. – 265 A.D.). This total number of 1464 stars and 283 constellations are the principal star-lists in ancient Chinese astronomy (Chen and Yang, 1993)⁴⁸.

One astronomical poem, *Bu Tian Ge* (The Song of the March of the Heavens), written by Wang (Wang, Xi-ming) during the Tang Dynasty (618 A.D. – 907 A.D.), shows how the Chinese memorised the stars (Chen, 1982)⁴⁹. This poem was only used by the emperor and was forbidden to the public during the Sung Dynasty (960 A.D. – 1279 A.D.). The feature of this poem is that the sky is divided into thirty-one regions which comprise Three Enclosures (called *San Yuan*⁵⁰ in Chinese) and Twenty-eight Mansions based on the position of the stars. The regions of Three Enclosures and Twenty-eight Mansions are the basis of the Chinese astronomical system. The Three Enclosures, which means three walled regions, are the Purple Forbidden Enclosure (called *Zi Wei Yuan*), Supreme Palace Enclosure (called *Tai Wei Yuan*) and Heavenly

⁴⁴ Needham, Joseph (1959) *op. cit.*, pp. 263.

⁴⁵ Shi, Shen (石申); Gan, De (甘德); Wu, Xian (巫咸).

⁴⁶ *Tian Wen* (天文); *Tian Wen Xing Chan* (天文星占).

Tian Wen (Astronomy) was written by Shi (Shi, Shen) and *Tian Wen Xing Chan* (Astronomical Star Prognostication) was written by Gan (Gan, De) around 370 B.C. – 270 B.C.

Needham, Joseph (1959) *op. cit.*, pp. 197.

⁴⁷ Chen, Zhuo (陳卓).

⁴⁸ Chen, Jiu-jin and Yang, Yi (1993) *Zhong Guo Gu Dai De Tian Wen Yu Li Fa* (The Chinese Ancestral Astronomy and Calendar). Taipei, Shang-wu, pp. 45 – 47.

⁴⁹ *Bu Tian Ge* (步天歌); Wang, Xi-ming (王希明).

Chen, Zun-gui (1982) *Zhong Guo Tien Wen Xue Shi* (The Chinese Astronomy History). Shanghai, Ren-min, pp. 405 – 409.

⁵⁰ *San Yuan* (三垣).

Market Enclosure (Tian Shi Yuan)⁵¹. Twenty-eight Mansions are divided into four groups and correlated with four celestial beings, i.e. Azure Dragon, White Tiger, Crimson Phoenix and Black Turtle (Chen, 1985; Chen and Yang, 1993; Leisure and Cultural Services Department, 2002)⁵².

Designated names for constellations are very different between the Chinese and westerners. In the western system, constellations are designated in accordance with celestial beings in legend, such as celestial gods (e.g. Hercules and Cassiopeia), animals (e.g. Leo and Taurus) or utensils (e.g. Aquila and Libra). In Chinese astronomy, the names of constellations are chosen from objects of daily life, which include people (such as Serving-maid and Herd boy), utensils (Winnowing-basket and Southern dipper), building structures (Wall and Encampment) and organs (Stomach and Heart). Considering the Twenty-eight Constellations, the order in the sky for each constellation and the relation with four celestial beings has been revealed. As shown in Figure 3-9, these figures show the order of Twenty-eight Constellations and each one's relation with the modern star map (Renshaw and Ihara, 1998)⁵³. The left hand side diagrams illustrate the Four Celestial Beings made by the Twenty-eight Constellations. These constellations are marked as red lines on the modern star map in diagrams on the right-hand side.

⁵¹ Zi Wei Yuan (紫微垣); Tai Wei Yuan (太微垣); Tian Shi Yuan (天市垣).

⁵² Chen, Zun-gui (1985) *op. cit.* pp. 25 – 49.

Chen, Jiu-jin and Yang, Yi (1993) *op. cit.*, pp. 43 – 50.

Leisure and Cultural Services Department (2002) 'English-Chinese Glossary of Chinese Star Regions', *Asterism and Star Name* [online]. Hong Kong, Hong Kong Space Museum. Available from: http://www.lcsd.gov.hk/CE/Museum/Space/Research/e_index.htm [Accessed 13th May 2002].

⁵³ Renshaw, Steve and Ihara, Saori (1998) *Star Charts and Moon Stations* [online]. Japan, Astronomy in Japan. Available from: <http://www2.gol.com/users/stever/charts.htm> [Accessed 2nd March 2001].

3.8 Discussion

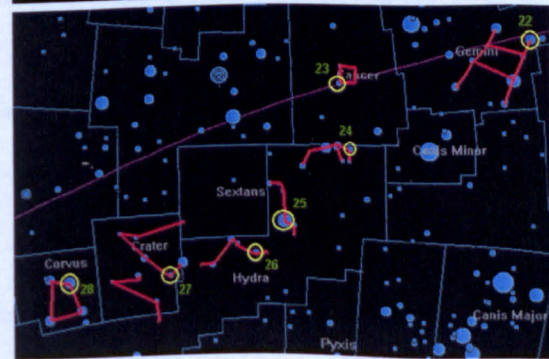
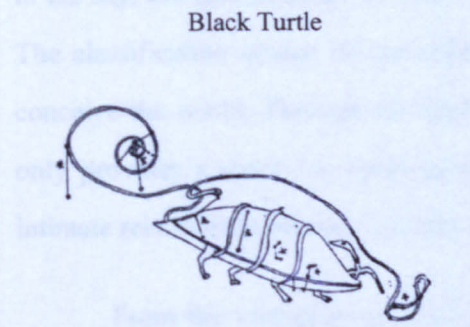
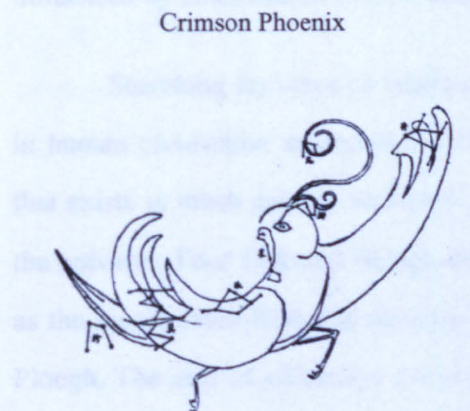
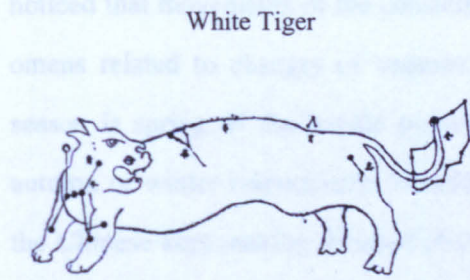
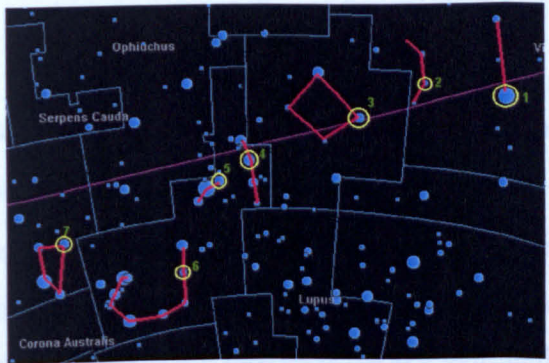


Figure 3- 9 The comparison of Twenty-eight Constellations and modern star map.

(Source: Renshaw, S. and Ihara, S., 1998)

3.8 Discussion

Chinese astronomy reveals constellations which are very different from western astronomy. Every movement of celestial phenomena was believed to indicate some omens in the Chinese astronomy and also in the west astrology. These omens were understood directly to influence the lives of beings on earth. For instance, the Chinese noticed that movements of the constellation known as the Plough in the sky indicated omens related to changes of seasons. If the handle of the Plough points east, the season is spring. If the handle points south, west, or north, the season is summer, autumn or winter respectively. In order to comprehend celestial omens from heaven, the Chinese kept making detailed observations of the sky to establish the connection between humans and the universe. The selection of orientation on earth has also been influenced by observations of the positions of stars in the sky.

Searching for ways of locating one's position in the universe has been shown in human civilisation around the world since ancient times. One significant feature that exists in much ancient architecture is the close connection between humans and the universe. Four Celestial Beings and Twenty-eight Constellations were considered as the magic omen from the universe, and were observed based on the centre of the Plough. The idea of astronomy not only records movements of celestial phenomenon in the sky, but also transfers its form into a dialogue between humans and a universe. The classification system of constellations furthermore reveals the way how people conceive the world. Through the application of Feng Shui, architecture therefore not only provides a space for inhabitation, but turns into a medium for displaying the intimate relationship between humans and the universe.

From the viewpoint on the classification or shaping of celestial phenomena (mapping into things, or animals), the way the Chinese conceive the world could be identified. The ancient Chinese used it to link natural environment (e.g. mountains, watercourses, or constellations) to animals (e.g. the Four Celestial Beings), or man-made artificial objects (e.g. architecture). The idea of four celestial animals is

transformed from the observations on the stars, not only converting into animals' physical features, but also embodying their characters. These characters could be used by the Chinese to decided on the auspiciousness or inauspiciousness, which is an exclusive principle applied in Chinese architecture.

3.9 Conclusion

This chapter distils how astronomy has influenced and been applied to the principles of Feng Shui - Four Celestial Beings, which was derived from the observation of astronomy. The classification of stars by west and east are equally arbitrary. It is a clear example of how making some of things involves imposition of a pattern, and sets up associations. All over the world people needed to identify celestial phenomena and they thought that the motions of the heaven had influence on the earth – with sun and moon by obviously do – so why not the rest? Also it was a way of meaning time – months. This chapter also reveals the ways in which the Chinese represented their comprehension of astronomy by means of the Chinese compass. The key issues revealed in this chapter are the meanings of Four Celestial Beings, how they are connected to Chinese astronomy, their use in Feng Shui, and how the idea of Four Celestial Beings was connected with the Twenty-eight Mansions and Twenty-eight Constellations in order to build up the ideal Feng Shui environment.

Chapter 4

The Fivefold Nature of Things: The Relation of Surname in Domestic Architecture

4.1 Introduction

This chapter reviews one special Feng Shui model for the selection of auspicious orientations for house elements such as the main entrance, kitchen, or bedrooms, based on the classification of surnames. Investigation of original references and historical literature reveals that this model has been mentioned, but never analysed in detail. Four significant Feng Shui concepts forming the theoretical aspect of the model have been revealed. These four concepts are the Five Elements, the Magic Square, the concept of centrality and the layout of the Chinese courtyard house.

This special Feng Shui model, the Five Surnames House Arrangement for selecting ideal orientations in house design, is based on the classification of names. This model was popular under the Han Dynasty and the Tang Dynasty (about 206 B.C. to 907 A.D.) in China, but it is hardly understood or used nowadays (Cao, 1996)¹.

Traditionally, all Chinese surnames could be classified into five classes according to the system of Five Notes, the traditional Chinese phonetics which form the

¹ Cao, Luo-yi (1996) *Feng Shui: Chuan Tong Huan Jing Lun Shu Yu Kong Jian Shi Jian De Ren Shi Yu Pi Pan* (Feng Shui: To Recognise and Criticise of Traditional Environment and Space). Master Dissertation, The National Taiwan University, pp. 45 – 56.

sounds of speech but are also used in music. These five classes of surnames are Gong, Shang, Jue, Zhi, and Yu (Yi, 1999)². Five Notes, also called Wu Sheng³ in Chinese, contains five tones, i.e. Gong, Shang, Jue, Zhi, and Yu. Each of the tones is the pentatonic scale for Chinese surnames. If the pronunciation of surname contains the sound of ‘ong’, such as Gong, Song, and Dong, it belongs to the tone of Gong. If the pronunciation of surname has the sound of ‘ang’, it belongs to the tone of Shang, for instance, the surnames of Xiang, Wang, Yang, Zhang and Jiang. The word Jue is also pronounced as Jiao. If the pronunciation of surname contains the sound of ‘ao’, it belongs to Jue, such as the surname of Zhao, Jao, Cao, Liao and Mao. If the pronunciation of surname has the sound of ‘ee’ or ‘i’, it belongs to Zhi, such as Pi, Li, Di, Xi and Bi. If the surname has the sound of ‘u’, it belongs to Yu, e.g. Yu, Su, Liu, and Xu.

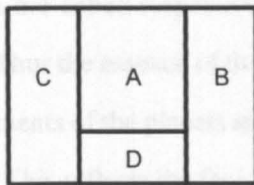
Figure 4-1 shows one ideal model for a house arrangement based on the surname of Gong class (Hwangbo, 1999)⁴. As the surname belongs to this class, the house is called a Gong house. Similarly, if the surname of a family belongs to the Shang class, the house is called a Shang house. This diagram is derived from *Tung Shu* designed for the year 877 A.D., which was found from Dunhuang in Xinjiang province, China. *Tong Shu*⁵ is an ancient Chinese almanac indicating some Chinese rituals for selecting auspicious dates, house arrangements or orientations for people’s social activities (i.e. marriage, travelling).

² Yi, Ting *et al.* (1999) *Zhong Guo Feng Shui Yu Jian Zhu Yan Jiu* (Geomancy and the selection in architecture placement in ancient China). Taipei, Yi-shu-chai, pp. 84.

³ Wu Sheng (五聲).

⁴ Hwangbo, Bong (1999) *In Search of Alternative Traditions in Architecture – A Cross-Cultural Interdisciplinary Study*. Ph.D. Thesis, The University of Sheffield, pp. 135.

⁵ *Tong Shu* (通書).



- A: shows the ideal special arrangement for the Gong house
- B: shows the purpose of this diagram is designed for the year 877 A.D.
- C: details orientation and special arrangement for each surname
- D: presents a traditional Chinese charm for guarding the house

Figure 4- 1 Five Surnames house arrangement.

(Source: Hwangbo, B., 1999)

4.2 The Five Elements

According to *I Ching* (Book of Changes), classification is the basis of conceiving the Chinese world and many classification sets have been applied to decide auspicious and inauspicious orientations in domestic architecture (Nanhuai, 1987)⁶. Ancient Chinese philosophers and thinkers tended to classify these sets into five categories correlated with the Five Elements. Examples of these sets are such as the configuration of houses, the use of colours, the note of surnames, or even the organs of human beings. Zhou, Dun-yi, a great philosopher of Neo-Confucianism under the Northern Sung Period (960 A.D. – 1127 A.D.), claimed that all of the many things in the world relate to one or other

⁶ Nanhuai, Jin (1987) *Yi Jing Za Shuo* (The Study of I Ching). Taipei, Lao-ku Wen-hua, twelfth edition, 1997, pp. 93 – 94.

of the Five Elements (Wang, 1995)⁷. Taking the Five Notes as an example, each note is attributed to one of the Elements: Gong to Earth, Shang to Metal, Jue to Wood, Zhi to Fire and Yu to Water.

The Five Elements (called Wu Xing in Chinese) were considered the five fundamental groups of substances in the world. The word Wu designates the elements, which are Water, Fire, Wood, Metal, and Earth, while Xing means movement, indicating transition between them. *Shu Jing* (Book of History) is the first literature work mentioned the Five Elements around the fourth to third B.C. (Hwangbo, 1999)⁸. Needham (1959) pointed out that the names of the Five Elements are related to the names of the Five Planets in ancient astronomy: Mercury, Venus, Mars, Jupiter, and Saturn are called respectively, Water star, Metal star, Fire star, Wood star, and Earth star⁹. Thus the essence of the Five Elements is considered linked to the relationships and movements of the planets and this notion is inseparable from the names used to describe them. This reflects the fact that the ancient Chinese considered all things on earth to be influenced by and related to celestial phenomena.

According to *Guan Shi Di Li Zhi Meng* (Mr. Guan's Geometrical Instruction), written by Guan, Lu (208 A.D. – 255 A.D.), many real and abstract objects such as notes, orientations, colours, planets and celestial animals could be sorted into five groups and correlated with the Five Elements¹⁰. He claimed that 'if Chi is placed in sky, it corresponds to the Five Planets; if Chi is placed on the earth, it correspond to the Five Orientations; if Chi is arranged in seasons, it corresponds to the Five Virtues; if Chi is used in music, it correspond to the Five Notes; if Chi is used in art, it corresponds to the Five Colours. The Chi is gathered together in terms of the Five Elements. Human beings

⁷ Wang, Fukun (1995) 'The Traditional Philosophical Framework of Fengshui Theory'. In: Wang, Q. (ed.) *Feng Shui Li Lun Yan Jiu Yi* (The Research of Feng Shui Theory Vol. 1). Taipei, Di-jing, pp. 9 – 14.

⁸ Hwangbo, Bong (1999) *op. cit.*, pp. 112.

⁹ Needham, Joseph (1959) *Science and Civilisation in China Vol. 3: Mathematics and the Sciences of the Heavens and the Earth*. Cambridge, Cambridge University Press, pp. 398 – 401.

¹⁰ Guan, Lu (The Three Kingdoms Period) *Guan Shi Di Li Zhi Meng* (Mr. Guan's Geometrical Instruction). In: Chen, Meng-lei *et al.* (1726) *Gu Jin Tu Shu Ji Cheng Bo Wu Hui Bian Yi Shu Dian* (Chrestomathy of Illustrations and Writings Ancient and Modern, Part of Natural Studies, Section of Art). Taipei, Ding-wen, reprinted in 1988, pp. 6869.

who are born by absorbing finest Chi are therefore superior to other live beings in the world. *I Ching* (Book of Changes) recorded that the heaven numbers have five numbers and the earth numbers have five numbers. The sum of the heaven numbers and the earth numbers are fifty-five. Thus, all beings in the world are created by the Chi of five¹¹.

Each connection between the Five Elements and other subjects has been shown. Guan (the Three Kingdoms Period, 220 A.D. – 265 A.D.) claimed that ‘Wood is Sui Xing (the planet Jupiter), the orientation east on the earth, the season spring, the virtue benevolence, the note Jue, and the colour azure. Fire is Ying Huo (the planet Mars), the orientation south on the earth, the season summer, the virtue courtesy, the note Zhi, and the colour crimson. Earth is Zhen Xing (the planet Saturn), the orientation centre on the earth, the four seasons, the virtue honest, the note Gong, and the colour yellow. Metal is Tai Bai (the planet Venus), the orientation west on the earth, the season autumn, the virtue righteousness, the note Shang, and the colour white. Water is Chen Xing (the planet Mercury), the orientation north on the earth, the season winter, the virtue wisdom, the note Yu, and the colour black¹².

Similarly, in *Huai Nan Zi* (Book of the Prince of Huai Nan), Liu (the Western Han Period, 206 B.C. – 9 A.D.) explained the Five Elements and their connections (Wang, 1998)¹³. He claimed that ‘what are the Five Planets? The east is Wood, which the emperor is Tai Hao, the assistance is Gou Mang who holds a compass to govern spring, the deity is Sui Xing (the planet Jupiter), the animal is Azure Dragon, the note is Jue, and the date includes Jia and Yi. The south is Fire, of which the emperor is Yan Di, the assistant is Zhu Ming who holds a weighing apparatus to summer, the deity is Ying Huo (the planet Mars), the animal is Crimson Phoenix, the note is Zhi, and the date includes Bing and Ding. The centre is Earth, of which the emperor is Huang Di, the

¹¹ 布於天爲五星，分於地爲五方，行於四時爲五德，布於律呂爲五聲，發於文章爲五色，總其精氣爲五行。人靈於萬物，稟秀氣而生。易曰，天數五，地數五，天地之數五十有五，故萬物皆感五氣而成。

¹² Sui Xing (歲星); Ying Huo (熒惑); Zhen Xing (鎮星); Tai Bai (太白); Chen Xing (辰星)。木爲歲星，於地爲東方，於時爲春，於德爲仁，其音角，其色青。火爲熒惑，於地爲南，於時爲夏，於德爲禮，其音徵，其色赤。土爲鎮星，於地爲中央，於時爲四季，於德爲信，其音宮，其色黃。金爲太白，於地爲西方，於時爲秋，於德爲義，其音商，其色白。水爲辰星，於地爲北方，於時爲冬，於德爲智，其音羽，其色黑。

¹³ Wang, Ji-ru (1998) *Huai Nan Zi Yi Zhu* (An Exposition of Huai Nan Zi). Taipei, Jian-an, pp. 69 – 70.

assistant is Hou Tu who holds a rope to govern four orientations, the deity is Zhen Xing (the planet Saturn), the animal is Yellow Dragon, the note is Gong, and the date includes Wu and Ji. The west is Metal, of which the emperor is Shao Hao, the assistant is Ru Shou who holds a ruler to govern autumn, the deity is Tai Bai (the planet Venus), the animal is White Tiger, the note is Shang, and the date includes Geng and Xin. The north is Water, of which the emperor is Zhuan Xu, the assistant is Xuan Ming who holds a power to govern winter, the deity is Chen Xing (the planet Mercury), the animal is Black Turtle, the note is Yu, and the date includes Ren and Gui¹⁴.

Table 4-1 shows the network of the Five Elements with physical phenomena (Lee, 1986; Wang, 1995; Hwangbo, 1999)¹⁵. Many subjects could be linked to the Five Elements, such as notes, orientations, colours, planets, celestial animals, seasons, meteorology, shapes, types, viscera, sense-organs and system. For instance, this system links Water with the north and the colour black, Metal with west and white, Earth with centre and yellow, Fire with south and red, while Wood belongs to east and azure.

¹⁴ Tai Hoa (太皞); Gou Mang (句芒); Jia (甲); Yi (乙); Yan Di (炎帝); Zhu Ming (朱明); Bing (丙); Ding (丁); Huang Di (黃帝); Hou Tu (后土); Wu (戊); Ji (己); Shao Hao (少昊); Ru Shou (蓐收); Geng (庚); Xin (辛); Zhuan Xu (顓頊); Xuan Ming (玄冥); Ren (壬); Gui (癸).

何謂五星? 東方, 木也, 其帝太皞其佐句芒, 執規而治春; 其神爲歲星, 其獸蒼龍, 其音角, 其日甲乙. 南方, 火也, 其帝炎帝, 其佐朱明, 執衡而治夏; 其神爲熒惑, 其獸朱鳥, 其音徵, 其日丙丁. 中央, 土也, 其帝黃帝, 其佐后土, 執繩而制四方; 其神爲鎮星, 其獸黃龍, 其音宮, 其日戊己. 西方, 金也, 其帝少昊, 其佐蓐收, 執矩而治秋; 其神爲太白, 其獸白虎, 其音商, 其日庚辛. 北方, 水也, 其帝顓頊, 其佐玄冥, 執權而治冬; 其神爲辰星, 其獸玄武, 其音羽, 其日壬癸.

¹⁵ Lee, Sang-hae (1986) *Feng Shui: Its Context and Meaning*. Ph.D. Thesis, Cornell University, pp. 60.

Wang, Fukun (1995) *op. cit.*, pp. 11.

Hwangbo, Bong (1999) *op. cit.*, pp. 115.

Table 4- 1 The network of the Five Elements with physical phenomena.

(Source: Lee, S., 1986; Wang, F., 1995; Hwangbo, B., 1999)

Five Elements	Wood	Fire	Earth	Metal	Water
Notes	Jue	Zhi	Gong	Shang	Yu
Orientations	East	South	Centre	West	North
Colours	Azure	Red / Crimson	Yellow	White	Black
Planets	Jupiter	Mars	Saturn	Venus	Mercury
Celestial Animals	Azure Dragon	Crimson Phoenix	Yellow Dragon	White Tiger	Black Turtle
Seasons	Spring	Summer	Long Summer	Autumn	Winter
Meteorology	Wind	Heat	Wet	Dry	Cold
Shapes	Straight	Sharp	Square	Round	Curve
Tastes	Salt	Bitter	Sweet	Acrid	Sour
Viscera	Liver	Heart	Spleen	Lung	Kidney
Sense-organs	Eyes	Tongue	Mouth	Nose	Ear
System	Bile	Small intestine	Stomach	Large intestine	Bladder

4.2.1 Nature of the Five Elements

According to *Qing Nang Hai Jiao Jing* (Book of Azure Satchel and Cape), the nature of the Five Elements has been detailed below (Wang, 1995)¹⁶.

Metal: The shape of Metal is round and slippery. The characteristic of Metal is that it is motionless. It is good if the Metal maintains its shape and characteristics by being smooth, full and even, then we can make use of its advantages to the maximum. When Metal loses its nature, by being fluid, inclining and cracking, an unpleasant situation may result.

Wood: The shape of Wood is long and string-like. Its characteristics are that it is straight and is unhindered. It is good if the Wood maintains its shape and characteristics by being smooth and vertical, then we can make use of its advantages to the maximum. While it loses its features by being rotten, unorganised, cracked and swollen, it may result an unpleasant situation.

¹⁶ Wang, Fukun (1995) *op. cit.*, pp. 14.

Water: The shape of Water is curved and fluid. Its characteristics are that it is changeable and flows from the heights to the lowland. It is good if the Water maintains its shape and characteristics by being fluid and active, then we can make use of its advantages to extreme. While it loses its shape and characteristic by being sluggish, tardy, and messy, it may cause an unpleasant situation.

Fire: The shape of Fire is sharp and pointed. Its characteristics are that it is burning and dynamic. It is good if the Fire is active and aggressive, flame and sharp, and moveable, then we can make use of its advantages to the maximum. While Fire loses its shape and characteristics by being damaged, it may result in an unpleasant situation.

Earth: The shape of Earth is rectangular, upright and foursquare. Its characteristics are that it is calm, composed but not sharp. It is good if the Earth is placid, upright and level, then we can make use of its advantages to the maximum. While it loses its shape and characteristics by being slanting and barren, it may result in an unpleasant situation.

In *the Healthy House*, the authors Baggs and Baggs (1996) interpreted the use of the Five Elements in the classification of building form¹⁷. Each element has an associated landform and building shape based on each one's nature. The Earth located in the centre stands for a flat-roof building. The Metal located in the west stands for domed or vaulted buildings. The Water located in the north stands for irregularly curved roofs. The Wood located in the east stands for skyscrapers, vertical monuments or buildings constructed of wood. The Fire located in the south stands for steep pitch-roofed buildings, spires and churches. Although the reason for making the link has not been introduced clearly and may just involve the personal opinion by the author, this link suggests a way for the classification system to identify building forms in terms of the Five Elements.

¹⁷ Baggs, Sydney and Baggs, Joan (1996) *The Healthy House*. London, Thames & Hudson, pp. 73.

4.2.2 The Altar of Land and Grain

In *Feng Shui Yu Jian Zhu* (Feng Shui and Architecture), the author Chen and Kong (1994) pointed out the link of the Five Elements, orientations and colours is in relation to geography¹⁸. This link is the basis of the Altar of Land and Grain (called Sheji Tan¹⁹ in Chinese) of the Forbidden City in Beijing. This altar was the place for holding services for the gods of land and grains used by emperors of the Ming Dynasty (1368 A.D. – 1644 A.D.) and Qing Dynasty (1644 A.D. – 1912 A.D.). Figure 4-2 shows the layout of the Altar of Land and Grain. This altar is a square platform in three tiers of 16 m, 16.9m and 17.8 m in length. The top tier is divided into five rooms paved with earth of five colours, azure in the eastern part, red in the southern, white in the western, black in the northern and yellow in the middle. The earth was originally collected from all parts of the country, symbolizing all the territory of the nation.

For the ancient Chinese, the nation was divided into five groups, i.e. east, west, north, south and the centre. The centre of the nation is the area near the middle of the Yellow River and Guan Zhong²⁰. The climate is pleasant and the ground covered with yellow earth. Thus, the centre links with Earth, the season long summer and the colour yellow. In the east of the nation, the climate is warm and the ground covered with azure earth based on containing plenty of Fe₂O₃. Thus, the east links with Wood, the season of spring and the colour azure. In the south of nation, the climate is hot and humid and the ground covered with red earth which is exposed to the rain. Thus, the south links with Fire, the season summer and the colour Red. In the west of the nation, the climate is cool and dry. The ground is covered with white earth which contains plenty of CaCO₃ and Na₂SO₄. Thus, the west links with Metal, the season autumn and the colour white. In the north of nation, the climate is cold and the ground covers with humus, the earth of

¹⁸ Chen, Jian-jun and Kong, Shang-pu (1994) *Feng Shui Yu Jian Zhu* (Feng Shui and Architecture). Taipei, Shu-hsing, pp. 95 – 96.

¹⁹ Sheji Tan (社稷壇).

²⁰ Guan means strategic pass and Zhong stands for inside. Guan Zhong (關中) is an area located in Shanxi Province, China. This area is within four strategic passes, i.e. Hang Gu Guan to the east, Wu Guan to the south, San Guan to the west and Shiau Guan to the north.

black. Thus, the north links with Water, the season winter and the colour black (Chen and Kong, 1994)²¹.

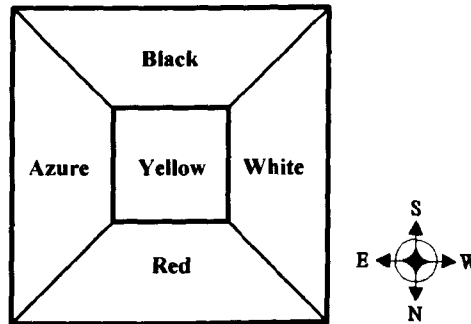


Figure 4- 2 The use of colour in the Altar of Land and Grain in Beijing.

4.2.3 Productive Cycle and Destructive Cycle

The Five Elements are not regarded as permanent states but give way to one another. They can be presented diagrammatically in terms of either a productive or a destructive cycle, as shown in Figure 4-3, which was first mentioned in the passage from *Chhün Chhiu Fan Lu* (String of Pearls on the Spring and Autumn Annals) around the second century (Needham, 1956)²². The destructive cycle obeys the following rule – Wood destroys Earth, Earth destroys Water, Water destroys Fire, Fire destroys Metal and Metal destroys Wood. The phenomenal experiences supporting this idea are fairly clear: plants destroy the Earth by covering it and absorbing its substance; Earth rises out of the sea or soaks up a puddle; Water puts out Fire; Fire turns Metal liquid, but axes cut down trees. Therefore, if things belonging to the Fire category are ideal for a certain orientation, this orientation will not be ideal for things belonging to the Metal category, since Fire destroys Metal, and so on.

The productive cycle follows the opposite rule that Wood gives rise to Fire, Fire gives rise to Earth, Earth gives rise to Metal, Metal gives rise to Water and Water gives

²¹ Chen, Jian-jun and Kong, Shang-pu (1994) *op. cit.*, pp. 95 – 96.

²² Needham, Joseph (1956) *Science and Civilisation in China Vol. 2: History of Scientific Thought*. Cambridge, Cambridge University Press, pp. 255 – 261.

rise to Wood. Again the phenomenal experiences are obvious: Wood burns; Fire produces ash (a form of Earth); Earth (as ore) produces Metal, Metal melts, turning into a kind of Water; Water nourishes plants. Therefore the orientation suited to things belonging to the Earth category will be also suitable for things belonging to the Metal category, as Earth gives rise to Metal, and so on.

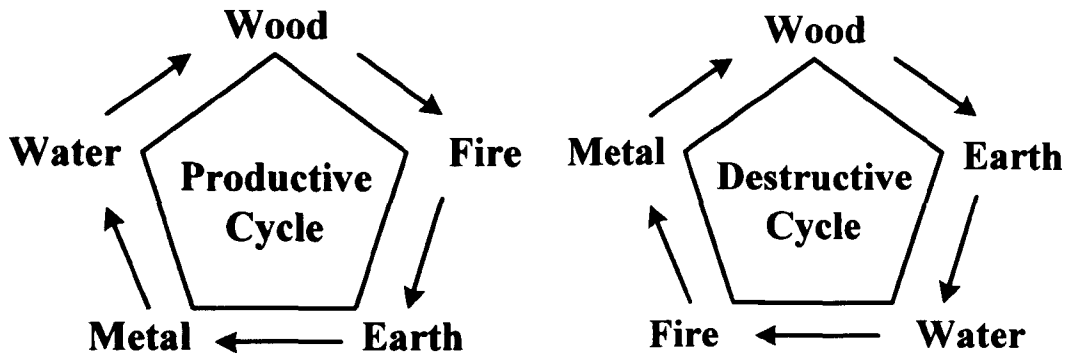


Figure 4- 3 Productive cycle and destructive cycle.

(Source: Needham, J., 1956; redrawn by the author)

In the *Lun Heng* (Critical Essays), the author Wang (the Eastern Han Period, 25 A.D. – 220 A.D.) claimed that the influence of the five surname types on house arrangement is based on the concept of the Five Elements. He stated that a southern location of the main entrance (the most important element in a house) is not suitable for a Shang house, while a northern one is not suitable for a Zhi house. Shang belongs to the Metal category, so is not suited to the ideal orientation for Fire (south), since Fire destroys Metal. The Zhi house is unsuitable for the north by the same reasoning, since Water (north) destroys Fire and Zhi belongs to the Fire category (Yuan and Fang, 1997)²³.

4.3 The Gong House

Figure 4-4 shows diagrammatically a typical Chinese courtyard house for a family

²³ Yuan, Hua-zhong and Fang, Jia-chang (trans.) (1997) *Lun Heng* (Critical Essays). Taipei, Gu-ji, pp. 1739 – 1758.

named under the Gong classification. It describes auspicious orientation according to the system of Five Surnames House Arrangement. In the centre of the diagram are the three Chinese characters Gong Xing Zhai²⁴, which name the house model. Gong is the surname of the family, Xing means surname, and Zhai means a house. Following the principle of Five Elements, the surname Gong belongs to Earth, and the ideal orientation for Earth is the centre (see Table 4-1). However, the main entrance cannot be placed at the centre: it is therefore shifted to the ideal orientation for Fire, because Fire gives rise to Earth in the productive cycle (also see Figure 4-3). As mentioned before, the main entrance is the first concern in Feng Shui, and the main entrance of the Gong House is ideally placed in the south. Moreover, because Wood destroys Earth in the destructive cycle, the main entrance of the Gong should avoid being placed to the east.

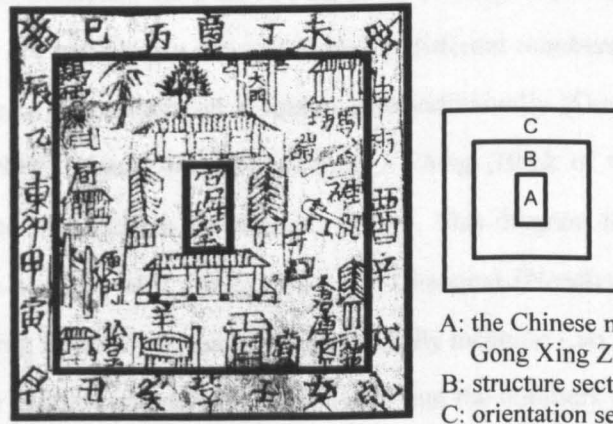


Figure 4- 4 The Gong House (detail from Figure 4-1).

The diagram of the Gong house contains two significant areas, the central part depicts the structure while the surrounding border is all about orientation. The border specifies twenty-four orientations with twenty-four Chinese characters, each of which means a specific direction. The structure section shows the ideal placement of each element in the house. It depicts a centralised building in a form of projected plan with four wings around a courtyard. This is surrounded by a series of peripheral outbuildings

²⁴ Gong Xing Zhai (宮姓宅).

presented more diagrammatically: gate, kitchen, toilet, storeroom, stable, sheep pen, chicken coop, etc. The significance of their positions will be explained in due course. The ordered arrangement reveals the notion of centrality which was an essential assumption in the Chinese world. Called the Middle Kingdom, China was considered the most significant country situated at the centre of the world and served by other lesser countries²⁵. Because the house is a microcosm of the universe²⁶, the constructive principle of the Gong House is also powerfully concentric.

4.4 The Magic Square

To identify the essence of the Chinese world, a diagram combining centrality, orientation and number was invented, known as the Magic Square. According to *I Ching* (Book of Changes), there are two types of the Magic Square, called Luo Shu and He Tu, which are two simple patterns made by different numbers of black and white dots from one to nine placed in a square area individually (Guo nad Huang, 1996; Hwangbo, 1999)²⁷. Figure 4-5 derived from *I Ching* (Book of Changes) shows the patterns of Luo Shu and He Tu (Schinz, 1996)²⁸. This diagram is generally found in many modern editions of *I Ching* (Book of Changes) (Needham, 1959)²⁹. He Tu, literally meaning River Chart, and Luo Shu, literally meaning Luo Writing, are used for presenting the Chinese cosmology and indicate that the numbers from one to nine are related to one or other of the Five Elements. Luo Shu (Luo Writing) and He Tu (River Chart) are the first invention of the relations between numbers and orientation of the physical world invented in the Neolithic Period in China.

²⁵ Camman, Schuyler (1961) The Magic Square of Three in Old Chinese Philosophy and Religion. *History of Religions*, Vol. 1, pp. 37 – 80.

²⁶ Rapoport, Amos (1969) *House Form and Culture*. New Jersey, Prentice-Hall, pp. 52.

²⁷ Luo Shu (洛書); He Tu (河圖).

Guo, Jian-xun and Huang, Jun-lang (trans.) (1996) *Yi Jing Du Ben* (The Study of I Ching). Taipei, San-ming, pp. 1 – 10.

Hwangbo, Bong (1999) *op. cit.*, pp. 118 – 123.

²⁸ Schinz, Alfred (1996) *The Magic Square: Cities in Ancient China*. London, Edition Axel Menges, pp. 70.

²⁹ Needham, Joseph (1959) *op. cit.*, pp. 57.

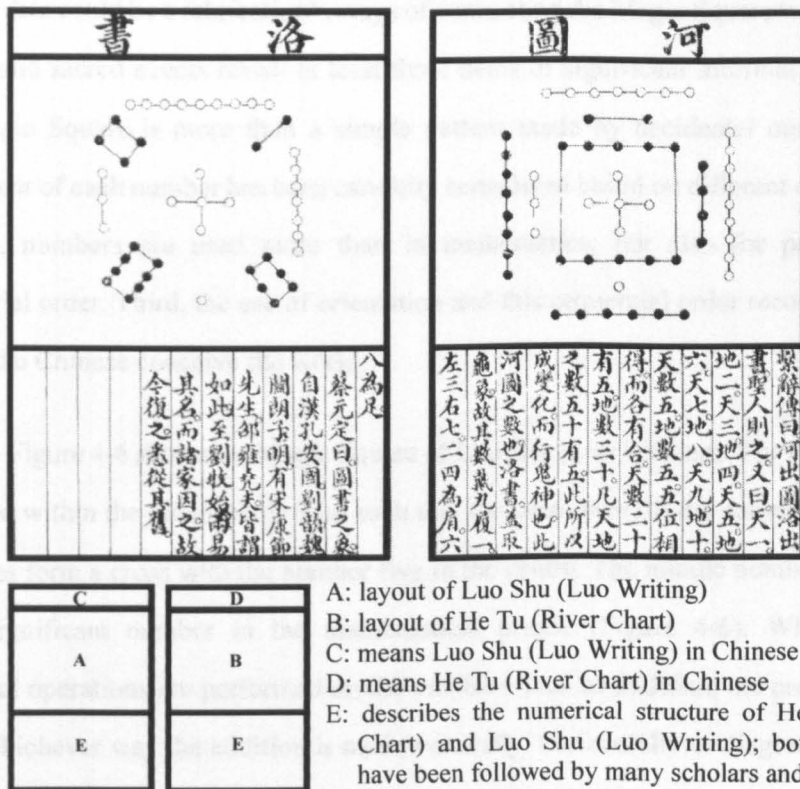


Figure 4- 5 The Magic Square.

(Source: Schinz, A., 1996)

4.4.1 The Magic Square of Luo Shu (Luo Writing)

The origin of Luo Shu, according to legend, was as a pattern revealed on the shell of a sacred turtle from the Luo River when Great Yu, the first engineer-emperor of the Hsia Dynasty in the twenty-third century B.C., was striving with flood control works³⁰. The turtle was a methodological animal reflecting the relation of heaven, humans and earth as described in section 2.5.3. Similarly, He Tu (River Chart) was as another magic pattern discovered by Fu Xi from the back of a celestial animal, dragon-horse, which came out of the Yellow River³¹. Although some Sinologists point out that this legend

³⁰ Guo, Jian-xun and Huang, Jun-lang (trans.) (1996) *op. cit.*, pp. 25 – 26.

³¹ Fu Xi is the first legendary emperor in the Neolithic Period of China who implies the establishment of government, law and order. He is also said to invent the calendar to announce the seasons for the proper

and the date could be a fabrication³², ways of connecting the Magic Square with celestial beings and sacred events reveal at least three items of significant information. Firstly, the Magic Square is more than a simple pattern made by accidental numbers. The placement of each number has been carefully considered based on different orientations. Second, numbers are used more than in mathematics, but also for presenting a sequential order. Third, the use of orientation and this sequential order records ways in which the Chinese conceive the world.

Figure 4-6 shows the Magic Square of Luo Shu (Luo Writing). The numbers are arranged within the ninefold division such that the even ones fill the corners, while the odd ones form a cross with the number five in the centre. The middle number, 5, is the most significant number in the mathematical puzzle (Figure 4-6). When simple logistical operations are performed on the numbers such as addition, the product is the same whichever way the addition is made vertically, horizontally or diagonally. If 5 is multiplied by 3 (the base number for the row or column), the result, 15, is the same as the sum of all the rows, columns or two main diagonals. If 5 is multiplied by 9 (the number of the ninefold), the result, 45, is the same as the sum from 1 to 9 (Needhams, 1959)³³.

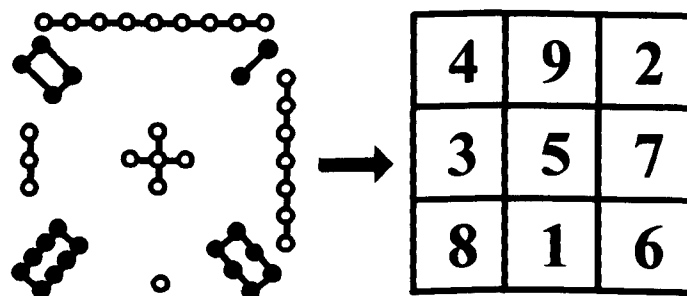


Figure 4- 6 Numbers in the Magic Square of Luo Shu (Luo Writing).

application of agricultural technology, developed the basis of writing and musical instruments, as well as discovered Ba Kuas.

Camman, Schuyler (1961) 'The Magic Square of Three in Old Chinese Philosophy and Religion', *History of Religions*, Vol. 1, pp. 39 – 42.

³³ Needham, Joseph (1959) *op. cit.*, pp. 55 – 62.

This order of the Magic Square of Luo Shu (Luo Writing) emphasises the relation between number and orientation. Four cardinal points and the centre are represented by the number of 1 for north, 3 for east, 9 for south, 7 for west and 5 for centre. Each number has its specific position which can be further related to the Five Elements. Thus 1 stands for Water, 3 for Wood, 9 for Fire, 7 for Metal and 5 for Earth (see Table 4-1). The other four sub-cardinal points are represented by 8 for northeast, 4 for southeast, 2 for southwest and 6 for northwest. According to the classic texts, the representation of four sub-cardinal points in the Five Elements is that 8 stands for Earth, 4 stands for Wood, 2 stands for Earth and 6 stands for Water. However, the reason for this is not clear.

4.4.2 The Magic Square of He Tu (River Chart)

Figure 4-7 shows the Magic Square of He Tu (River Chart). The numbers are placed within a cross division in a square area which shows a different placement from Luo Shu. According to *I Ching* (Book of Changes), the white dots which presents odd number is called heaven number, while the black dots which presents even number is called earth number. Thus, the Chinese drew the connection between numbers and the universe (heaven/earth).

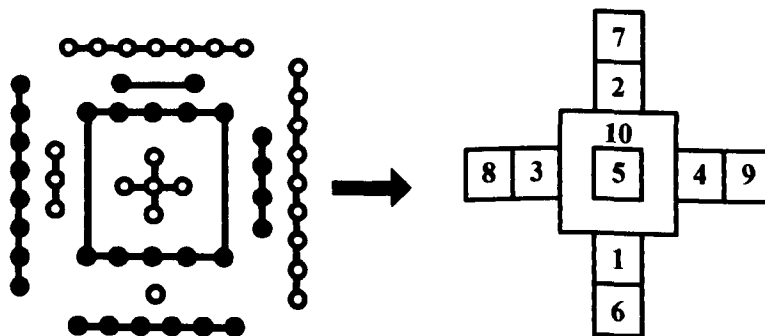


Figure 4- 7 Numbers in the Magic Square of He Tu (River Chart).

A passage derived from *I Ching* (Book of Changes) describes the order of numbers from one to nine and its relation with heaven or earth. It said that ‘heaven is one, earth is two, heaven three, earth four, heaven five, earth six, heaven seven, earth eight, heaven nine, and earth ten.’ The sum of the heaven numbers is twenty-five and earth numbers thirty. Furthermore, the sum of the heaven numbers and earth numbers is fifty-five. Twenty-five, thirty and fifty-five are numbers able to be divided by five. The five seems to be a significant one in numbers. Therefore, the number five is placed in the centre of the square area based on the centre being significant in space.

4.4.3 Application of the Magic Square

As the pattern sets out an arrangement of numbers in space, the Magic Square was widely employed in architectural design and city planning in China over millennia. Taking as an example the city planning in the Neolithic Period in China, Great Yu, the first emperor, divided the nation into Nine Provinces. The central province was then designated capital for royal residents. The two types of Magic Square were the first known invention defining the relationship between centrality and spatial arrangement in the physical world. The Magic Square of Luo Shu (Luo Writing) can be applied fairly directly to the diagram of the Gong house we have been considering (Figure 4-8), for the plan falls into the ninefold division quite easily, with the main construction in the central area and minor rooms in the other eight grid-squares.

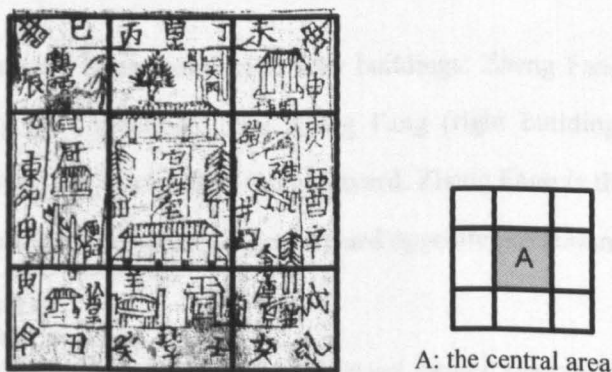


Figure 4- 8 The layout of the Gong House (according to Luo Shu)

The Five Surnames House arrangement seems to have been designed to present centrality, the Five Elements and the Magic Square in the house model. The Gong House imposes this network in the physical world.

4.5 The Chinese Courtyard House

The main construction of the Gong House consists of four buildings around a central courtyard in a standard traditional Chinese arrangement, named Si He Yuan³⁴, as shown in Figure 4-9. The plan is a square fitting into a grid system which forms the basic unit of city planning in China (Lee, 1986; Xu, 1998)³⁵. In Feng Shui, the square (and even more the Magic Square) is considered the ideal configuration for house layout.

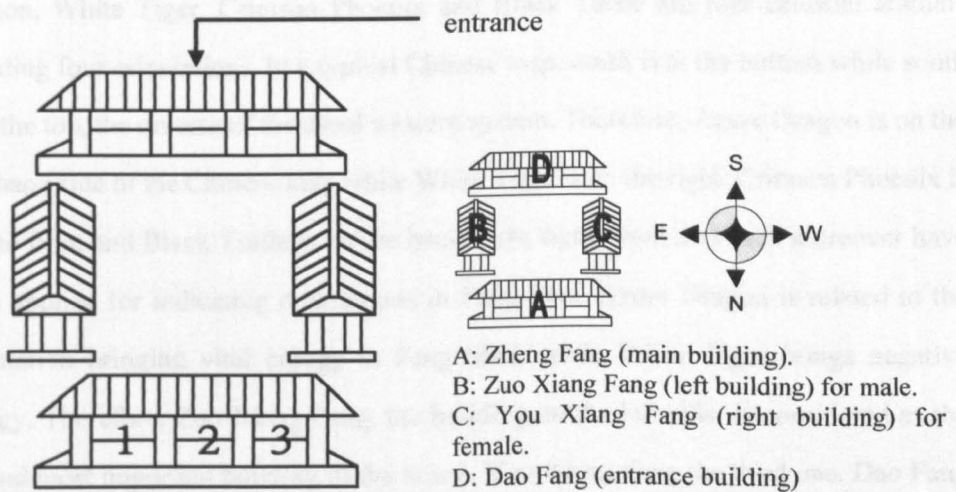


Figure 4- 9 Main construction of the Gong House.

The courtyard house consists of four buildings: Zheng Fang (main building), Zuo Xiang Fang (left building), You Xiang Fang (right building), and Dao Fang (entrance building). All four open to the courtyard. Zheng Fang is the highest building of the house situated at the back of the courtyard opposite the entrance. The south is at

³⁴ Si He Yuan (四合院).

³⁵ Lee, Sang-hac (1986) *op. cit.*, pp. 297 – 302.

Xu, P. (1998) 'Feng-shui Models Structured Traditional Beijing Courtyard Houses', *Journal of Architectural and Planning Research*, Vol. 15, No. 4, pp. 271 – 282.

the top as opposed to north in the western system. The house is entered from the top and seen from the point of view of the householder looking back along the door on the axis.

In general, Zheng Fang is divided into three, five, seven or nine bays (shown as three bays in Figure 4-9) in order to maintain the principal room on the central axis. Three is an odd number relating to heaven and Yang. Zheng Fang contains the most important rooms such as living rooms and master bedroom for the householder and all major activities. Zuo Xiang Fang and You Xiang Fang are two lower buildings facing each other which symbolise protection for Zheng Fang. These contain lesser rooms such as bedrooms and study rooms for children or relatives. Zuo Xiang Fang, the building on the left-hand side of the main structure, has the position of Azure Dragon in Feng Shui while You Xiang Fang has the position White Tiger. As mentioned in Chapter 3, Azure Dragon, White Tiger, Crimson Phoenix and Black Turtle are four celestial animals guarding four orientations. In a typical Chinese map, north is at the bottom while south is at the top, the reverse of the usual western system. Therefore, Azure Dragon is on the left-hand side of the Chinese map while White Tiger is on the right, Crimson Phoenix is on the front and Black Turtle is on the back. Left, right, front and back moreover have been applied for indicating orientations in Feng Shui. Azure Dragon is related to the orientation bringing vital energy in Feng Shui, while White Tiger brings negative energy. Therefore, Zuo Xiang Fang, the building on the left side, is considered as the second most important building of the house, You Xiang Fang the third one. Dao Fang is the building at the front of the courtyard considered as the least significant. Rooms for servants or guests are arranged inside this, alongside the main entrance.

The spatial arrangement of the Chinese courtyard house reflects hierarchical order and also implies the traditional paternalist Chinese social order, males being considered superior to females, as shown in Figure 4-10. Each room has a specific location following the order of members in the family. The master bedroom for the householder occupies Zheng Fang, the principal building, while rooms for sons are placed in Zuo Xiang Fang, the next in rank, and daughters are located in You Xiang Fang, the third.

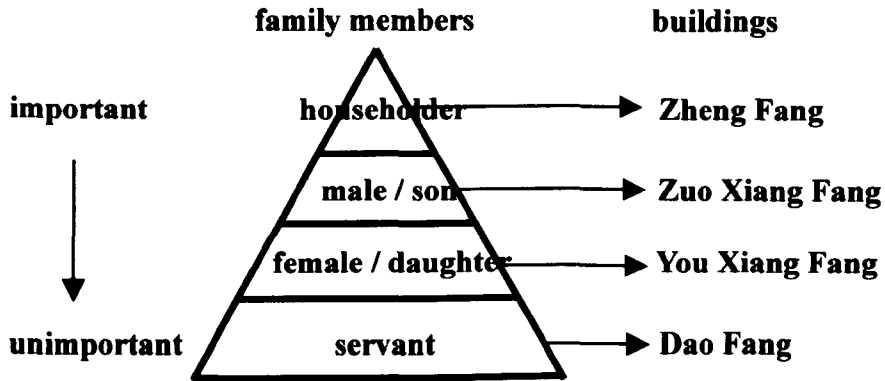


Figure 4- 10 The order of a family in buildings.

4.6 Twenty-four Orientations

The outer ring of the diagram shown in Figure 4-3 involves twenty-four characters which specify twenty-four points of the compass. The twenty-four orientations (also called twenty-four mountains) is one way to specify orientations for domestic architecture according to the Feng Shui compass (Needham, 1962)³⁶. Other practices are the four orientations (four cardinal points) and eight orientations (four cardinal points and four sub-cardinal points).

The twenty-four orientations system was introduced by a Feng Shui master named Chiu, Yen-han³⁷ in around 713 A.D. – 741 A.D. (Chen and Kong, 1994)³⁸. He divided the 360-degree field into twenty-four sections of fifteen degrees each. In addition, he selected twenty-four characters to designate these orientations which derive from various categories in the traditional Chinese number system. Four characters derive from the Eight Kuas³⁹, eight characters from the Heavenly Stems⁴⁰, and twelve

³⁶ Needham, Joseph (1962) *Science and civilisation in China. - Vol.4: Physics and physical technology. - Part 1: Physics*. Cambridge, Cambridge University Press, pp.v239 – 312.

³⁷ Chiu, Yen-han (邱延翰).

³⁸ Chen, Jian-jun and Kong, Shang-pu (1994) *op. cit.*, pp. 87.

³⁹ The Eight Kuas is described in detailed in Chapter 5.

⁴⁰ Heavenly Stems, called Tian Gan (天干) in Chinese, contains ten words, which are Jia, Yi Bing, Ding, Wu, Ji, Geng, Xin, Ren and Gui. Heavenly Stems and Earthly Branches make up a number system for counting the Chinese 60 year cycle.

characters from the Earthly Branches⁴¹ (Crump, 1990; Lee, 1986)⁴². Figure 4-11 describes the relationship between each character and its respective orientation. For example, position ‘g’ means east and is placed on the left-hand side; position ‘s’ stands for west and is on the right; position ‘m’ represents south and is at the top; position ‘a’ means north and is at the bottom.



Figure 4- 11 Twenty-four orientations.

The characters used in the Twenty-four orientations are:

1. Four characters from the Eight Kuas: Chien (position v), Kun (p), Ken (d) and Sun (j). These characters are placed in the four sub-cardinal points.
2. Eight characters from Heavenly Stems: Chia (position f), Yi (h), Ping (l), Ting (n), Keng (r), Hsin (t), Jen (x) and Kuei (b). Every two words are placed next to the four cardinal points.
3. Twelve characters from Earthly Branches: Tzu (position a), Chou (c), Yin (e), Mao (g), Chen (i), Szu (k), Wu (m), Wei (o), Shen (q), Yu (s), Hsu (u) and Hai (w). Four of them are placed in the four cardinal points, that is Tzu (a) for north, Mao (g) for east, Wu (m) for south and Yu (s) for west. The other eight characters are placed next to the four sub-cardinal points.

⁴¹ Earthly Branches, called Di Zhi (地支) in Chinese, contains twelve words, which are Zi, Chou, Yin, Mao, Xhen, Si, Wu, Wei, Shen, You, Xu and Hai.

⁴² Crump, Thomas (1990) *The Anthropology of Numbers*. Cambridge, Cambridge University Press, pp. 39 – 91.

Lee, Sang-hae (1986) *op. cit.*, pp. 143 – 146.

4.7 C These twelve characters are related to the Chinese twelve divisions of time, derived from the movements of the heavens.

Considering the twenty-four orientations in the Gong House, the order in space for each element in the house has been revealed. As shown in Figure 4-12, it is a four square structure with a courtyard in the centre. The main entrance or the gate is placed in the direction of 'n' opposite to the principle building for the householder in the north. Considering the hierarchical order in a family as shown in Figure 4-10, householder and males are considered superior to other members, who are occupied in buildings located in the north and the east. The northeast thus is significance. This may explain why the shrine is placed at the northeast. The chicken coop is in 'j' and the pigsty in 'x'. Both placements work with the Table 5-2 according to the Eight Kuas. However, this table does not apply to the horse stable in 'p' and the sheep pen in 'b'. The well is in 't'. This arrangement works with the Table 4-1 according to the Five Elements. Gardens are in 'm', 'l' and 'k'. The kitchen is in 'g' (the east), the side entrance in 'f', the storeroom between 't' and 'u', and the tools for husking rice in 's' and 'r'. Reasons for these arrangements are not clear.

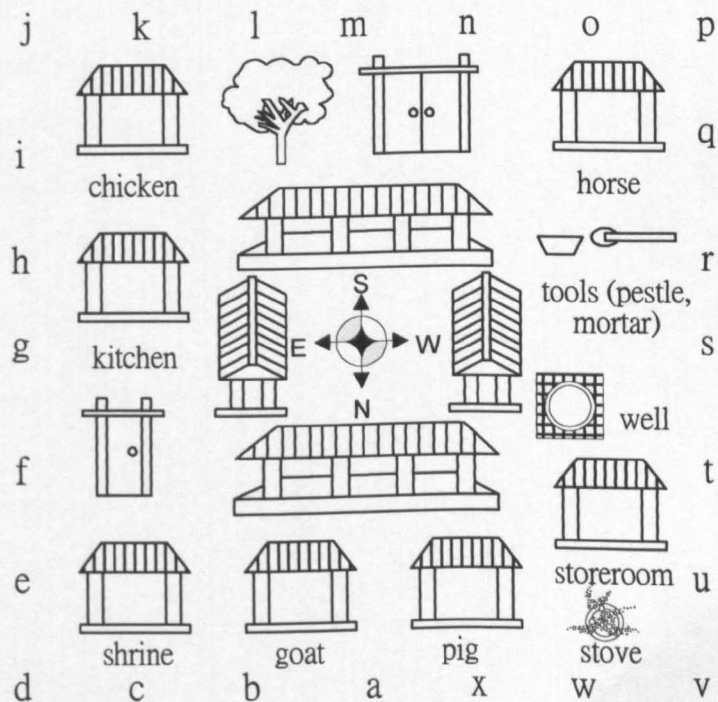


Figure 4- 12 Illustration of the placement for the Gong House.

4.7 Conclusion

Feng Shui aims to conceive an ideal status so that people and houses could exist in a dynamic state of balance and harmony. Domestic architectural design by the Five Surnames house arrangement reflects the ideas of ancient Chinese cosmology and their way of classifying the world. Although this practice involves divination for auspicious and inauspicious concerns, the valuable advantage of this model lies in the way it connects abstract concepts to the physical world. By classifying surnames, each group of surnames could be correlated to the Five Elements according to their attribute of notes. The house model involves the notion of productive cycle and destructive cycle for conceiving the auspicious or inauspicious concerns between houses and residents. Centrality is a significant notion which is ideally expressed in the Magic Square. The order in space followed the centrality, placing the most significant matter in the centre. The use of twenty-four orientations in the house model reveals a connection between the viewpoint of the house and Chinese cosmology.

Chapter 5

The Relation of Orientation and Time in Domestic Architecture: The Eight Houses Arrangement

5.1 Introduction

Orientation in space and time used to be the principal themes for the arrangement of interior space and the placing of furniture in Chinese traditional architecture. Domestic architecture was a microcosm for the ancients, revealing not only peoples' ideas of the world, but also social behaviour and cultural influences. This chapter reviews one significant Feng Shui model – the Eight Houses Arrangement for determining spatial order in domestic architecture. This model is based on a person's birth year to decide on his/her favourable or unfavourable orientation. This was regarded as a key requirement in domestic architecture.

Many Feng Shui specialists have applied this model in designing domestic architecture. Investigation of original references and historical literature reveals that it provides a unique way to build up the relationship between people, time and domestic buildings. This literature includes *Huang Di Zhai Jing* (The Yellow Emperor's Classic of Dwelling), *Ba Zhai Jing* (Eight Houses Arrangement), *Ba Shan Er Shi Si Long* (Eight Mountains and Twenty-four Dragons), *Yang Zhai Shi Shu* (Ten Books of Houses), *Jin Guang Dou Lin Jing* (Book of the Big Dipper Casting its Golden Light), *Yang Zhai San Yao* (Three Principles for Houses) and *Ba Zhai Ming Jing* (Bright

Mirror of Eight Houses Arrangement). But although the old books show numerous rules or regulations for spatial arrangement and furniture placement, they lack detailed analysis of the spirit behind this model. The objective of this chapter is to distil fundamental concepts and principles of this model.

The Eight Houses Arrangement originates from the Tang Dynasty (618 A.D. – 907 A.D.) in China and was in vogue during the Qing Dynasty (1644 A.D. – 1912 A.D.). This Feng Shui model was reputedly designed by Ruoguan Dao-ren¹, a mysterious Taoist priest, and later edited by Gu, Wu Lu² in 1790. Figure 5-1 shows eight diagrams to identify the ideal spatial arrangement and furniture placement, derived from *Ba Zhai Ming Jing* (Bright Mirror of Eight Houses Arrangement), which is the original reference for the Eight Houses Arrangement (Ruoguan Dao-ren, 1790)³.

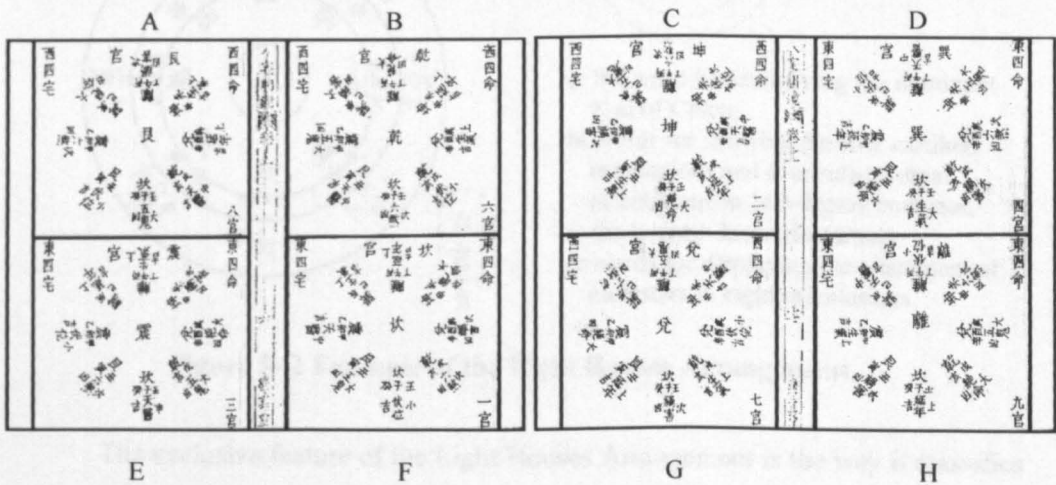


Figure 5- 1 The eight diagrams of the Eight Houses Arrangements.

(Source: Ruoguan Dao-ren, 1790)

Each diagram is arranged following four levels in structure. Take the diagram in position B as an example, as shown in Figure 5-2. The four levels are marked as four concentric circles. The ring a placed in the centre is a word that identifies the dominant Kua, which is Chien in this diagram. The ring b contains words for showing

¹ Ruoguan Dao-ren (箬冠道人). Dao-ren means a Taoist priest.

² Gu, Wu Lu (顧吾廬).

³ Ruoguan (1790) *Ba Zhai Ming Jing* (Bright Mirror of the Eight Houses Arrangement). Taipei, Wu-ling, reprinted in 1996, pp. 53 – 56.

the four cardinal orientations and four sub-cardinal orientations in a 360-degree compass. Each of the eight orientations is displayed with one Kua from the Eight Kuas. The ring c is another type of orientation system, demonstrating the twenty-four orientations. The ring d contains words displaying the placement of nine stars in eight orientations. There are two stars placed in the same orientation. Thus, the nine stars are fitted in eight orientations. The dotted square in position e contains three words, which means the West-four house. Two words in position f mean the Chien chamber. Three words in position g mean the West-four person. Two words in position h mean the chamber six.

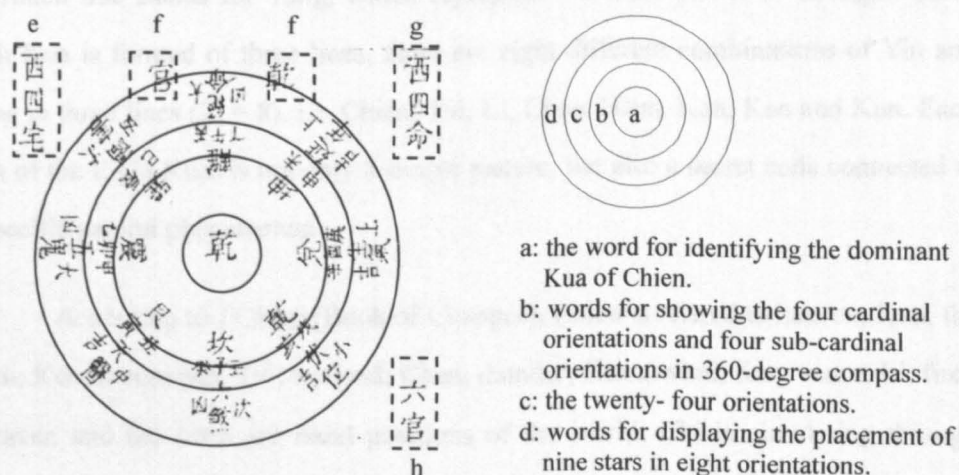


Figure 5- 2 Example of the Eight Houses Arrangement.

The exclusive feature of the Eight Houses Arrangement is the way it classifies people and domestic architecture. The idea of the Eight Kuas provides a link between the classification of people and that of domestic architecture. Both people and domestic architecture are divided into eight groups and so fitted into one of the Eight Kuas. There are eight diagrams which display eight kinds of placements of nine stars in four cardinal orientations and four sub-cardinal orientations. Each star has its specific auspicious or inauspicious concern. By selecting a suitable orientation for each room and piece of furniture, the idea is that residents will benefit. This is what Feng Shui attempts to achieve.

5.2 The Eight Kuas

5.2.1 The Origin of the Eight Kuas

The Eight Kuas, called Ba Kua⁴ in Chinese, are symbols composed of Yin Yang elements and representative of the Chinese worldview. Each symbol or Kua is made up by three lines, each of which could be either a broken line or an unbroken line. The broken line stands for Yin, which represents the female power or gentleness. The unbroken line stands for Yang, which represents the male power or strength. Since each Kua is formed of three lines, there are eight different combinations of Yin and Yang in three lines ($2^3 = 8$), i.e. Chien, Tui, Li, Chen, Hsun, Kan, Ken and Kun. Each Kua of the Eight Kuas is not only a simple pattern, but also a secret code connected to a specific natural phenomenon.

According to *I Ching* (Book of Changes), Chien is related to heaven; Kun, the earth; Ken, mountains; Tui, wetland; Chen, thunder; Hsun, wind; Kan, water; Li, fire⁵. 'Heaven and the earth are fixed positions of the world; Chi is circulating through mountains and wetland; thunder and wind interact, for water and fire are against each other (Xu, 1993)⁶'. A further claim is that 'thunder is a kind of catalyst to stimulate all things in the world. Wind's function is to spread things around the world. Rain is meant to water the world. The sun (fire) aims to dry things. Ken Kua (mountains) implies numerous beings living in mountains. Tui Kua (wetland) implies wetland is pleasant for the beings. Chien Kua (heaven) implies that heaven governs the world. Kun Kua (the earth) implies that the earth is where the beings dwell (Xu, 1993)⁷'. *I Ching* (Book of Changes) addresses each status of the eight types of natural

⁴ Ba Kua (八卦). The Eight Kuas is also translated as Pa Kua, or Ba Gua.

⁵ Chien (乾); Kun (坤); Ken (艮); Tui (兌); Chen (震); Hsun (巽); Kan (坎); Li (離).

⁶ 天地定位, 山澤通氣, 雷風相薄, 水火不相射.

Xu, Zi-hong (annot.) (1993) *op. cit.*, pp. 588 – 589.

⁷ 雷以動之, 風以散之, 雨以潤之, 日以烜之, 艮以止之, 兌以說之, 乾以君之, 坤以藏之.

Xu, Zi-hong (annot.) (1993) *op. cit.*, pp. 588 – 589.

phenomenon to present how the world is working. The Eight Kuas thus is a sacred symbol to present ancient Chinese cosmology.

Many phenomena can be correlated to one of the Eight Kuas (Guo, 1996)⁸. This is a primitive way used by the ancient Chinese to conceive the world. Table 5-1 shows the connection between the Eight Kuas and objects or subjects in the world according to *I Ching* (Book of Changes) (Wang, 1995)⁹. Chien Kua corresponds to orientation northwest, Metal of the Five Elements, the head of a human body, the father in a family, a horse in animals, the heaven in natural phenomena and with vigorous condition. The other seven Kuas with its corresponding objects or subject are shown in Table 5-1 accordingly.

Table 5- 1 The network of the Eight Kuas with other species.

(Source: Wang, F., 1995)

The Eight Kuas	Chien	Kun	Chen	Hsun	Kan	Li	Ken	Tui
Orientations	Northwest	Southwest	East	Southeast	North	South	Northeast	West
The Five Elements	Metal	Earth	Wood	Wood	Water	Fire	Earth	Metal
Human Body	Head	Belly	Feet	Hip	Ears	Eyes	Hands	Mouth
Family Members	Father	Mother	Eldest Son	Eldest Daughter	Second Son	Second Daughter	Youngest Son	Youngest Daughter
Animals	Horse	Buffalo	Dragon	Cock	Pig	Pheasant	Dog	Goat
Natural Phenomena	Heaven	Earth	Thunder	Wind	Water	Fire	Mountains	Wetland
Condition	Vigorous	Gentle	Movement	Enter	Falling	Graceful	Stop	Happiness

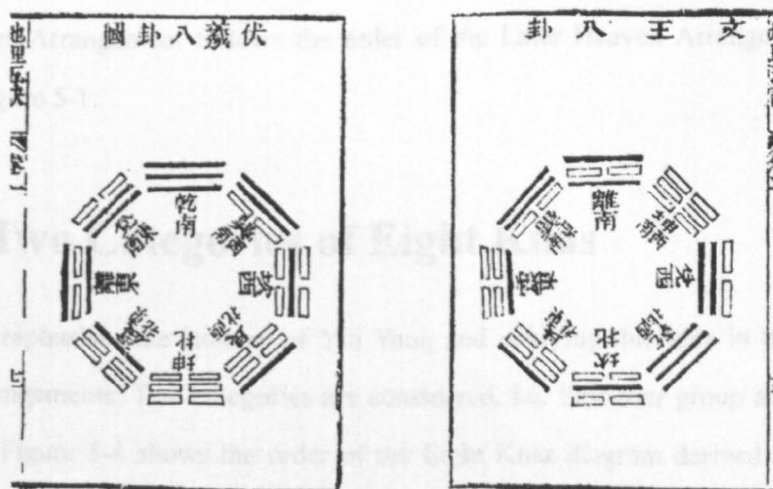
5.2.2 The Eight Kuas Diagram

The Eight Kuas diagram is a symbol comprised by the Eight Kuas for displaying eight orientations. Two types of Eight Kuas diagrams, the Former Heaven Arrangement and the Later Heaven Arrangement, are shown in *I Ching* (Book of Changes). They were

⁸ Guo, Jian-xun and Huang, Jun-lang (trans.) (1996) *Yi Jing Du Ben* (The Study of I Ching). Taipei, San-ming, pp. 569 – 584.

⁹ Wang, Fukun (1995) 'The Traditional Philosophical Framework of Fengshui Theory'. In: Wang, Q. (ed.) *Feng Shui Li Lun Yan Jiu Yi* (The Research of Feng Shui Theory Vol. 1). Taipei, Di-jing, pp. 12.

first mentioned in *Shuo Kua* (Interpreting the Kuas) in the Warring States Period (403 B.C. – 221 B.C.) (Guo and Huang, 1996)¹⁰. The Former Heaven Arrangement was believed designed by Fu Xi in legend. The Later Heaven Arrangement was designed by King Wen, the founder of the Zhou Dynasty (1111 B.C. – 221 B.C.). There are eight types of Kuas placed on the four cardinal orientations and four sub-cardinal orientations. Each Kua thus covers forty-five degrees of the 360-degree compass, as shown in Figure 5-3 (Zhao, the Qing Dynasty)¹¹.



(A) The Former Heaven Arrangement.

(B) The Later Heaven Arrangement.

Figure 5- 3 The orientation order of Eight Kuas.

(Source: Zhao, J., the Qing Dynasty)

The south is at the top as opposed to north in the western system. In the Former Heaven Arrangement (position A in Figure 5-3), the Kua of Chien is orientated in south; Tui, southeast; Li, east; Chen, northeast; Kun, north; Ken, northwest; Kan, west; Hsun, southwest. In the Later Heaven Arrangement (position B),

¹⁰ *Shuo Kua* (Interpreting the Kuas) was written in the Warring States Period (403 B.C. – 221 B.C.) but was missing when the Chinese Emperor, Qin Shihuang, burned most of the old literature in the Qin Dynasty (221 B.C. – 206 B.C.). This book was found hidden in a wall in about 73 B.C. – 49 B.C. in the Han Dynasty.

Guo, Jian-xun and Huang, Jun-lang (trans.) (1996) *Yi Jing Du Ben* (The Study of I Ching). Taipei, San-ming, pp. 569 – 584.

¹¹ Zhao, Jiu-feng (the Qing Dynasty) *Di Li Wu Jue* (Five Methods of Feng Shui). Taipei, Wu-ling, reprinted in 1998.

the Kua of Chien is oriented in northwest; Kan, north; Ken, northeast; Chen, east; Sun, southeast; Li, south; Kun, southwest; and Tui, west. Each Kua therefore becomes a special term for identifying orientation.

The Chinese considered that the Former Heaven Arrangement explains the fundamental concepts of the Eight Kuas and the world creation according to *I Ching* (Book of Changes). In contrast, the Later Heaven Arrangement is for practical used (Nanhuai, 2002)¹². This may explain why the placement of the Eight Kuas for the Eight Houses Arrangement follows the order of the Later Heaven Arrangement, as shown in Figure 5-1.

5.2.3 Two Categories of Eight Kuas

Feng Shui emphasises the balance of Yin Yang and applying this idea in the Eight Houses Arrangements. Two categories are considered, i.e. East-four group and West-four group. Figure 5-4 shows the order of the Eight Kuas diagram derived from *Ba Zhai Ming Jing* (Bright Mirror of the Eight Houses Arrangement) (Ruoguan Dao-ren, 1790)¹³. This diagram contains two sections. The first section placed at the bottom is a table with four lines to present the progress of the Eight Kuas from the Supreme Pole (Tai Ji).

¹² Nanhuai, Jin (2002) *Dao Jia, Mi Zong Yu Dong Fan Shen Mi Xue* (Taoism, Buddhist and Eastern Mystagogy). [online]. Chinese Buddhist Canon Series. Available from: <http://www.buddhist-canon.com/PUBLIC/PUBNOR/YUANNAN/djnz/index.html> [Accessed 10th May 2002].

¹³ Ruoguan Dao-ren (1790) *op. cit.*, pp. 23.

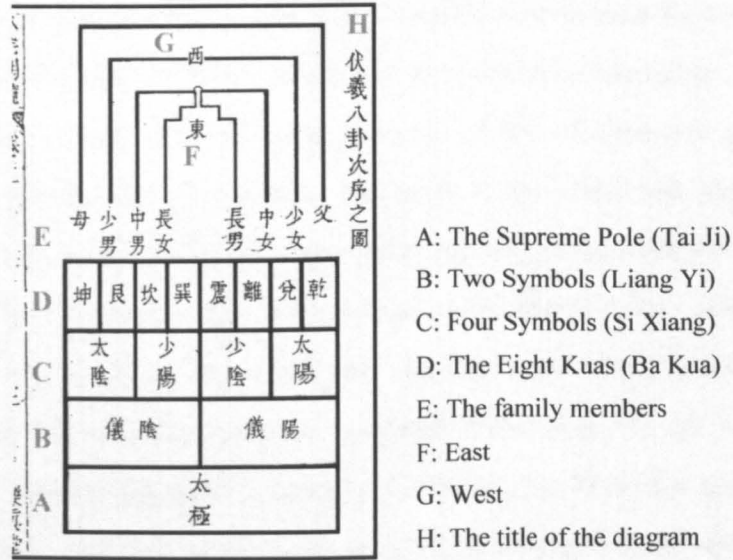


Figure 5- 4 The order of Eight Kuas diagram.

(Source: Ruoguan Dao-ren, 1790)









The position A indicates the Supreme Pole (Tai Ji). The position B contains two columns, called the Two Symbols (Liang Yi¹⁴), named as Yin and Yang. The Two Symbols is derived from the Supreme Pole. The Two Symbols later on divide into four sections, called Four Symbols (Si Xiang), they are Greater Yang (Tai Yang), Greater Yin (Tai Yin), Lesser Yang (Shao Yang) and Lesser Yin (Shao Yin), as shown in position C¹⁵. Position D contains eight columns, they are the Eight Kuas. The other section placed on top of the table involves in two parts. The position E shows one name within eight members of a family. These eight members are father, mother, the eldest son, the eldest daughter, the second son, the second daughter, the youngest son, and the youngest daughter. Each member corresponds to one of the Eight Kuas. According to the order from the right-hand side to the left-hand side, the father corresponds to Chien Kua, the youngest daughter to Tui Kua, the second daughter to Li Kua, the eldest son to Chen Kua, the eldest daughter to Hsun Kua, the second son to Kan Kua, the youngest son to Ken Kua, and the mother to Kun Kua.

¹⁴ Liang Yi (兩儀).

¹⁵ Si Xiang (四象); Tai Yang (太陽); Tai Yin (太陰); Shao Yang (少陽); Shao Yin (少陰).

Several lines connect to these family members aim to show the corresponding relationship in a family. Members of a family are sorted into four: group 1, the father and the mother; group 2, the youngest daughter and the youngest son; group 3, the second son and the second daughter; and group 4, the eldest son and the eldest daughter. Group 1 and 2 are sorted into another category system called the West-four group (position G). Group 3 and 4 are sorted in to the category system called the East-four group (position F), as shown in Table 5-2. Hence, the way to decide the West-four group is that these four Kuas are developed from Lesser Yin and Lesser Yang which have opposite structures in terms of Yin Yang. The West-four group contains Kun, Ken, Tui and Chien. Another four Kuas are developed from Greater Yang and Greater Yin, and also have opposed structures of Yin Yang. The classification of Eight Kuas in these categories reveals the idea that Yin Yang should always retain a harmonious balance.

Table 5- 2 The operation of the West-four group and the East-four group.

Yin Yang	Four Symbols	Eight Kuas		Two Categories
Yin -- --	Greater Yin -- --	-- --	Kun 	The West-four group
		-- --	Ken 	
	Lesser Yang -- --	-- --	Kan 	The East-four group
		-- --	Hsun 	
Yang — —	Lesser Yin — —	-- --	Chen 	The East-four group
		— —	Li 	
	Greater Yang — —	— —	Tui 	The West-four group
		— —	Chien 	

5.3 The Classification of Humans and Domestic Architecture

5.3.1 Eight Kuas of Person

According to *Ba Zhai Ming Jing* (Bright Mirror of Eight Houses Arrangement), the classification of humans into eight groups is based on the birth year, and each year belongs to one of the Eight Kuas. The Chinese lunar calendar presents years in terms of Heavenly Stems and Earthly Branches. Heavenly Stems, called Tian Gan in Chinese, is a set of ten words: Jia, Yi, Bing, Ding, Wu, Ji, Geng, Xin, Ren and Gui. Earthly Branches, called Di Zhi, is a set of twelve words: Zi, Chou, Yin, Mao, Xhen, Si, Wu, Wei, Sheng, You, Xu and Hai. Heavenly Stems and Earthly Branches combine in a number system for counting the Chinese sixty-year cycle (Crump, 1990)¹⁶.

According to his or her birth year within this sixty-year cycle, each person can establish his or her Eight Kuas of person. Eight Kuas for person is pronounced as Ming Kua¹⁷ in Chinese. Gender difference further influences the classification of Eight Kuas for persons. Thus a male and a female born in the same year have different Eight Kuas of person. Table 5-3 and Table 5-4 show the classification of the Chinese sixty-year cycle in terms of Eight Kuas (Feiyun Shanjen, 1994)¹⁸. Each person can find out his or her Eight Kuas of person: for example, a male born in 1917 has an Eight Kuas of person for Kun. However, a female born in the same year has an Eight Kuas of person for Hsun.

¹⁶ Crump, Thomas (1990) *The Anthropology of Numbers*. Cambridge, Cambridge University Press, pp. 39 – 91.

¹⁷ Ming Kua (命卦).

¹⁸ Feiyun Shanjen (1994) *Xuan Ji Li Zhai Kan Hao Feng Shui* (Ways to Select Good Feng Shui Houses). Taipei, Shih-pao Wen-hua., pp. 89.

Table 5- 3 The Eight Kuas of Peron for the West-four group.

(Source: Feiyun Shanjen, 1994)

Eight Kuas	Year of Birth (the Chinese Sixty-year Cycle)	
	Male	Female
Ken	Ji Si (e.g. 1929); Wu Yin (e.g. 1938); Ding Hai (e.g. 1947); Bing Shen (e.g. 1956); Yi Si (e.g. 1965); Jia Yin (e.g. 1974); Gui Hai (e.g. 1983)	Ding Mao (e.g. 1927); Geng Wu (e.g. 1930); Bing Zi (e.g. 1936); Ji Mao (e.g. 1939); Yi You (e.g. 1945); Wu Zi (e.g. 1948); Jia Wu (e.g. 1954); Ding You (e.g. 1957); Gui Mao (e.g. 1963); Bing Wu (e.g. 1966); Ren Zi (e.g. 1972); Yi Mao (e.g. 1975) Xin You (e.g. 1981)
Tui	Geng Wu (e.g. 1930); Ji Mao (e.g. 1939); Wu Zi (e.g. 1948); Ding You (e.g. 1957); Bing Wu (e.g. 1966); Yi Mao (e.g. 1975)	Ji Si (e.g. 1929); Wu Yin (e.g. 1938); Ding Hai (e.g. 1947); Bing Shen (e.g. 1956); Yi Si (e.g. 1965); Jia Yin (e.g. 1974); Gui Hai (e.g. 1983)
Chien	Xin Wei (e.g. 1931); Geng Xhen (e.g. 1940); Ji Chou (e.g. 1949); Wu Xu (e.g. 1958); Ding Wei (e.g. 1967); Bing Xhen (e.g. 1976)	Wu Xhen (e.g. 1928); Ding Chou (e.g. 1937); Bing Xu (e.g. 1946); Yi Wei (e.g. 1955); Jia Xhen (e.g. 1964); Gui Chou (e.g. 1973); Ren Xu (e.g. 1982)
Kun	Bing Yin (e.g. 1926); Ren Shen (e.g. 1932); Yi Hai (e.g. 1935); Xin Si (e.g. 1941); Jia Shen (e.g. 1944); Geng Yin (e.g. 1950); Gui Si (e.g. 1953); Ji Hai (e.g. 1959); Ren Yin (e.g. 1962); Wu Shen (e.g. 1968); Xin Hai (e.g. 1971); Ding Si (e.g. 1977); Geng Shen (e.g. 1980)	Jia Zi (e.g. 1924); Gui You (e.g. 1933); Ren Wu (e.g. 1942); Xin Mao (e.g. 1951); Geng Zi (e.g. 1960); Ji You (e.g. 1969); Wu Wu (e.g. 1978)

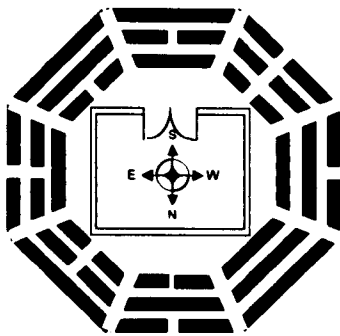
Table 5- 4 The Eight Kuas of person for the East-four group.

(Source: Feiyun Shanjen, 1994)

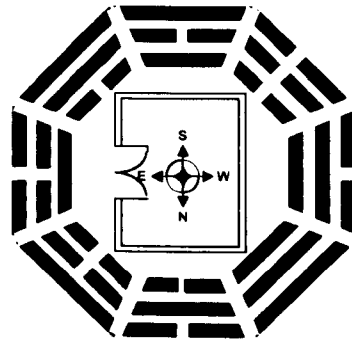
Eight Kuas	Year of Birth (the Chinese Sixty-year Cycle)	
	Male	Female
Hsun	Jia Zi (e.g. 1924); Gui You (e.g.1933); Ren Wu (e.g.1942); Xin Mao (e.g.1951); Geng Zi (e.g.1960); Ji You (e.g.1969); Wu Wu (e.g.1978)	Bing Yin (e.g.1926); Yi Hai (e.g. 1935); Jia Shen (e.g. 1944); Gui Si (e.g. 1953); Ren Yin (e.g. 1962); Xin Hai (e.g. 1971); Geng Shen (e.g. 1980)
Chen	Yi Chou (e.g. 1925); Jia Xu (e.g. 1934); Gui Wei (e.g. 1943); Ren Xhen (e.g. 1952); Xin Chou (e.g. 1961); Geng Xu (e.g. 1970); Ji Wei (e.g. 1979)	Yi Chou (e.g. 1925); Jia Xu (e.g. 1934); Gui Wei (e.g. 1943); Ren Xhen (e.g. 1952); Xin Chou (e.g. 1961); Geng Xu (e.g. 1970); Ji Wei (e.g. 1979)
Kan	Ding Mao (e.g. 1927); Bing Zi (e.g. 1936); Yi You (e.g. 1945); Jia Wu (e.g. 1954); Gui Mao (e.g. 1963); Ren Zi (e.g. 1972); Xin You (e.g. 1981)	Ren Shen (e.g. 1932); Xin Si (e.g. 1941); Geng Yin (e.g. 1950); Ji Hai (e.g. 1959); Wu Shen (e.g. 1968); Ding Si (e.g. 1977)
Li	Wu Xhen (e.g. 1928); Ding Chou (e.g. 1937); Bing Xu (e.g. 1946); Yi Wei (e.g. 1955); Jia Xhen (e.g. 1964); Gui Chou (e.g. 1973); Ren Xu (e.g. 1982)	Xin Wei (e.g. 1931); Geng Xhen (e.g. 1940); Ji Chou (e.g. 1949); Wu Xu (e.g. 1958); Ding Wei (e.g. 1967); Bing Xhen (e.g. 1976)

5.3.2 Eight Kuas of House

The classification of houses is decided by orientation. Eight Kuas for house is pronounced as Zhai Kua¹⁹ in Chinese. The main entrance is one determinant in identifying orientation. For example if, as shown in Figure 5-5 (A), the main entrance faces south, the orientation of the house is north, which belongs to Kan of the Eight Kuas. Therefore, the Eight Kuas of house in this case is Kan. In another example, shown in Figure 5-5 (B), the main entrance faces east, the orientation is west, which belongs to Tui, therefore, the Eight Kuas of house in this case is Tui.



(A) Eight Kuas of house for Kan.



(B) Eight Kuas of house for Tui.

Figure 5- 5 Two types of Eight Kuas of House.

5.4 Mapping of Nine Stars in the Eight Types of Eight Kuas

As mentioned before, the Eight Kuas diagram is a magic pattern for representing orientations. There are eight types of Eight Kuas showing in the Eight Houses Arrangement. Any one of the Eight Kuas could be related to any of the eight orientations, with four auspicious and four inauspicious considerations. These eight orientations are related to nine stars in the heaven. Each star has its specific auspicious or inauspicious concern. The order of auspicious or inauspicious orientations for each type of the Eight Kuas is specific and is different from one to another. According to

¹⁹ Zhai Kua (宅卦).

Yang Zhai Shi Shu (Ten Books of Houses), nine stars in the heavens are connected to nine regions on the earth (Wang, 1590)²⁰. The nine stars are Vitality (called Sheng Chi), Medicine (called Tian Yi), Prolong Life (called Yan Nian), Dying (called Jue Ming), Ghost (called Wu Gui), Decease (called Liu Sha), Disaster (called Huo Hai), Left Assist (called Zuo Fu) and Right Assist (called You Bi)²¹.

Now we turn to the content of a specific Kua among the eight. This is regarded as being composed of eight further Kuas, but one is dominant and the other seven subordinate. The Kua of person or the Kua of house decides the dominant Kua. Having decided the dominant Kua, if it is Chien, this is called the Eight Kuas for Chien. The dominant Kua determines how the nine stars would be placed in a specific orientation in the Eight Kuas diagram. The rule for this is based on the position of the dominant Kua in relation to the other seven Kuas. As mentioned before, the structure of each Kua is composed of three lines, each being either Yin or Yang. Any two Kuas can be compared by looking at the three lines in each. For instance, the comparison of Chien Kua and Hsun Kua as shown in Figure 5-6 is that the lowest line (earth) is different, while the other lines (heaven and humans) are the same.

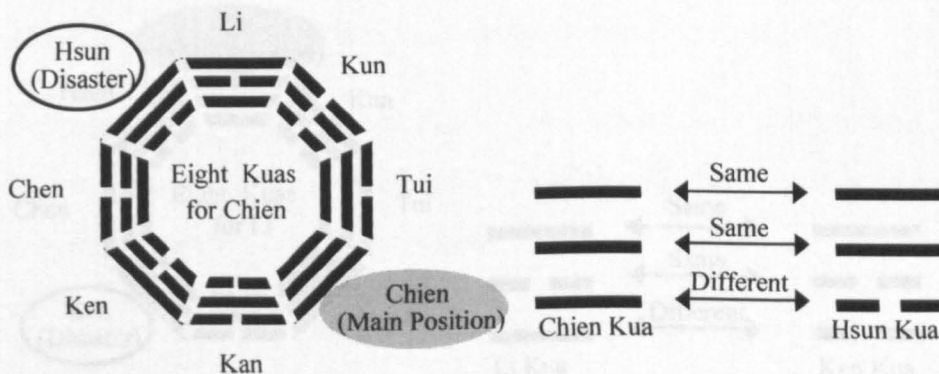


Figure 5- 6 Comparison of Chien and Hsun in the Eight Kuas for Chien.

²⁰ Wang, Jun-rong (1590) 'Yang Zhai Shi Shu (Ten Books of Houses)'. In: Chen, Meng-lei *et al.* (1726) *Gu Jin Tu Shu Ji Cheng Bo Wu Hui Bian Yi Shu Dian* (Chrestomathy of Illustrations and Writings Ancient and Modern, Part of Natural Studies, Section of Art). Taipei, Ding-wen, reprinted in 1988, pp. 7004 – 7043.

²¹ Sheng Chi (生氣); Tian Yi (天醫); Yan Nian (延年); Jue Ming (絕命); Wu Gui (五鬼); Liu Sha (六煞); Huo Hai (禍害); Zuo Fu (左輔); You Bi (右弼).

Rules for deciding auspicious or inauspicious concerns are:

Rule 1: The orientation for the dominant Kua is always the Main Position (called Fu Wei²²) in relation to which Left Assist and Right Assist are placed; their orientation can be secondarily auspicious.

Rule 2: Comparing the dominant Kua with any others, if the lowest line of these two Kuas is different, while the other two lines are the same, the orientation in this Kua is concerned with Disaster. This star is considered inauspicious, which means accidents and mishaps.

For example (see Figure 5-6), considering the Eight Kuas with the dominant Kua as Chien (☰), Hsun Kua (☱) shows that the lowest line is different, but the other two lines are the same as the Chien Kua, therefore the orientation in Hsun is designated as Disaster. Another example (see Figure 5-7), considering the Eight Kuas with the dominant Kua as Li (☲), Ken Kua (☵) shows that the lowest line is different, while the other two lines are the same as the Li Kua, therefore the orientation in Ken is designated as Disaster.

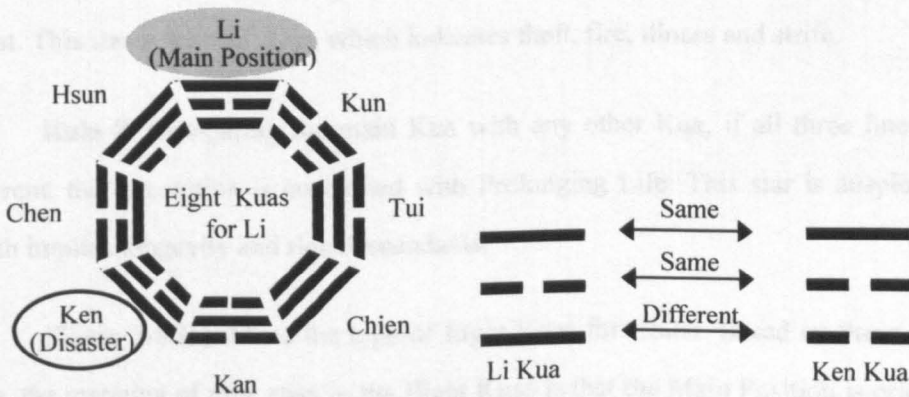


Figure 5- 7 The comparison of Li Kua and Ken Kua.

Rule 3: Comparing the dominant Kua with any other Kuas, if the middle line of these Kuas is different, while the other two lines are the same, the orientation is

²² Fu Wei (伏位).

concerned with Dying. This star is inauspicious, which implies total loss of descendants and the worst disaster.

Rule 4: Comparing the dominant Kua with any other Kuas, if the top line of these Kuas is different, while the other two lines are the same, the orientation in this Kua is concerned with Vitality. This star is related to an auspicious concern, which implies the generation of breath and energy.

Rule 5: Comparing the dominant Kua with any other Kua, if only the top line of these Kuas is the same, while the other two lines are different, the orientation in this Kua is concerned with Medicine. This star is auspicious, which implies doctors from heaven and good health.

Rule 6: Comparing the dominant Kua with any other Kua, if only the middle line is the same, while the other two are different, the orientation is concerned with Decease. This star is inauspicious, which implies killing and disadvantage.

Rule 7: Comparing the dominant Kua with any other Kua, if only the bottom line is the same, while the other two are different, the orientation is concerned with Ghost. This star is inauspicious, which indicates theft, fire, illness and strife.

Rule 8: Comparing the main Kua with any other Kua, if all three lines are different, the orientation is concerned with Prolonging Life. This star is auspicious, which implies longevity and rich descendants.

Figure 5-8 (a) shows the type of Eight Kuas for Chien. Based on these eight rules, the mapping of nine stars in the Eight Kuas is that the Main Position is oriented northwest; Disaster, southeast; Dying, south; Vitality, west; Medicine, northeast; Decease, north; Ghost, east; Prolong Life, southwest. Figure 5-8 (b) shows the type of Eight Kuas for Tui. The Main Position is oriented to west; Disaster, north; Dying, east; Vitality, northwest; Medicine, southwest; Decease, southeast; Ghost, south; and Prolong Life, northeast. Figure 5-8 (c) shows the type of Eight Kuas for Ken. The

Main Position is oriented to northeast; Disaster, south; Dying, southeast; Vitality, southwest; Medicine, northwest; Decease, east; Ghost, north; and Prolong Life, west. Figure 5-8 (d) shows the type of Eight Kuas for Kun. The Main Position is oriented to southwest; Disaster, east; Dying, north; Vitality, northeast; Medicine, west; Decease, south; Ghost, southeast; and Prolong Life, northwest.

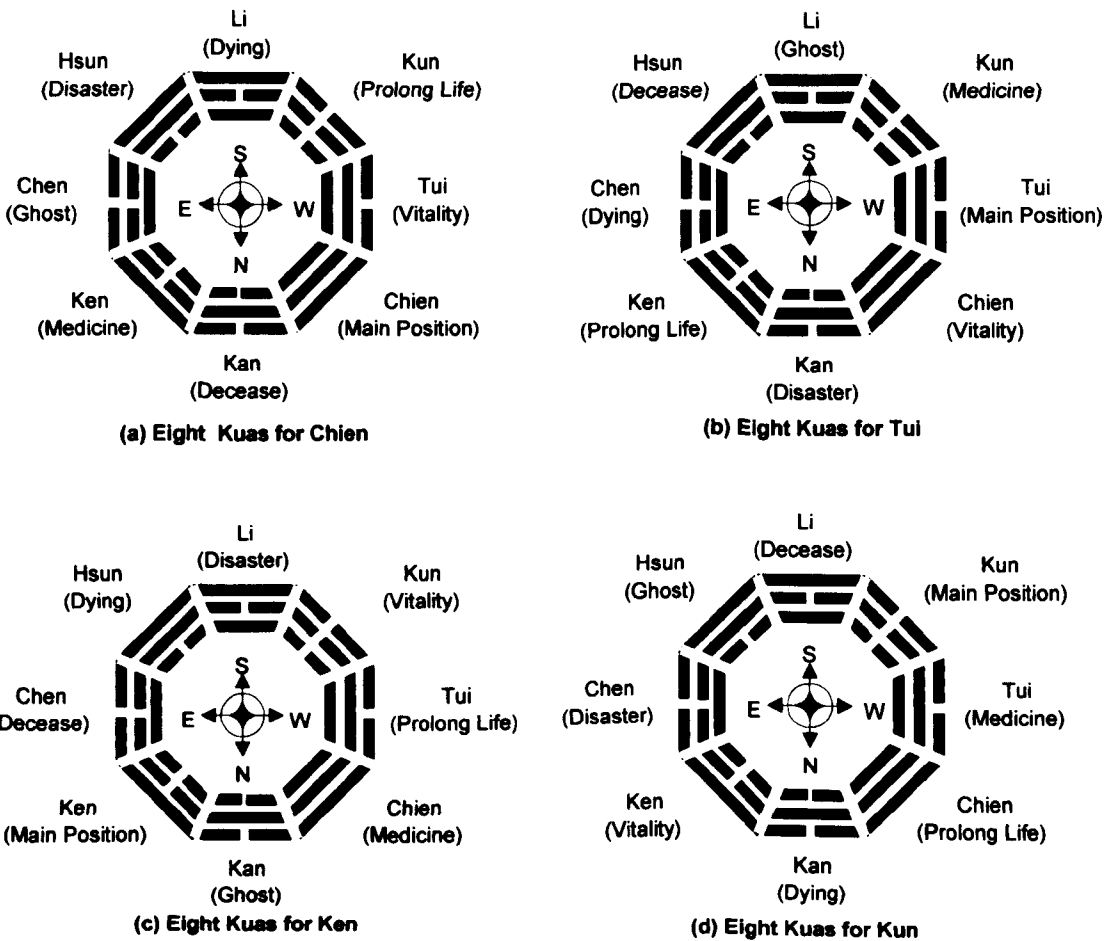


Figure 5- 8 Mapping of nine stars in the West four group of Eight Kuas.

Figure 5-9 (a) shows another type of Eight Kuas for Li. The mapping of nine stars is that the Main Position is oriented to south; Disaster, northeast; Dying, northwest; Vitality, east; Medicine, southeast; Decease, southwest; Ghost, west; and Prolong Life, north. Figure 5-9 (b) shows the type of Eight Kuas for Kan. The Main Position is oriented to north; Disaster, west; Dying, southwest; Vitality, southeast; Medicine, east; Decease, northwest; Ghost, northeast; and Prolong Life, south. Figure

5-9 (c) shows the type of Eight Kuas for Chen. The Main Position is oriented to east; Disaster, southwest; Dying, west; Vitality, south; Medicine, north; Decease, northeast; Ghost, northwest; and Prolong Life, southeast. Figure 5-9 (d) shows the type of Eight Kuas for Hsun. The Main Position is oriented to southeast; Disaster, northwest; Dying, northeast; Vitality, north; Medicine, south; Decease, west; Ghost, southwest; and Prolong Life, east.

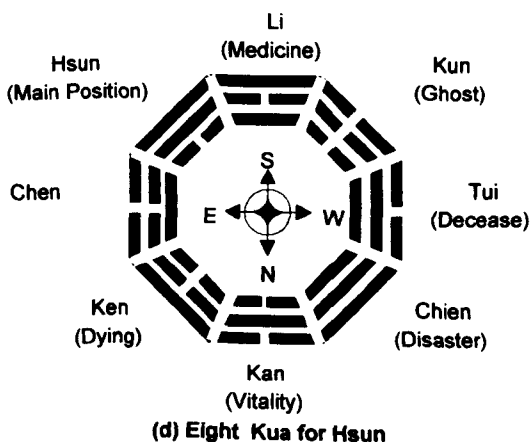
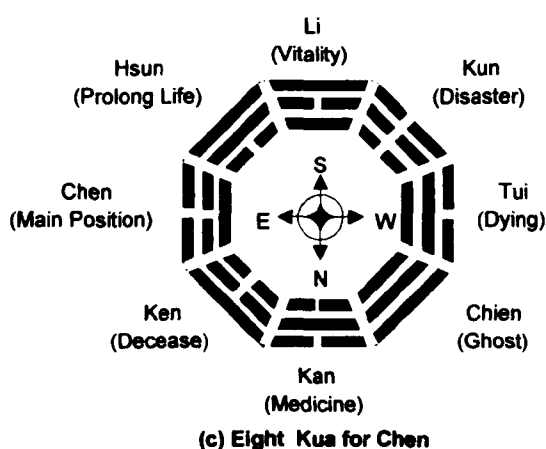
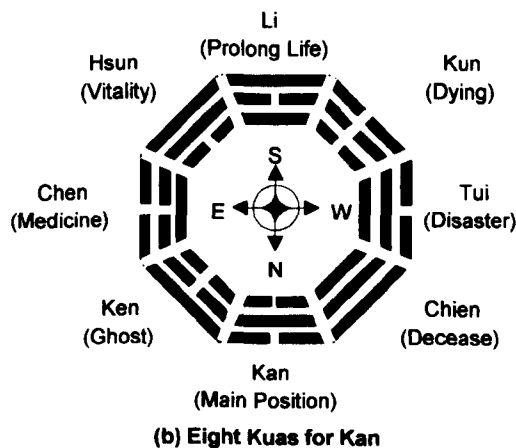
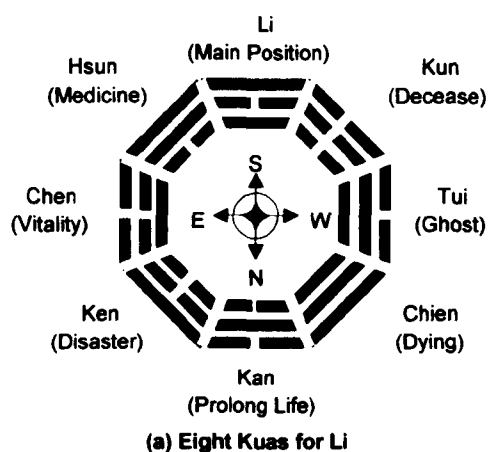


Figure 5- 9 Mapping of nine stars in the East four group of Eight Kuas.

You Nian Ge is a Chinese poem included in *Ba Zhai Ming Jing* (Bright Mirror of Eight Houses Arrangement), which illustrates each type of the Eight Kuas with its auspicious or inauspicious terms in each orientation (Ruoguan Dao-ren, 1790)²³. Table

²³ You Nian Ge (遊年歌).

Ruoguan Dao-ren (1790) *op. cit.*, pp. 33 – 34.

5-5 shows the original contents of You Nian Ge and its meaning. This poem is used to memorise the order of nine stars in the eight types of Eight Kuas through sound and rhythm. The structure of this Chinese poem is composed of eight sentences. Each of these sentences has eight words to demonstrate the order of nine stars in orientations. The first word of each sentence is the name for a specific type of the Eight Kuas.

Table 5- 5 The contents of You Nian Ge.

Chinese Poem	Translations
Chien-Liu-Tian-Wu-Huo-Jue-Yan-Sheng (乾六天五禍絕延生);	Chien- Decease - Medicine - Ghost - Disaster - Dying - Prolong Life - Vitality;
Kan-Wu-Tian-Sheng-Yan-Jue-Huo-Liu (坎五天生延絕禍六);	Kan- Ghost - Medicine - Vitality - Prolong Life - Dying - Disaster - Decease;
Ken-Liu-Jue-Huo-Sheng-Yan-Tian-Wu (艮六絕禍生延天五);	Ken- Decease - Dying - Disaster - Vitality - Prolong Life - Medicine - Ghost;
Chen-Yan-Sheng-Huo-Jue-Wu-Tian-Liu (震延生禍絕五天六);	Chen- Prolong Life - Vitality - Disaster - Dying - Ghost - Medicine - Decease;
Hsun-Tian-Wu-Liu-Huo-Sheng-Jue-Yan (巽天五六禍生絕延);	Hsun- Medicine - Ghost - Decease - Disaster - Vitality - Dying - Prolong Life;
Li-Liu-Wu-Jue-Yan-Huo-Tian-Sheng (離六五絕延禍生天);	Li- Decease - Ghost - Dying - Prolong Life - Disaster - Medicine - Vitality;
Kun-Tian-Yan-Jue-Sheng-Huo-Liu-Wu (坤天延絕生禍五六);	Kun- Medicine - Prolong Life - Dying - Vitality - Disaster - Decease - Ghost;
Tui-Sheng-Huo-Yan-Jue-Liu-Wu-Tian (兌生禍延絕六五天).	Tui- Vitality - Disaster - Prolong Life - Dying - Decease - Ghost - Medicine.

Considering the first sentence of You Nian Ge, it is oriented in the following order, Chien -Liu-Tian-Wu- Huo-Jue-Yan-Sheng. Chieh is the first word of the first sentence, which means that this sentence is used to demonstrate the order of nine stars for the type of Eight Kuas for Chien. According to the Later Heaven Arrangement, Chien is orientated northwest. The order of nine stars in orientation is starting from the direction of northwest in a clockwise order as shown in Figure 5-8 (a). Similarly, the order of the second sentence is Kan-Wu-Tian-Sheng-Yan-Jue-Huo-Liu. Kan is the first word of the first sentence, which means that this sentence is used to demonstrate the order of nine stars for the type of Eight Kuas for Kan. Kan is orientated in north in the Later Heaven Arrangement. The order of nine stars in orientation is starting from the direction of north in a clockwise order as shown in Figure 5-9 (b).

5.5 The Harmonic Spatial Arrangement

Ideal Category Arrangement between Human Beings and Houses:

The categories of the East-four group and West-four group are applied to Eight Kuas of person and Eight Kuas of house. Each person and house therefore has the attribute of the East-four group or the West-four group. The ideal arrangement for person and house is that both should belong to the same of the East-four group or the West-four group (Ruoguan Dao-ren, 1790)²⁴. That is to say, if a person belongs to the East-four group, he or she ideally lives in a house which also belongs to the East-four group. For the same reason, if a person fits in the West-four group, a house belonging to the West-four group is ideal for him or her. The underlying meaning of this rule is that humans and houses should share the same Yin Yang attribute in order not to oppose each other. However, if the ideal arrangement is not found, the Eight Houses Arrangement provides some ways, such as adjusting the orientation of doors or bedrooms, to minimize or avoid the inauspicious influence.

Spatial Arrangement of Rooms:

Based on different functions for each space, rooms are divided into major spaces and minor spaces. Major spaces include the living room, study and bedrooms, which are ideally placed in orientations defined as auspicious, such as Vitality, Medicine, Prolong Life and the Main Position. Minor spaces include storage, laundry and lavatories, which are regarded as suited to orientation defined as inauspicious, such as Dying, Ghost, Decease and Disaster. This spatial arrangement is believed to minimize inauspicious influence on the inhabitants.

A family may have members born into both West-four group and East-four group. The location of bedrooms tends to follow the traditional paternalist social and

²⁴ Ruoguan Dao-ren (1790) *op. cit.*, pp. 15.

hierarchical order as described in section 4.5. Thus, the householder carries the highest priority to locate his bedroom according to his Eight Kuas of person. Rooms for other members can be placed based on each one's Eight Kuas of person.

Spatial Arrangement of Furniture:

By selecting a suitable orientation for the main pieces of furniture, i.e. doors, oven, beds and toilets, the idea is that auspicious energy from the world will be brought into the house while inauspicious energy will be kept out.

Doors: Based on each one's Eight Kuas of person, the location of the door in each room must be placed in an orientation regarded as auspicious. These orientations are Vitality, Medicine, Prolong Life and the Main Position.

The Oven: The oven in the kitchen implies a function relating to the power of consumption. The suitable orientation is that for inauspicious concern, such as Dying, Ghost, Decease and Disaster. This implies eliminating inauspicious influence which may affect the inhabitants.

Beds: The suitable orientation for a bed also depends on each one's Eight Kuas of person. The bed should be placed in an orientation regarded as auspicious.

Toilets: Toilets remove the dirtiness, which implies taking out inauspicious influence from the house. The suitable location for placing toilets is therefore an orientation for inauspicious concern, such as Dying, Ghost, Decease and Disaster.

5.6 Conclusion

This chapter reviews and discusses one significant Feng Shui model - the Eight Houses Arrangement for determining spatial order in domestic architecture. This model rooted in the ancient worldview reveals the strong intention of the ancient

Chinese to cooperate with what they saw as the Natural law rather than defying it. Four concepts are derived from the investigation of this model.

1. **Classification:** All humans or houses are classified into eight different groups, each human or house is correlated with one of the Eight Kuas. Each Kua is related to one of the eight orientations. Further, the Eight Kuas are classified into two groups.
2. **Mappings:** The Eight Kuas are related to nine stars in the heavens. Each Kua in the Eight Kuas is related to one of the eight orientations which can be auspicious or inauspicious. The auspicious and inauspicious orientations for persons are decided by their birth years.
3. **Harmony:** In an ideal house for its residents, the Kua for persons and the Kua for house must relate in a harmonic way. Each Kua is related to one of the eight orientations that are concerned with auspiciousness and inauspiciousness.
4. **Regulations:** The Chinese social order is a hierarchical system based on paternalist concern, that is to say, elders are considered superior to juniors and males are superior to females. Each member of the family therefore has its different priority for sitting each room in the house. There are rituals that the Chinese have been used.

Based on the viewpoints from these four concepts and a case study of a house design, this model provides a unique way to build up the relationship between people, time and domestic architecture. It would help understand the fundamental concepts of how orientation, time and domestic architecture have been connected in Feng Shui.

Chapter 6

The Elite of Feng Shui: The Forbidden City in Beijing

6.1 Introduction

This chapter introduces how Feng Shui left its mark on traditional Chinese architecture, taking the Forbidden City in Beijing as an example. The Forbidden City is one of the most significant pieces of architecture in Chinese history. This great palace demonstrates the elite of Feng Shui (Hwangbo, 1999; Wang, 1995)¹.

The Forbidden City, known as the Imperial Palace Museum or Gugong² in Chinese, was located at the northern end of the North China Plain. This palace served twenty-four emperors as their royal residence, and as the administrative centre both for the Ming Dynasty (1368 A.D. – 1644 A.D.) and the Qing Dynasty (1644 A.D. – 1912 A.D.). The construction of the Forbidden City was started in 1406 by an emperor called Ming Chengzu³ of the Ming dynasty and completed in its general construction in 1420. The spatial arrangement of the palace city involved the use of Yin Yang, the

¹ Hwangbo, Bong (1999) *In Search of Alternative Traditions in Architecture – A Cross-Cultural Interdisciplinary Study*. Ph.D. Thesis, The University of Sheffield, pp. 105.

Yi, Ting *et al.* (1999) *Zhong Guo Feng Shui Yu Jian Zhu Yan Jiu* (Geomancy and the selection in architecture placement in ancient China). Taipei, Yi-shu-chai, pp. 177.

Wang, Qiheng (1995) The Xingshui Principle in Fengshui Theory and the Design of the Exterior Space of Old Chinese Buildings. In: Wang, Q. (ed.) *Feng Shui Li Lun Yan Jiu Yi* (The Research of Feng Shui Theory Vol. 1). Taipei, Di-jing, pp. 108.

² Gugong (故宫).

³ Ming Chengzu (明成祖).

Eight Kuas and the Magic Square. The Chinese emperors built their palace in accordance with the ideas of Feng Shui.

Figure 6-1 is an ancestral drawing of the Forbidden City in the Qing Dynasty (Yi, 1999)⁴. This drawing shows an outline of the Forbidden City and the natural environment surrounding the palace. It depicts an ideal spatial placement with several features derived from Feng Shui. For example, the shape of the city was a rectangle, an ideal shape according to Feng Shui. In addition, the centre is the most significant area, following the concept of the Magic Square. The spatial arrangement was designed with parallel streets and based on a central axis. Principal buildings were placed in the middle, while subordinate buildings were placed around. Moreover, a mountain was located to the rear, serving as a well-placed protection to the natural environment. As mentioned in Chapter 3, an ideal Feng Shui environment has hills surrounding to north. The mountain described here is relevant to the mountain type Zhu Shan, as described in Section 3.2, which is the Principal Mountain type.



Figure 6- 1 An ancestral drawing of the Forbidden City.

(Source: Yi, T. *et al.*, 1999)

⁴ Yi, Ting *et al.* (1999) *op. cit.*, pp. 32.

The Forbidden City has been studied from various perspectives, such as anthropology, archeology, history, geography, meteorology and architecture. These studies provide plenty of useful information on analysing the general background about the construction, development, and history of the palace city, such as Johnston (1934), Weng (1982), Beguin and Morel (1997), Holdsworth (1998) and Li (1999)⁵. Some specialised studies raised further issues about the use of Feng Shui in the Forbidden City, such as Wang (1995), Schinz (1996), Yi (1998) and Liu (1999). The study of Wang (1995) discussed the relationships between Chinese architecture and the natural surroundings, based on the viewpoint of visual art⁶. The palace was interpreted as a kind of great artwork expressing the use of measurement in architecture. This measurement was based on the principles of Feng Shui. According to Wang, Feng Shui is a way to express the beauty of art in architecture.

Schinz's study (1996) emphasised the connection between the planning of the palace and the Magic Square⁷. He points out that the planning involved several concepts, such as Magic Square, Yin Yang and Five Elements. However, he does not provide a detailed explanation of these concepts. Yi (1999) explains the results of applying Feng Shui to the Forbidden City and also includes quotations from historical literature describing the site of Beijing, which are significant but difficult to understand. He also describes how Feng Shui was applied to the design of the palace⁸. The problem of Yi's descriptions is that there are no translations of or explanations about the meaning of the historical literature. The study of Liu (1999) provides a general historical background of Beijing, the location of the Forbidden City⁹. Liu

⁵ Johnston, Reginald F. (1934) *Twilight in the Forbidden City*. London, Gollancz.

Weng, Wango and Yang, Boda (1982) *The Palace Museum Peking*. London, Orbis Publishing Limited.

Beguin, Gilles and Morel, Dominique (1997) *The Forbidden City: Center of Imperial China*. USA, Harry N Abrams.

Holdsworth, May *et al.* (1998) *The Forbidden City*. USA, Odyssey Publications.

Li, Xia (ed.) (1999) *The Forbidden City*. Beijing, Jing-cheng.

⁶ Wang, Qiheng (1995) *op. cit.*, pp. 108 – 115.

⁷ Schinz, Alfred (1996) *The Magic Square: Cities in Ancient China*. London, Edition Axel Menges, pp. 282 – 347.

⁸ Yi, Ting *et al.* (1999) *op. cit.*, pp. 177 – 180.

⁹ Liu, Li (1999) The building of the city of Beijing in the Ming dynasty (1368 – 1644). *Edinburgh Architecture Research 26* [online] Edinburgh, The Department of Architecture, The University of

pointed out that the Forbidden City was involved in Feng Shui and Chinese cosmology. However, the direct link between Feng Shui and the palace is not discussed in depth.

Broadly speaking, most studies have recognised and shown the influence of Feng Shui upon the Forbidden City, without detailed discussions on how precisely Feng Shui operated in planning the palace. This will be the main task of this chapter, which puts special emphasis on historical literature to reveal the original design concept and ancestral viewpoints. The reasons for selecting Beijing as a site are also shown. Furthermore, the result of adopting Feng Shui for the Forbidden City is discussed.

6.2 The Historical Background and the Site of Beijing

This section develops an overview of the historical background of Beijing and examines the natural environment with regard to Feng Shui. Much historical literature and information is presented and discussed in detail. This section further reveals why Beijing was chosen as the capital of China in ancient times and how the chronicle of locating the Forbidden City in Beijing was developed.

Beijing, also known as Peking, has been the capital of China for centuries. As the most significant Chinese cultural centre, it has been referred to by different names in history. It has great influence in China in many fields, such as politics, the military, the economy and society. The chronicle of Beijing records the role it has played and why the location is significant for Chinese history. Figure 6-2 shows its location on the map of China (Microsoft ® Encarta ® Online Encyclopedia, 2001)¹⁰. It lies in the

Edinburgh. Available from: <http://www.caad.ed.ac.uk/publications/ear/liliu.html> [Accessed 15th January 2002].

¹⁰ Microsoft ® Encarta ® Online Encyclopedia (2001) 'Beijing (Peking), China', *All the Greatest Cities of the World* [online], Available from: <http://www.greatestcities.com/beijing/> [Accessed 15th January 2002].

northeast part of China around 39°56'N and 116°20'E and covers an area of about 16,800 square kilometres. Beijing is surrounded by Mongolia to northwest, the Gobi Desert from north to west, Korea across the sea to the east and a bay called Bohai to southeast.



Figure 6- 2 The location of Beijing in China.

(Source: Microsoft ® Encarta ® Online Encyclopedia, 2001)

In terms of climate, Beijing is continental with distinctive four seasons. The average annual precipitation is around 600 – 700 mm. Cold wind comes from the north in winter and the cool wind from the south in summer. The temperature varies between about 38° C in July and -15° C in January. Generally, spring and autumn are shorter than winter and summer. Spring is dry and windy. Summer is hot and humid. Autumn is fine and clear. Winter is long, dry and cold. Following this geographical introduction, the next section concerns the city's historical background.

The progress of development is divided into three periods, i.e. the early period (the Bronze Age – 916 A.D.), the middle period (916 A.D. – 1368 A.D.), and the late period (1368 A.D. – Nowadays). Because the Forbidden City was built up during the late period, the following descriptions concentrate on the late period, but detailed descriptions on the other two periods (the early and the middle period) are given in Appendix B. The late period introduces Beijing as the capital city for Chinese emperors during the Ming Dynasty (1368 A.D. – 1644 A.D.) and the Qing Dynasty (1616 A. D. – 1911 A.D.), the finest period of the city's history when the Forbidden

City was developed. Chinese imperialism ended in 1912 when the Republic of China was founded.

The Ming Dynasty (1368 A.D. – 1644 A.D.):

The city named Dadu (predecessor of Beijing) was destroyed completely when it was conquered by the army of Ming Taizu¹¹, the first emperor of the Ming Dynasty, in 1368. Ming Taizu (1328 – 1398) changed the name from Dadu to Beiping (meaning northern peace) and assigned his fourth son Zhu Di¹² (1402 – 1424) to guard the area. The first capital of the Ming Dynasty was Nanjing (the other city located in the middle of China). Zhu Di later ascended the throne as third emperor of the Ming Dynasty, and was called Ming Chengzu¹³. In 1403, he changed the name from Beiping to Beijing and established it as a subordinate capital. In 1420, Ming Chengzu moved the capital from Nanjing to Beijing, the best location to prevent the Mongolians breaking through to the south (Liu, 1999)¹⁴.

The construction of Beijing started in 1404. More than twenty-three hundred thousand artisans and a million labourers were involved in building the city (Yi, 1999)¹⁵. Figure 6-3 shows an ancestral sketch of Beijing under the Ming Dynasty (Schinz, 1996)¹⁶. This diagram illustrates the general outline. Several features expressing the design concept are described below.

1. Beijing was composed of four sections, an outer city placed at the south, an inner city placed at the north, a palace city called Huangcheng¹⁷ was

¹¹ Ming Taizu (明太祖) whose name was Chu, Yuanzhang (朱元璋) established the Ming Dynasty in 1368.

¹² Zhu Di (朱棣) was given the name as Yenwang (meaning the prince of Yen).

¹³ Ming Chengzu (明成祖).

¹⁴ Liu, Li (1999) *The Building of the City of Beijing in the Ming Dynasty (1368 – 1644)*. *Edinburgh Architecture Research 26* [online] Edinburgh, The Department of Architecture, The University of Edinburgh. Available from: <http://www.caad.ed.ac.uk/publications/ear/liliu.html> [Accessed 15th January 2002].

¹⁵ Yi, Ting *et al.* (1999) *op. cit.*, pp. 172.

¹⁶ Schinz, Alfred (1996) *The Magic Square: Cities in Ancient China*. London, Edition Axel Menges, pp. 326.

¹⁷ Huangcheng (皇城).

placed at the central area of the inner city, and in the centre of this was the Forbidden City.

2. The Spatial arrangement of the palace city contained lakes to the west, a hill to the north and the Forbidden City at the centre.
3. There were nine gates in the wall of the inner city and seven gates in the wall of the outer city. Each gate had a subordinate gate in front to provide extra protection.
4. The wall of the inner city had two gates on each of the east, west and north walls, and three gates on the south wall.
5. The outer city had three gates in the south wall, one gate each in the east and the west walls, and another two side gates in the north wall, next to the south wall of the inner city.
6. The main gate of the palace was placed to the south facing a principal road on the central axis.
7. The streets within Beijing were clearly directed to every gate.

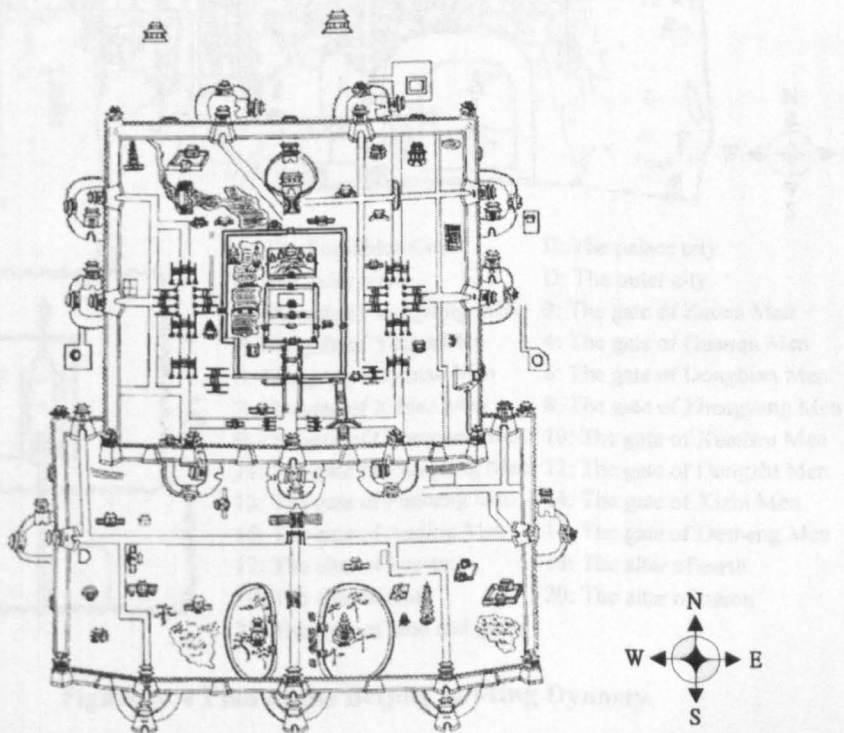


Figure 6- 3 An ancestral sketch of Beijing in the Ming Dynasty.

(Source: Schinz, A., 1996)

Figure 6-4 illustrates the detailed plan of Beijing with four principal parts, i.e. the Forbidden City, the palace city, the inner city and the outer city. There were five significant altars, i.e. the altars of heaven, of earth, of sun, of moon and the altar of land and grain (Schinz, 1996) ¹⁸.

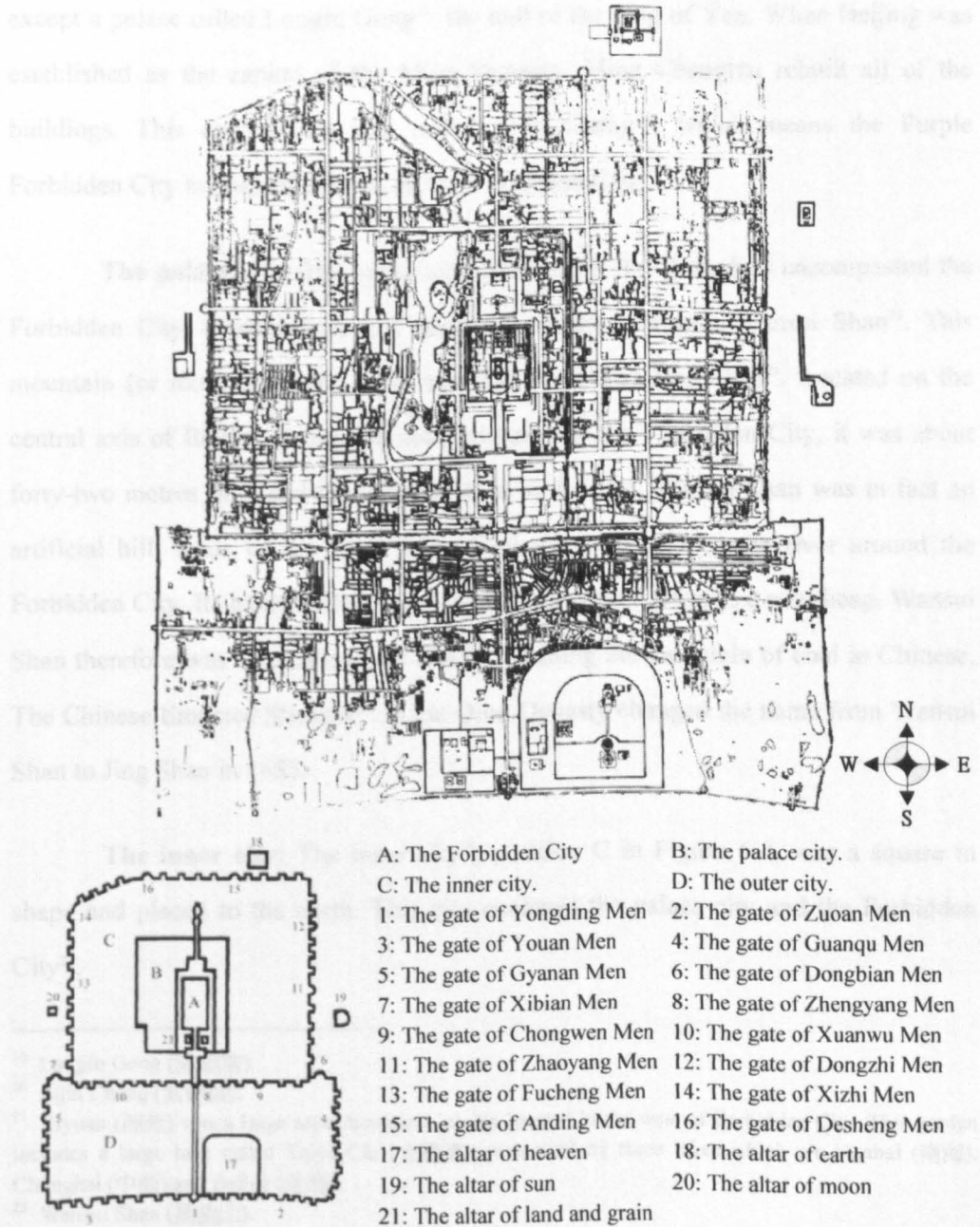


Figure 6- 4 Plan of the Beijing in Ming Dynasty.

(Source: Schinz, A., 1996)

¹⁸ Schinz, Alfred (1996) *op. cit.*, pp. 326.

The Forbidden City: The Forbidden City, (position A in Figure 6-4) was located at the centre of Beijing as the palace for the Chinese Emperor. This palace was located on the site of the former palace called Danei in the Yuan Dynasty. When Ming's army conquered Dadu (Beijing), most buildings in Danei had been destroyed except a palace called Lungfu Gong¹⁹, the hall of the king of Yen. When Beijing was established as the capital of the Ming Dynasty, Ming Chengtzu rebuilt all of the buildings. This new palace was called Zijin Cheng²⁰, which means the Purple Forbidden City henceforth known as 'the Forbidden City'.

The palace city: The palace city (position B in Figure 6-4) encompassed the Forbidden City, a royal botanical garden²¹ and the mountain Wansui Shan²². This mountain (or more accurately hill) was also known as Jing Shan²³. Located on the central axis of Beijing facing the north entrance to the Forbidden City, it was about forty-two metres high and the highest place in the city. Wansui Shan was in fact an artificial hill, made of the spoil from digging out the man-made river around the Forbidden City. Its location had also been used in earlier times as a coal-heap. Wansui Shan therefore was also called Mei Shan²⁴, meaning the mountain of coal in Chinese. The Chinese Emperor Shunzhi²⁵ in the Qing Dynasty changed the name from Wansui Shan to Jing Shan in 1655.

The inner city: The inner city²⁶, position C in Figure 6-4, was a square in shape and placed to the north. This city enclosed the palace city and the Forbidden City²⁷.

¹⁹ Lungfu Gong (隆福宮).

²⁰ Zijin Cheng (紫禁城).

²¹ Xiyuan (西苑) was a large royal botanical garden located in the west of Forbidden City. This garden includes a large lake called Taiye Chi (太液池) comprised by three lakes which are Nanhai (南海), Chung hai (中海) and Beihai (北海).

²² Wansui Shan (萬歲山).

²³ Jing Shan (景山).

²⁴ Mei Shan (煤山).

²⁵ Shunzhi (順治).

²⁶ The inner city was called Jingcheng (京城).

²⁷ Three gates on the south wall were Zhengyang Men (position 8), Chongwen Men (position 9) and Xuanwu Men (position 10). Two gates on the east wall were Zhaoyang Men (position 11) and Dongzhi Men (position 12). Two gates on the west wall were Fucheng Men (position 13) and Xizhi Men (position

The outer city: The outer city, position D in Figure 6-4, was a rectangle in shape placed to the south²⁸.

Five altars: Four altars were placed at the four cardinal orientations and the fifth was placed at the centre, which revealed the use of the Magic Square.

1. **The altar of heaven:** The altar of heaven was placed at position 17 in Figure 6-4 which was located at the south within the outer city.
2. **The altar of earth:** The altar of earth was placed at position 18 in Figure 6-4 which was located in the north outside the inner city. The placement of these two altars could be based on the notion that south refers to heaven while north refers to earth.
3. **The altar of the sun:** The altar of the sun was placed at position 19 in Figure 6-4, located in the east, outside the inner city.
4. **The altar of the moon:** The altar of moon was placed at position 20 in Figure 6-4 which was located in the west, outside the inner city. This placement could be based on the sun rising from the east while the moon sets in the west.
5. **The altar of land and grain:** The altar of land and grain was placed at position 21 in Figure 6-4, located at the southwest corner within the palace city. This altar was the central one among the five. The detailed placement of the altar was discussed in section 4.2.2.

The placement of the inner city and the outer city revealed several features relating to the use of the Chinese cosmology, Yin Yang, the Magic Square and the Eight Kuas.

1. The inner city placed to the north referred to the 'Kun' Kua according to the Eight Kuas. In *I Ching* (Book of Changes), the 'Kun' Kua has the

14). Two gates on the north wall were Anding Men (position 15) and Desheng Men (position 16).

²⁸ Three gates on the south wall were Yongding Men (position 1), Zuoan Men (position 2) and Youan Men (position 3). The gate on the east wall was Guanqu Men (position 4). The gate on the west wall was Gyanan Men (position 5). A side gate on the east of the north wall was Dongbian Men (position 6). The other side gate on the west of the north wall was Xibian Men (position 7).

attribute of 'earth' in the ideas of the Magic Square and counts as 'Yin' within the polarity Yin Yang (Xu, 1993)²⁹. For the same reason, the outer city was placed to the south which referred to the Kua of 'Chien' according to the Eight Kuas. The Kua of 'Chien' has the attribute of 'heaven' and 'Yang'. The combination of inner city and outer city implied a microcosm constructed by 'earth' and 'heaven' which human beings lived inside.

2. As mentioned in section 4.5, the typical Chinese map shows a reversal of direction when compared with the western system, so north is to the bottom and south to the top. On such a map the inner city located in the north would appear beneath the outer city located in the south. This implies that earth is under heaven. The outer city referred to heaven. The south side of the wall in the outer city was designed with a curve, which correlates with the Chinese worldview that 'the heaven (the south) is round and the earth (north) is square'³⁰.
3. According to the Magic Square, a square area has nine-fold divisions. Each division indicates a secret code from one to nine representing four cardinal orientations, four sub-cardinal orientations and the centre. The centre standing for the secret code of 'five' was the most significant division. To attain the most privilege in the world, the Chinese Emperor was to live in the centre of the world, at the meeting of the four cardinal orientations and the four sub-cardinal orientations. The Forbidden City was designed to demonstrate this notion of centrality.
4. 'Nine' was a secret code according to the Magic Square. Placing nine gates on the wall of the inner city reveals its use. There were three gates placed in the south wall of the inner city, as shown at position C in Figure 6-3. 'Three' was an odd number. The odd number was a so called 'heavenly number' according to the *I Ching* (Book of Changes) and

²⁹ Xu, Zi-hong (annot.) (1993) *Zhou I* (Book of Changes). Taipei, Di-qiu, pp. 521.

³⁰ 天圓地方.

belonged to the polarity Yang. Two gates were located in the east, the west and the north walls respectively. 'Two' was an even number. The even number was an 'earthly number' according to the *I Ching* (Book of Changes) and belonged to the Yin polarity. The number of gates in the city wall was determined according to the use of heavenly and earthly numbers, and the combination of these numbers is equivalent to nine (Yi, 1999)³¹.

The Qing Dynasty (1616 A.D. – 1911 A.D.):

A northern nomad called Manchu whose ancient name was Nuzhen³² conquered the Ming Dynasty and started another era, the Qing Dynasty, in 1644. The first Qing Emperor, Fulin³³, established the capital in Beijing and changed its name from Beijing to Yenjing, or Jingshi. The city of Yenjing retained much architecture and construction from the Ming Dynasty. The Forbidden City remained the palace city for the Chinese Emperor. However, citizens living in Yenjing were divided into two groups. One group lived in the inner city and the other group in the outer city³⁴. The group living in the inner city were people who belong to Baqi³⁵ of Manchu, loyal to the Emperor. During peace time, people of Baqi served as production workers, while in the war time, they became warriors. The meaning of Baqi was eight flags in Chinese, a unique social organization system created by Manchu. Baqi comprised eight groups of people. Each group had a specific colour of flag as the group symbol, and each group occupied one of the four cardinal orientations or the four sub-cardinal orientations. The other group of people living in the outer city contained common citizens who did not belong to Baqi of Manchu.

³¹ Yi, Ting *et al.* (1999) *op. cit.*, pp. 176.

³² Nuzhen (女真).

³³ Fulin (福臨).

³⁴ Social Science On Line (2000) Jingshi in Qing Dynasty. *Beijing Travel* [online] China, Social Science On Line. Available from: <http://www.e-travel.net.cn/jj18.htm> [Accessed 10th February 2002].

³⁵ Baqi (八旗).

Generally, the fabric of the city was preserved from the Ming Dynasty, but the Chinese Emperors in the Qing Dynasty refurbished buildings and remade the royal garden. For example, the Emperor of Shunzhi refurbished six halls within the Forbidden City in 1655; the hall of Taihe Dian and the palace of Qianqing Gong were refurbished twice by the Emperor Kangxi (1662 A.D. – 1722 A.D.); the Emperor Qianlong build up the island Qionghua Dao from 1741 A.D. to 1771 A.D.; the Empress dowager Cixi rebuilt Taiye Chi from 1885 to 1888³⁶.

After the Chinese Imperialism:

The Qing Dynasty ended in 1912, and a new nation, the Republic of China, was established. Chinese imperialism was replaced by democracy and later by a change to communism under the People's Republic of China in 1949. The Forbidden City was changed to the Palace Museum. The city of Beijing remains the capital.

6.3 Examination of Beijing by Feng Shui Specialists

Looking at the site in more detail, Beijing is located between the North China Plain (or Huabei Plain), the Mongolian Plateau and the Songliao Plain³⁷. The mountain range of Yan Shan lies to the northwest, the range Taihang Shan to the southwest, the bay of Bohai to the east and the North China Plain to the south³⁸. According to the study of Yi (1999), many Feng Shui specialists or scholars examined the location of Beijing as an ideal Feng Shui site (Yi, 1999)³⁹. Several examples are shown below.

Yang, Yi⁴⁰ (834 A.D. – 900 A.D.), a great Feng Shui specialist in the Tang Dynasty, described the natural environment of Beijing. He raised several issues on

³⁶ Kangxi (康熙); Qianlong (乾隆); Qionghua Dao (瓊華島); Cixi (慈禧).

³⁷ Huabei Plain (湖北平原); Songliao Plain (松遼平原).

³⁸ Yan Shan (燕山); Taihang Shan (太行山).

³⁹ Yi, Ting *et al.* (1999) *op. cit.*, pp. 163 – 164.

⁴⁰ Yang Yi (楊益).

Chung, Yi Ming (1996) *Biography of Chinese Feng Shui Specialists*. Taipei: Wu-ling, pp. 61.

examination of mountains and watercourses around Beijing in order to explain why the location of Beijing was considered an ideal Feng Shui site for establishing the capital. Several explanations of the natural surroundings from the original literature are described below (Yi, 1999)⁴¹.

‘Yen Shan was the highest mountain in this area pointing towards heaven, which was located at the end of the northern range (part of the Dragon range)⁴². This part of the Dragon range stretching for thousands miles was extended from the middle of the Kunlun range⁴³. Part of the Dragon range stretched to the east for hundreds miles and met the mountain of Tienshou Shan, which ended in the ocean. This range covered more than thousand miles of terrain⁴⁴. Rivers flowed around the terrain: the rivers of Liaodong and Liaoxi along the sides (the east and the west), the Yellow River in front and the River of Yalu at the rear⁴⁵. Considering the geography around the site, the Dragon range was long; the layout of the site was beautiful; the Dragon range was developed completely⁴⁶; the site was located at the inter section of mountains and watercourse; it was surrounded by the Yellow River, the mountain of Tienshou, the river of Yalu at rear. A large stone near by the sea called Jieshi as the key controls the entrance. (The site is surrounded by mountains and watercourses showing the ideal Feng Shui environment as discussed in section 3.2) This environment was an ideal Feng Shui site⁴⁷. For practical purposes the location of Yen Ji (Beijing) made it easy for emperors to govern the Central Plains of inner China and to control the Mongolian plateau outside China. Yen Chi (Beijing) became the most a significant city of the world⁴⁸.

⁴¹ Yi, Ting *et al.* (1999) *op. cit.*, pp. 163.

⁴² 燕山最高，象天市，蓋北幹之正結。

⁴³ 其龍發崑崙之中脈，綿亙數千里。

⁴⁴ 以入中國為燕雲，復東行數百里起天壽山，乃落平洋，方廣千餘里。

⁴⁵ 遼東遼西兩支，黃河前繞，鴨綠後纏。

⁴⁶ Dragon is a celestial animal with a long body in Chinese myth. The outline of a mountain range is described as the body of a dragon.

⁴⁷ 以地理之法論之，其龍勢之長，桓局之美，乾龍大盡，山水大會，帶黃河，天壽，鴨綠纏其後，碣石鑰其門，最是風水法度。

⁴⁸ 以形勝論，燕冀內跨中原，外控朔漠，真天下都會。

The accordance of mountains and watercourses around Beijing with the principles of Feng Shui site was mentioned by another ancestral scholar, Zhu, Xi (1130 A.D. – 1200 A.D.). He identified the location of Beijing as having mountains located on the left-hand side functioning as the Dragon; mountains on the right-hand side as the Tiger; in front was An Shan; with a river flowing by. This environment was compatible with the layout of the ideal Feng Shui site. Several explanations of the natural surroundings in the original literature are discussed below (Yi, 1999)⁴⁹.

'Ji (Beijing) was located in the centre of the world, a highly significant factor to be an ideal Feng Shui location. Mountains were coming from the clouds towards to the city. The ridge of the mountains was within the cloud. Water from the west of the ridge flowed into the place Longmen and the river of Xi. Water flowing from the east of the ridge flowed into the deep on the east. The Yellow River surrounded the site of Beijing to the front. The mountain of Hau Shan was located on the right-hand side which symbolised the Tiger. The mountain of Sung Shan in the Central Plains linked Hua (the mountain of Hua Shan) to the central plains. Sung Shan became An (An Shan, the Desk Mountain) in front. The mountain of Tai Shan was located to the left-hand side, which symbolised the Dragon. The mountains of Huinan were to be the second layer of An (An Shan). The mountains of Chiangnan and Wu Ling were to be the third and fourth layers of An (An Shan)⁵⁰.

The significant location of Beijing was referred to in *Jinshi* (the History of Jin) (Tuotuo, the Yuan Dynasty)⁵¹. A paragraph quoted from *Jinshi* indicated that 'the city of Yen (Beijing) was located in a strategic location which was next to precipitous mountains on the north and adjacent to extensive regions on the south. This layout was

⁴⁹ Yi, Ting *et al.* (1999) *op. cit.*, pp. 163 – 164.

⁵⁰ 山脈自雲中發來，雲中正高脊處，自脊以西之水則西流入於龍門西河，自脊以東之水則東流入於海。前面黃河環繞，右畔是華山聳立為虎，自華來至中原為嵩山，是為前案，遂過去為泰山，聳於左，是為龍。淮南諸山是第二重案，江南諸山及五嶺又為第三、四重案。

⁵¹ *Jinshi* (金史).

Jinshi was written by Tuotuo *et al.* around 1314 to 1355 which was a historic book for the country of Jin. Tuotuo *et al.* (the Yuan Dynasty) *Lie Chuan* Vol. 34. *Jin Shi* (the History of Jin) [online]. Silencer Library Enterprises. Available from: <http://www.angelibrary.com/oldies/jinshi/096.HTM> [Accessed 11th February 2002].

analogous to sitting in a hall with a moat surrounding and facing a courtyard in front of the hall. It was believed that humans born in this area were brave while horses were strong. Although the previous country of Liao was a small country, it was able to control the south and north regions, and it took territory from the Sung Dynasty because Liao governed the city of Yen (Beijing). This was the reason why Yen was the best city as a capital⁵².

According to *Yuanshi*⁵³ (the History of the Yuan Dynasty), a member of an ancestral royal family of Mongolia, called Batulu, recommended Yen (Beijing) as the capital of the Yuan Dynasty. He proposed that ‘the area around Youyen (Beijing) was entrenched by a Dragon and assembled by a Tiger. The terrain was majestically impressive. This city controlled the area around the river of Changjiang and the river of Huai on the south, in addition to connecting with the Mongolian Plateau to the north. The Emperor living in the centre of the kingdom would accept respects from four orientations around the world. If the Emperor would like to govern the world, the capital was ideally established in Yen (Song, the Ming Dynasty)⁵⁴. Another minister called Hao (Hao, Jing⁵⁵) also recommended establishing the capital in Yen (Beijing). Hao noted that ‘Yen (Beijing) was able to control Laidong on the east, connect Sanchin on the west, relay strategic mountains in the rear and face Heshuo plain in front. The Emperor was able to govern the world while facing south⁵⁶.’ The first Chinese Emperor of the Yuan Dynasty, Hubbleih (1215 A.D.– 1294 A.D.), followed their suggestions and established Yen (Beijing) as the capital in 1264 (Yi, 1999)⁵⁷.

⁵² 燕都地處雄要，北倚山險，南壓區夏，若坐堂隍，俯視庭宇，本地所生，人馬勇勁，亡遼雖小，止以得燕故能控制南北，坐致宋幣。燕蓋京都之選首也。

⁵³ *Yuanshi* (the History of the Yuan Dynasty) was written by Song, Lian *et al.* around 1310 – 1381 which as a historic book for the Yuan Dynasty.

⁵⁴ 幽燕之地，龍蟠虎踞，形勢雄偉，南控江淮，北連朔漠。且天子必居中以受四方朝覲。大王果欲經營天下，駐驛之所，非燕不可。

Song, Lian *et al.* (the Ming Dynasty) *Lie Chuan* Vol. 6. In: Song, Lian *et al.* *Yuanshi* [online]. Silencer Library Enterprises. Available from: <http://www.angelibrary.com/oldies/yuanshi/119.htm> [Accessed 11th February 2002].

⁵⁵ Hao, Jing (郝經).

⁵⁶ 燕東控遼東，西連三晉，背負關嶺，瞰臨河朔，南面以蒞天下。

⁵⁷ Yi, Ting *et al.* (1999) *op. cit.*, pp. 164.

The layout of Beijing was further explained in *Yuanshi* (Song, the Ming Dynasty)⁵⁸. 'Jincheng (Beijing) was based on the range of Taihang on the right-hand, next to the deep on the left-hand side and relayed on the strategic pass of Juyong. Thus the location of city was set in the north direction'⁵⁹.

According to *Huangdu Dayitung Fu*, Jin (Jin, Yuzi) discussed the climate, geography and cultural background of Beijing (Yi, 1999)⁶⁰. Jin stated that 'Beijing was located in the centre of the world in harmony with Yin Yang with pleasant seasons. A tribute could easily be delivered to the city without any obstruction. Earth of the land for a thousand miles was fertile. The watercourse included nine rivers majestically flowing into the land. The mountain range of Taihang and the strategic pass of Juyong gave a solid protection. Beijing was the city desired by the Chinese Emperor Yuan Taizu. The environment of Beijing was created by nature to reveal the most beautiful scenery. Beijing was located at the intercourse of Yin and Yang, which fully nourish the land in depth. This location faced extensive countryside on the south and the sea on the east. The range of Taihang was perpendicularly located on the west. The strategic pass of Juyong was steeply located on the north. The river of Yuquan was curved flowing down and connected to the river of Jin lingering around⁶¹'.

The introduction of rivers around Beijing was shown in Wu (Wu, Chang-yuan) in the Qing Dynasty (Yi, 1999)⁶². He stated that 'to Beijing, the river located at Azure Dragon was the river of Bai which was flowing from the cloud and towards to the city of Tungchou on the south. The river located at White Tiger was the river of Yu which was flowing from the mountain of Yuchuan, passed through the inner city of Danei

⁵⁸ Song, Lian *et al.* (the Ming Dynasty) *Shi* Vol. 10, Geography No. 1. In: Song, Lian *et al.* *Yuanshi* [online]. Silencer Library Enterprises. Available from:

<http://www.angelibrary.com/oldies/yuanshi/119.htm> [Accessed 11th February 2002].

⁵⁹ 京城右擁太行，左挹滄海，枕居庸，奠朔方。

⁶⁰ *Huangdu Dayitung Fu* (皇都大一統賦); Ching, Yuzi (金幼孜).

Yi, Ting *et al.* (1999) *op. cit.*, pp. 164.

⁶¹ 北京當天下之中，陰陽所和，寒暑弗爽。四方貢賦，道里適均。且沃壤千里，水有九河之滄溟之雄。山有太行居庸之固。維此北京，太祖所屬。天造地設，靈鐘秀毓。總交匯於陰陽，盡灌輸於海陸。南臨鋸野，東瞰滄溟。西有太行之巖嶮，北有居庸之崢嶸。瀉玉泉之逶迤，貫金河而回榮。

⁶² Wu, Chang-yuan (吳長元).

Yi, Ting *et al.* (1999) *op. cit.*, pp. 164.

and flowed out the city. After that, this river converged on the river of Tunghui and met the river Bai at the end. The watercourse located at the Crimson Phoenix was the river of Lukou which flowed from the river of Sangchien at Datung and into the boundary of Wanping. The watercourse located at the Black Turtle indicated rivers of Shiyu, Gaoliang, Huanghua, Zhenchuan and the river of Yu which converged in the north of Jinshi (Beijing) and flowed into the river of Bai on the east⁶³.

Further investigation on the development of Beijing based on the use of Feng Shui is shown in *Xijin Zhi*⁶⁴ (the Record of Capital), a historical book chronicling the Yuan Dynasty. It described that ‘in the city planning of Dadu (Beijing), the placement for palace halls and official buildings was designed by Liu (Liu, Bingzhong) in accordance with geographical longitude and latitude (derived from Feng Shui). The planning of Dadu specified the geographical configuration of the natural environment in order to generate environmental arteries and veins (meaning mountain ranges and waterways) for emperors (Yi, 1999)⁶⁵. This paragraph shows that the city plan of Dadu was designed by Liu (Liu, Bingzhong) in accordance with the principles of Feng Shui (Schinz, 1996; Yi, 1999)⁶⁶. The planning of Dadu reveals a way of directing Chi into the city from the natural surroundings including mountain ranges and waterways.

Mountain ranges: Dadu was located at the end of the Yen mountain range. The Yen range was read as a Dragon range carrying Chi. If Dadu was placed at the end of the range, Chi would pour into the city. This placement was interpreted as bringing environmental arteries and veins for the Emperor.

⁶³ 北京青龍水爲白河，出密雲，南流至通州城。白虎水爲玉河，出玉泉山，經大內，出都城，注通惠河，與白河合。朱雀水蘆溝河，出大同桑乾，入宛平界。玄武水爲濕餘，高粱，黃花，鎮川，榆河，俱統京師之北，而東與白河合。

⁶⁴ *Xijin Zhi* (析津志)。

⁶⁵ 大都內外城制與宮室，公府，並系聖載，與劉秉忠率按地理經緯，以王氣爲主。先取地理之形勢，先生王脈，以成大業。

Yi, Ting *et al.* (1999) *op. cit.*, pp. 170.

⁶⁶ Schinz, Alfred (1996) *op. cit.*, pp. 286 – 292.

Yi, Ting *et al.* (1999) *op. cit.*, pp. 170 – 172.

Waterways: Ways of directing water into Dadu focused on two methods. One was to build up an inlet channel bringing spring water from the mountain⁶⁷ into the city. This inlet channel was called Jinshui He, which means the river of Metal water. According to the Five Elements, Metal indicates the orientation of west. The channel of Jinshui He flowed into the palace city of Danei from the west, the orientation of Metal, which implied generating environmental arteries and veins for the emperor. The other method was to build up wells within the palace. A well⁶⁸ was intended to bring spring water from the mountain of Yuquan Shan from under the earth. This well was located in the imperial kitchen used in cooking for the emperor. The imperial kitchen was located to the east side of the south entrance in Danei.

Figure 6-5 shows old watercourses around Dadu (Schinz, 1996)⁶⁹. This figure contains the location of Dadu (position A) and old city layouts for the country of Liao and Jin (position B). In summary, the location of Dadu was placed above the watercourse which was under the earth. This placement implied another way of bringing environmental arteries and veins for emperors.

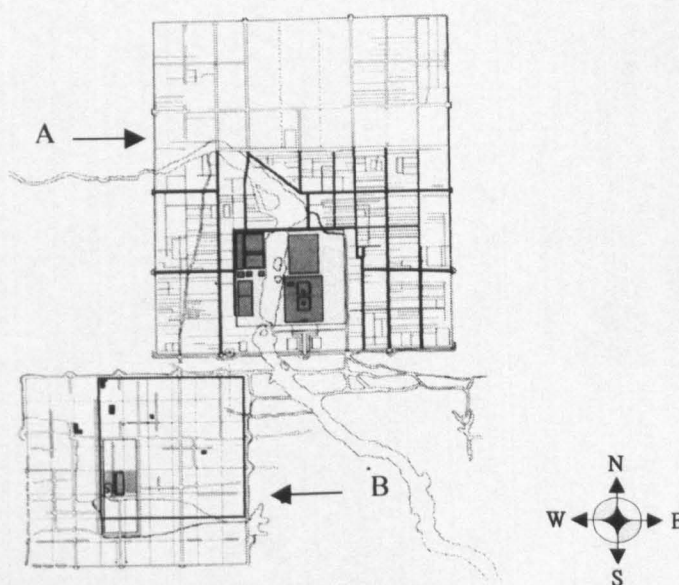


Figure 6- 5 The old watercourse in Dadu.

(Source: Schinz, A., 1996)

⁶⁷ The mountain indicated the mountain called Yuquan Shan (玉泉山).

⁶⁸ The well indicated the well called Dapao Jing (大庖井).

⁶⁹ Schinz, Alfred (1996) *op. cit.*, pp. 289.

6.4 The Forbidden City

6.4.1 The Layout of the Forbidden City

The Forbidden City served twenty-four Chinese Emperors as their royal palaces and administration centre during the Ming and Qing Dynasties. The layout of the Forbidden City was a rectangle in shape surrounded by a moat and the city wall. Figure 6-6 shows the front view of the Forbidden City from the south (Ru and Peng, 1998)⁷⁰. The north – south length of the palace was 960 m and the east – west length 750 m.



Figure 6- 6 The Forbidden City (the south bird eye view).

(Source: Ru, J. and Peng, H., 1999)

Figure 6-7 shows the plan of the Forbidden City (Wang, 1995)⁷¹. The area was about 720,000 square metres. The city wall around the palace was 10 m high and 6.66 m wide at the top, 8.62 m at the bottom. The circumference of the wall was about 3,428 m. The moat⁷² surrounding the city wall was 52 m in width, and the circumference was about 3800 m. This moat provided protection for the palace.

⁷⁰ Ru, J. and Peng, H. (1998) *Palace Architecture*. New York, Springer-Verlag, pp. 113.

⁷¹ Wang, Qiheng (1995) The Xingshui Principle in Fengshui Theory and the Design of the Exterior Space of Old Chinese Buildings. In: Wang, Q. (ed.) *Feng Shui Li Lun Yan Jiu Yi* (The Research of Feng Shui Theory Vol. 1). Taipei, Di-jing, pp. 111.

⁷² The moat was called Tongzi He (筒子河).

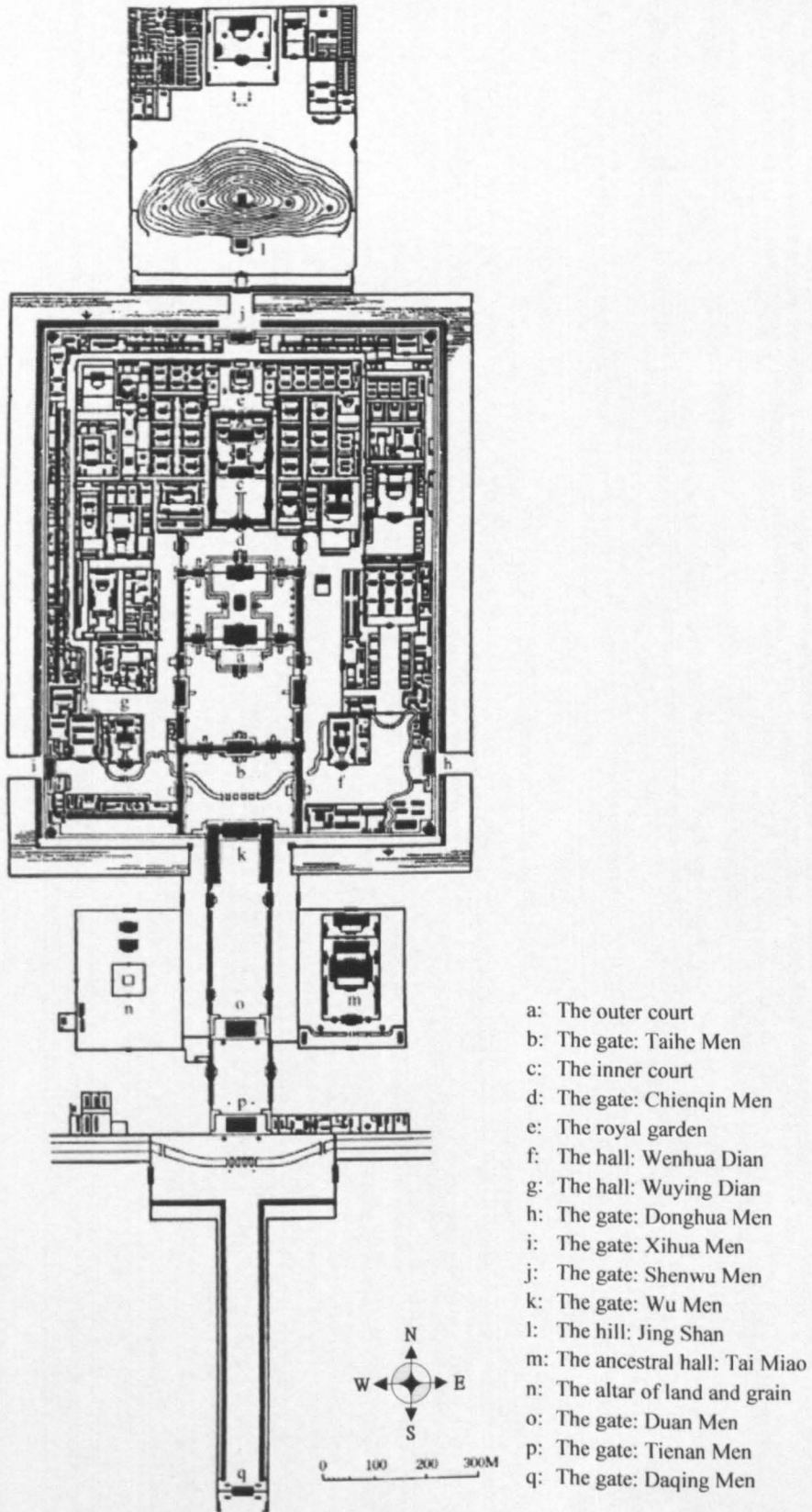


Figure 6- 7 The plan of the Forbidden City.

(Source: Wang, Q., 1995)

The configuration of the palace was square with four gates placed at the four cardinal orientations. The gate on the east was called Donghua Men⁷³, position h. The gate on the west was called Xihua Men⁷⁴, position i. The gate on the north was called Xuanwu Men⁷⁵ (or Shenwu Men⁷⁶ under the Qing Dynasty) position j. The gate on the south was the front gate called Wu Men⁷⁷, position k. In front of Wu Men, another three gates, the gate of Duan Men⁷⁸ (position o), Tienan Men⁷⁹ (position p), and Daqing Men⁸⁰ (position q) were placed towards the outside. A main road on the north-south axis of the palace was placed in front of Wu Men. The road was about 600 m in length. An ancestral hall⁸¹ for emperors was placed to the east of the road, position m in Figure 6-7. The altar of land and grain⁸² was placed to the west of the road, at position n.

6.4.2 Outer Court and Inner Court

Space within the Forbidden City was divided into two principal divisions, outer court⁸³ (position a in Figure 6-7) and inner court⁸⁴ (position c). The outer court was a division where the Emperor held a meeting with officers or where formal ceremonies took place. The inner court was a division to accommodate the Emperor and the imperial family.

The Outer Court:

Figure 6-8 shows a detailed diagram of the outer court (Ru and Peng, 1998)⁸⁵. This

⁷³ Donghua Men (東華門) means the gate of east glorious.

⁷⁴ Xihua Men (西華門) means the gate of west glorious.

⁷⁵ Xuanwu Men (玄武門) means the gate of black turtle.

⁷⁶ Shenwu Men (神武門) means the gate of celestial turtle.

⁷⁷ Wu Men (午門) means the gate of noon.

⁷⁸ Duan Men (端門) means the gate of correct demeanor.

⁷⁹ Tienan Men (天安門) means the gate of heavenly peace.

⁸⁰ Daqing Men (大清門) means the gate of great Qing.

⁸¹ The ancestral hall was called Tai Miao (太廟).

⁸² The altar of land and grain was called Sheji Tan (社稷壇).

⁸³ The outer court was called Wai Chao (外朝) or known as Three Front Halls.

⁸⁴ The inner court was called Nei Ting (內廷) or known as Three Back Halls.

⁸⁵ Ru, Jinghua and Peng, Hualiang (1998) *Palace Architecture*. New York: Springer-Verlag, pp. 151.

court contains three principal buildings, i.e. Taihe Dien⁸⁶, Zhonghe Dien⁸⁷ and Baohe Dien⁸⁸, which are the central buildings of the Forbidden City. These three buildings reveal a typical style of traditional Chinese architecture. A large courtyard was located between the hall of Taihe and the main gate in front. The gate of Taihe⁸⁹ was the main gate (position 2) placed at the south wall of the outer court gate on the north-south central axis (position 1). This gate faced towards to Wu Men (position k in Figure 6-7).

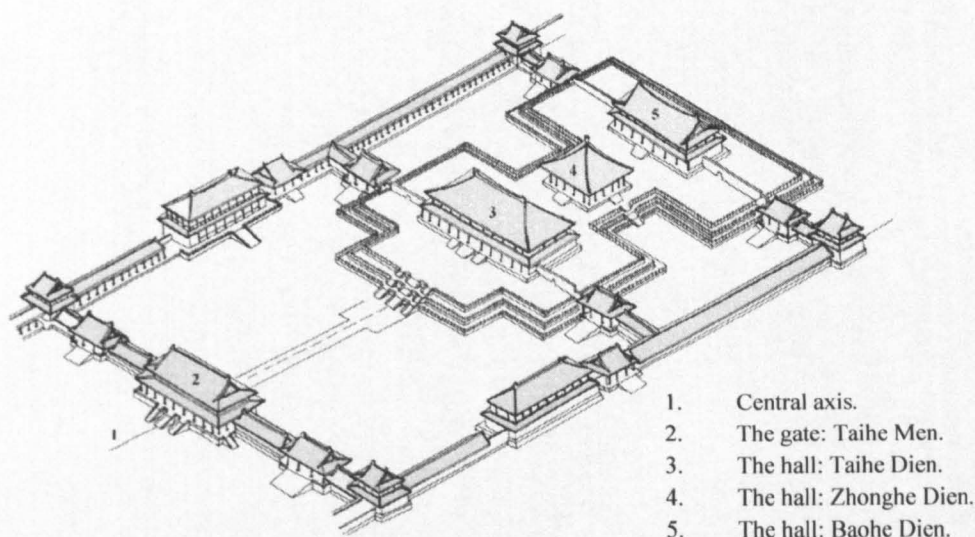


Figure 6- 8 Diagram of the outer court.

(Source: Ru, J. and Peng, H., 1999)

Taihe Dien: The hall of Taihe, shown in position 3 in Figure 6-8, was the largest building in the Forbidden City. The construction of Taihe Dien was divided into eleven bays in front if one includes corridors at both sides (shown as three bays in Figure 4-9) and five bays to the side (Figure 6-9 (A))⁹⁰. The building was 26.92 m high located on a platform of 8.13 m height. The measure of the area was about 2,377 square metres. This hall was located on the north-south central axis, and was first built

⁸⁶ Taihe Dien (太和殿) means the hall of supreme harmony.

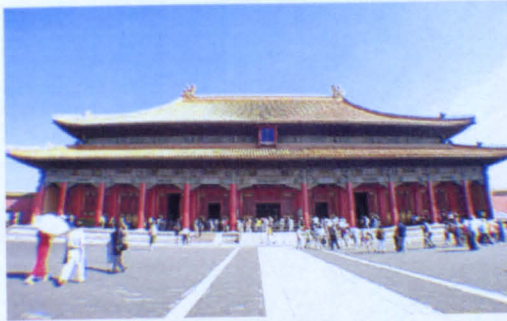
⁸⁷ Zhonghe Dien (中和殿) means the hall of middle harmony.

⁸⁸ Baohe Dien (保和殿) means the hall of preserving harmony.

⁸⁹ Taihe Men (太和門) means the gate of supreme harmony.

⁹⁰ Li, Y. and Hao, J. (2002) Photo Gallery, *The Forbidden City*. [online] China. Available from: http://library.thinkquest.org/C0126670/index_en.htm [Accessed 14th February 2002].

in 1420 but rebuilt several times after fires. The construction of the building remaining today is the hall built in 1695. The hall of Taihe was a formal hall used for grand ceremonies, such as the Emperor ascending the throne, the birthday ceremony of the Emperor, the marriage ceremony of the Emperor and Empress, receiving respects from civil and military officials or dispatching generals to battles.



(A) The hall of Taihe Dien



(B) The hall of Zhonghe Dien.



(C) The hall of Baohe Dien.

Figure 6- 9 Three principal buildings of the outer court.

(Source: Li, Y. and Hao, J., 2002)

Zhonghe Dien: The hall of Zhonghe Dien was the smallest building in the outer court located between the hall of Taihe and the hall of Baohe, shown in position 4 in Figure 6-8. This building was built in 1420. The plan was square. The construction of Zhonghe Dien was divided into five bays in front and five bays to the side (Figure 6-9 (B))⁹¹. The measure of the area was about 580 square metres. This hall

⁹¹ Li, Y. and Hao, J. (2002) 'Photo gallery', The Forbidden City. [online] China. Available from: http://library.thinkquest.org/C0126670/index_en.htm [Accessed 14th February 2002].

was a lounge for emperors reviewing memorials to the throne or taking a rest before attending a formal ceremony.

Baohe Dien: The hall of Baohe Dien, shown as position 5 in Figure 6-8, was located to the north of the outer court. The construction of Baohe Dien was divided into nine bays in front and five bays to the side (Figure 6-9 (C))⁹². The use of numbers five, nine and eleven (the odd numbers), was displayed in these three halls so that the principal room can in each case be located on the central axis. This building was 29.50 m in height. The measure of the area was about 1,240 square metres. This building was a banquet hall for emperors holding banquet for ministers or official guests.

The Inner Court:

The inner court was a division accommodating the emperor and the imperial family. The inner court comprised three sections, i.e. the east, central and west sections. The layout of the central section of the inner court was similar to the outer court, containing three principal buildings and a main gate in front. The three principal buildings are Chienqin Gong⁹³, Jiaotai Dien⁹⁴ and Kunning Gong⁹⁵, as shown in Figure 6-10 (Li, 1999)⁹⁶. All three halls are located on the north-south central axis. The measure of the inner court was about 220 m in length along the north-south direction and 120 m in width. The measure of the area was about 26,000 square metres. The gate Chienqin Men⁹⁷ (position D in Figure 6-10) was the main gate for the inner court. The east section contained the East Six Halls, while the west section contained the West Six Halls.

⁹² Li, Y. and Hao, J. (2002) Photo Gallery, *The Forbidden City*. [online] China. Available from: http://library.thinkquest.org/C0126670/index_en.htm [Accessed 14th February 2002].

⁹³ Chienqin Gong (乾清宮) means the palace of heavenly purity.

⁹⁴ Jiaotai Dien (交泰殿) means the hall of union and peace.

⁹⁵ Kunning Gong (坤寧宮) means the palace of earthly tranquility.

⁹⁶ Li, Xia (ed.) (1999) *The Forbidden City*. Beijing, Jing-chen, pp. 90.

⁹⁷ Chienqin Men (乾清門) means the gate of heavenly purity.



A: Chienqin Gong B: Jiaotai Dien C: Kunning Gong D: Chienqin Men

Figure 6- 10 The east bird eye view of the inner court.

(Source: Li, X., 1999)

Chienqin Gong: The palace of Chienqin Gong (position A in Figure 6-10) was the largest building in the inner court located on the north-south central axis of the Forbidden City. This palace was built in 1420 and rebuilt several times after fires. The construction remaining today was built in 1798. The construction of Chienqin Gong was divided into nine bays in front and five bays to the side. The building was 20 m in height. The size was about 1,400 square metres. This palace was a bedchamber for emperors from the Ming Dynasty until the beginning of the Qing Dynasty when the emperor Yongzheng⁹⁸ moved to the other hall. Then it was changed to a private hall for giving banquets for the imperial family, summoning officials, reading testimonials, receiving foreign missions or ambassadors or handling routine state affairs. The west wing of Chienqin Gong called Xiwu⁹⁹ was used as the study of the Emperor and the office of eunuchs in the Qing Dynasty. The east wing of Chienqin Gong called Dongwu¹⁰⁰ was used as the study room of the Prince in the Qing Dynasty.

Jiaotai Dien: The plan of Jiaotai Dien (position B) was square in shape. This hall was not shown in the original plan and was built by a Chinese emperor called Ming Shitsung in around 1522 – 1566 (Chu, 2002)¹⁰¹. The construction of Jiaotai Dien

⁹⁸ Yongzheng (雍正) was a Chinese emperor (1723 – 1735) in Qing Dynasty.

⁹⁹ Xiwu (西廡).

¹⁰⁰ Dongwu (東廡).

¹⁰¹ Chu, C. (2002) *Jiaotai Dien*. [online] China. The Palace Museum. Available from: <http://www.dpm.org.cn/big5/china/F/F1/F1a.htm> [Accessed 14th February 2002].

was composed of three bays in front and three bays to the side. This hall was to preserve twenty-five imperial seals, in addition to being used by the Empress to accept offerings of respect on three principal festivals, i.e. New Year's Day, the Winter Solstice and the Empress' birthday.

Kunning Gong: The palace of Kunning Gong (position C) was built in 1420 and had already been rebuilt several times after fires. The construction of Kunning Gong had nine bays in front and three bays to the side. This palace was used as a bedchamber for the Empress. The west part was used for offering sacrifices to the Manchu gods. The east part was used as a bridal chamber of the Emperor in the Qing Dynasty. Since the emperor Yongzheng moved to the other hall for rest, the Empress moved out of the palace of Kunning Gong. This palace was then used only for offering sacrifices to the Manchu gods.

6.4.3 Concept of Yin Yang

The spatial arrangement of the outer court and inner court was designed in accordance with Yin Yang. As mentioned above, the outer court was a division where the Chinese Emperor held a meeting with officers or where formal ceremonies took place. The inner court was a division accommodating the Emperor and the imperial family. Based on these different functions, the outer court is relevant to public purposes considered as Yang, while the inner court is relevant to private uses considered as Yin.

The outer court was placed in front of the inner court. This arrangement reflected the concept of duality in Yin Yang. The spatial arrangement of public/Yang area and private/Yin placed Yin Yang in balance.

The use of duality was further applied within the private area. This was divided into two sections with six halls in each. The East Six Halls were located on the east and the West Six Halls on the west. The east was an orientation where the sun rises. On the contrary, the west was where the sunset goes down. This also considered

by the Chinese as part of the system Yin / Yang. Thus, the East Six Halls was seen as Yang and the West Six Halls as Yin.

The East Six Halls: The East Six Halls contained six buildings located in the east of the inner court. These buildings included the palaces of Zhai Gong¹⁰², Jingren Gong¹⁰³, Chengqian Gong¹⁰⁴, Yonghe Gong¹⁰⁵, Zhongcui Gong¹⁰⁶ and Jingyang Gong¹⁰⁷. They were generally used for Crown Princes (the idea of Yang) for accommodation as well as study.

The West Six Halls: The West Six Halls contained six buildings located in the west of the inner court. These included Yongshou Gong¹⁰⁸, Taiji Dian¹⁰⁹, Tiyuan Dian¹¹⁰, Changchun Gong¹¹¹, Yikun Gong¹¹², Tihe Dian¹¹³ and Chuxiu Gong¹¹⁴. The West Six Halls were used to accommodate both the Empress and the imperial concubines (the idea of Yin). The original plan of these palaces accommodated female members of the imperial family, such as Empress dowager, Empress or imperial concubines.

6.4.4 The Use of Numbers

Number and Buildings:

According to *I Ching* (Book of Changes), odd numbers called 'heavenly numbers' and

¹⁰² Zhai Gong (齋宮) means the palace of abstinence.

¹⁰³ Jingren Gong (景仁宮) means the palace of great benevolence.

¹⁰⁴ Chengqian Gong (承乾宮) means the palace of bearing heaven.

¹⁰⁵ Yonghe Gong (永和宮) means the palace of eternal peace.

¹⁰⁶ Zhongcui Gong (鍾粹宮) means the palace of cherishing essence.

¹⁰⁷ Jingyang Gong (景陽宮) means the palace of great yang.

¹⁰⁸ Yongshou Gong (永壽宮) means the palace of eternal longevity.

¹⁰⁹ Taiji Dian (太極殿) means the hall of supreme ultimate.

¹¹⁰ Tiyuan Dian (體元殿) means the hall of all-encompassing universe.

¹¹¹ Changchun Gong (長春宮) means the palace of everlasting spring.

¹¹² Yikun Gong (翊坤宮) means the palace of assisting earth.

¹¹³ Tihe Dian (體和殿) means the hall of harmonious universe.

¹¹⁴ Chuxiu Gong (儲秀宮) means the hall of gathering excellence.

the even numbers called 'earthly numbers'(Hsu, 1993)¹¹⁵. As mentioned above, the outer court referred to Yang and the inner court referred to Yin. The use of numbers in the outer court involved the odd numbers three, five, nine and eleven for arranging the halls and the bays of each hall. The numbers used in the inner court were the even numbers two and six. The use of two indicated that there are two principal palaces, i.e. Chienqin Gong and Kunning Gong. The building of Jiaotai Dien was later and not shown on the original plan. The number six indicated the East Six Halls and the West Six Halls.

Number and Driven Nails on Doors:

One feature of Chinese architecture is driven nails with heads on the door which appear on the surface of the door plank. Driving nails into the door was originally used to fix the door plank. These nails were designed with round heads. The number of nails was used as a manner to identify different ranks of people. According to *Daqing Huidian*¹¹⁶, the placement of nails on the door plank for palaces, altars or temples required nine rows and nine columns; while the placement of mansions for qinwan (similar to a duke) required seven rows and nine columns; the placement for mansions of princes involved seven rows and seven columns¹¹⁷.

There were two different numbers of nails on the door planks of the four cardinal gates of the city. These two numbers were eighty-one and seventy-two. The placement with eighty-one nails involved nine rows and nine columns, for the south gate of Wu Men, the north gate of Shenwu and the west gate Xihua. The placement of seventy-two nails involved eight rows and nine columns. The gate with the seventy-two nails was the east gate of Donghua.

¹¹⁵ Hsu, T. (annot.) (1993) *Zhou I, the Book of Changes*. Taipei: Di-qiu, pp. 595.

¹¹⁶ *Daqing Huidian* (大清會典).

¹¹⁷ Avon (2002) *The File of the Forbidden City* [online] Available from: http://freehomepage.taconet.com.tw/This/is/taconet/top_hosts/f3807391/city.htm [Accessed 24th January 2002].

Chen, Zhen-hua. Gu Gong. *The Chinese Traditional Architecture* [online]. Available from: <http://members.ch.tripodasia.com.hk/carlchan/> [Accessed 24th January 2002].

6.4.5 Consideration of the Eight Kuas and *I Ching* (Book of Changes)

In the inner court, there were three principal buildings, i.e. Chienqin Gong, Jiaotai Dien and Kunning Gong. The terms for these three buildings reflect the idea of the Eight Kuas. The word ‘Gong’ means palace. The term ‘Chienqin’ was composed of two words, ‘Chien’ and ‘qin’ in Chinese. ‘Chien’ referred to heaven according to the Eight Kuas, while in *I Ching*; ‘qin’ referred to purity. The term ‘qin’ reinforced the connection with heaven. The term ‘Kunning’ was composed of two words, ‘Kun’ and ‘ning’ in Chinese. ‘Kun’ referred to earth according to the Eight Kuas; ‘ning’ referred to tranquillity. The term ‘ning’ emphasized the description as earthly. To sum up, Chienqin refers to heaven with purity, while Kunning stands for earth with tranquility. The term Jiaotai was composed of two words, ‘Jiao’ referred to union while ‘tai’ indicated peace. The term of ‘tai’ originated from the Kua of Tai according to the sixty-four Kuas in *I Ching* (Book of Changes). The Kua of Tai was composed of the Kua of Chien at the top and the Kua of Kun at the bottom (Figure 6-11).

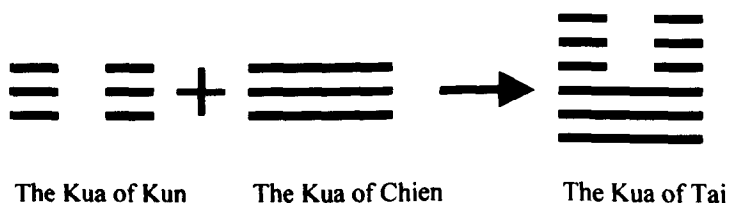


Figure 6- 11 The construction of the Kua of Tai.

The building of Jiaotai Dien was placed in the centre of the inner court, while the building of Chienqin Gong was located to the south, referring to heaven, and the building of Kunning Gong was located on the north, referring to earth. The location of Jiaotai Dien at the centre implied the concept of union of heaven and earth in a balanced condition, i.e. the harmonic situation.

6.4.6 Typical Chinese City Planning: the Use of the Magic Square

The City of the Emperor (Wang-cheng):

Figure 6-12 shows a type of city planning layout called Wang-Cheng, which means the City of the Emperor. Wang-Cheng was originally described in Kaogon Ji, a section of a classic text (Rykwert, 1976)¹¹⁸. This diagram was redrawn from a classic text called the *Yong Le Da Dian* (Vast Documents of the Yong Le Era), written in 1407, which shows the ideal layout for a capital. Several features of the layout are described below, including methods of planning the shape of the city, arranging gates, locating the palace city in the capital, positioning halls or sleeping quarters in a palace city, and laying out streets.

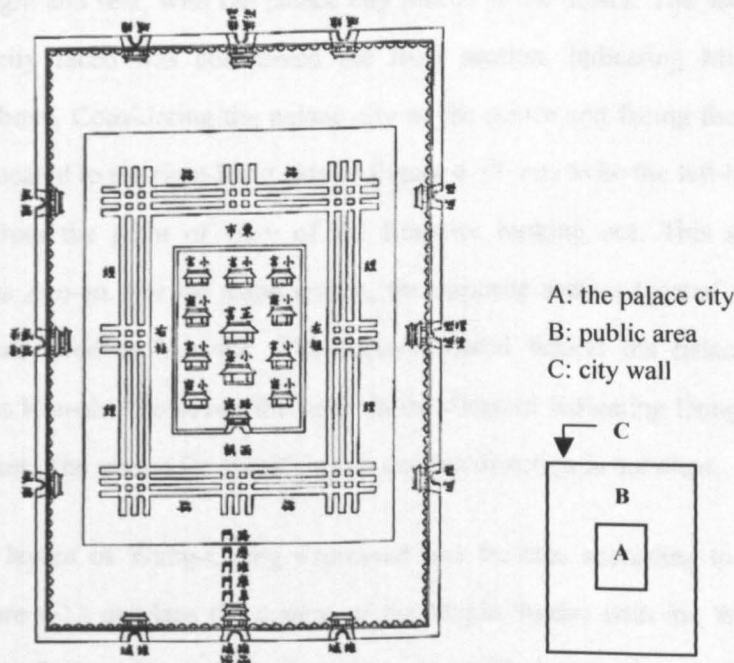


Figure 6- 12 The layout of the City of the Emperor (Wang-cheng).

(Source: Rykwert, J., 1976)

¹¹⁸ Rykwert, Joseph (1976) *The Idea of a Town: The Anthropology of Urban Form in Rome, Italy and the Ancient World*. Massachusetts, The MIT Press, 1999, pp. 182.

According to Kaogon Ji, the layout of a capital with the palace at the centre must follow the ideas of 'Zuo-zu, You-she, Mian-zhao and Hou-shi'¹¹⁹. Zuo-zu means placing the ancestral altar on the left hand side of the palace. You-she means placing the altar of the god of land and grain on the right hand side. Mian-zhao means placing the administrative area in the front. Hou-shi means commercial areas were to be located in the rear. Thus each division within the city has its purpose.

This diagram has three sections: a palace city placed at the centre (position A in Figure 6-12), a public area surrounding the palace city inside the city wall (position B) and a city wall surrounding the whole (position C).

In the public area (position B), several vertical lines indicate longitude. Horizontal lines indicate latitude. The public area was divided into four sections, i.e. front, left, right and rear, with the palace city placed at the centre. The section which the palace city faced was considered the front section, indicating Mian-zhao as mentioned above. Considering the palace city as the centre and facing the front gate, the section located to the right-hand side of Figure 6-12 was to be the left-hand side to the palace from the point of view of the Emperor looking out. This section was considered as Zuo-zu. For the same reason, the opposite section located at the other side was considered as You-she. The section placed behind the palace city was considered as Hou-shi. However, the letter in the diagram indicating Dong-shi means the east market. The reason for specifying an eastern direction is not clear.

The layout of Wang-Cheng expressed two features according to the Magic Square. Figure 6-13 overlaps the pattern of the Magic Square with the Wang-cheng. They have two features in common: first, the rectangular shape and second the placing of the palace city in the central area which was the most significant division according to the Magic Square.

¹¹⁹ 左祖, 右社, 面朝, 後市.

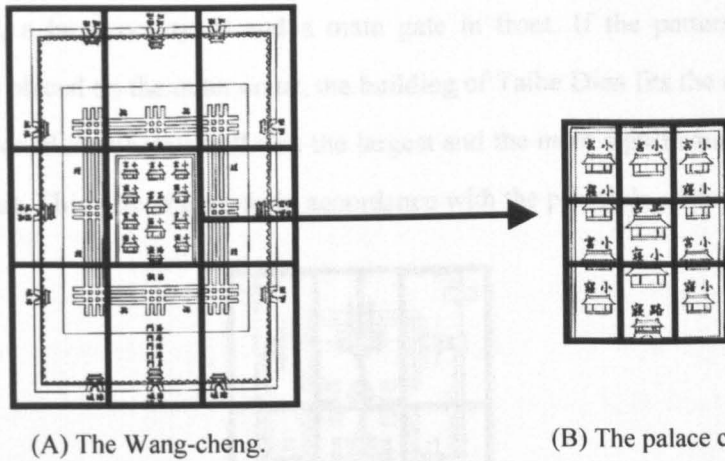


Figure 6- 13 Overlapping the Magic Square with city layout.

The Layout of the Forbidden City:

Figure 6-14 shows the pattern of Magic Square overlapping on the plan of the Forbidden City. The outer court was fitted in the central chamber in the Magic Square. As mentioned in Chapter 5, the central chamber is the most significant chamber in a rectangular space. The outer court was in the central chamber, which was understood as the most significant area from which the Emperor could govern the country.

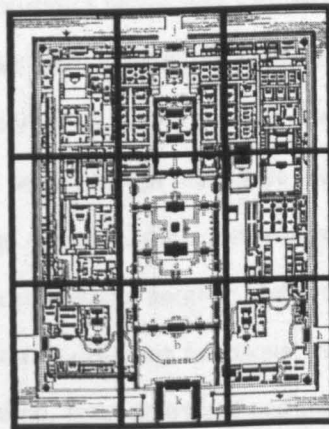
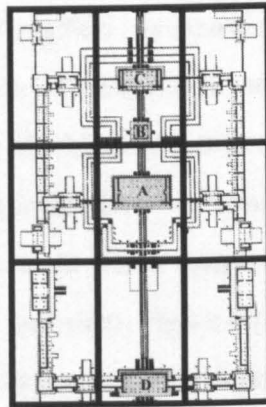


Figure 6- 14 Overlapping the Magic Square on the Forbidden City.

The pattern of the Magic Square can be detected in the detailed units of the Forbidden City. Take the outer court as an example, as shown in Figure 6-15 (Ru and Peng, 1998)¹²⁰. This was rectangular in shape and comprised of three principal

¹²⁰ Ru, Jinghua and Peng, Hualiang (1998) *Palace Architecture*. New York, Springer-Verlag.

buildings, a large courtyard and a main gate in front. If the pattern of the Magic Square is placed on the outer court, the building of Taihe Dien fits the central chamber. As mentioned above, this hall was the largest and the most significant building of the outer court. This placement was in accordance with the principle of the Magic Square.



- A. The hall: Taihe Dien.
- B. The hall: Zhonghe Dien.
- C. The hall: Baohe Dien.
- D. The gate: Taihe Men.

Figure 6- 15 Overlapping the Magic Square above the outer court.

(Source: Ru, J. and Peng, H., 1998)

6.4.7 The Chinese Courtyard House

Traditionally, the Chinese courtyard house was formed by inward-facing buildings on four sides and closed by outer walls. The courtyard house has various sizes and styles. The simple house for a family was a single courtyard with enclosing walls. The main building was located on the north and the main gate placed on the south (as shown in Figure 4-9). If it was a large mansion, the courtyard house would contain more than two courtyards, one is placed behind another. Take a two-courtyards house as an example. The way of indicating different functions was based on size and location. The layout of the main building, front courtyard and main gate were the same as for a typical Chinese courtyard house mentioned above. Behind the main building, there would be secondary buildings. The second courtyard was placed behind the main building and was closed by another wall. The main building was normally designed as a living room and the front courtyard space had the most public use. The rooms for private use such as bedrooms were placed behind the main building. Buildings located

on the central axis were considered superior to buildings at the sides. In addition, buildings on the left-hand side (from the point of view of the householder looking out) were superior to buildings on the right-hand side.

The Forbidden City was rectangular in shape which was considered an ideal configuration according to Feng Shui. As shown in Figure 6-7, the Forbidden City was composed of various types of rectangular units. Each unit was developed in accordance with the layout of a Chinese courtyard house. Take the inner court as an example. The layout of the inner court was compatible with the layout of a Chinese courtyard house. The inner court was a square or rectangular space, the outside of which has buildings on all four sides. Figure 6-16 shows a layout of the inner court. The main gate was placed in front. A large courtyard was located between the main gate and the most significant building, Chienqin Gong. The next buildings in the hierarchy, i.e. Jiaotai Dien and Kunning Gong, were placed behind Chienqin Gong. All these three buildings were located on the central axis of the inner court. Other minor buildings were placed on the left and right hand sides of the central axis. The East Six Halls was located on the left-hand side of the inner court, while the West Six Halls was located on the right-hand side. As mentioned above, the East Six Halls were used for the crown prince for accommodating and studying, while the West Six Halls accommodated female members of the imperial family. To locate male members on the left-hand side and female members on the right-hand side expressed a typical spatial arrangement of the Chinese courtyard house.

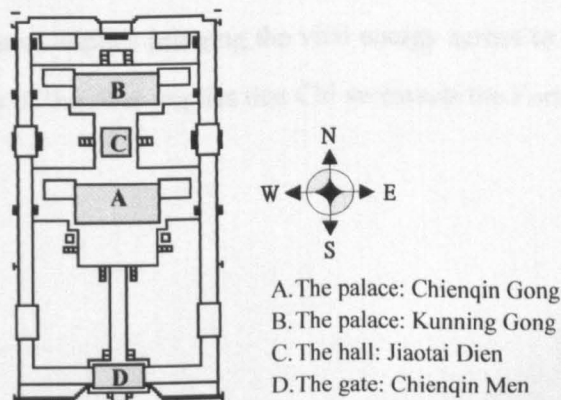


Figure 6- 16 The layout of the inner court.

6.4.8 The Concept of the Ideal Feng Shui Site

In general, the layout of the Forbidden City expressed the use of cardinal orientation as its principal orientation. The Forbidden City included a mountain, Jing Shan, lying on the north and a watercourse, Jinshui He, flowing across the site, as shown in Figure 6-11. This spatial placement was in accordance with the principle of the ideal Feng Shui environment (also see section 3.2).

Orientation: The main gate of the Forbidden City was placed to the south. All of the main palaces in the outer court and in inner court were placed on the north-south central axis with all buildings facing south.

Mountains: The mountain of Jin (Jin Shan) was placed at the back of the Forbidden City. This mountain was considered as the Principal Mountain (Zhu Shan) of the site in accordance with the principle of Feng Shui.

Watercourse: An inlet channel of Jinshui was flowing across the courtyard located between the gate Wu Men (position k in Figure 6-7) and the gate of Taihe (position b), flowing from west to east, as shown in Figure 6-17 (Ru and Peng, 1998)¹²¹. The river of Jinshui was a manmade river used not only as fire fighting and escape canal but also for achieving the idea of Feng Shui. The layout of the river of Jinshui was flowing from the northwest corner of the Forbidden City to the south, by flowing across the front courtyard towards the east, and leaving the Forbidden City on the southeast corner. The layout of the river formed a curve intending to enclose the outer court. This watercourse implies bringing the vital energy across to permeate the Forbidden City. The curve of the river implies that Chi surrounds the Forbidden City.

¹²¹ Ru, Jinghua and Peng, Hualiang (1998) *Palace Architecture*. New York: Springer-Verlag, pp. 132.



Figure 6- 17 The east view of the river of Jinshui.

(Source: Ru, J. and Peng, H., 1999)

6.4.9 Naming and Chinese Cosmology

Zi-jin Cheng was the principal term used for the Forbidden City which was comprised by three Chinese letters, i.e. Zi, Jin and Cheng. Cheng means city. Jin refers to forbidden. The meaning of Zi has two explanations. The first one was considered in accordance with Chinese constellations. Zi referred to the star of Zi-wei, known as Polaris or the North Star in the modern constellation system. The Chinese considered Zi-wei Xing¹²² the most significant star located in the centre of the heaven. This star was surrounded by all the other stars in the sky. Similarly, the Forbidden City was located at the centre of the earth. The Chinese make a connection between the center of earth, the Forbidden City, and the centre of heaven, Zi-wei Xing. The word Zi being the first letter of Zi-jin Cheng (the Forbidden City) was used to identify that the palace is used for the Chinese Emperor (Liu, 1999)¹²³.

The other viewpoint was derived from Chinese legend. The ancient Chinese believed that the palace of the Gods in heaven was called Zi Gong¹²⁴. To identify the

¹²² Zi-wei Xing (紫微星).

¹²³ Liu, Li (1999) *The Building of the City of Beijing in the Ming Dynasty (1368 – 1644)*. *Edinburgh Architecture Research* 26 [online] Edinburgh, The Department of Architecture, The University of Edinburgh. Available from: <http://www.caad.ed.ac.uk/publications/ear/liliu.html> [Accessed 15th January 2002].

¹²⁴ Zi Gong (紫宮).

privilege of the Emperor who was considered to be the son of Gods, the palace of the emperor was called Zi Gong. The second letter of 'jin' refers to forbidden and 'Cheng' means city. The palace for the Chinese Emperor was dignified and was forbidden to public entry. This great palace therefore was called Zi-jin Cheng, Zi Gong, Jin Gong and known as the Forbidden City (Yi, 1999)¹²⁵.

6.5 Conclusion

This chapter has investigated the underlying concepts of the Forbidden City in Beijing from many aspects, through the viewpoint of Feng Shui. A broader investigation on why the site of Beijing was regarded as an ideal site for the capital was first introduced. The historic descriptions on the city planning of Beijing as well as the examination of Beijing by Feng Shui specialists were described. The spatial arrangement of the palace city has been identified with the use of the principles of Feng Shui. First, the site of Forbidden City was arranged to be in the centre of a rectangle, revealing the concept of Magic Square with parallel streets and based on a central axis. This described typical Chinese city planning, particularly for the city of the emperor. The environment surrounding the site was carefully arranged in order to build an ideal Feng Shui environment, with an artificial mountain located in the north and an artificial river flowing from the northwest corner of the Forbidden City to the south. The spatial arrangements of outer and inner court, the East Six Halls and the West Six Halls in the outer court reveal the use of duality which referred to Yin Yang. The naming of the buildings in the inner court was given in accordance with the Eight Kuas and *I Ching* (Book of Changes), and each building was built in accordance with the layout of a Chinese courtyard house. Also, the name given for the Forbidden City could reveal Chinese cosmology linking with the stars in the sky. In total, the design of the Forbidden City is an excellent example to reveal the key principles of Feng Shui used in traditional Chinese architecture.

¹²⁵ Yi, Ting *et al.* (1999) *op. cit.*, pp. 177.

Chapter 7

Conceiving the World: A Cross-cultural Investigation into Traditional Domestic Architecture

7.1 Introduction

As discussed in Chapter two, Feng Shui is the way the ancient Chinese revealed their understanding about the world and applied this understanding to their dwellings. What Feng Shui explores is a way to establish an ideal dwelling environment that will allow human beings to live in harmony with the natural environment of the world. However, this kind of attempt to establish a guiding cosmology was not unique to the ancient Chinese but is found in many other cultures. Similarly, many traditional domestic architectures were built to reflect considerations about the relations between human beings and the natural environments of the world. Traditional architectures such as the pyramids of ancient Egypt, the monuments of the Mayas and Incas, the Angkor Wat of the Hindus (Hancock and Faiia, 1998)¹, the yurt of the Mongols (Pearson, 1994; Wang, 1998)², the longhouse of the Tukanoans (Hugh-Jones, 1995)³ and the houses of the

¹ Hancock, Graham and Faiia, Santha (1998) *Heaven's Mirror*. England, USA, Australia, Canada, New Zealand: Penguin Books, 1999.

² Pearson, David (1994) *Earth to Spirit: In Search of Natural Architecture*. London: Gaia Books, pp. 29.
Wang, Gui-xiang (1998) *Wen Hua, Kong Jian Tu Shi Yu Dong Xi Jian Zhu Kong Jian* (Culture, Spatial Pattern and East-West Architectural Space). Taipei: Tien-yuan Cheng-shi, pp. 68 – 69.

Betsileo (Kent, 1990)⁴, Berber (Bourdieu, 1971)⁵ and Native American (Neihardt, 1932; Nabokov and Easton, 1989; Pearson, 1994; Wang, 1998)⁶ all show this tendency.

This chapter takes examples from three primitive cultures. Section 7.2 introduces the Native Americans and section the 7.3 Tukanoans. Section 7.4 investigates the Berber. Through a general investigation on these different types of architecture, this chapter attempts to reveal how the indigenous cultures achieved their understanding and built a link between human beings, architecture and the world, particularly falling into the representation of this sort of link in the aspect of the spatial arrangement of houses using various means such as methods of orientation and classification.

7.2 The Native Americans

7.2.1 Introduction

The Native Americans are indigenous people in the America of the Western Hemisphere who originally immigrated from Asia by way of the Bering Strait sometime during the late glacial epoch. They were the first people to live in North,

³ Hugh-Jones, Stephen (1995) 'Inside-out and Back-to-front: the Androgynous House in Northwest Amazonia'. In: Carsten, J. and Hugh-Jones, S. (ed.) *About the House*. Cambridge: Cambridge University Press, pp. 226 – 252.

⁴ Kent, Susan (1990) *Domestic Architecture and the Use of Space*. Cambridge: Cambridge University Press.

⁵ Bourdieu, P. (1971) 'The Berber House' in M. Dauglas, (ed.) *Rules and Meanings: the Anthropology of Everyday Knowledge*. Harmondsworth: Penguin, pp. 98 – 110, 1973.

⁶ Neihardt, John G. (1932) *Black Elk Speaks: Being the Life Story of a Holy Man of the Oglala Sioux*. USA: Bison Book, 1995.

Nabokov, Peter and Easton, Robert (1989) *Native American Architecture*. Oxford: Oxford University Press.

Pearson, David (1994) *op. cit.*, pp. 29.

Wang, Gui-xiang (1998) *op. cit.*, pp. 69.

South, or Central America for thousands of years. According to *the Collins Cobuild English Dictionary* (1995), Native American are people from any one of the many tribes which were already living there before the Europeans arrived (Sinclair, 1995)⁷. In *the Oxford Dictionary of Difficult Words*, the Native American is a member of any of the indigenous peoples of the Americas (Jewell, 2001)⁸. Many anthropologists and archaeologists believe that the first Native American came to the Americas from Asia approximately 20,000 to 30,000 years ago. At that time, huge ice sheets covered much of the northern half of the earth, and much of the earth that is now underwater was dry land. One area dry then but submerged now is the Bering Strait, which today separates Asia and North America. The Native American, following migrations of herd animals or following the coastline and living off the wealth of the sea, made their way across. By 12,500 years ago, they had spread throughout the New World, from the Arctic in the north all the way to the bottom of South America (Hooker, 1996; *The American West*, 2001)⁹.

The Native Americans were divided into many tribes. Each of them has its own specific name to reflect the pride of the group and its way of life. For example, the Delawares living in eastern North America called themselves Lenni Lenape, which means original men or manly men (Lytle, 1908)¹⁰. Another tribe, the Ogalala, which means they scatter their own (Elk, 1997)¹¹ lived in the Plains of North America. The Native Americans developed various types of domestic architecture built up in

⁷ Sinclair, John *et al.* (1995) *The Collins Cobuild English Dictionary*. Great Britain: Harper Collins Publishers, pp. 1097 – 1098.

⁸ Jewell, Elizabeth J. *et al.* (ed.) (2001) *The Oxford Dictionary of Difficult Words*. New York: Oxford University Press, pp. 290.

⁹ Hooker, Richard (1996) *The People: Cultures in America* [online]. USA, Washington State University. Available from: <http://www.wsu.edu/~dee/CULAMRCA/BEGIN.HTM> [Accessed 26th April 2002].

The American West (2001) *Native Americans* [online]. The American West. Available from: <http://www.americanwest.com/pages/indians.htm> [Accessed 26th April 2002].

¹⁰ Lytle, James R. (1908) *The Indians of Delaware County* [online]. USA, Point & Click Software, Inc. Available from: <http://www.delaware.org/history/indians.htm> [Accessed 26th April 2002].

¹¹ Elk, David Little (1997) *Oceti Sakowin* [online]. David Little Elk. Available from: <http://www.studymed.de/sakowin.html> [Accessed 26th April 2002].

different areas, such as the lodge, pueblo, longhouse, tipi, iglu, hogan, pithouse, wikiup, plank house and chickee (Giese, 1996)¹². Although these houses show different façades and kinds of construction, houses to the Native American meant more than dwelling or the design and decoration of buildings, but also embraced how these indigenous people understood the world, and gave order and meanings to a wild and untamed place.

The next section 7.2.2, discusses how Native American people presented their vision of the world. Several legends involving how the world was made are linked. Section 7.2.3 introduces a Haida house which is a large plank structure on the Northwest Coast. This section shows how the layout of the Haida house is based on cosmic concepts.

7.2.2 Black Elk's Vision of the World

Black Elk (1863 A.D. – 1950 A.D.) was a holy man and spiritual interpreter to the tribe of Oglala Sioux. In the book *Black Elk Speaks*, written by John G. Neihardt in 1932, Black Elk offered not only traditional Lakota spiritual ways of life, but also visions of the world structure and ideas about reality (Neihardt, 1932)¹³. This book is a recreation in English interpreting the oral history that Black Elk recounted for Neihardt in the Sioux language in 1931. Some researchers have doubted it and suggested that this vision may not be true, and that Black Elk either lied to Neihardt, or Neihardt made it up (Otter, 2001)¹⁴. However, the book does claim to explore Native American religious thought, and presents the vision of Black Elk which was

¹² Giese, Paula (1996) *Pre-Contact Housing Types* [online]. Paula Giese. Available from: <http://www.kstrom.net/isk/maps/houses/housingmap.html#buttons> [Accessed 26th April 2002].

¹³ Neihardt, John G. (1932) *Black Elk Speaks: Being the Llife Story of a Holy Man of the Oglala Sioux*. United States of America: Bison Book, eighth cloth printing, 1995.

¹⁴ Otter, Blue (2001) *Black Elk's Vision* [online]. Earth Mother Crying. Available from: <http://www.wovoca.com/black-elk-speaks-vision-of-racial-harmony.htm> [Accessed 30th April 2001].

socially, physically, and psychologically influenced by the Native American tradition (Neihardt Center, 2002)¹⁵.

The Great Vision:

The Great Vision as interpreted by Black Elk shows the Native Americans presenting their respect to the world, and their unique ways to elaborate the meanings of four cardinal directions. Orientation to the Native American is more than a tool to point out direction. For instance, orientations are linked to specific ancestral beings, natural phenomena and human behaviour. Each direction is presented as a sacred Grandfather corresponding to one Power of the World and linked to various natural phenomena (Neihardt, 1932)¹⁶.

According to the text *Black Elk Speaks*, Black Elk had received a Great Vision and sacred gifts of power at the age of nine when he was very ill almost to the point of death (Neihardt, 1932)¹⁷. This Great Vision revealed six sacred Grandfathers, each representing one specific Power of the World and standing for one direction.

The first Grandfather represents the Power of the West. The west is the direction where the sun goes down and where the thunder beings live. This Grandfather gave Black Elk a wooden cup of water and a sacred bow. The wooden cup of water stands for the power to make life. The sacred bow stands for the power to destroy. This Grandfather then turned into a black horse. The second Grandfather represents the Power of the North. The north is where the giant lives. This Grandfather gave Black Elk a powerful herb, which represents the power to make beings live. This Grandfather turned into a white goose. The third Grandfather represents the Power of

¹⁵ Neihardt Center (2002) *The Story of Black Elk*. [online]. Neihardt Center. Available from: <http://www.wayne.esu1.k12.ne.us/neihardt/blackelk.html> [Accessed 26th April 2002].

¹⁶ Neihardt, John G. (1932) *op. cit.*, pp. 29.

¹⁷ Neihardt, John G. (1932) *op. cit.*, pp. 20 – 47.

the East. The east is where the sun shines continually. This Grandfather gave Black Elk the good red day and a peace pipe with a spotted eagle outstretched upon the stem, which corresponds to the power to make sick beings well. This Grandfather turned into a bison.

The fourth Grandfather represents the Power of the South. The south is where a person should always face. This Grandfather gave Black Elk the yellow day and a sacred stick, which symbolises the power to grow and make things blossom. This Grandfather also presented an image about a sacred ceremony involving a holy stick placed in the centre which bloomed into a tree, surrounded by a hoop of people and divided by two intersecting roads, i.e. a red road and a black road. The red road running from north to south symbolises the road of good. The black road from west to east symbolises a fearful road, a road of troubles and of war. This Grandfather turned into an elk.

The fifth Grandfather represents the Spirit of the Sky. This Grandfather turned into a spotted eagle hovering. This image stood for all the wings of the air, and the winds and the stars which shall be like relatives, also expressing the power of nature. The sixth Grandfather represents the Power of the Earth. This Grandfather is represented as Black Elk himself with all the years that he would live. From this Grandfather, Black Elk obtained the idea that the primary meaning of his vision was not his being called to the spirit world, but instead, being given the powers of the Earth. These two last Grandfathers represent the connection between human beings (Black Elk himself) and the world (the Sky and Earth). Human beings living in the world are influenced by the powers of nature from the world (Neihardt, 1932)¹⁸.

To summarise, the first four Grandfathers were related to cardinal orientations. Each of them gave Black Elk some sacred objects which symbolise various power

¹⁸ Neihardt, John G. (1932) *op. cit.*, pp. 27 – 31.

from the world. Colours and animals are linked to specific orientations. The other two Grandfathers are tied to vertical directions of upward and downward. Table 7-1 shows the associations between the cardinal points and the selected objects, powers, colours and mythical animals.

Table 7- 1 The use of classification system in the four cardinal orientations and other subjects derived from the Great Vision.

Orientations		Symbolical Objects	Intangible Power	Colours	Celestial Animals
West	Where the sun goes down and where the thunder beings live	Water in a Wooden Cup	Live	Black	Horse
		Bow	Destroy		
North	Where the giant lives	Herb	To make live	White	Goose
East	Where the sun shines continually	Pipe	Peace and make well for sicken beings	Red	Bison
South	Where you always face	Stick	To grow and make things blossom	Yellow	Elk

The value of presenting the Great Vision by the Black Elk in this section is to show how the Native American classifies the world and links this worldview to different objects. Four cardinal orientations served as a primitive classification system to divide the world into four. Visible or invisible objects are linked to each of the orientations, and each also represents one invisible power from nature. The use of colours and animals shows how the Native Americans reinforced their idea that all beings in the world can be correlated, and this has strong correlations with Feng Shui for the Chinese. It must be noted though, that different cultures make different connections. For instance, the link between orientation and colour is not the same for Native Americans and Chinese (see Table 7-2). However, there are strong similarities in the way they seek to structure phenomena.

The Sacred Pipe

Traditionally, the Native Americans considered the pipe a sacred instrument, called *Chankana*, which involves a long and narrow stem. Different parts of the pipe were

Table 7- 2 Classification system for Native Americans and Chinese.

Orientations	Native Americans		Chinese	
	Colours	Animals	Colours	Animals
East	Red	Bison	Azure	Dragon
West	Black	Horse	White	Tiger
South	Yellow	Elk	Crimson	Phoenix
North	White	Goose	Black	Turtle

Both cultures find correlations between colours and animals and orientations. However, based on the different life style and cultural background, their results are different. For instance, the east corresponds to the animal Bison for the Native Americans, and the animal Dragon for the Chinese. The use of different animals perhaps reflects that the Native Americans were hunting people, while the Chinese were rooted in agriculture. Thus the Native Americans, with Bison, Horse, Elk and Goose, took physical animals which they could find in the natural world. Such physical animals did not have as much significance to the Chinese. Instead, they chose four celestial animals, i.e. Dragon, Tiger, Phoenix and Turtle, which would have more symbolical meanings to reinforce their significance. The characters of the celestial animals have been considered as the determining factor to decide the ideal form of the mountains surrounding a house in Feng Shui. For instance, Azure Dragon indicates mountains located at the east, with an ideal form in which the mountains should be ‘undulating’.

The use of colours between these two cultures also presents different results. None of the same colours corresponds with the same orientation. However, an interesting finding is that the colours black and white are used for the orientations west and north by both cultures, although their respective positions are opposite.

The Sacred Pipe:

Traditionally, the Native American considered the pipe a sacred instrument, called Chanunpa, which allowed a link with the spirit world. Different parts of the pipe were

decorated to indicate different divisions of the world and the pipe was given four ribbons of different colours, i.e., black, white, red and yellow, hanging on its stem. These ribbons represented the four quarters of the world (Neihardt, 1932)¹⁹.

Table 7-3 details the meanings of the ribbons on the pipe. Each ribbon represents one natural phenomenon of the world. The four ribbons together symbolise the whole world. The black ribbon is linked to the orientation of west. This orientation, where thunder beings live, is associated with rain. The white ribbon is linked to north and associated with the cleansing wind. The red ribbon is linked to east, associated with the light, and is where the morning star lives to give men wisdom. The yellow ribbon is linked to south and associated with the summer and the power to grow (Neihardt, 1932)²⁰.

Table 7- 3 Meanings of four colours of ribbons for the sacred pipe.

Colours	Orientations	Natural Phenomena
Red	East	Light / morning star
Black	West	Rain
Yellow	South	Summer
White	North	Wind

According to Black Elk, the original sacred pipe was brought by a mysterious woman in legend (Neihardt, 1932)²¹. This sacred pipe is an instrument to indicate the connection between human beings and the world. The pipe which has a bison calf carved on one side stands for the earth. The earth is the place to bear and feed human beings. Twelve eagle feathers tied with grass onto the stem are used to represent the twelve moons of the sky.

¹⁹ Neihardt, John G. (1932) *op. cit.*, pp. 2.

²⁰ Neihardt, John G. (1932) *op. cit.*, pp. 2.

²¹ Neihardt, John G. (1932) *op. cit.*, pp. 3 – 5.

The Calendar Moons:

The Native American followed a twenty-eight day lunar calendar. The lunar calendar system is a classification of time similar to that of the Chinese. It is based on the idea that the division of a circle into twenty-eight parts would form a lunar zodiac corresponding to the distance, against a backdrop of stars, which is travelled by the moon each day. Although both ancient Chinese and Native Americans applied the lunar calendar as their principal calendar system, they had different ways to designate each 'month'. The beginning of the circle was most probably the star on the horizon at the time of the Spring Equinox. Each periodicity of the moon is called a Moon. A year contains twelve Moons. Each Moon is designated according to crops and agricultural changes during that time. For instance, July is the 'Moon When Cherries are Ripe' and November is the 'Moon of Falling Leaves'. This system clearly shows changes of plants in natural environment to provide information, and reflects how the Native American interpreted their observations of the world. This kind of information would be important to hunter-gatherers who expect to search for fruit in the break of hunting. Native Americans used eighteen different natural phenomena changes to describe the progress of time.

In *Black Elk Speaks*, Neihardt (1932) addressed the ways in which Native Americans visualised time²². Table 7-4 shows the calendar moons of a year. The month known as January today is interpreted as the Moon of Frost in the Tepee²³. February starts with the Moon of the Dark Red Calves, followed by the Moon of the Dark Red Calf²⁴. March is the Moon of the Snowblind²⁵. April is the Moon of the Red Grass Appearing²⁶. May begins with the Moon When the Ponies Shed²⁷, and then

²² Neihardt, John G. (1932) *op. cit.*

²³ Neihardt, John G. (1932) *op. cit.*, pp. 137, 267.

²⁴ Neihardt, John G. (1932) *op. cit.*, pp. 90, 138.

²⁵ Neihardt, John G. (1932) *op. cit.*, pp. 90, 105, 138.

²⁶ Neihardt, John G. (1932) *op. cit.*, pp. 63, 139.

²⁷ Neihardt, John G. (1932) *op. cit.*, pp. 18, 139.

comes the Moon of Shedding Ponies²⁸. June is the Moon of Making Fat²⁹ or the Moon of Fatness³⁰. July is the Moon When Cherries are Ripe³¹. August is called the Moon When the Cherries Turn Black, the Moon When the Cherries are Ripe or the Moon of Black Cherries³². September is the Moon When the Calves Grow Hair³³ or the Moon When the Plums Are Scarlet³⁴. October is the Moon of the Changing Season³⁵. November is the Moon of Falling Leaves³⁶. December is the Moon of the Popping Trees³⁷. Seven of the months have singular terms, and the other five have plural terms. Some of the plural terms present the same meaning, for instance, August is called the Moon When the Cherries Turn Black, the Moon When the Cherries are Ripe or the Moon of Black Cherries. All three identify the time that cherries are ripe. The reason for showing more than one term to identify a month may be caused by the translation from the Sioux language to the English. Thus, different terms are used in different parts of the book *Black Elk Speaks*.

²⁸ Neihardt, John G. (1932) *op. cit.*, pp. 196.

²⁹ Neihardt, John G. (1932) *op. cit.*, pp. 80, 90, 148, 159, 177, 203.

³⁰ Neihardt, John G. (1932) *op. cit.*, pp. 196.

³¹ Neihardt, John G. (1932) *op. cit.*, pp. 57.

³² Neihardt, John G. (1932) *op. cit.*, pp. 16, 61, 132, 248.

³³ Neihardt, John G. (1932) *op. cit.*, pp. 81, 133, 140.

³⁴ Neihardt, John G. (1932) *op. cit.*, pp. 177.

³⁵ Neihardt, John G. (1932) *op. cit.*, pp. 10.

³⁶ Neihardt, John G. (1932) *op. cit.*, pp. 18, 134, 135.

³⁷ Neihardt, John G. (1932) *op. cit.*, pp. 7, 179, 253.

Table 7- 4 The calendar moons to the Native American.

The Twelve Months	The Calendar Moons
January	The Moon of Frost in the Tepee
February	The Moon of the Dark Red Calves The Moon of the Dark Red Calf
March	The Moon of the Snowblind
April	The Moon of the Red Grass Appearing
May	The Moon When the Ponies Shed The Moon of Shedding Ponies
June	The Moon of Making Fat The Moon of Fatness
July	The Moon When Cherries are Ripe
August	The Moon When the Cherries Turn Black The Moon When the Cherries are Ripe The Moon of Black Cherries
September	The Moon When the Calves Grow Hair The Moon When the Plums Are Scarlet
October	The Moon of the Changing Season
November	The Moon of Falling Leaves
December	The Moon of the Popping Trees

A lunar month to the Chinese is determined by the period required for the moon to complete its full cycle of 29 and half days. An ordinary year with 12 months comprises 353, 354, or 355 days. Each month is designated by the number one to twelve. To keep this calendar in relative alignment with the solar calendar, an extra month, the leap month, must be added approximately every 30 to 34 months. Seven additional lunar months have to be added every nineteen years. About every two and a half years, a leap month is added to adjust the calendar. The leap month is designated according to the time when it is added. For instance, if the leap month is added after August, the leap month is called 'leap August'. The year containing the leap month is called the leap year. A leap year has 13 months and comprises 383, 384, or 385 days. The Chinese lunar calendar is the combination of solar and lunar calendar systems so as to have its years consistent with the tropical year and its months consistent with the synodic months.

Prior to adoption of the Western solar calendar system, the Chinese exclusively followed a lunar calendar in determining the times of planting, harvesting,

and festival occasions. The Chinese lunar calendar divides a year into Twenty-four Solar Divisions, known as Er Shi Si Jie Chi³⁸, in each twelve months. The words Er Shi Si means twenty-four. Jie stands for segment. Chi is the same Chi as energy and also means climate. The system of Twenty-four Solar Divisions identifies the significant seasons and climate changes. This provides useful information for farmers work from sowing and tilling to the final harvest in a year.

Table 7-5 shows the details of the Twenty-four Solar Divisions. This system begins with the Start of Spring, known as Li Chun. It is followed by Rain Water, known as Yu Shui. This is the time when preparations for planting are made. Excited Insects, known as Jing Zhe, is the time of spring thunder and the stirring of new life. It is followed by Spring Equinox, known as Chun Fen. Clear and Bright, known as Qing Ming, is marked by the howling of southeasterly winds. Grain Rains, known as Gu Yu, reminds the farmers that seasonal downpours are beginning. The summer divisions begin with Start of Summer, known as Li Xia. Grain Fills, known as Xiao Man, is the time when the grain swells on the stalks. Grain in Ear, known as Mang Zhong, marks the time of harvest. It is followed by the Summer Solstice, known as Xia Zhi. Slight Heat, known as Xiao Shu, and Great Heat, known as Da Shu, are the time when the warmth of summer becomes increasingly more feverish. There follows the End of Heat, known as Chu Shu. Start of Autumn, known as Li Qiu, is the day on which the temperature begins to cool. White Dew, known as Bai Lu, is the time when the moisture congeals to frost. The Autumnal Equinox, known as Qiu Fen, is the true start of the fall season. Cold Dew, known as Han Lu, and Frost Descends, known as Shuang Jiang, are the time when the weather turns cold. Next comes Start of Winter, known as Li Dong. Light Snow, known as Xio Xue, and Heavy Snow, known as Da Xue, mark the deep winter. The Winter Solstice, known as Dong Zhi, is a day of deep significance. It is followed by Little Cold, known as Xiao Han, and Severe Cold,

³⁸ Er Shi Si Jie Chi (二十四節氣).

known as Da Han, the final two divisions of the cycle before beginning the new year (Iap, 2002; Hwangbo, 1999)³⁹.

Table 7- 5 The Twenty-four Solar Divisions.

Number	Twenty-four Solar Divisions		Beginning Date (Approximate)
	Chinese name	Translation	
1	Li Chun	Start of Spring	5 February
2	Yu Shui	Rian Water	20 February
3	Jing Zhe	Excited Insects	7 March
4	Chun Fen	Spring Equinox	22 March
5	Qing Ming	Clear and Bright	6 April
6	Gu Yu	Grain Rains,	21 April
7	Li Xia	Start of Summer,	6 May
8	Xiao Man	Grain Fills	22 May
9	Mang Zhong	Grain in Ear	7 June
10	Xia Zhi	Summer Solstice	22 June
11	Xiao Shu	Slight Heat	8 July
12	Da Shu	Great Heat	24 July
13	Chu Shu	End of Heat	8 August
14	Li Qiu	Start of Autumn	24 August
15	Bai Lu	White Dew	8 September
16	Qiu Fen	Autumnal Equinox	24 September
17	Han Lu	Cold Dew	9 October
18	Shuang Jiang	Frost Descends	24 October
19	Li Dong	Start of Winter	8 November
20	Xio Xue	Light Snow	23 November
21	Da Xue	Heavy Snow	7 December
22	Dong Zhi	Winter Solstice	22 December
23	Xiao Han	Little Cold	6 January
24	Da Han	Severe Cold	21 January

We may conclude that the way to designate each month for hunter-gathers was based on an observation of plants changes in the natural environment, such as the Moon Falling Leaves or the Moon When Cherries are Ripe. In contrast, the Chinese were agrarian people. The way to designate the Twenty-four Solar Divisions was based on the need for farmers working from sowing rice and tilling to the final harvest

³⁹ Hwangbo, Bong (1999) *In Search of Alternative Traditions in Architecture – A Cross-Cultural Interdisciplinary Study*. Ph.D. Thesis, The University of Sheffield, pp. 134 – 136.
Iap, Arthur *et al.* (2002) *24 Solar Divisions* [online]. Republic of China, Government Information Office. Available from: http://www.gio.gov.tw/info/festival_c/html_e/24.htm [Accessed 10th May 2002].

in a year. It clearly points out the weather changes within a year, for instance, Start of Spring normally begins on 5 February and Start of Winter normally begins on 8 November. In addition, the way to designate the twelve months is followed by a sequence of numbers from one to twelve. The use of twelve months mainly helps to identify the time for the Twenty-four Solar Divisions in a year. The use of Twenty-four Solar Divisions provides a more detailed description on the changes of the weather within a year, which provides good information for agrarian people to respond to.

Sky, the Father and the Earth, the Mother:

To the Native American, the sky and the earth are interpreted as a father and a mother. All living things with feet or wings or roots are considered as their children (Neihardt, 1932; Cleary, 1996)⁴⁰. The mouthpiece of the pipe implies a mother's breast. When one smokes the pipe from the mouthpiece, this action implies a baby-sucking breast milk from the mother. As mentioned above, the whole pipe is interpreted as the earth. The smoke represents the nutrition providing life energy from the earth. The action of smoking a pipe further implies that all beings absorb nutrition from the earth. This demonstrates how the natural law operates.

As mentioned in Chapter 2, the Chinese considered that the heaven (the sky) stands for Yang and the earth represents Yin according to Yin Yang. Yin and Yang are interpreted as female and male respectively. According to the Eight Kuas, the heaven represents a father and the earth stands for a mother (see Chapter 5 for details). The Chinese and the Native Americans thus shared the view of the sky as father and the earth as mother. Furthermore, Chi is the life force or energy existing in the world for the Chinese. The idea of Chi as in breath or wind is very close to the smoke within the

⁴⁰ Neihardt, John G. (1932) *op. cit.*, pp. 3.

Cleary, Kristen Marée (1996) *Native American Wisdom*. USA: Barnes & Noble Books, pp. 9.

pipe to the Native American. Both Chi and the smoke imply the life force or energy from the world to provide nutrition for human beings.

7.2.3 The Haida House

Introduction:

This section introduces a traditional type of domestic architecture for the Native American, called the Haida house, to show how the ancient worldview bears on spatial arrangement and furniture placement in the house. The Haida house is a large plank house for Native Americans found along the Northwest Coast, an archipelago of islands (the Queen Charlotte Islands) off the northern coast of British Columbia near the province's border with Alaska. The Haida people occupy the large northern island, Graham Island, in which is mountainous on the western side and flat with isolated outcrops of rock on the east side (MacDonald, 1998)⁴¹.

According to the research work done by MacDonald (1998), houses for the Haida people could be sorted into two categories, a smaller and a larger type. The smaller ones average 6 by 9 meters, and accommodate thirty to forty closely related family members. The larger houses average 15 by 18 meters and can accommodate up to a hundred residents including family members and slaves (MacDonald, 1998)⁴².

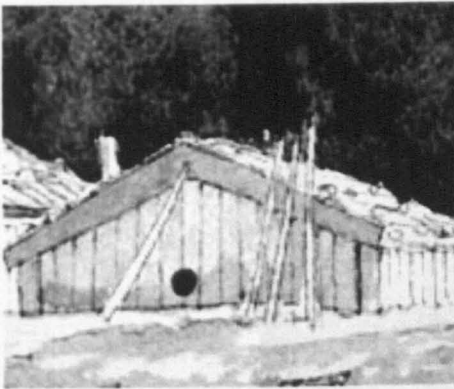
The Façade of the Haida House:

The construction of the Haida house follows different styles in the northern and

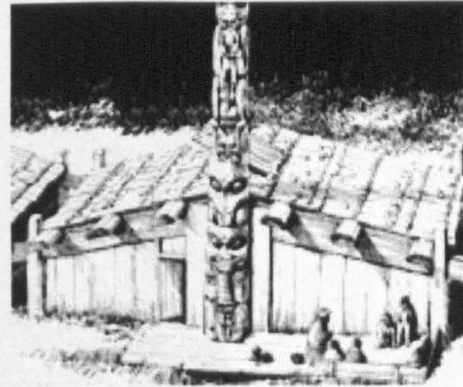
⁴¹ MacDonald, George F. (1998) *The People and the Island* [online]. Canada, Canadian Museum of Civilization Corporation. Available from: <http://www.civilization.ca/aborig/haida/hapindx.html> [Accessed 2nd May 2002].

⁴² MacDonald, George F. (1998) *Houses* [online]. Canada, Canadian Museum of Civilization Corporation. Available from: <http://www.civilization.ca/aborig/haida/havho01e.html> [Accessed 2nd May 2002].

southern regions, as shown in Figure 7-1 (MacDonald, 1998)⁴³. These two are the most popular house styles for the Haida people. Figure 7-1(a), left, is the Haida house of the northern region. The main feature of house construction is an internal frame, constructed of four or more vertical poles spanned by massive round beams up to about 15 metres in length. The façade is covered by wide planks. Figure 7-1(b), right, is the Haida house of the southern region. The main feature of the house construction here is the external frame. The façade is covered by planks fitted precisely between the parallel timbers of the house frame. A large so-called totem pole carved in various patterns is placed in front of the house.



(A) Northern Style.



(B) Southern Style.

Figure 7- 1 Two styles for the Haida house.

(Source: MacDonald, 1998)

Figure 7-2 shows a front view of the Haida house belonging to the southern style (Nabokov and Easton, 1989)⁴⁴. This plank house is made of cedar wood pieces found along the wooded areas near the sea, which is durable in the environment of dampness and rain. The roof is placed on top in an upside-down V shape, with six

⁴³ MacDonald, George F. (1998) *Houses* [online]. Canada, Canadian Museum of Civilization Corporation. Available from: <http://www.civilization.ca/aborig/haida/havho01e.html> [Accessed 2nd May 2002].

⁴⁴ Nabokov, Peter and Easton, Robert (1989) *Native American Architecture*. Oxford: Oxford University Press, pp. 230.

rafters and a square smoke hole. This house has totem poles embedded in the ground as internal and external decorative tribal symbols. The carved interior poles placed in four corners of the house are not just decoration, but support roof beams. The external pole placed in front of the house is called the frontal pole. The entrance is a hole cut at the bottom of the frontal pole. Various images, such as animals, mythical beasts, and humans are carved onto the pole. Each image is a symbol with particular meaning. For instance, the image of a frog is a symbol of good luck to protect the house from collapse in inclement weather. (Hallman, 1995; Wright, 2002; Mulder-Slater, 2002)⁴⁵.



Figure 7- 2 The front view of the Haida house.

(Source: Nabokov and Easton, 1989)

⁴⁵ Hallman, Bruce (1995) *A Haida House* [online]. Bruce Hallman. Available from: <http://www.hallman.org/indian/house.html> [Accessed 2nd May 2002].

Wright, Robin K. (2002) *Totem Poles: Heraldic Columns of the Northwest Coast* [online]. Seattle, The University of Washington. Available from: <http://content.lib.washington.edu/aipnw/wright/> [Accessed 30th April 2002].

Mulder-Slater, Amdrea (2002) *Northwest Coast Native Art History: Crests, Masks and Totem Poles* [online]. About, Inc. Available from: <http://arthistory.about.com/library/weekly/aa012302a.htm> [Accessed 30th April 2002].

The Layout of the Haida House and Traditional Worldview:

Figure 7-3 shows a layout of the Haida house (Nabokov and Easton, 1989)⁴⁶. This diagram shows the relation of the house and the world, rooted in their traditional worldview. Both the Haida house and the ideal Feng Shui environment share the same principle, i.e., facing water in the front and having protection at the back, adjusting this principle to accompany the practical geographic conditions. As described in Chapter 3, an ideal Feng Shui environment faces the river in the front and has the Principal Mountains at the back (see also Figure 3-1). The Haida house faces the sea in the front and has a forest at the back (shown in Figure 7-9). The difference is that the Haida house is located on a long belt of land near the beach, while the ideal Feng Shui environment is located in a basin surrounded by mountains.

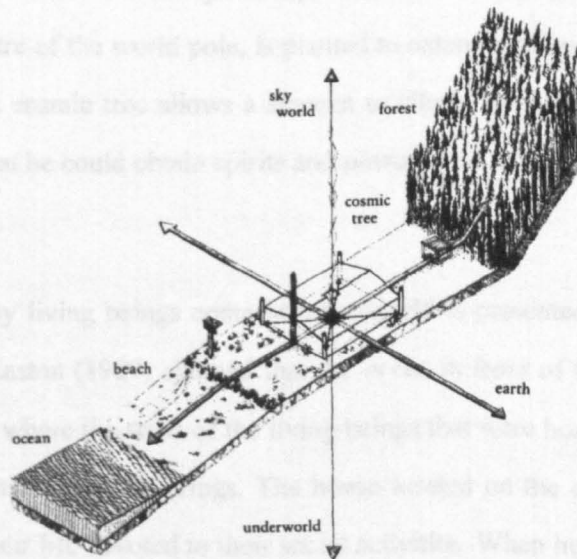


Figure 7- 3 The layout of the Haida house.

(Source: Nabokov and Easton, 1989)

The house serves as a model of the world located at its centre, embodying a mythological idea. The world comprises three zones, i.e. the sky world, the earth, and

⁴⁶ Nabokov, Peter and Easton, Robert (1989) *op. cit.*, pp. 39.

the underworld. The earth is where human beings live, located under the sky world but above the underworld. The Haida house, therefore was symbolically located at the centre of the world.

As shown in many cultures, most buildings are rectangular, which is consistent with the experience of front/back and left/right. This can be extended into the idea of three dimensions, including up/down. The right angle is given by gravity, proved by the spirit level and the plumb line. Three dimensions give a world where the axes are all at right angles. To replicate this concept, buildings are developed with straight materials like tree-trunks and with a construction system of alternating layers on the two axes. As shown in Figure 7-3, the configuration of the house plan is rectangular. Four poles are placed in the corners. The house becomes a model symbolising the world. The four poles represent the four quarters of the sky. A cosmic tree, or the centre of the world pole, is planted to extended through the smoke hole in the house. This cosmic tree allows a shaman to climb, symbolising his access to the sky world so that he could obtain spirits and powers from the sky world (Nabokov and Easton, 1989)⁴⁷.

The way living beings come into the world is presented in the Haida house. Nabokov and Easton (1989) claimed that the ocean in front of the house represented the underworld where the souls of the living beings that were born emerged from. The Whale is the chief of living beings. The house located on the earth is where human beings spend their life devoted to their social activities. When human beings die, their bodies would be buried in coffins placed near the forest and thus in association with the sky world. The Thunderbird is the chief being of the sky world (Nabokov and Easton, 1989)⁴⁸. The Haida people build up a life cycle linking the underworld, the earth and the sky world. They use physical objects observed in their surroundings to

⁴⁷ Nabokov, Peter and Easton, Robert (1989) pp. 38.

⁴⁸ Nabokov, Peter and Easton, Robert (1989) pp. 38.

express this life cycle. The underworld (the ocean) is where the souls of human beings come from. The earth (houses) is where human beings spend their lifetime. The sky world (forests) is where human beings go at the end. This case could provide some clues on the alignment of directions between a person, a house and the surrounding environment or place on the planet. Direction for a person is the way a person faces, having a front and back and left and right sides. The front is not only the place of eyes and mouth – communication, but also symmetrical. If one imagines an implied axis along the line in which the person would walk if not turning, there is an axis of seeing and walking. The back is the unseen, and also the past – where one walked from.

To sum up, the Haida house is used as a medium to interpret the traditional worldview for the indigenous Haida people. The classification system is the principal frame to conceive the world, dividing it into three levels, the sky world, the earth, and the underworld. This house is regarded as a microcosm located at the centre of the world. The four corner poles draw a boundary. The layout of the house follows some givens of the natural environment (mountains, and the ocean). Various living beings (animals) are linked to different directions to represent the invisible powers of nature. Living in the house thus provides a way for human beings to occupy the centre of the world and to govern all life beings and powers of nature around the world. The layout of the Haida house further interprets the life cycle of human beings in the world. It explains where human beings come from, where human beings spend their lifetime, and where they will be at the end. These concepts are the basis of the worldview of the Haida people, which is a significant heritage for Native Americans.

7.3 The Tukanoans in Northwest Amazonia

7.3.1 Introduction

The Tukanoans are indigenous people living in Northwest Amazonia. The region is known as the Vaupés, lying between the equator and 1° north latitude and between 69° and 71° west longitude. This is one of the headwater regions of the Northwest Amazon River drainage. The natural environment is covered by humid and tropical rainforest. The eastward part of the land is sloping, and the west section is high open land exposed rock and caves. The region faces savanna at the south and the north. Considering the weather, the minimum temperature is around 10° to 20° C, and the maximum is around 34° to 40° C. There are dry and rainy seasons which differ largely in volume of rain. The rainy season is divided into two periods, the major rainy season from April to August, and the lesser rainy season from October to November (Jackson, 1983)⁴⁹.

7.3.2 Traditional Worldview

The use of three layers vertically to express how the universe is constructed is a feature considered by the ancient Chinese. According to *I Ching* (Book of Changes), each Kua is comprised by three parallel lines to represent the sky, human beings and the earth respectively. Similarly, dividing the universe into three layers so that the universe is constructed by the sky world, the earth and the underworld is also considered by the Tukanoans. The sky world is where celestial beings lived. All live beings live on the earth. The underworld is a mysterious area. Figure 7-4 originally made by Béksta (1988) illustrates a general picture regarding the worldview of the

⁴⁹ Jackson, Jean E. (1983) *The Fish People: Linguistic Exogamy and Tukanoan Identity in Northwest Amazonia*. Cambridge: Cambridge University Press, pp. 13 – 16.

Tukanoans (Hugh-Jones, Stephen, 1995)⁵⁰. The world is divided into six areas. Each of them represents one specific orientation in space. The area (1) is the centre of the world. This is the place with houses for human beings. (2) is the house for the Sky Thunder. This is the safest refuge for a Tukanoan shaman. (3) is the Milk River House located at the mouth of the Amazon. (4) is a protective sphere. (5) is the House of Night located at headwaters. (6) is the Underworld House which is the alternative refuge of the Tukanoan shaman.

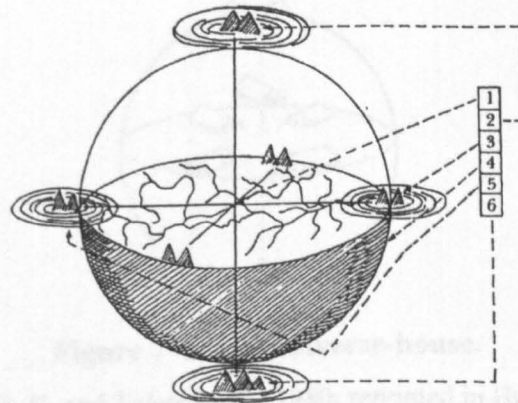


Figure 7- 4 The worldview of the Tukanoans.

(Source: Béksta, C., 1988; reprinted in Hugh-Jones, S., 1995)

How was the world created? The Tukanoans believe that the world was made by a female deity according to a Desana creation myth (Hugh-Jones, 1995)⁵¹. The deity had feather ornaments covering her body which formed a protective house. The world itself is the 'universe-house', or 'universe-womb'. This universe-house is where life beings come from. There are five celestial Thunders created by the deity living within the universe-house. The Tukanoans believe that five celestial Thunders imply five powers of nature. Each of them has his compartment. These compartments are placed in the four cardinal orientations and zenith located in the centre, as shown in

⁵⁰ Hugh-Jones, Stephen (1995) *op. cit.*, pp. 235.

Béksta, C. (1988) *A Maloca Tukano-dessana e Seu Simbolismo*. Manaus, SEDUC / AM, pp. 47.

⁵¹ Hugh-Jones, Stephen (1995) *op. cit.*, pp. 234.

Figure 7-5 (Umúsin and Tolamã, 1980; Hugh-Jones, 1995)⁵². On the top of the universe is the zenith located in the centre. The box at the bottom of the universe is the underworld space. Five compartments are placed in between. The central one is superior to the other four placed at the four cardinal orientations. As mentioned above, four cardinal orientations and the centre are guarded by celestial beings, the five Thunders. These five Thunders are related to the creation of human beings and the world in myth. Each of them owns one compartment occupying a specific orientation.

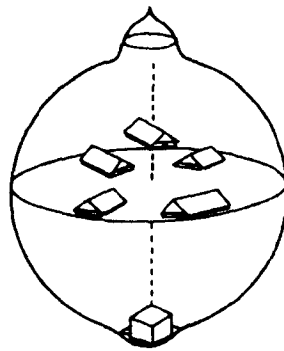


Figure 7- 5 The universe-house.

(Source: Umúsin, P. K. and Tolamã, K., 1980; reprinted in Hugh-Jones, S., 1995)

Hugh-Jones (1995) claimed that the Thunder at the zenith is related to the creation of human beings⁵³. The Tukanoans believe that proto-men and proto-women are feather people made of feather ornaments vomited up by the Thunder at the zenith. The Thunder's body was later transformed as an anaconda-canoe for the feather people travelling along the cosmic river. The cosmic river is the route that the feather people settle their houses. The people dance when they go up the banks along the cosmic river. The 'transformation-houses' made of rapids and rock outcrops on the banks along the cosmic river are sacred sites and ancestral dwellings created by the dances of the feather people. Figure 7-6 illustrates the transformation houses

⁵² Umúsin, Panlõn Kumu and Tolamã, Kenhiri (1980) *Antes o Mundo Não Existia*. São Paulo: Livraria Cultura, pp. 194, 51 – 4.

Hugh-Jones, Stephen (1995) *op. cit.*, pp. 234.

⁵³ Hugh-Jones, Stephen (1995) *op. cit.*, pp. 234 – 235.

established along the cosmic river (Umúsin and Tolamán, 1980; Hugh-Jones, 1995)⁵⁴. When the anaconda-canoe arrive in the centre of the world, the feather people turn into human beings who are ancestors of the different Tukanoan groups. The anaconda-canoe returned to its original form, the Thunder in the sky.

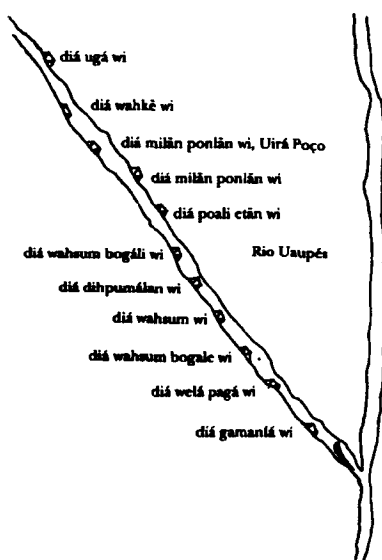


Figure 7- 6 Transformation houses established along the cosmic river.

(Source: Umúsin, P. K. and Tolamán, K., 1980; reprinted in Hugh-Jones, S., 1995)

To the Tukanoans, this myth implies a life cycle in the universe. Human beings come from the universe and rely on the universe for living. Various intimate relationships between life beings and the space have been shown. For example, the female womb is where children live; the compartment is where a family is accommodated; the universe-house is where human beings stay. The links of womb and children, compartment and family, and universe and human beings are established.

Similarly, the Chinese myth considered that all human beings are created by a celestial female deity called Nu Wa⁵⁵ from a handful of earth. Both the Tukanoans and the Chinese regard a female deity as the creator of living beings. The difference is that

⁵⁴ Umúsin, Panlõn Kumu and Tolamán, Kenhíri (1980) *op. cit.*, pp. 209.

Hugh-Jones, Stephen (1995) *op. cit.*, pp. 234.

⁵⁵ Nu Wa (女媧).

the human beings are made of feathers to the Tukanoans, and the handful of earth to the Chinese. In addition, these two cultures have different viewpoints on dealing the creation of the world. Although both cultures considered the universe as a dome, they used differently to illustrate the universe. The Tukanoans considered the universe as a womb of the female deity, while the universe to the Chinese does not fit with any concrete object to illustrate the dome.

The use of celestial beings to represent four cardinal orientations and the centre of the world is shown by both the Tukanoans and the Chinese. However, they use different celestial beings. Thunders used by the Tukanoans are related to the power of nature which does not have concrete form. However, the Chinese use celestial animals, i.e. Dragon, Tiger, Phoenix and Turtle. All these animals can be illustrated as concrete configurations and correspond to physical mountains' layout.

7.3.3 The Tukanoan Longhouse

The Site:

The Tukanoan longhouse or maloca is a traditional type of domestic architecture used by the eastern Tukanoan-speaking people in Northwest Amazonia. The spatial arrangement of the longhouse has been shown to be involved in ancestral worldview. Figure 7-7 shows an example of the site of a longhouse that redraws the longhouse setting made by the author from the original diagram made by Jackson (1983)⁵⁶. The house site (position A) is placed at the centre, which is surrounded by forest. The configuration of the site is semi-circular at the top and rectangular at the bottom. The (position B) is the interior space of the house. One door (position C) is placed near the rectangular section which is the Men's door. The other door is placed near the semi-

⁵⁶ Jackson, Jean E. (1983) *op. cit.*, pp. 27.

circular section which is the Women's door. The kitchen (E) is placed near the Women's door. The main path (F) towards the principal river (H) is connected to the rectangular side of the house. A minor path (G) for women walking towards a side stream (I) is connected to the semi-circular section. A large open kitchen garden (J) is arranged between the house and a manioc garden (K).

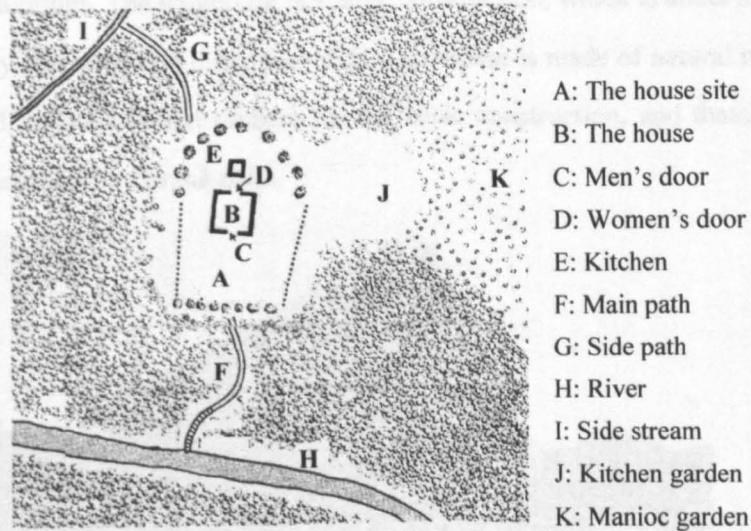


Figure 7- 7 The site of a Tukanoan longhouse.

(Source: Jackson, J. E., 1983; redraws by the author)

Both the Tukanoans and the Chinese established their houses facing a river in the front. However, the river has a different significance to the Tukanoans and the Chinese. The natural environment where the Tukanoans live is humid and covered by rainforest. The settlement of houses to the people focuses on the relation between the house location and the river. Differently, the natural environment to the Chinese comprises various types of mountains, rivers, plains, or basins. The way to establish an ideal Feng Shui environment is more complicated, which involves considerations of all these geographical features.

The Longhouse:

Figure 7-8 shows an example of the Tukanoan longhouse, which has a gable on the top of the end wall (Hugh-Jones, 1995)⁵⁷. This house is to accommodate a community, which consists of a group of brothers living with their wives, children and unmarried sisters, and one or both of their parents (Hugh-Jones, 1995)⁵⁸. The front wall has a large door in the centre, which is decorated with human figures and striking geometrical paintings. The longhouse is a large construction, which is about a hundred feet long, forty feet wide and thirty feet high. This house is made of natural materials, such as round, smooth barked timbers for the basic construction, and thatched with fan-shaped leaves of the Caraná palm.



Figure 7- 8 Front view of the Tukanoan longhouse.

(Source: Hugh-Jones, 1995)

The house configuration of the Tukanoan longhouses presents different geometric forms in its front and at the rear. Figure 7-9 shows a ground floor plan of the Tukanoan longhouse (Hugh-Jones, 1995)⁵⁹. This house faces east with different shapes in its rear and the front sections. The front section is rectangular, with one entrance, that is the men's door, placed on the central axis. This door is wide and lofty.

⁵⁷ Hugh-Jones, Stephen (1995) *op. cit.*, pp. 229.

⁵⁸ Hugh-Jones, Stephen (1995) *op. cit.*, pp. 228.

⁵⁹ Hugh-Jones, Stephen (1995) *op. cit.*, pp. 230.

The rear section is semi-circular, which has five entrances. One entrance, that is the women's door, is placed at the central axis. This door is smaller than the men's door. The others are entrances for the four compartments inside the longhouse. These entrances are the only space to allow light and air to pass through the house. The reason why the women's door is formed as semi-circular maybe comes from the appearance of the belly of the pregnant woman, while the appearance of the belly of the man maybe the determinant factor for the men's door. A communal hot plate for baking bread is placed at the intimate private space at the rear of the house. This is where people sit around for warming and chatting. The focal hearth of the communal hot plate also implies a womb. When one bakes bread, this activity symbolises a womb carries and nourishes a child. The starch and fibre of manioc bread represent the flesh and bones of a child (Hugh-Jones, 1995)⁶⁰. The allocation of the communal hot plate provides a meaningful way for the Tukanoans to connect their daily lives to the understanding of human bodies.

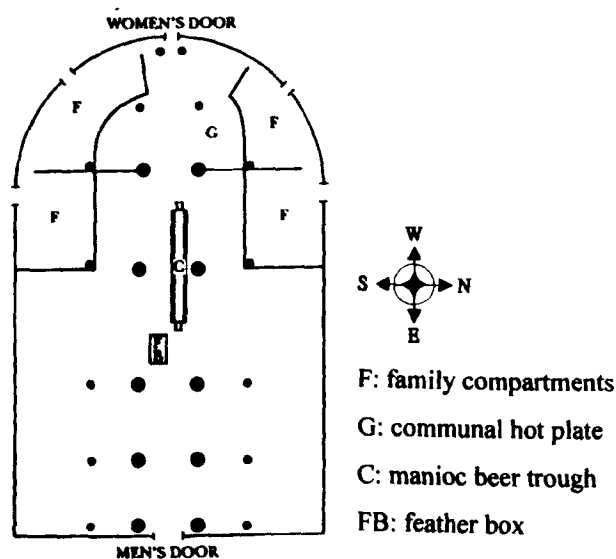


Figure 7- 9 Ground floor plan of the Tukanoan longhouse.
(Source: Hugh-Jones, 1995)

⁶⁰ Hugh-Jones, Stephen (1995) *op. cit.*, pp. 231.

A feather box for containing feather ornaments, such as featherhead dresses and other heirlooms, is suspended above the central space. As mentioned above, ancestors of Tukanoans were feather people coming from the world in myth. To reserve this concept, the Tukanoans keep feather ornaments in a feather box placed inside the house. In a traditional dance, dancers would perform under the feather box. This implies dancers returning to their ancestral proto-human state in a wider cosmos. This would not only show the treasure of the feather box for the Tukanoans that allocates the feather box to the centre, but also demonstrate that the Tukanoans have a connection with Thunder at the Zenith.

The Tukanoans replicate various basic components observed from the natural world in their domestic space. Each part of the longhouse indicates different elements of the world. Earth, sky, mountains and rivers have been considered to be the basic components of the world. The longhouse itself has been treated as a medium to communicate with human beings and the world. When the longhouse is regarded as transformed into a microcosm, house elements, such as floor, roof, posts and aisles are used to replicate the world. For example, floor indicates earth, roof symbolises sky, the central aisle hints at the cosmic river, posts imply mountains which are used for supporting the sky above, as shown in Table 7-6.

Table 7- 6 Connections between the Tukanoan longhouse and the world.

House Elements	Objects from the World
The Floor	The Earth
Posts	Mountains
The central aisle	The cosmic river
The Roof	Sky

Similar to other primitive cultures, the Tukanoans established their dwelling along rivers. For the Tukanoans, a river is more than a natural object for them to get water, but also a permanent object in the natural environment to help them distinguishing directions in the rainforest. This may explain why the river is significant in legend and further represented by the central aisle in a house plan.

The construction of the Tukanoan longhouse shows the use of the central axis in the plan. Similarly, the use of the central axis in a house has also shown in the Chinese courtyard house as discussed in section 4.5 and the Forbidden City in section 6.4. In the Tukanoan longhouse, the central axis is represented by the central aisle. Four rows of columns supporting the roof are placed in the east-west direction inside the house. Two principal rows near the central axis are large columns, which create a broad aisle on the central axis linking the men's door at the front to the women's door at the rear. The other two rows are made of smaller and shorter timbers placed on both sides. All of the columns are connected by longitudinal and transversal beams on the top, and are bounded with much symmetry by vines.

Several compartments made of short palm-thatch partitions are placed near the semi-circular end. These compartments are occupied by separate families belonging to a patriarchal community. The compartment for the family of the chief or head of the community is located at the furthest point near the rear. The chief of the community is usually the father or eldest brother. Compartments for other married younger brothers are towards the front. Other unmarried youths or visitors stay in the large open space near the front door in the rectangular section. The concept of duality is shown in the spatial layout of the Tukanoan longhouse, interior space is divided into two areas, i.e. a private and a public use. The space for private use is arranged near the rear of the house, which is close to the women's door, while the space for public use is located near the front of the house, which is near the men's door.

In a Chinese courtyard house, buildings are arranged in four cardinal directions enclosed a courtyard inside (Figure 4-9). Every member of a family occupies different buildings according to hierarchical social order. Differently, Tukanoan longhouse is a large house face a courtyard in the front. It comprises of several compartments for accommodating separate families. The similarity for the two types of house is that the householder couple is accommodated at the building or room

opposite to the main door. Interior space is divided into different layers for private and public used. The private space is arranged near the end of the house. Space for public used close to the house entrance at the front. However, the configuration of house plan is very different between the Tukanoans and the Chinese. As discussed in Chapter 4, the rectangular is the ideal house layout in Feng Shui. This configuration tends to present the notion stability. Differently, the Tukanoan longhouse is rectangular at the front and semi-circular at the rear.

The Tukanoan longhouse identifies the front door as the men's door and the back door as the woman's door. Doors for compartments inside the house are towards the exterior of the house. This arrangement creates divergent directions in space. Differently, the Chinese not specify door by gender difference. Doors for buildings inside the house are towards to the courtyard at the centre. This placement creates convergent directions in space which is opposite to the Tukanoan longhouse.

7.4 The Berbers in North Africa

7.4.1 Introduction

This section introduces another technologically primitive culture, called the Berbers, who also reflect an ancient worldview in their traditional domestic architecture. The Berbers live in North Africa along the Mediterranean coast, the Sahara and Sahel. There is little documentation of the origin and race of the Berbers and when they first migrated to the North Africa. According to *the Collins Cobuild English Dictionary* (1995), Berber means belonging or relating to a certain ethnic group of Moslems in

North Africa, or to their language or customs⁶¹. Traditionally, Berber people called themselves Amazigh. The term Berber is a name recorded by many early Roman, Greek, and Phoenician colonial works for numerous heterogeneous ethnic groups that share similar cultural, political, and economic practices. Since pre-historic times, the Berbers have been invaded from Asia, Europe, American, and the Arabs. In the seventh century A.D., the Berbers were moving towards the Atlas Mountains and other areas near the Sahara when the Arabs invaded North Africa. Islam was brought by the Arabs, and many Berber people converted to Islam while retaining some of their original beliefs, so many of their rituals contain animistic references and elements retained from earlier pagan religions. The Berbers live in rural areas where they grow crops and raise sheep and cattle. Some live in stone houses in larger villages, others live in tents or clay huts in smaller villages (Think Quest Team, 1998; Art & Life in Africa, 1998; Novisi Group, 2001)⁶².

7.4.2 The Berber House

Pierre Bourdieu, a French sociologist, in his research work 'The Berber House' discussed traditional domestic architecture for a Kabyle family to demonstrate the Berbers' understanding of the world in terms of house design (Bourdieu, 1971)⁶³. The Kabyle is one tribe of Berbers located in Morocco Tunisia, western Libya, and the coastal mountain regions of northern Algeria. There are a total of over 3,000,000

⁶¹ Sinclair, John *et al.* (1995) *The Collins Cobuild English Dictionary*. Great Britain: Harper Collins Publishers, pp. 146.

⁶² Think Quest Team (1998) *Berber* [online]. Think Quest Team. Available from: http://library.thinkquest.org/16645/the_people/ethnic_berber.shtml [Accessed 2nd March 2002].

Art & Life in Africa (1998) *Berber (Amazigh) Information* [online]. USA, University of Iowa. Available from: <http://www.uiowa.edu/~africart/toc/people/Berber.html> [Accessed 2nd March 2002].

Novisi Group (2001) 'Amazigh (Berber)', *Legacy Magazine*. [online]. USA, Novisi Group. Available from: <http://ngilegacy.com/amazigh.htm> [Accessed 10th March 2002].

⁶³ Bourdieu, P. (1971) 'The Berber House' in M. Dauglas, (ed.) *Rules and Meanings: the Anthropology of Everyday Knowledge*. Harmondsworth: Penguin, 1973, pp. 98 – 110.

inhabits in these areas. The majority are 2,500,000 inhabits living in Algeria (FLW, 2001)⁶⁴. Figure 7-10 shows Bourdieu's presentation of the ground floor plan of a Berber House (Bourdieu, 1971)⁶⁵. This plan illustrates how interior space is arranged.

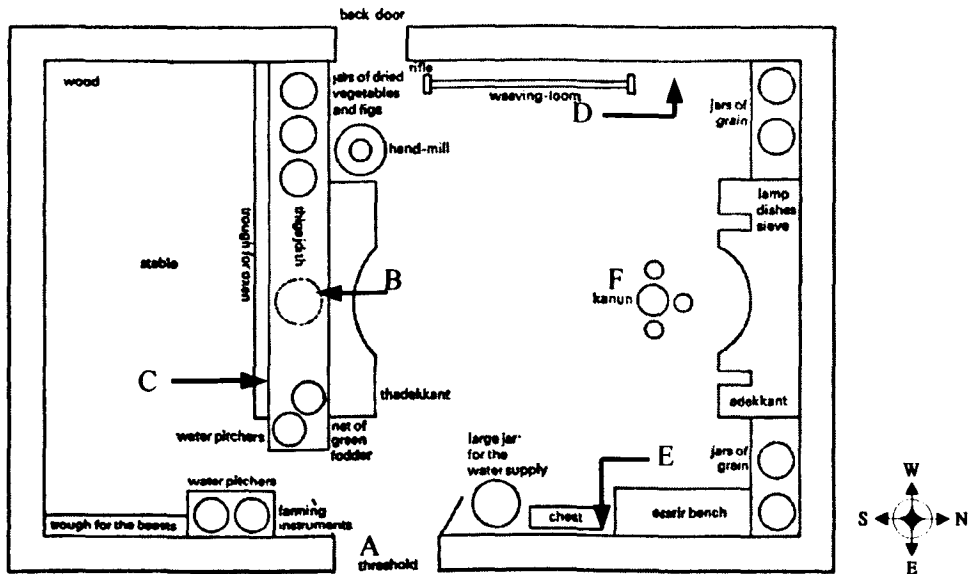


Figure 7- 10 The ground floor plan of the Berber house.

(Source: Bourdieu, 1971)

Spatial arrangement shows the use of three axes including vertical, horizontal and the centre for constructing the house. The house plan is rectangular corresponding to four cardinal orientations. The main entrance (position A in Figure 7-10) is placed in the east wall opposite to the back door in the west wall. The main pillar (the dotted circle, position B) is located at the centre of the partition. It is the trunk of a forked tree supported the main beam at the south/north axis above.

Both the Chinese courtyard house and the Berber House show the same configuration of the house plan, which is rectangular. In the Berber house, the main entrance is located at the east and there is a back door to the west. The central axis to

⁶⁴ FLW (2001) *Kabyle* [online]. USA, FLW, Inc. Available from: <http://www.flw.com/languages/kabyle.htm> [Accessed 3rd March 2002].

⁶⁵ Bourdieu, P. (1971) *op. cit.*, pp. 107.

the house is east/west direction. This shows the opposite direction to the Chinese courtyard house which has the central axis in a north/south direction.

The partition (position C) divides interior space into areas, i.e. a larger room to the north and a smaller one to the south, at a point one third of the way along its length. Each of them has different functions and constructions. The floor of the larger room is about fifty centimetres higher than the smaller one, and covered over by a layer of black clay and cow dung which women polish with a stone. This area is reserved for major activities, such as cooking and weaving. The fireplace for cooking is arranged in position C. The smaller room is roofed in wood and paved with flagstones, which is the low and dark part of the house. This is the place that pertains to sexuality and procreation. This room is divided vertically into lower and upper sections. The lower part is a stable for animals placed on the ground. The upper part is a loft located above the stable where people sleep.

Bourdieu (1977) points out that the west wall (position D) is called the wall of light and the east wall (position E) is called the wall of darkness, which likes a mirror bringing to light the paradoxes of bilateral symmetry⁶⁶. This is based on two reasons: physically, because of the position of the main door as only source of light; culturally, because according to Bourdieu there is an ensemble of oppositions of light/dark; male/female; culture/nature etc.

The idea of nature/culture is considered to associate with other duality concepts in the two rooms. Cooking and weaving are two cultural activities to the Berbers. Cooking involves producing food and weaving involves producing cloths. Both activities take place in the larger room. This place therefore is related to culture according to Bourdieu's reading. In contrast, sleeping, sex, giving birth and death for

⁶⁶ Bourdieu, P. (1971) *op. cit.*, pp. 99 – 100.

humans and animals are natural activities. All these activities are taking place in the smaller room. This place is related to nature (Bourdieu, 1971)⁶⁷.

The idea of dry/wet is shown in furniture placement inside the house. Objects created by fire, such as the fireplace (position F), lamp, kitchen utensils are placed near the west wall (the wall of light) and the north wall. On the contrary, objects placed near the east wall (the wall of darkness) and the south wall are moist, green, or raw. These objects are things such as a trough, pitchers, or jar to store water, and chest or bench to store sacrificed animals.

The idea of male/female can be interpreted as various ways. In the house construction, the main beam lies above the forked pillar which is the basis for building a house. The main pillar made by a forked tree symbolises a female (a wife). The main beam which connects the gables symbolises a male (the householder). This notion is also reflected in the spatial arrangement of the house. The place for humans (especially guests), fire, lamps, cooking utensils and the rifle (male honour) is sorted into the space with masculine features. In contrast, the place for animals, water jars, sleep, sex, birth and death is sorted into the space with feminine feature. The smaller room is regarded as feminine space with characteristics, such as low, dark, raw, wet, and nature, and the large one is masculine space with characteristics, such as high, light, cooked, dry, and culture (Gieryn, 2001)⁶⁸.

Furthermore, the exterior space is associated with features of bright and hot, which is associated with male character. On the contrary, the interior space is associated with features of dark and cool, which is associated with female character (Bourdieu, 1977)⁶⁹.

⁶⁷ Bourdieu, P. (1971) *op. cit.*, pp. 98 – 100.

⁶⁸ Gieryn, Thomas F. (2001) *What Buildings Do* [online]. Los Angeles, Center for Comparative Social Analysis, the Sociology Department at the University of California. Available from: <http://www.sscnet.ucla.edu/soc/groups/ccsa/gieryn.PDF> [Accessed 3rd June 2002].

⁶⁹ Bourdieu, Pierre (1977) *op. cit.*, pp. 134.

Traditionally, a girl of the family will be arranged sitting behind the weaving-loom and having a rifle at her back. This is based on that the rifle is the symbol of the male point of honour and the protector of female honour. The weaving-loom is the symbol of all protection. This arrangement implies the girl is under the protection of male members of the family, including her father and brothers. The shadow created by the weaving-loom has more than a practical function, but also turns into an ideological concern to imply a good protection. Therefore, this arrangement is imbued with meaning as a significant placement within the Berber house.

All these examples point out duality is a primitive classification system for people to conceive the world. All activities (e.g. cooking, weaving or sleeping), physical objects (e.g. fireplace, water jar or pillar) or natural phenomena (e.g. light, darkness) can be connected in terms of duality including orientations e.g. left/right; front/back; up/down; east/west; north/south. Orientations thus can be given different meanings.

Spatial layout of the Berber house shows the use of duality in all three axes. One pole is associated with high, light, male, hot, culture etc. The other, on the contrary, is associate with low, dark, female, cold, nature etc (Bourdieu, 1971)⁷⁰. This concept is similar to Yin Yang used by the Chinese as discussed in section 2.5.1. However, the Berbers present different expressions.

Bourdieu (1971) noted that orientations to the Berbers is also influenced by their understanding about seasonal changes⁷¹. Similar to the Chinese, the Berbers are agrarian people. Seasonal structure for both cultures reveals their consideration of farming activities. The four seasons is the general way to identify the time for these farming activities to the Berbers. The notion of dry and wet is the way to identify

⁷⁰ Bourdieu, P. (1971) *op. cit.*, pp. 98 – 100.

⁷¹ Bourdieu, P. (1971) *op. cit.*, pp. 108.

seasonal changes. These divisions are fitted in four seasons in a year. In contrast, the Chinese do not use the idea of duality to deal with the seasonal change. The Twenty-four Solar Divisions established by the Chinese is a significant guideline to farmers. This seasonal change provides further detailed information about seasons and climate changes in a year.

To the Berbers, the structure of seasons is decided based on the need of farming activities. Figure 7-11 shows a cycle of farming activities in a year (Bourdieu, 1977)⁷². Summer is the time to harvest, which is the dry season in a year. On the contrary, winter is the time for germination, which is the wet season in a year. Autumn is the time transforming from the dry season to the wet season. This season can be divided into four sections with different farming activities. The first section is the time for stubble. It is the time after harvest in the dry season. The next section is the time for fallowing. The third section is the time that the season start to transform from dry season to wet season. This is the time for farmers to start ploughing, and later sowing in the fourth section. On the contrary, spring is the time transforming from the wet season to the dry season. This is the time for crops from emergence, growth, and ripening.

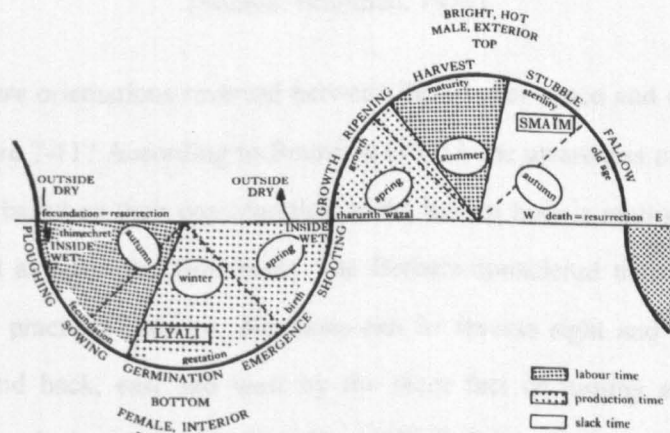


Figure 7- 11 A cycle of farming activities in a year.

(Source: Bourdieu, 1977)

⁷² Bourdieu, P. (1977) *op. cit.*, pp. 134.

How are the four seasons fitted into four cardinal orientations? Figure 7-12 shows how the four seasons are fitted into the four cardinal orientations based on the use of inversion and duality in accompany with farming activities (Bourdieu, 1971)⁷³. Generally, the interior space can be divided into two parts in terms of consideration of duality dry/wet. The dry part includes orientations north and west (the dry-wet part). The wet part includes orientations south and east.

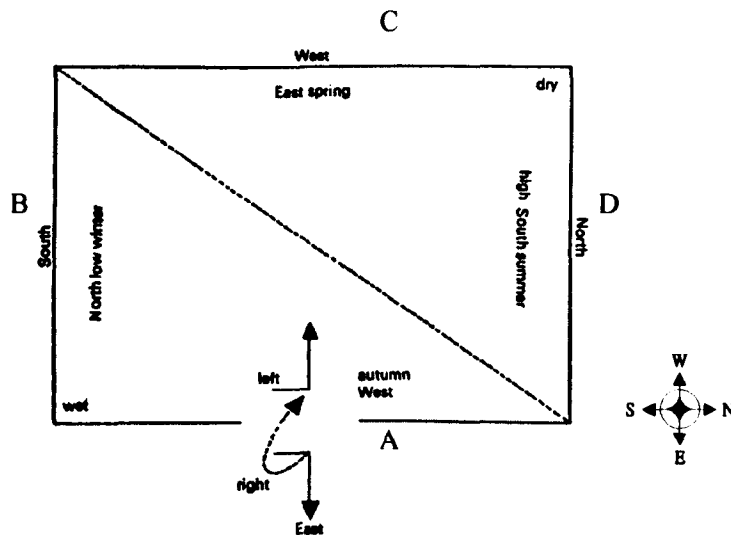


Figure 7- 12 Fitting of four seasons in orientations to the Berber house.

(Source: Bourdieu, 1971)

Why are orientations reversed between the interior space and the exterior as shown in Figure 7-11? According to Bourdieu (1971), the awareness of orientation to the Berbers is based on their consideration of the human body's motion. Orientations are interpreted as left/right, front/back. The Berbers considered that a human body functions as a practical operator, directions can be reverse right and left, north and south; front and back, east and west by the mere fact of turning about to 'face' someone or 'turn its back' on him (Bourdieu, 1977)⁷⁴. When the body enters the house from the exterior space, his right hand side is the orientation south, the left hand side is

⁷³ Bourdieu, P. (1971) *op. cit.*, pp. 108.

⁷⁴ Bourdieu, P. (1971) *op. cit.*, pp. 109.

north, the front is west, and the back is east. On the contrary, when a person goes out from the interior space, his right hand side is reverse to the orientation north, his left hand side is south, the front is east, and the back is west. Hence, the usual conceptual associations of the cardinal directions between interior space and the exterior space are reversed, which is like a mirror as mentioned above.

Bourdieu (1971) pointed out that the front door (position A in Figure 7-11) corresponds symbolically to the 'door of the year', which is the beginning of the wet season and the agrarian year⁷⁵. The position A is associated with autumn. Winter is the wet season followed by autumn, which is associated with position B, the wet part of the house. Spring followed by winter is the time transforming from the wet to dry. This season is associated with position C. Summer is the dry season of the year. This season is associated with position D, the driest part of the house. Thus, four seasons are fitted in cardinal directions of the house to the Berbers.

To sum up, the Berbers present the use of duality and inversion to build up their classification system to deal with spatial arrangement and furniture placement in their house design. An intimate connection between human beings, houses and the world has been drawn (see Table 7-7). Interior space of the house is divided based on the concept of duality, one is associated with high, light, male, hot, culture etc. The other, on the contrary, is associate with low, dark, female, cold, nature etc.

⁷⁵ Bourdieu, P. (1971) *op. cit.*, pp. 108.

Table 7- 7 The use of classification system to the Berbers.

Genders	Features	Seasons	Farming activities	Orientations to interior	Orientations to exterior
Male	Dry; light; cooked; hot and culture	Summer	Harvest	South	North
		Spring	Emergence, growth, and ripening	East	West
Female	Wet; dark; raw; cold and nature	Winter	Germination	North	South
		Autumn	Stubble, fallow, ploughing, and sowing	West	East

7.5 Conclusion

This chapter discusses how different cultures relate their ancient worldviews to spatial arrangements for domestic architecture. These technologically primitive people give each orientation a different meaning, so that orientation becomes a unique architectural term to express human understanding of the world. Furthermore, spatial arrangement for domestic architecture is in accordance with an orientation that allows human beings to be in harmony with the world.

Chapter 8

Case Studies Applying Feng Shui

8.1 Introduction

This chapter explores how Feng Shui is used in the design and planning of domestic architecture. Two house design cases are discussed at a detailed level on how the aforementioned principles of Feng Shui can be of beneficence. The first house design case focuses on the spatial arrangement of a house interior, with sections on the reason why the house owner bought the house, on the orientations with auspicious or inauspicious meanings for each member of the family, and on how to locate the main entrance, rooms and furniture within this concept of orientation. This interior house design case shows both the original house plans describing the situation as found and the final design plans involving in the concept of Feng Shui. This case is an example showing a modification of an existing house restricted to its interior design.

The second house design case discusses how Feng Shui is applied to a new building. This example shows a house design expected to provide dual-functions, for both domestic use and working. This design involves a broader range of tasks than the first case. The major tasks include the design of the façade of the building, the division of a space into two for domestic and working use based on the idea of Yin Yang, the use of house elements, such as windows, doors, garden, courtyard, and the design of the Feng Shui pool, intended to enhance the circulation of Chi and bring auspicious Chi into the house. Also involved are decisions about orientations with auspicious or inauspicious attributes with respect to each family member living in the house, within

the Eight Houses Arrangement, and how to arrange a suitable colour for each room applying the idea of the Five Elements. This house design case involved the use of Feng Shui both for exterior and interior space in architecture.

8.2 Interior Design Case Study

8.2.1 Introduction

This section describes an interior design of a house located in England. The owner, Mr. Yen, bought this property in 1998, in order to accommodate his family. The exterior of this house follows a typical English builder's vernacular. The family of Mr. Yen is composed of four members: the householder, his wife, an elder son and a younger daughter. Both Mr. and Mrs. Yen are Chinese who originally lived in Taiwan and emigrated to England in 1995. With a limited budget, Mr. and Mrs. Yen intended to arrange only the interior space of the house according to the principles of Feng Shui, without requiring any changes to the facade. As required by Mr. and Mrs. Yen, this interior design case was designed by the author in 2000. The Eight Houses Arrangement (mentioned in Chapter 5), is used as the major principle in this renovation. According to this principle, all human beings and houses are classified into eight different groups, each human or house being correlated with one of the Eight Kuas. This study focuses on the following three areas: (1) An examination of the site and how it fits with Feng Shui requirements. (2) An investigation of ways of allocating each room. (3) An investigation on ways of arranging the furniture in order to comply with the orientation of residents.

8.2.2 Examination of the site

The site is located in Manchester, England. Figure 8-1 shows the site plan of the house which is a trapezoid shape (marked as dark gray colour) containing a rectangular

house plan (shown as a light gray colour) in the centre of the figure. The house is surrounded by other houses with a road in the front. Considering the layout of the house, it contains three divisions: (1) A large open space in the wider side of the trapezoid site. (2) A small open space in the narrow side of the trapezoid site. (3) A rectangular space where the main building is placed (shown as a shaded rectangle inside the trapezoid area).

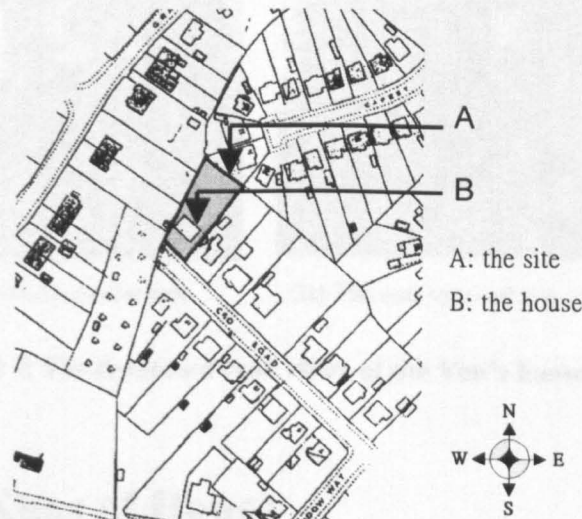


Figure 8- 1 The site plan.

Regarding the shape of the site, Feiyun Shanjen (1994) proposed that there are several ideal shapes in Feng Shui¹. Table 2-1 has discussed historic illustrations showing different shapes of sites and their properties according to *Yang Zhai Shi Shu* (Ten Books of Houses). The trapezoid is one of the ideal shapes, in which the wider side is placed at the rear of the site, and the narrow in the front. This is because this shape looks like a container, and with the mouth (the entrance) narrow and the bottom of the container wide, the Chi could flow into the site easily and be conserved inside. The mouth is ideally to be at the main entrance. The trapezoid shape implies conserving the most wealth within the site and is therefore beneficial to the residents.

Figure 8-2 (A) shows a front view of the house which faces southwest, i.e. the narrow side of the trapezoid shape. Figure 8-2 (B) shows a rear view of the house

¹ Feiyun Shanjen (1994) *Xuan Ji Li Zhai Kan Hao Feng Shui* (Ways to Select Good Feng Shui Houses). Taipei: Shih-pao Wen-hua, pp. 19 – 20.

facing northeast, the wider side of the trapezoid shape. In summary, regarding the examination of the site, the shape of the house is considered to be ideal for dwelling. This is also one of the determinant requirements that caused Mr. and Mrs. Yen to purchase this house.



(A) The front view: the southwest side.



(B) The rear view of: the northeast side.

Figure 8- 2 The front and rear views of the Yen's house.

8.2.3 Eight Kuas of House

As mentioned in Chapter 5, the orientation of houses needs to be compatible with the orientation of the residents. To decide orientation, the key consideration is the location of the main entrance. Figure 8-2 shows that the main entrance of the house is placed in the middle of the front side. Following the layout of the house, the location of the main entrance is shown in Figure 8-3. The floor plan of the house is rectangular in shape. The main entrance thus faces southwest, and the main orientation is northeast. According to the principle shown in section 5.3.2, if the orientation is northeast, the house belongs to the Ken category.

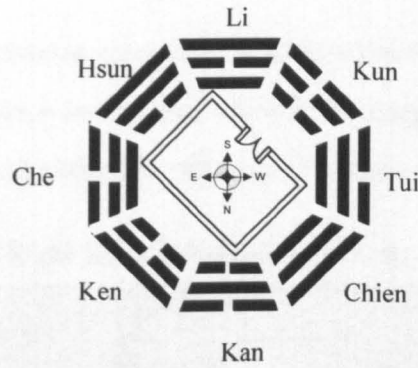


Figure 8- 3 Eight Kuas of house for Ken.

Table 8-1 shows the details of the house. The layout of the house is rectangular. The orientation of the house is northeast. The Eight Kuas of House belongs to Ken. The details of the orientation with auspiciousness are Vitality in the southwest; Medicine in the northwest; Prolong Life in the west; the Main Position in the northeast. The inauspicious orientations are Disaster in the south; Evil Luck; in the east; Ghost in the north; Dying in the southeast.

Table 8- 1 Details of the house examination.

Shape	House orientation	Eight Kuas of House	Orientation	
			Auspiciousness	Inauspiciousness
Rectangle	Northeast	Ken	A: southwest B: northwest C: west D: northeast	E: south F: east G: north H: southeast

A: Vitality (Sheng Chi)
 B: Medicine (Tian Yi)
 C: Prolong Life (Yan Nian)
 D: Main Position (Fu Wei)

E: Disaster (Huo Hai)
 F: Evil Luck (Liu Sha)
 G: Ghost (Wu Gui)
 H: Dying (Jue Ming)

8.2.4 Eight Kuas of Person

As mentioned in section 5.3.1, the classification of human beings is divided into eight groups, based on the birth year, and each year falls into one of the Eight Kuas. The birth year of each member in Mr. Yen’s family is: Mr. Yen: born in January 1958; Mrs. Yen: born in November 1960; the elder son: born in April 1992; the younger daughter:

born in September 1996.

Table 8-2 is derived in accordance with the Eight Houses Arrangement, which shows Eight Kuas of Person for Mr. Yen's family, the category (the East-four group or the West-four group), and orientation with auspiciousness and inauspiciousness.

Table 8- 2 Eight Kuas of Person for the Mr. Yen's family.

Members of the family	Date of Birth	Eight Kuas of Person	Category	Orientation	
				Auspiciousness	Inauspiciousness
Mr. Yen (householder)	January, 1958	Tui ☰ ☷	West-four group	A: northwest B: southwest C: northeast D: west	E: north F: southeast G: south H: east
Mrs. Yen (wife)	November, 1960	Kun ☷ ☷	West-four group	A: northeast B: west C: northwest D: southwest	E: east F: south G: southeast H: north
The elder son	April, 1992	Ken ☰ ☷	West-four group	A: southwest B: northwest C: west D: northeast	E: south F: east G: north H: southeast
The younger daughter	September, 1996	Kun ☷ ☷	West-four group	A: northeast B: west C: northwest D: southwest	E: east F: south G: southeast H: north

A: Vitality (Sheng Chi)

B: Medicine (Tian Yi)

C: Prolong Life (Yan Nian)

D: Main Position (Fu Wei)

E: Disaster (Huo Hai)

F: Evil Luck (Liu Sha)

G: Ghost (Wu Gui)

H: Dying (Jue Ming)

How is Table 8-2 completed? Take Mr. Yen as an example, Mr. Yen was born in January 1958. According to the Chinese lunar calendar, January 1958 belongs to the year of Ding You. As shown in the Table 5-3 of section 5.3.1, if a male was born in the year of Ding You, he belongs to an Eight Kuas of person for Tui. If Mr. Yen has an Eight Kuas of person for Tui, he belongs to the category of the West-four group. The orientation with auspicious meanings is: northwest is considered as Vitality (Sheng Chi); southwest, Medicine (Tian Yi); northeast, Prolong Life (Yan Nian); west, the Main Position (Fu Wei). The orientation with inauspicious meanings is: north is considered as Disaster (Huo Hai); southeast, Evil Luck (Liu Sha); south, Ghost (Wu Gui); east, Dying (Jue Ming). Figure 8-4 shows the details of the eight orientations for the type of Eight Kuas for Tui.

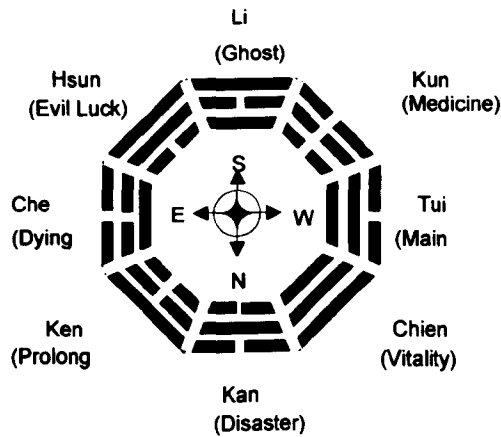


Figure 8- 4 Details of the type of Eight Kuas for Tui.

8.2.5 Orientation of the House

As shown in Table 8-2, the Eight Kuas of Person for the Yen's family are Mr. Yen, Tui; Mrs. Yen, Kun; the elder son, Ken; the younger daughter, Kun. All of these four Eight Kuas belong to the West-four group. As mentioned in the section 8.2.3, this house has the type of Eight Kuas for Ken, which belongs to the West-four group. This case study is an example where all of the members of the family belong to the same Eight Kuas of Person. Both the Eight Kuas of Person and the Eight Kuas of the House belong to the same category system, i.e. the West-four group. Thus, this house is compatible with the residents in Yen's family.

8.2.6 Spatial Arrangement

Following the idea of Yin Yang, rooms inside the house are divided into two categories, for private and public use. As mentioned in section 2.5, the attribute of Yang relates to bright, dynamic and flat ground while the attribute of Yin stands for dark, static or steep. Therefore, rooms for public use can be considered with the attribute of Yang, such as rooms placed in the downstairs, i.e. the ground floor. Rooms for private division are related to Yin, such as rooms placed in the upstairs, i.e. the first

floor. The spatial arrangement of up/down or public/private therefore follows the principle of Yin Yang.

A. Ground floor

Figure 8-5 shows the original ground floor plan. With their limited budget, Mr. and Mrs. Yen paid attention to the interior planning of the house, and wished to make the most use of the existing partition arrangement, which allowed a large room for a lounge/dining room in the northwest and a room for kitchen/study in the northeast. A garage was located next to the main entrance in the front part of the house.

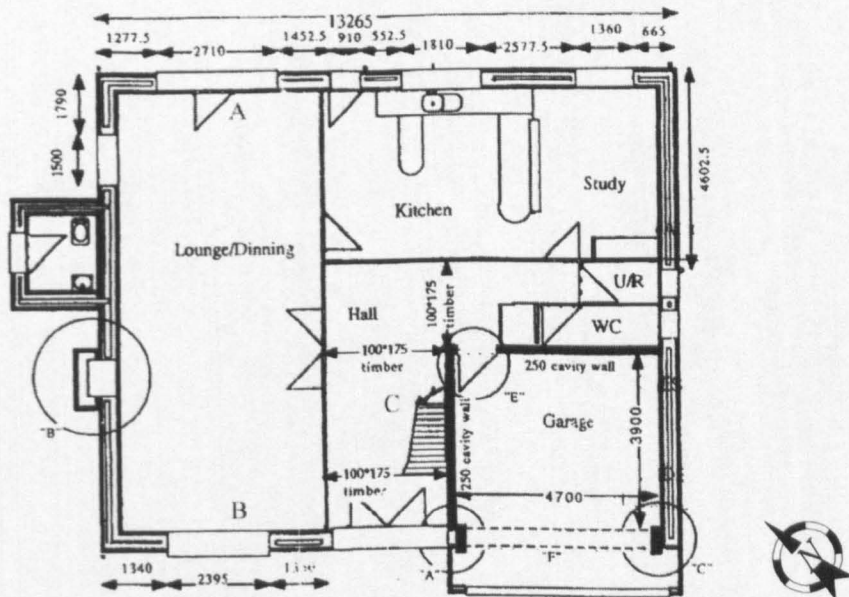


Figure 8- 5 The original plan of the ground floor.

Investigating the spatial arrangement of rooms on the ground floor, three major issues were identified, and had to be modified in accordance with Feng Shui.

1. As shown in Figure 8-6, the kitchen shares the same room with the studying area, which creates an incompatible situation. The kitchen has a cooking range, which is related to the attribute of Fire in the Five Elements. However, the study area is related to gaining knowledge which should be placed in an area with peaceful

attributes, such as Wood in the Five Elements. Thus, fitting the study and the kitchen in the same room is not at all an ideal combination.

2. A stair (the position C in Figure 8-5) faces a large window and is close to the front door, as shown in Figure 8-6 (A). This placement would make it difficult to conserve the auspicious Chi, which would go through the house directly.

3. Two windows (positions A and B in Figure 8-5) in the lounge/dining face each other, as shown in Figure 8-6 (B). For the same reason as before, Chi would not be conserved within the house.



(A) The view of the stair from the first floor.



(B) Two windows face each other.

Figure 8- 6 Two examples of unsuitable arrangement.

Modification:

Rooms in the ground floor are designed to be rooms for public use, such as entertaining visitors. Figure 8-7 shows the new plan of the ground floor. There are entrance hall, lobby, the living room, kitchen, laundry and garage. The spatial arrangement of each room and the furniture placement (e.g. door, cabinet or cooking range) are decided by the consideration of orientation for auspiciousness or inauspiciousness in accordance with the Eight Houses Arrangement.

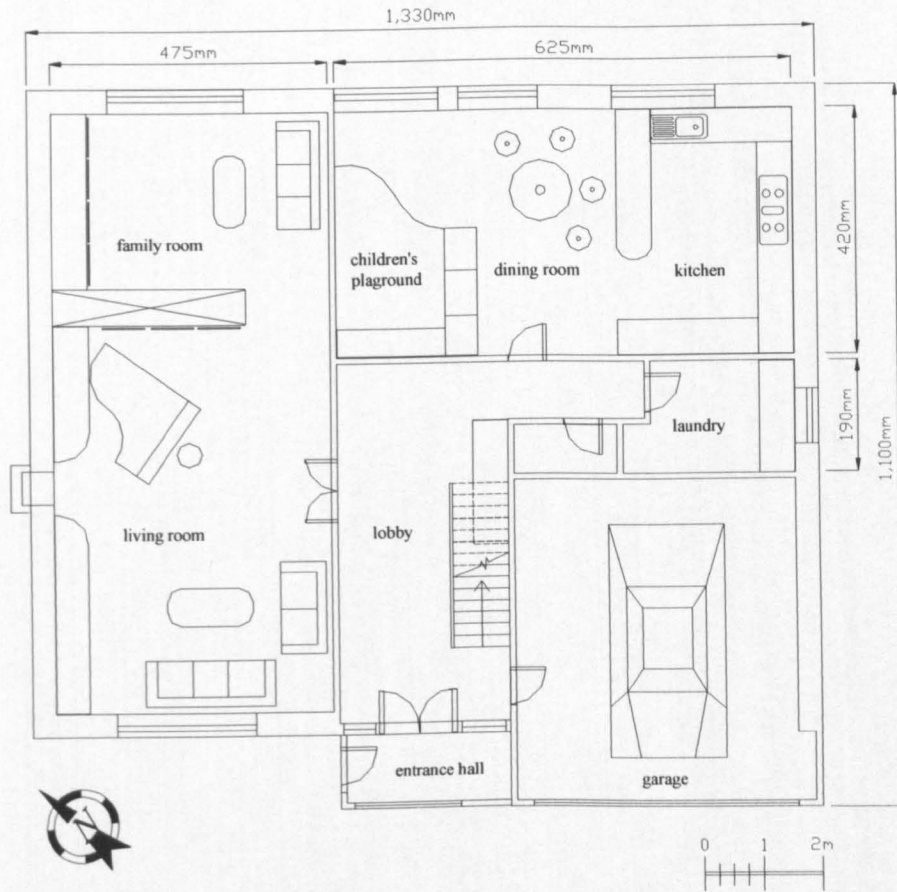


Figure 8- 7 The ground floor plan.

Five principal modifications are considered for rooms in the ground floor, discussed below.

Arrangement 1: The placing of the main entrance is decided by two factors, i.e. the Eight Kuas of Person for the householder and the Eight Kuas of House. As shown in Figure 8-5, the orientation of southwest of Medicine (Tian Yi) applies to the householder. The southwest also relates to the orientation of Vitality (Sheng Chi) for the house, which under the Eight Kuas of House belongs to Ken (as mentioned in section 8.2.3). Therefore, the main entrance is placed in the southwest which is considered auspicious for both the Eight Kuas of Person for the householder and the Eight Kuas of House to the house. This arrangement implies that auspicious Chi would come from this location.

Arrangement 2: Figure 8-8 (A) shows the spatial arrangement of the entrance hall and lobby. An entrance hall is built in front of the main entrance to conserve the auspicious Chi inside the house. The staircase in the lobby faces towards a large window (position A), which will result in auspicious Chi flowing out from the house directly. However, the large window next to the main entrance is helpful for receiving sunlight. Mrs. Yen wished to keep it. To solve the problem, the entrance hall is built with a solid wall as a barrier in position B to block the Chi flowing out directly. The auspicious Chi could thus be conserved inside.

Arrangement 3: Figure 8-8 (B) shows the spatial arrangement of the living room and family room. Two windows (positions A and B) are placed on the same vertical line. A large cabinet is used as a partition wall to divide the large space into two rooms. The large room functions as a living room (more public and is thus close to the main entrance) and the smaller one as a family room. The placing for the large cabinet is based on an idea that if two windows are in line, Chi will flow through the house and out again. The large cabinet prevents the two windows facing each other so that the Chi is conserved and circulated.

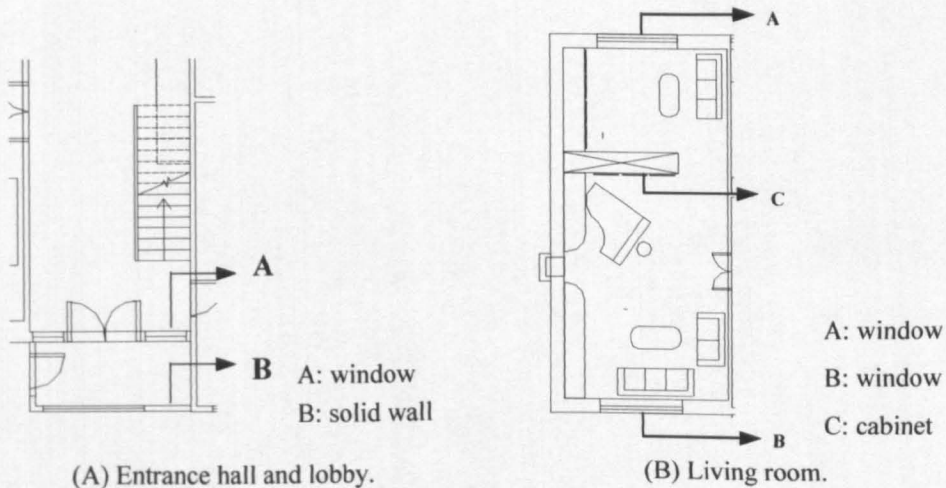


Figure 8- 8 Details of interior placement.

Arrangement 4: Figure 8-9 shows the layout of the kitchen, which consists of three areas: kitchen, dining space and children's playground. According to Feng Shui, the cooking range of the kitchen is more than a practical tool for cooking, but also

associated with the provision of nutrition. The use of the cooking range implies producing abundance and richness to the family. Therefore, the use of the cooking range has to be given an auspicious orientation. In this case, the switch of the cooking range is placed in the northwest, an orientation related to Vitality (Sheng Chi) to the householder and Prolong Life (Yan Nian) to his wife. When they turn on the cooking range, this procedure symbolises bringing richness and abundance to the family.

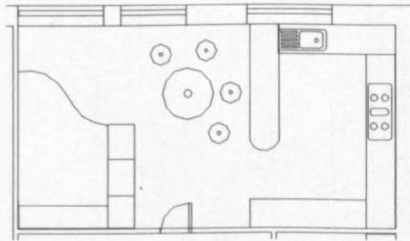


Figure 8-9 Layout of the kitchen.

Arrangement 5: The cooking range is placed to face a wall and oriented to southeast, an orientation with inauspicious concern for Mr. Yen and Mrs. Yen. Considering the Eight Kuas of Person for Tui (Mr. Yen), southeast is oriented to the nine stars of Evil Luck (Liu Sha) and for the Eight Kuas of Person for Kun (Mrs. Yen), to the nine stars of Ghost (Wu Gui). The reason for this arrangement is that fire is believed to be a powerful element for blocking inauspicious influences. If the cooking range is placed in an orientation regarded as inauspicious for the householder or his wife, this arrangement implies blocking the unfavourable Chi flowing into the house. The inauspicious orientations for Mr. And Mrs. Yen are north, south, west, and southeast. However, southeast is the most suitable orientation compatible with the layout of the kitchen. Moreover, the cooking range facing a wall means good protection and control of the fire in a suitable position.

B. First floor

Figure 8-10 shows the original plan of the first floor. This floor contains five rooms, including an en-suite master bedroom, and two toilets. The central part of this floor is designed as the space for corridor and the staircase with five rooms surrounding.

Windows are allocated to each room. Thus, each room is able to receive the natural light and has a nice view.

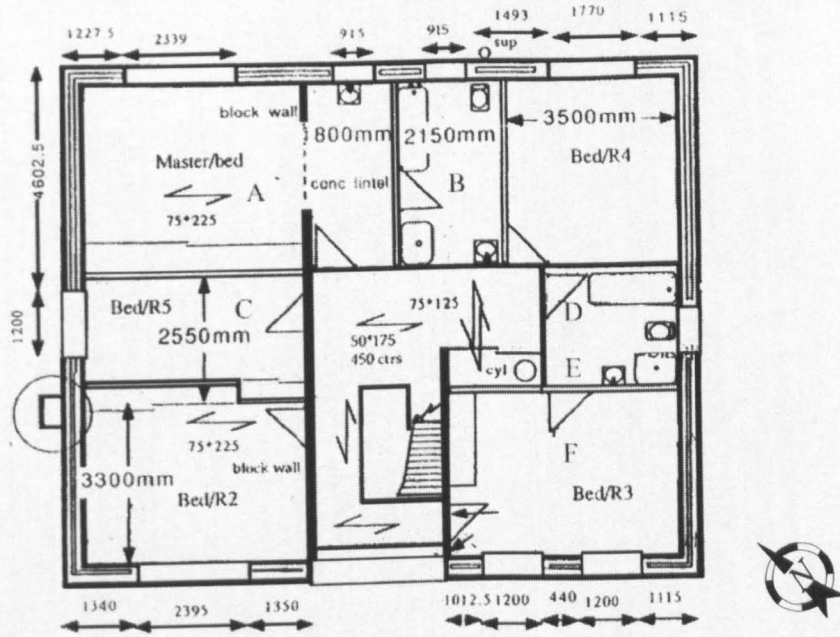


Figure 8- 10 The original plan of the first floor.

Considering the spatial arrangement of rooms on the first floor, three issues were raised in relation to the idea of Feng Shui.

1. The door of the toilet (position B in Figure 8-11) in the master bedroom faced the room (position A) directly. This placement is related to inauspicious use. The inauspicious Chi coming from the toilet would be considered to influence the residents living inside directly.

2. The room in position C faces the door of another toilet (position D). For the same reason, this room is not a suitable location for a bedroom.

3. The toilet in position D contains two doors. One door is towards to the corridor; the other door (position E) opens into a room (position F). As mentioned above, it is not an ideal placement for a door of a toilet to face into a room directly.

Modification:

Spatial arrangement of rooms in the first floor is designed to be a private area. Figure

8-11 shows the plan of the first floor. Three bedrooms, one for each member of the family, a study room and a tearoom for family use are located on this floor. The way of locating each room in the first floor is based on its function. Six principal considerations according to Feng Shui are discussed below.

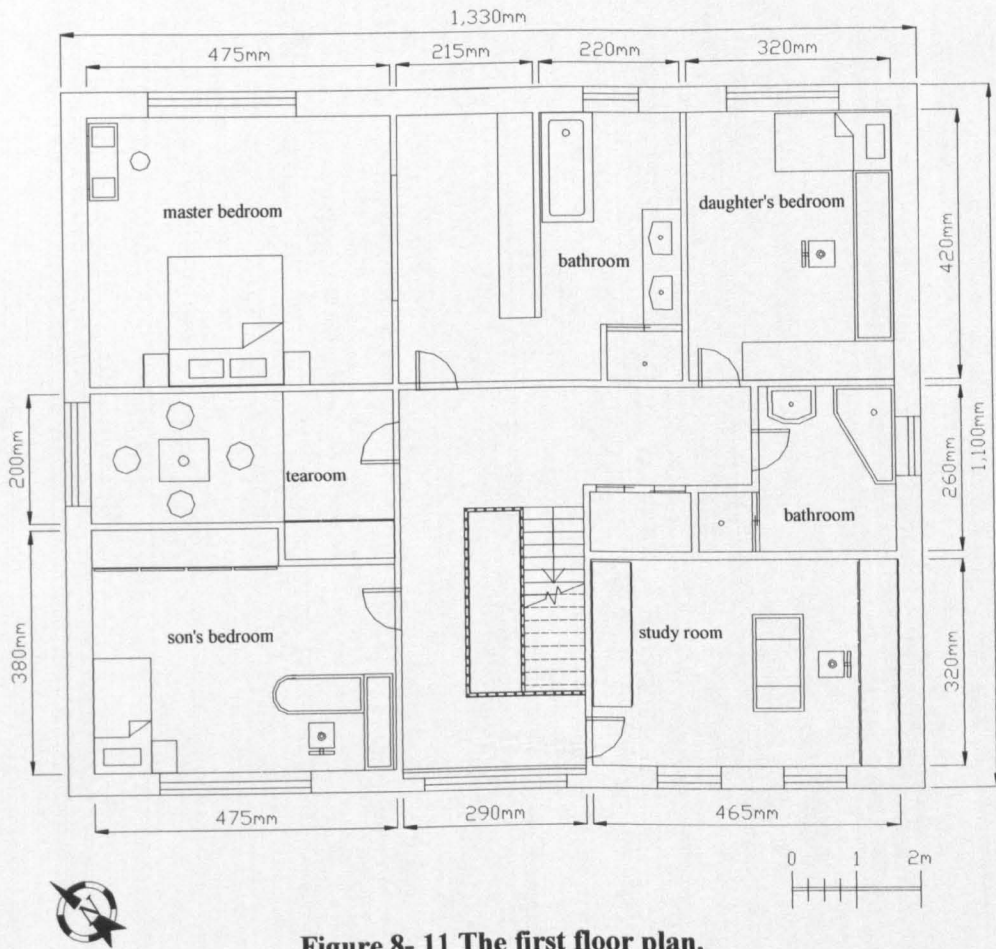


Figure 8- 11 The first floor plan.

Arrangement 1: The first task is to locate the master bedroom. In a traditional Chinese family, the householder normally is the principal member, from financial, physical or psychological perspectives. The householder therefore is considered the most significant member in a family. Thus, the master bedroom has to be located prior to other bedrooms. As shown in Figure 8-11, the master bedroom is placed in the northwest part of this floor. Considering the Eight Kwas of Person, northwest is related to Vitality (Sheng Chi) for Mr. Yen and relates to Prolong Life (Yan Nian) for Mrs. Yen. Both Vitality (Sheng Chi) and Prolong Life (Yan Nian)

indicate auspicious aspects. Thus, the master bedroom is placed in the northwest region which is an ideal spatial arrangement according to Feng Shui.

Arrangement 2: The position of the son's bedroom is the second priority when arranging this floor. In Chinese tradition, males are superior to females. In this case, the son has the second priority in location of bedroom. Considering the Eight Kuas of Person, southwest relates to Vitality (Sheng Chi) while northeast relates to the Main Position (Fu Wei) to the son.

Arrangement 3: Placing the daughter's bedroom is the third concern for this floor. The bedroom for the daughter is placed in the northeast part of the first floor. Considering the Eight Kuas of Person, northeast relates to Vitality (Sheng Chi) while northwest relates to Medicine (Tian Yi) for the daughter.

Arrangement 4: Considering the furniture placement in a bedroom, the bed should be placed with an orientation auspicious for the person occupying it. The placement of a bed has become a significant issue in Feng Shui, because normally one spends at least one third of a day sleeping on a bed. This arrangement is believed to help one absorb the most favourable Chi when sleeping. A bed facing direction is decided by the central axis of a bed. The head of a bed is ideally next to a wall (Feiyun Shanjen, 1994)². The wall implies a well protection at the back when one lies on the bed. This placement is similar to the ideal Feng Shui environment as mentioned in section 3.2. Thus, a person should face an orientation with auspicious aspects when he lies on the bed.

In the master bedroom, the head of a bed is placed next to the wall in the southwest. One can face northeast when he lies on the bed. Considering the Eight Kuas of Person, northeast relates to Prolong Life (Yan Nian) for the householder and Vitality (Sheng Chi) for his wife. This placement implies bringing the most favourable Chi to them. With regard to the son's bed and his study desk, he would face northeast.

² Feiyun Shanjen (1994) *op. cit.*, pp. 30 – 40.

These placements imply to bring him the most favourable Chi. Similarly, the head of a bed in the daughter's room is placed next to the wall in the southeast. The daughter would face northwest when she lies on the bed.

Arrangement 5: A study room is placed in the southeast part which is the only large space left in this floor. Considering the Eight Kwas of Person, southeast relates to Evil Luck (Liu Sha) for the householder and Ghost (Wu Gui) for his wife. Both Evil Luck (Liu Sha) and Ghost (Wu Gui) relate to inauspicious concerns. The placement of a study desk applies the concept of the ideal Feng Shui environment again. Thus, the desk should be placed in front of a wall, and one can face an orientation with auspicious aspects when he sits in front of the desk. To consider the orientation of the study desk, northwest is the orientation related to Vitality (Sheng Chi) for the householder and Prolong Life (Yan Nian) for his wife. Thus, the study desk is placed that one can face northwest to adjust for this unpleasant circumstance.

Arrangement 6: A tearoom is placed in a small space between the master bedroom and the son's bedroom. The door of this room faces the door of a bathroom directly. According to Feng Shui, unfavourable Chi will flow out from the bathroom. If the door of a room faces the door of a bathroom, this will cause unfavourable Chi to go into this room directly. This room position is improper for any bedroom. Therefore, a tearoom is designed in this space.

8.3 Architectural Design Case Study

8.3.1 Introduction

This section introduces the design of a dual-function house located in Taiwan, aiming to develop a dwelling achieving fusion and coexistence of humans and their surroundings in accordance with the principles of Feng Shui. The house owner, Mr. Lu, owns a photography studio, intending to build up a place functioning as a working

space as well as a dwelling. Following the requirements from Mr. Lu, the house is apportioned into two parts, one is designed for domestic and leisure purpose, and the other is for business serving as a photography studio.

The original building was a terrace house built in about 1950, probably unable to bear the frequency of earthquakes that happen in Taiwan. The house owner and his wife required a new construction located on the existing site.

Rebuilding the house provided more scope to arrange space than the previous case. This design case not only focuses on spatial arrangement of rooms for interior space, but also on the exterior space and the building façade. Many house elements are introduced to bring auspiciousness, such as the Feng Shui pool, courtyard and gardens. The Eight Houses Arrangement decides orientations with auspicious or inauspicious attributes with respect to each residence and the house. The use of colour for each room applies the idea of the Five Elements. This house is designed by the author and has been presented in the Art Design Exhibition of the Manchester Metropolitan University in 1997. This house is designed for the author's family. Interior placement for the house has been adjusted in 2002.

This house is designed as a six-storey building. The lower two floors, i.e. the ground and the first floors, were designed as an area for business. The other four floors and the rooftop are areas for dwelling and leisure. Spatial planning of the lower two floors was based on ten people working everyday in a regular way. There are a lobby, a photography studio, a meeting room and an office. Spatial planning of the other four floors was to accommodate Mr. Lu's family of seven members including Mr. Lu, his wife, an elder daughter and her husband, an elder son, a younger daughter and her husband. Mr. Lu emphasised the need to build this part more than for mere dwelling purpose, but with additional functions for leisure. To fulfil these requirements, the area was planned to consist of a large living room with home theatre, a dining room, a kitchen, family rooms, a gym, an outdoor swimming pool, bathrooms, a study area, four bedrooms, an ancestral worship room and several gardens.

8.3.2 Site

The house is located in the city centre of Taipei in Taiwan. The average temperature is around twenty-three degrees Centigrade and with an abundance of rainfall. The cold wind blows from the north in winter and a cool wind from the south during the summer season. Figure 8-12 (A) shows the site plan of this house. The site is 220.55 square metres. It faces a twenty metre road on the south and lies between two three-storey buildings to east and west, in addition to a five-storey building on the north, as shown in Figure 8-12 (B). The chosen orientation was ideal for housing. Feng Shui suggests a house should face the south but be surrounded with some objects (e.g. hills, buildings or walls) as protection in the north, east and west sides (as shown in section 3.2). A practical reason in this location is that the cold wind could be blocked from the house in winter and a cool wind could be brought into the house in summer. Feng Shui expresses this idea in terms of blocking the inauspicious Chi from the north and bringing the auspicious Chi from the south. Furthermore, by facing south, the house could avoid sunlight directly entering in the daytime.

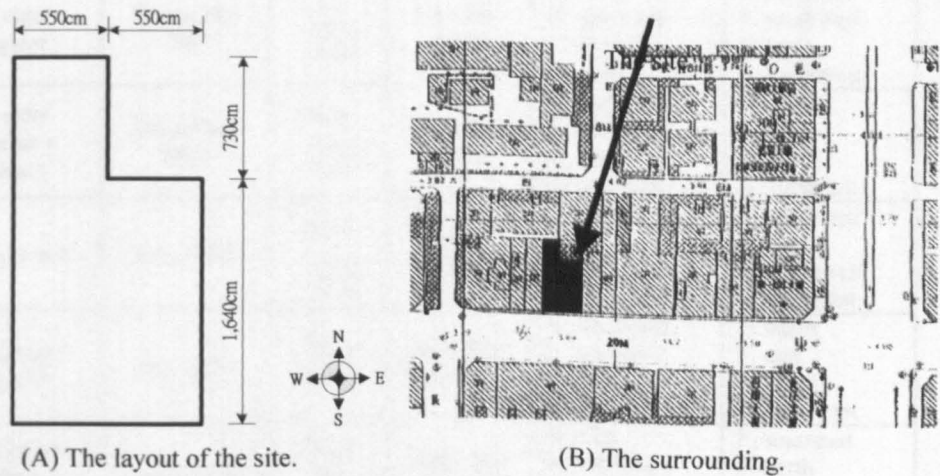


Figure 8- 12 The site plan.

8.3.3 Eight Kuas of Person

As mentioned in Chapter 6, the classification of human beings is divided into eight groups, based on the birth year, and each year relates to one of the Eight Kuas. The

birth year of each member in the family is: Mr. Lu: born in June 1934; Mrs. Lu: born in August 1940; the elder daughter: born in September 1967; the husband of the elder daughter: born in December 1965; the elder son: born in June 1969; the younger daughter: born in May 1972; the husband of the younger daughter: born in August 1967. Table 8-3 shows the detailed information on this family, derived in accordance with the Eight Houses Arrangement. This table presents Eight Kuas of Person, the category (East-four group or West-four group), and orientations with auspicious or inauspicious sense.

Table 8- 3 Eight Kuas of Person for the Mr. Lu's family.

Members of the family	Date of Birth	Eight Kuas of Person	Category	Orientation	
				Auspicious	Inauspicious
Mr. Lu (householder)	June, 1934	Chen ☰ ☷	East-four group	A: south B: north C: southeast D: east	E: southwest F: northeast G: northwest H: west
Mrs. Lu (wife)	August, 1940	Li ☰ ☷	East-four group	A: east B: southeast C: north D: south	E: northeast F: southwest G: west H: northwest
The elder daughter	September, 1967	Li ☰ ☷	East-four group	A: east B: southeast C: north D: south	E: northeast F: southwest G: west H: northwest
The elder daughter's husband	December, 1965	Ken ☰ ☷	West-four group	A: southwest B: northwest C: west D: northeast	E: south F: east G: north H: southeast
The elder son	June, 1969	Hsun ☰ ☷	East-four group	A: north B: south C: east D: southeast	E: northwest F: west G: southwest H: northeast
The younger daughter	May, 1972	Ken ☰ ☷	West-four group	A: southwest B: northwest C: west D: northeast	E: south F: east G: north H: southeast
The younger daughter's husband	August, 1967	Chien ☰ ☷	West-four group	A: west B: northeast C: southwest D: northwest	E: southeast F: north G: east H: south

A: Vitality (Sheng Chi)

D: Main Position (Fu Wei)

G: Ghost (Wu Gui)

B: Medicine (Tian Yi)

E: Disaster (Huo Hai)

H: Dying (Jue Ming)

C: Prolong Life (Yan Nian)

F: Evil Luck (Liu Sha)

How is this table made? Take Mr. Lu as an example, Mr. Lu was born in June 1934. According to the Chinese lunar calendar, June 1934 belongs to the year of Ren Xhen. As shown in Table 5-2 of section 5.3.1, if a male was born in the year of Ren

Xhen, he is categorised under Eight Kuas of person for Chen, which belongs to the East-four group. The orientations with auspicious senses are south, Vitality (Sheng Chi); north, Medicine (Tian Yi); southeast, Prolong Life (Yan Nian); east, the Main Position (Fu Wei). Other orientations have inauspicious meanings. Southwest is Disaster (Huo Hai); northeast, Evil Luck (Liu Sha); northwest, Ghost (Wu Gui); west, Dying (Jue Ming). Figure 8-13 shows the details of the eight orientations representing the type of Eight Kuas for Chen with auspiciousness or inauspiciousness.

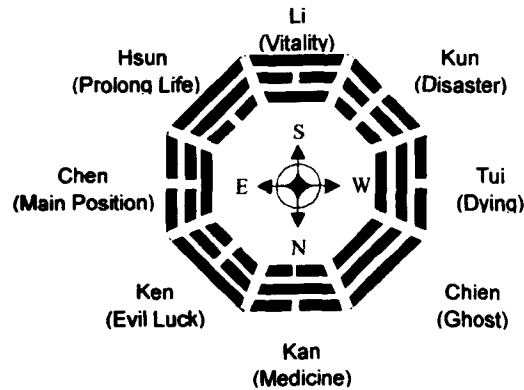


Figure 8- 13 Details of the type of Eight Kuas for Chen.

8.3.4 Eight Kuas of House

According to the Eight Houses Arrangement (as mentioned in section 5.3.2), the classification of houses is decided by direction. Figure 8-15 shows that the site is surrounded with buildings on the east, west and north, and faces a road to the south. In deciding the orientation, the main entrance is the determinant. If a house is placed facing a road to the south, the orientation of the house is north. The Eight Kuas of House in this case is Kan (Figure 8-14). Kan belongs to the East-four group. As mentioned in section 5.5.1, the ideal arrangement for person and house is that both should belong to the same group, i.e. the East-four group or the West-four group. Thus, a house facing the south is an ideal arrangement for the householder because the house and the householder belong to the same group.

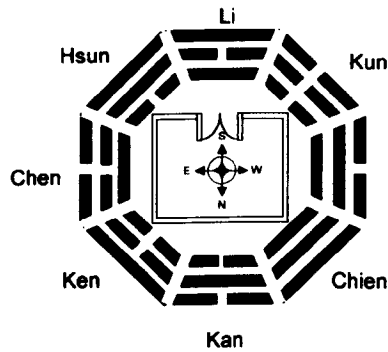


Figure 8- 14 Eight Kuas of house for Kan.

8.3.5 Design Process

This section describes the design process of the spatial arrangement inside the house.

A. The Floors of the House

As mentioned above, the space for business should be arranged for ten people. A large space with six metres ceiling height is needed for the photo studio. Arranging a two-storey space for business is reasonable in this house. Space for the family's private use was required to accommodate seven adults. Space for personal use, such as bedrooms, would occupy three floors. Space for shared use and entertaining guests would occupy one floor. Thus, the remaining four floors of the six are given to accommodation. In Chinese tradition, numbers have their auspicious or inauspicious sense. The number 'two' implies double blessing, 'four' stands for death, and 'six' is a lucky number implying that everything will go smoothly without any hitch. The building with six floors therefore begins with an auspicious impression. To avoid the description of the living space as the unlucky 'four' floors, a bonus room on the rooftop was added, making the living space four and half.

B. Use of Yin Yang

This section demonstrates the use of Yin Yang for spatial arrangement of the site. Features of auspiciousness and inauspiciousness can be considered in terms of Yin

Yang. The inauspiciousness is defined in relation to the Yin attribute and auspiciousness in relation to the Yang. As mentioned in section 3.3.2, the Chi coming from the north and west has inauspicious meanings while the Chi coming from the south and east has auspicious meanings. Figure 8-15 shows ways of creating sections with Yin and Yang attributes by dividing one space with a wall. Position A shows that the wall is placed at the north and the west of the site, dividing the space into two sections, one section (northwest of the site) relates to Yin and the other (southeast of the site) relates to Yang. The wall forms a barrier to prevent inauspicious Chi from the north and the west. The auspicious Chi from the south and the east could be brought into the site to beneficial effect.

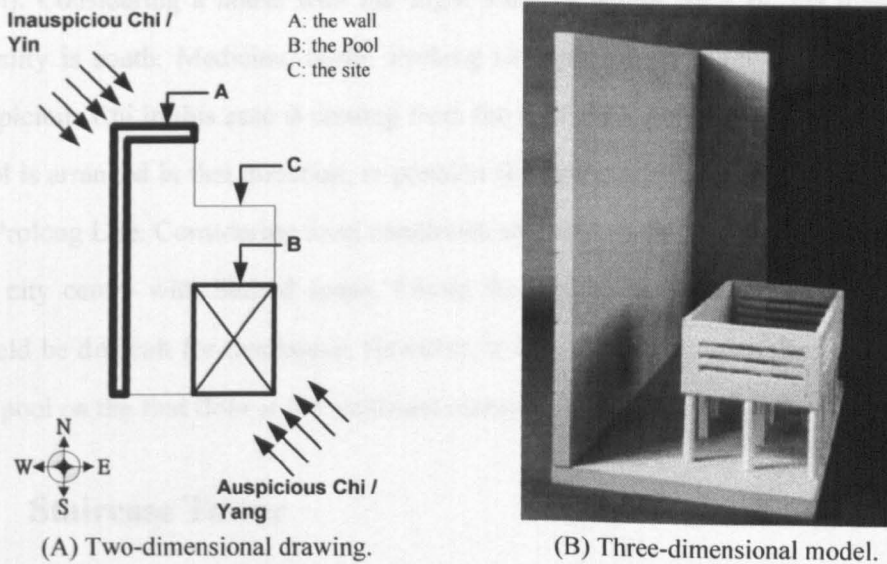


Figure 8- 15 The use of Yin Yang in the space.

C. Feng Shui Pool

As mentioned in *Zang Shu* (Book of Burial), Guo claims that Chi will be scattered by wind and coagulated by water (Guo, the Jin Dynasty)³. To create an environment to conserve the Chi, a Feng Shui pool, known as Feng Shui Chi⁴, has been used by Feng Shui specialists to conserve the Chi in a house. Traditionally, the Feng Shui pool is a

³ Guo, Pu (The Jin Dynasty) 'Zang Shu (The Book of Burial)'. In: Ji, Yun *et al.* (ed.) (1782) *Jing Yin Wen Yuan Ge Si Ku Qvan Shu 808* (Complete Library of the Four Treasuries Vol. 808). Taipei, Taiwan Shang-wu, reprinted in 1983, pp. 11 – 38.

⁴ Feng Shui Chi (風水池).

semi-circular configuration to store water located in front of the house. Various kinds of pool have been used, such as fountain, fishpond, lotus pond, mere and tarn (Lin, 1990; Lin, 1990)⁵. The use of the Feng Shui pool is more than for conservation of Chi, for it can also provide some practical functions. The house owner, Mr. Lu expected a pool with leisure equipment, and his family were pleased at the idea of a swimming pool.

Furthermore, the Feng Shui pool needs to be located on an orientation related to auspiciousness. Four orientations containing auspicious meanings are Vitality (Sheng Chi), Medicine (Tian Yi), Prolong Life (Yan Nian) and Main Position (Fu Wei). Considering a house with the Eight Kuas of House for Kan, the direction of Vitality is south; Medicine, north; Prolong Life, southeast; Main Position, east. As auspicious Chi in this case is coming from the southeast, shown in Figure 8-15 (A), a pool is arranged in that direction, in position B, Figure 8-15, regarded as the direction of Prolong Life. Considering local conditions and surroundings, the site is located near the city centre with limited space. Fitting the swimming pool on the ground floor would be difficult for this house. However, it was possible to raise the height and fit the pool on the first floor at the southeast corner next to the office.

D. Staircase Tower

This house is a six-storey building. Locating an elevator in the house would provide more convenience to the residents. The room for the elevator creates a vertical space connecting the floors. Similarly, the stair has the attribute of connecting each floor within the building. In accordance with concerns of the route for residents moving within the house, a staircase tower including the elevator and stair seemed suitable. The staircase tower would create a space for auspicious Chi to circulate vertically within the building, if the staircase tower could be ideally placed in a direction with

⁵ Lin, Hui-Cheng (1990) *Taiwan Chuan Tong Jian Zhu Shou Ce* (Taiwan Traditional Architectural Manual). Taipei, Yi-shu-chai, pp. 17.

Lin, Jun-kuan (1990) *Shui Zai Zhong Guo Zao Yuan Ahang Zhi Ying Yong* (The Applications of Water in Chinese Garden). Taipei, Di-jing, pp. 105 – 116.

auspicious sense.

E. Spatial Arrangement of the Site

Figure 8-16 (A) illustrates the spatial arrangement of the site, which includes four fundamental components, i.e. the pool, staircase tower, the floor and the wall. The disposal of the four components is based on the function of each, from exterior use to interior purpose. Figure 8-16 (B) demonstrates the relative locations of these four components. Position A is the area for the pool, placed on the first floor. The space under the pool is designed as a corridor to lead people going into the house to the main entrance, placed to south of the staircase tower. Position B is area of the staircase tower which is a connector linking the exterior space and the interior area; from public to private space. The staircase tower is placed in the east, which is the orientation of Medicine (Tian Yi), an orientation with auspicious sense. This placement implies that Chi could circulate inside the tower and be brought into the house. Position C is the floor where the residents have accommodation and work. Position D is the wall built as a barrier to block the inauspicious Chi coming from north and west.

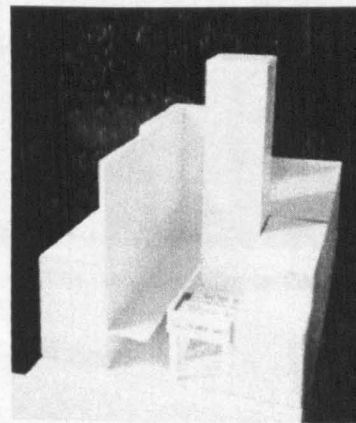
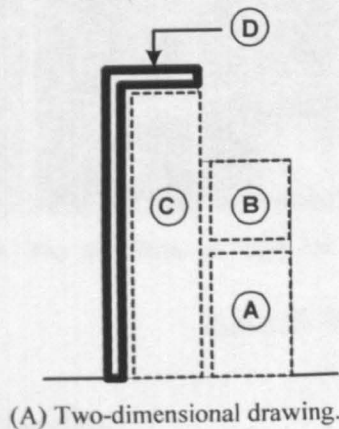


Figure 8- 16 Spatial arrangement of the site.

F. Courtyard

The shape of the site is rectangular, at position C Figure 8-16. The north-south length

is much longer than the east-west. The site is surrounded by buildings to east, west and north. This would cause Chi to accumulate within the lower three floors of the house, and the natural sunlight was not able to reach this area.

In order to improve this circumstance, creating a specific space for circulating the Chi and receiving sunlight is an important issue. For a vertical direction, a courtyard is a suitable design. The courtyard can create an environment that allows the Chi to circulate in a vertical direction. To admit sunlight, the top of the courtyard is glazed. Figure 8-17 shows the indoor courtyard designed for the house. It has a four-floors to bring in sunlight from the top vertically. Within the courtyard, the Chi must circulate within these four floors.



(A) The view from the southwest.



(B) The view from the northwest.

Figure 8- 17 The indoor courtyard.

G. Garden

Taipei City is dense, with crowded buildings surrounding and some environmental problems, such as noise, heavy traffic and air pollution. According to Yin Yang, as mentioned in Chapter 2, buildings stands for Yang and space implies Yin. Too many buildings would create too much Yang. How to improve these conditions is another

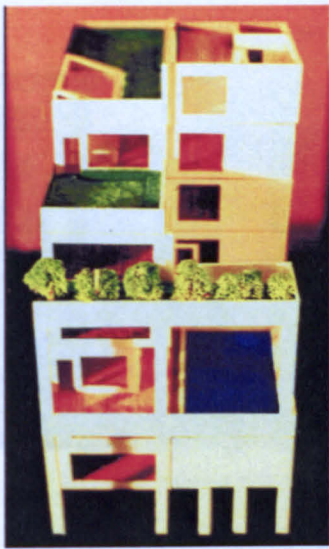
significant issue for the house design.

A dream house for the house owner is a peaceful place surrounded by beautiful trees, flowers and next to a pond. How could we achieve the picture of the dream house in this building? A swimming pool to satisfy the need of a pond is achieved. Designing gardens within the house is a way to present the peaceful sense of plants. This peaceful garden is also a medium which could improve the quality of Chi within the space.

With a six-storey building, how could one arrange gardens so that every floors can benefit? Placing several gardens on different floors is a way to reach this target. In accordance with the practical conditions for each floor, different types of garden have been designed to build up the space in various layers and with different views. Figure 8-18 (A) shows the disposal of gardens located on different floors. Gardens placed at the south and on the rooftop aim to enhance the auspicious Chi coming from these directions. Moreover, when one stands on the rooftop garden and faces south, he or she could see different layers of gardens.

H. Windows

As shown in Figure 8-15 (A), the Chi coming from east and south is regarded as auspicious. Placing windows on the east and south of the house aims to allow auspicious Chi to enter the house. Figure 8-18 (B) shows the placement of windows in the south and east sides. Windows to east and south can have various views to the outside. These windows placed at different locations and floors provide various view of gardens and the swimming pool, encouraging a pleasant and peaceful feeling. The residents will feel as if living away from the crowded city centre.



(A) The view from the south.



(B) The view from the southeast.

Figure 8- 18 The front view of the house.

Figure 8-19 (A) shows the interior structure of the house from the southwest view. This shows that Chi has access to the house from the south, the east and the top floor, and would be able to circulate within the house via the courtyard in the centre. Figure 8-19 (B) shows the placement of windows in the north (position A) and west (position B) sides. The Chi coming from these two directions has an inauspicious meaning. Windows placed in these two directions are designed with translucent glass. Limited use of windows aims to minimise the inauspicious Chi accessing the house. In order to receive at least some sunlight, a tradeoff between sunlight and inauspicious Chi is made. Windows to west (position B) are designed as different layers from bottom to top. This placement implies a concept of a continual progress which has an auspicious sense.

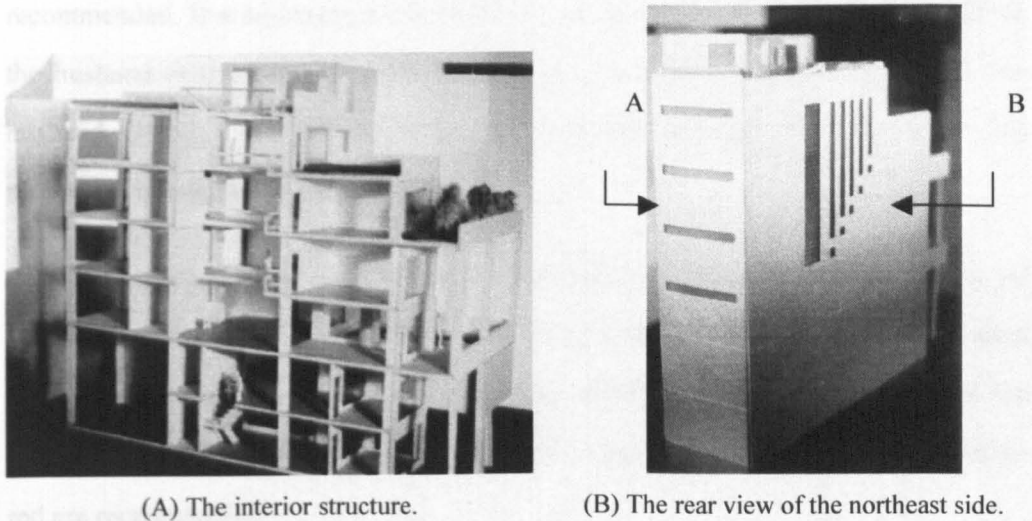


Figure 8- 19 The placement of windows.

I. Colours/the Five Elements

As mentioned in section 4.2, each of the Five Elements complies with one colour. That is turquoise for Wood, red for Fire, yellow for Earth, white for Metal and black for Water. Considering the Eight Kuas, each Kua corresponds to one of the Five Elements (Wang, 1995)⁶. That is: the Kua of Chien corresponds to Metal, Kun to Earth, Chen to Wood, Hsun to Wood, Kan to Water, Li to Fire, Ken to Earth and Tui to Metal.

The colour used for each room of the house complies with the Eight Kuas of Person for the resident. The Eight Kuas of Person for Mr. Lu is Chen which has the attribute of Wood in the Five Elements. Because the householder is superior in status to the other members in a family, the use of colour for public space in the house should be in accordance with the suitable colour for Mr. Lu. Thus, the colour of turquoise and the series of colours related to turquoise are suggested to be ideal.

The use of colour in each bedroom is dependent on its resident. For example, the elder son's Eight Kuas of Person is Hsun, which fits with Wood of the Five Elements. The colour of turquoise and the series of colours related to turquoise are

⁶ Wang, Fukun (1995) 'The Traditional Philosophical Framework of Fengshui Theory'. In: Wang, Q. (ed.) *Feng Shui Li Lun Yan Jiu Yi* (The Research of Feng Shui Theory Vol. 1). Taipei, Di-jing, pp. 19.

recommended. If a bedroom accommodates a couple, the use of colour could follow the husband or the wife. In Chinese tradition, a woman would give support to her husband. Thus, if the use of colour for bedroom complies with the wife, this placement is considered auspicious.

Considering the use of colour in the master bedroom, the Eight Kuas of Person for Mr. Lu is Chen, while that for Mrs. Lu is Li. The Kua of Chen is linked with Wood, while Li is linked with Fire. The use of colour complying with Fire for Mrs. Lu would be considered. Thus, the colour red and the series of colours related to red are recommended.

Another example is the bedroom for the elder daughter and her husband. The Eight Kuas of Person for the elder daughter is Li while her husband is Ken. Li links with Fire as mentioned. The Kua of Ken links with Earth. According to the productive cycle, Fire gives rise to Earth. The selection of colour for Fire would not only benefit the elder daughter herself, but also her husband.

The third bedroom is occupied by the younger daughter and her husband. The Eight Kuas of Person for the younger daughter is Ken while her husband is Chien. Ken is linked with Earth and Chien with Metal. According to the productive cycle, Earth gives rise to Metal. The colour for Earth is yellow. Yellow and the series of colours related to yellow are used in their bedroom. Again, the selection of colour for Earth would benefit the couple.

8.3.6 Interior Arrangement of the House

A. The Ground Floor

As mentioned in Section 8.3.1, this house consists of six floors. The lower two floors are designed as a working space. Figure 8-20 shows the ground floor plan. This floor contains a corridor, the entrance of the office and the entrance of the house, a lobby, a

meeting room, storage rooms and a photography studio. Four principal arrangements for the ground floor are discussed below.

Arrangement 1: A corridor within the columns on the southeast of the site leads people into the house from outdoors. The ceiling of the corridor is made by glass so that sunlight can reach the floor through the glass. The sunlight forms a straight light pattern directing the way to the entrances. The office entrance is placed in the east which is the orientation of Medicine (Tian Yi). In addition, numerous columns giving a high density of support are placed at the southeast of the site, conceived as trees making an image of a forest.

Arrangement 2: The orientations of the entrances for the office and the house are decided according to the Eight Kuas of House. The office entrance facing east is the direction of Medicine. The house entrance faces south with the direction of Prolong Life. Both the east and south are orientations with auspicious meanings. The placement of these entrances implies bringing auspicious Chi into the house.

Arrangement 3: A photography studio is placed at the north of the site. The reason is the relation of Yin Yang to this space. As shown in Figure 8-12, the site is surround by two three-storey buildings on the east and west, in addition to a five-storey building on the north. The north part of the site therefore is darker than the east and west, an area with the attribute of Yin. Functionally, a photography studio needs a dark space and requires two floors in height. Thus, this space is ideal for the photography studio.

Arrangement 3: A photography studio is placed at the north of the site. The reason is considered the use of Yin Yang in this space. As shown in Figure 8-12, the site is surround by two three-floors buildings one the east and west, in addition to a five-floors building on the north. The north part of the site therefore is darker than the east and west, which is an area with the attribute of Yin. Functionally, a photography studio needs a dark space and requires two floors in height. Thus, this space is ideally for the photography studio placed.

Arrangement 4: Windows are placed on the south and east. This placement aims to bring the sunlight and auspicious Chi into the house.

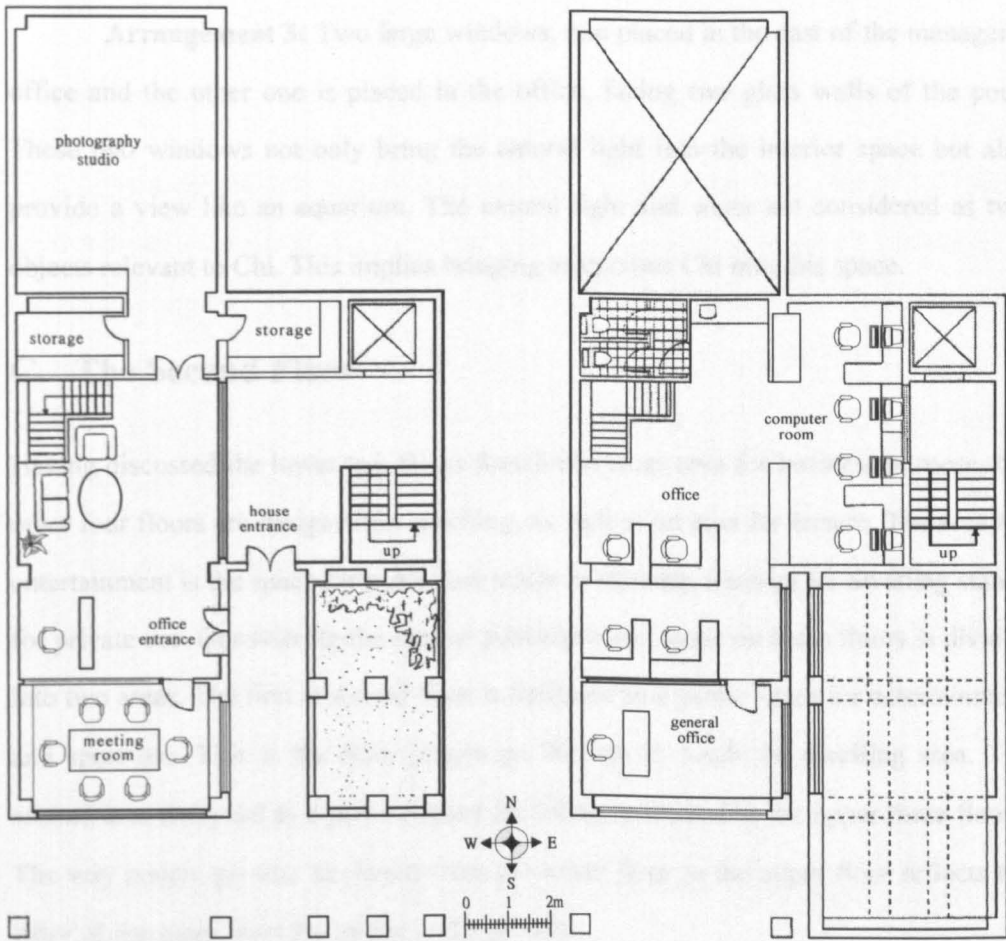


Figure 8- 20 The ground floor plan.

Figure 8- 21The first floor plan.

B. The First Floor

Figure 8-21 shows the first floor plan which contains one office for staff, one office for the manager, a computer room and a toilet. Three principal arrangements are described below.

Arrangement 1: The manager office for the house owner, Mr. Lu, is placed at the south which is the direction considered as Vitality for Mr. Lu.

Arrangement 2: To conceive the auspicious Chi from the south and the east, windows are placed at these two orientations.

Arrangement 3: Two large windows, one placed in the east of the manager's office and the other one is placed in the office, facing two glass walls of the pool. These two windows not only bring the natural light into the interior space but also provide a view like an aquarium. The natural light and water are considered as two objects relevant to Chi. This implies bringing auspicious Chi into this space.

C. The Second Floor

Having discussed the lower two floors functioned as an area for business purpose, the other four floors are designed for dwelling, as well as an area for leisure. The area for entertainment is the space for public use while in contrast, the area for dwelling stands for private use. Considering the idea of public/private, space on these floors is divided into two areas. The first at second floor is designed as a public space for entertainment and sport use. This is the floor people go through to reach the dwelling area. The second area designed as a private space for living is located in the upper three floors. The way people get into the house from the lower floor to the upper floor reflects the entry of the space from the public to the private.

Figure 8-22 shows the second floor plan. This floor contains a living room, a storeroom, a shower room, a gym, a balcony and an outdoor swimming pool. Arrangements are described in below.

Arrangement 1: Again, the entrance faces the east which is the orientation of Medicine.

Arrangement 2: A large living room is the first space people encounter after getting through the entrance. The living room is designed as an open space for multifunctional use. A large screen and hi-fi are placed on the west wall. This room

functions as a home theater. A piano is placed near the entrance and next to a window. The family would arrange a family concert in this room.

Arrangement 3: As mentioned above, a courtyard four-floors in height is designed above the west part of the living room.

Arrangement 4: A gym is placed at the south of the living room. This room has windows on its three sides, the north, the east and the south. This room connects the living room and the outdoor space. The sunlight is able to enter the living room through these windows. Mirrors are placed on the wall of the west side in the room. The reflection brings in the outdoor view into the interior space. This disposal intends to increase the auspicious Chi and the natural sunlight to the house.

Arrangement 5: An outdoor swimming pool is placed at the southeast of the house. This pool supplies a Feng Shui pool to this house, aiming to bring the auspicious Chi and vitality to the house. Two large windows placed on the east wall within the swimming pool connect to the office on the second floor. These windows provide a view as an aquarium to the office.

Arrangement 6: Glass tiles are placed on the floor to the east of the balcony. When the light gets through the glass tiles, the shadow on the ground floor forms a way directing of people into the house.

Arrangement 7: a storeroom is placed at the north of this floor. This area is surround by buildings on its east, west and north, and therefore is dark (shown in Figure 8-15).

D. The Third Floor

Figure 8-23 shows the third floor plan. This floor contains a dining room, a kitchen, a laundry, a public bathroom, which are related to less public used, and an en-suite bedroom for private used. Spatial arrangements for this floor are described in below.

Arrangement 1: Again, the entrance on the third, fourth and fifth floors are design to face the east in accordance with Feng Shui.

Arrangement 2: The dining room is an open space with windows on the south and north and a courtyard on the west. The sunlight can reach through the windows and the courtyard.

Arrangement 3: A door placed on the south of the dining room will lead people to a stair connecting a small garden on the fourth floor (also see in Figure 8-24).

Arrangement 4: The kitchen is located at the north with a cooking range placed at the northwest part of this house. The cooking range is placed at the west and the switch faces the east. Considering the Eight Kuas of House for Ken, the northwest is the orientation of Decease; the west is Disaster; the east is Medicine and the north is the Main Position. The cooking range is placed at the inauspicious orientation which implies exhausting the inauspicious Chi coming from this direction. Both the arrangement of orientation of kitchen and cooking range imply the creation of richness and vitality to this family.

Arrangement 5: An en-suite bedroom with a bed facing the east is placed at the south side of this floor. This room was designed for the elder son of Mr. Lu. The elder son with his Eight Kuas of Person for Hsun, has an auspicious meaning of Prolong Life on the east, while Medicine on the south. Allocating the elder son in this room has an auspicious meaning. The bed is placed facing the east. The east is orientation of Prolong Life which is an auspiciousness.

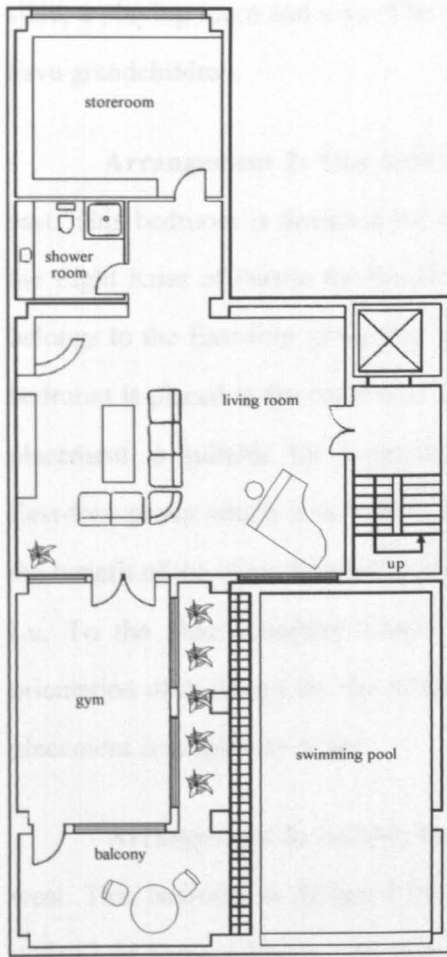


Figure 8-22 The second floor plan.

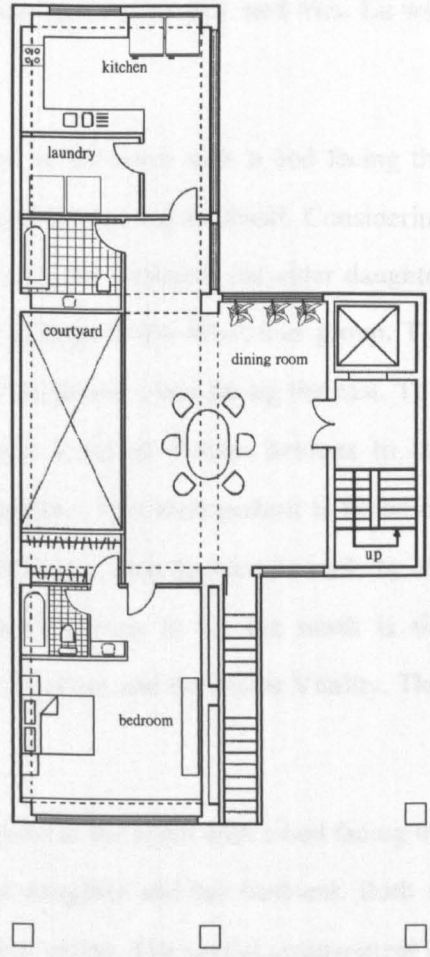


Figure 8-23 The third floor plan.

E. The Fourth Floor

Figure 8-24 shows the fourth floor plan. This floor is the space for private use composed of a family room with children's playground, a bathroom and two bedrooms. The two bedrooms are designed for the two daughters and their husbands. Mr. and Mrs. Lu prepare this floor for their two married daughters and their husbands when they have a family gathering. The family room with children's playground is designed for Mr. and Mrs. Lu's grandchildren. Arrangements for this floor are described below.

Arrangement 1: An open space after the entrance is designed as a family room with a children's playground. The children's playground contains a children's

slide, a playing room and toys. This space is prepared for when Mr. and Mrs. Lu will have grandchildren.

Arrangement 2: One bedroom is placed at the north with a bed facing the east. This bedroom is designed for the elder daughter and her husband. Considering the Eight Kuas of Person for the elder daughter and her husband, the elder daughter belongs to the East-four group but her husband belongs to the West-four group. The bedroom is placed at the north with a door at the south and a bed facing the east. This placement is suitable for a person whose Eight Kuas of Person belongs to the East-four group which is benefit to the elder daughter. This arrangement is based on the benefit of the elder daughter, rather than her husband. This decision is made by Mr. Lu. To the elder daughter whose Eight Kuas of Person is Li, the north is the orientation of Prolong Life, the south is the Main Position and the east is Vitality. This placement is auspicious to her.

Arrangement 3: Another bedroom is placed at the south with a bed facing the west. This bedroom is designed for the younger daughter and her husband. Both of their Eight Kuas of Person belong to the West-four group. The spatial arrangement of this room makes it difficult to achieve the orientation suitable for the West-four group, but this can be compensated in arranging the orientation of the bed. The younger daughter's Eight Kuas of Person is Ken, so the bed facing west is the orientation of Prolong Life for her which is an auspicious consideration. As her husband's Eight Kuas of Person is Chien, the west-facing bed is the orientation of Prolong Life for him.

F. The Fifth Floor

Figure 8-25 shows the fifth floor plan. This floor is the space for private use which is composed of a study area, the master bedroom and an outdoor garden. Apart from the entrance arranged to face east, other arrangements are described below.

Arrangement 1: The master bedroom is placed on the north with a door to the south and a bed facing east. Considering the Eight Kaus of Person, Mr. Lu is Chen and Mrs. Lu is Li. Both belong to the East-four group. Under the Eight Kuas of Person for Chen, the north is the orientation of Medicine, the south is Vitality and the east is the Main Position. Under the Eight Kuas of Person for Li, the north is Prolong Life, the south is the Main Position and the east is Vitality. Arrangement of the master bedroom is auspicious to both the Mr. Lu and his wife.

Arrangement 2: An outdoor garden is an open area placed at the south which enhances the auspicious Chi coming from this direction.

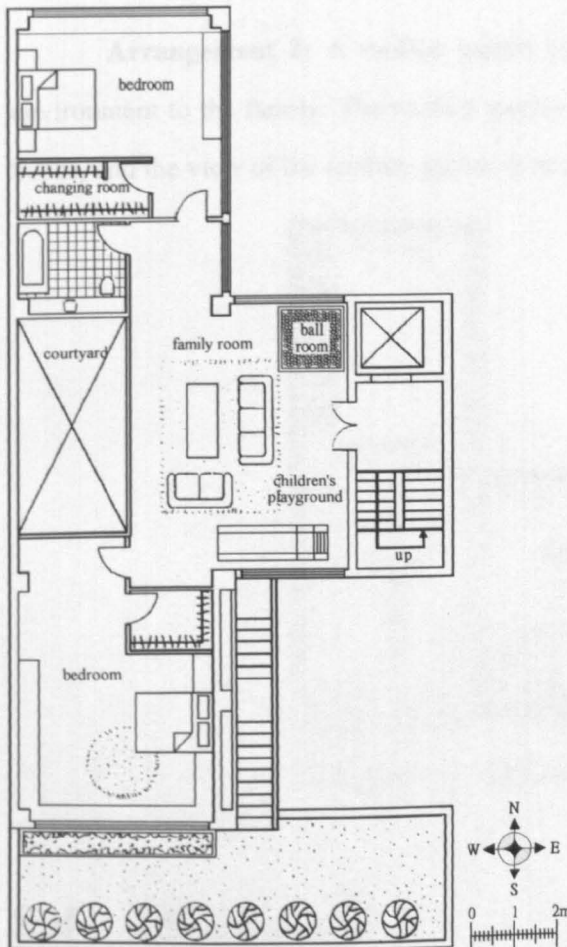


Figure 8-24 The fourth floor plan.

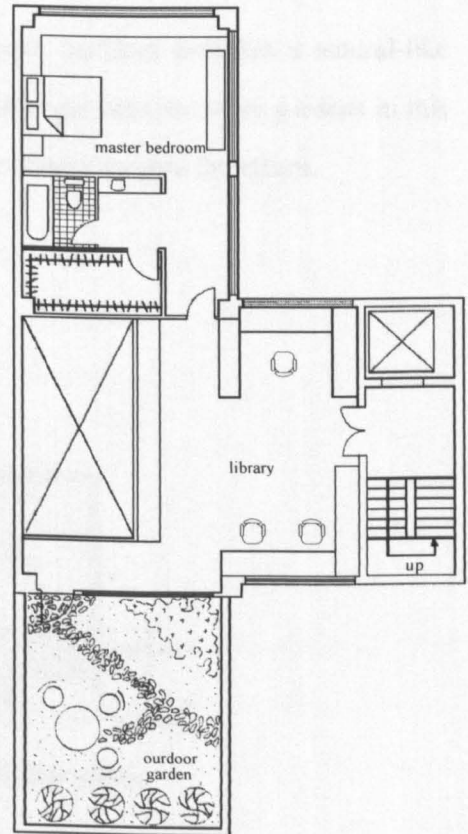


Figure 8-25 The fifth floor plan.

G. The Rooftop Floor

Figure 8-26 shows the rooftop plan. This floor is designed for an outdoor rooftop garden and an ancestral worship room. Arrangements for this floor are described in below.

Arrangement 1: The reason why the ancestral worship room is allocated in the upper floor is that ancestral spirit is a family tradition to many Chinese. Considering the spatial arrangement of a house, the upper floor is concerned as superior than the lower one. Placing the ancestral worship room on the top floor implies the respect to the ancestral spirit.

Arrangement 2: A rooftop garden placed outdoors provides a natural-like environment to the family. The rooftop garden is larger than the other gardens in this house, and the view of the rooftop garden is more extensive than the others.

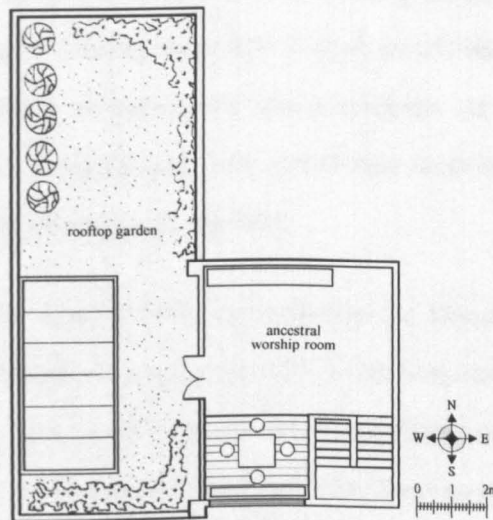


Figure 8- 26 The rooftop plan.

8.4 Discussion

The reason why many Chinese would follow the principles of Feng Shui in constructing domestic architecture is based on the common background of belief in divination of the future, astrology, geomancy, physiognomy, the choice of lucky and

unlucky days, orientations, colours, materials, dimensions and so on. Tao and Chi are the basic concepts for many Feng Shui believers. As described in Chapter 2, Tao is the way to govern the universe including all human beings, living creatures and even houses. Each of these objects can be connected to each other. Chi is the vital energy circulating within the universe to give being vitality. Every human being is a member of the universe. To live in harmony with the world is believed by the Chinese to be the ideal condition for every human being. Feng Shui therefore provides a way of thinking about the intimate connection between human beings and the world. Although modern technology can improve the quality of material objects, creating an ideal domestic environment so that human beings can live in harmony with the world is the final destination for building a house. This is what Feng Shui attempted to reach. The technology can be changed day by day. House elements such as the cooking range change with format and type with the advance of technology and this change might cause a dislocation of correct orientation for the cooking range. However, because of the underlying meaning of cooking range lasts longer, its orientation can be re-iterated and defined. To reasonably re-iterate new house elements, an understanding of the principles of Feng Shui is significant. This would also show the importance of this research – to explore the ideology of Feng Shui.

As described by Bong (1999), the experience of living in the universe with harmony might be of benefit in many ways only if one believes in that world-system and its classification system. In the first case study, the design of a Feng Shui house at least provided a way of being more Chinese in England and so seeming more at home, and therefore feel more comfortable. Whether the design of Feng Shui houses would really provide physical benefits for dwellers and whether this effect is shared with friends of these dwellers are beyond the scope of this research, but would be a fruitful area for investigation.

The design (or planning) of a domestic architecture following the idea of Feng Shui in the two cases draws attention to two aspects. One is the location to surrounding landscape, i.e. the environment. The other is the interior design and

arrangement of room and furniture. The significant parameters used in the former are matters such as the site, the environment, the location, and the orientation of the house, while the key parameters for the latter are the orientation of the house, rooms as well as furniture. Besides the circulation of Chi inside the house is a key parameter. These factors are discussed as follows :

1. **The site:** The site of the house is the specific place being analysed. Auspicious Chi should be encouraged to enter the site and design in such a way to meander through it before leaving, however, inauspicious Chi need to be recognized and prohibited from entry. Take the second case as an example, the house facing the south is judged to be an ideal one to block the inauspicious Chi from the north and could bring the auspicious Chi from the south into the house. Besides, the shape (circle, rectangle, triangle, or others) of the site is considered in these two design cases. For instance, in the first case, the shape of the site is analysed to achieve conservation of wealth.

2. **The location:** The location contains the site and is usually limited to the surroundings visible from the site. The views from a site at any location are limited by some elements of the natural or built environment, such as tall buildings, a spire or electrical supply poles. The factor of selecting a location was not considered in both of the design cases. This is because the locations of the two cases have already been decided before designing. However, the quality of the location can be improved, by refining the environment of the location, such as by creating artificial features: ponds, private fountains, pools, and so on, or by developing natural features such as trees, grass, vegetated areas. The other way for improving the quality of the location is to arrange windows of the house so as to provide the residents inside the house with a designed picture.

3. **The environment:** The environmental qualities of a location need to be designed so as to be beneficial to the Feng Shui of a site. Features that can be used include natural features (mountains, hills, prominences, lakes, ponds, seashore, rivers,

streams, waterfalls, various sizes of trees, types of trees, etc.), artificial features (reservoirs, fountains, roads, bridges, railways, garbage dumps, tunnels, etc.), industrial areas (such as chemicals and chimneys), and public buildings (school, hospitals, churches, etc.). In assessing such features with their prioritised magnitude and importance would lead to a complicated theory, however, these two cases are not considered in such a detailed level, only focusing on an overarching viewpoint.

4. The orientation of the house: Deciding the orientation of the house can derive from various sources. One might refer to the compass direction that a site faces, who uses either a normal magnetic compass, or a Chinese compass. In these two cases, the orientation of the house, following the major approach, is decided from the main entrance. To decide whether the orientation of the house is compatible with the members of the family. The decider of the family members are used as a datum, derived from inputting the birth year of the decider into a mapping table. In the first and second case, the decider is chosen from the person, which earns the most fortune for the family.

5. The orientation of rooms and furniture: This is considered based on the orientation of person(s) who is (are) designated to stay inside. The orientation of a person comes from his or her birth year. The orientation of room is taken to compare with the orientation of a person to check up compatibility. The furniture is arranged to comply with the orientation of a person.

6. The circulation of Chi : The idea of Chi has been largely applied in these two cases, particularly in the second case, based on the condition with greater flexibility. Chi is explained to follow a curvilinear course, thus if the front door is opposite the back door, Chi will pass straight through and the beneficial effects might be lost. Chi can be consumed or nourished, and Chi can escape from open windows, but furniture or partitions can be used to deflect it. Some other Feng Shui principles even explain the creation of Chi in accordance with the shapes, such as sharp corners might create stagnant Chi, or symmetrical shapes is favourable than irregular plan.

8.5 Conclusion

This chapter has taken two contemporary houses to explore how the principles of Feng Shui are applicable to domestic architecture. The first design case showed a modification of an existing house restricted to the interior design. The results of this case are examined with various aspects based on the principles of Feng Shui i.e. the examination of the shape of the site and house, the arrangement and allocation of rooms, the placement of furniture. The design of the second case showed a broader range of tasks than the first case, involving the use of Feng Shui both for exterior and interior space, with the use of additional house elements including Feng Shui pool, colour, courtyard, and garden. The main principles of Feng Shui used in these two examples include the circulation of Chi, Yin Yang, the Five Elements, and the Eight Kuas.

Chapter 9

Conclusion and Future Work

9.1 Summary and Conclusion

This thesis has considered and explored many aspects in an attempt to explore the ideology of Feng Shui comprehensively. It has focused on deducing the fundamental basis of Feng Shui as well as its intimate interconnections with social relations, cultural forces and theoretical applications. Critical historical documents and references written by ancient Chinese were presented and explained. With the provision of classical and modern examples, this thesis has provided in-depth descriptions and discussions on Feng Shui. Feng Shui was explored and identified with a balanced worldview, the so-called Tian Ren He Yi (the Union of Human Beings and Heaven), and with the use of classification and connection, which intimately interconnects social relations, cultural forces, and architecture.

The uses of classification and connection are based on an evolutionary worldview, i.e. Tai Ji Tu Shuo (Clarification of the Supreme Pole Diagram), which illustrates the path of evolution from the ultimateless through the great ultimate, Yin Yang, and from the Five Elements to a myriad of things. This evolutionary approach describes how the myriad of things were originally formed with various categories of 'building blocks', e.g. the Five Elements. These common 'building blocks' have been inherited in the myriad things and therefore each subject or object in the world belongs

to one specific category, and one can connect it to another based on the criterion of sharing the same category of building block.

Classification is a technique for grouping a wide range of house elements or of subjects, such as family names, human bodies, orientations, colours, dimensions, mountain profiles, date of birth, and astronomy and linking them to the domain of Feng Shui, which provides an unique way to divide any object into two, four, five, eight, twenty-four, and even up to sixty-four classes. The technique of connection can link different subjects when they fall into the same category.

Orientation in space is the principal theme for connection. Orientation is not only used for the arrangement of interior space and the placing of furniture in Feng Shui, but is also used as a determinant factor to bind other subjects, such as materials, bodies, colours, and animals. By means of features of animals, stars in the sky, and surnames, each orientation was embodied with features or characters that can eventually reveal the meanings of auspiciousness or inauspiciousness.

An intimate relationship between human beings and the world has been disregarded in most contemporary architecture, which pays too much attention to merely providing a solution to technical aspects of requirements, regardless of the other aspects such as culture, social behaviour and worldview. The idea that one's name, date of birth, or shape of geography might determine one's suitability or otherwise to occupy a particular house seems strange to a modern western-educated person, and can all too easily be derided as superstitious nonsense or false science. It seems highly unlikely that such a connection could ever be proved materially to influence one's luck. But many psychological ills of the modern world, of anomie, amnesia and dislocation, can be blamed on lack of connection with place, and such a connection is precisely what the Feng Shui system attempted to provide. The freedom to live anywhere has as its complement a belonging to nowhere, while openness to all orientations means a lack of significance for any specific orientation. Rootless is thus also directionless.

According to Kuhn's renowned work, *the Structure of Scientific Revolutions*, science is 'a series of peaceful interludes punctuated by intellectually violent revolutions' After such revolutions, 'one conceptual worldview is replaced by another (Kuhn, 1962)¹.' This is the fundamental theme of Kuhn's argument, the successive transition from one paradigm to another so that the typical developmental pattern of a mature science is the successive transition qualitatively transformed, and quantitatively enriched by fundamental novelties of either fact or theory. If Kuhn's argument is true, we might expect that the current theories of architecture that we have been taught and which we apply to solving the problems that these theories dictate, would prove unhelpful to unravelling the basis of Feng Shui. Since the paradigm is wrong, we might not be able to provide an adequate judgement of the principles used in Feng Shui, such as Chi or the Five Elements, or other principles used in the other ancient domestic architectures. However, to reason about other cultural principles merely based on the paradigm of Feng Shui, is also not applicable. To remain deeply indoctrinated into currently accepted theories is always to fall into the situation mentioned by Kuhn: 'Philosophers of science have repeatedly demonstrated that more than one theoretical construction can always be placed upon a given collection of data (Kuhn, 1962)²'. 'The man who is striving to solve a problem defined by existing knowledge and technique is not just looking around. He knows what he wants to achieve, and he designs his instruments and directs his thoughts accordingly (Kuhn, 1962)³'.

Distilling principles from Feng Shui, and other principles of domestic architectures, might provide a guideline for further improvement for domestic architecture that could be more suitable and more applicable to a broader community.

The popular technique might gradually fade from time to time or be used differently in each culture: however, underlying meanings embedded in these

¹ Kuhn, Thomas S. (1962) *The Structure of Scientific Revolutions*. USA, The University of Chicago Press.

² Kuhn, Thomas S. (1962) *op. cit.*, pp. 76.

³ Kuhn, Thomas S. (1962) *op. cit.*, pp. 96.

techniques might last longer. The distillation of these underlying meanings from many Chinese examples is the key topic of this thesis. This means that techniques such as the use of celestial animals, astronomy, family names and others might eventually fade away. However, the underlying meanings of these techniques rooted in the believers of Chinese domestic architecture might last much longer. In this thesis, a balanced worldview with that Feng Shui applies, and the way of classifying objects or matters, as well as connecting objects was explored and exemplified. This, so called, underlying meanings seems to be applicable to these believers.

9.2 The Balanced Worldview

The essence of Feng Shui was identified as a way to achieve the fusion and coexistence of the natural environment and human beings, ideally existing in a dynamic state of balance and harmony. When mentioning the essence of ‘Tian Ren He Yi (the Union of Human Beings and Heaven)’, two critical notions, i.e. Tao (the way the universe works) and Chi (the vital energy of the universe) were considered. Chi was used to stand for a measurement of auspiciousness or idealness of house design, while Tao was used to represent the cosmology that most Chinese believed in. Chi can be either auspicious or inauspicious.

The idea of Chi has also been applied in many practices, not only in domestic architecture, but also in other domains, such as traditional Chinese medicine. The idea of Chi is used to explain human bodies, houses, and heaven, providing a unique way of linking various subjects into one fundamental concept. The intimate relation between human beings, houses and the universe was emphasised in many items of Chinese classical literature. For instance, a house, explained according to the classical literature, is analogous to a human body. The form of the land implies a whole human body; a spring of water flowing inside the house connotes human blood circulation; the land of the house means human skin and flesh; grass and plants growing on the

land implies human hair; the house stands for the clothes of a human; doors and windows represent the cap and sash of human dress. The relation between the human body and the house is clearly presented. Moreover, the world is considered as one completed celestial body with various kinds of spirit or energy inside enabling its operation. According to ancient Chinese philosophy, such as the *Huai Nan Zi* (Book of the Prince of Huai Nan), heaven has nine levels; similarly, the body of a human being has nine orifices. Heaven has four seasons governing twelve months; similarly, the human body has four limbs governing twelve articulates (Wang, 1998)⁴. Considering the concept of duality, two contrary attributes of all entities, i.e. Yin and Yang, are commonly used in Feng Shui. The condition that Yin and Yang are equal in size indicates the fulfilment of ‘Tian Ren He Yi (the Union of Human Beings and Heaven)’. The relative amount of Yin Yang is another type of measurement deciding an ideal or auspicious house. The measurement of the qualitative amount of Yin and Yang would help to decide whether the house design is in accordance with the idea of ‘Tian Ren He Yi (the Union of Human Beings and Heaven)’.

9.3 Classification and Connection

Two significant notions, i.e. classification and connection are rooted as the basis linking with human beings, houses, and the world used in Feng Shui. Similarly, a few modern architects, such as Frank Lloyd Wright and Hugo Häring, were passionately concerned about having the right place for things and identifying places with activities. For instance, Häring believed in north-south orientation of beds and applied it in all his late work. (Blundell-Jones, 1999; 2002)⁵ However, no modern architectural theories yet encountered by the author adequately elucidate or focus on the idea that

⁴ Wang, Ji-ru (1998) *Huai Nan Zi Yi Zhu* (An Exposition of Huai Nan Zi). Taipei, Jian-an, pp. 103.

⁵ Blundell-Jones, Peter (1999) *Hugo Häring: The Organic Versus the Geometric*. London, Edition Axel Menges, pp. 150 – 153.

Blundell-Jones, Peter (2002) *Modern Architecture Through Case Studies*. Oxford, Butterworth Heinemann.

houses can correlate with human beings and the world. Yet the three key classification as well as connection theories used in Feng Shui are the Four Celestial Beings, the Five Elements, and the Eight Kuas, providing a way that human beings can find connection with houses and the world.

The ideal Feng Shui environment is the first model making the link between natural environment and astronomy. The fundamental concept of the ideal Feng Shui environment was considered relevant to Chinese astronomy described in terms of the Four Celestial Beings, i.e. Azure Dragon, White Tiger, Crimson Phoenix and Black Turtle. Each celestial being is composed of seven constellations, and therefore the Four Celestial Beings consist of the Twenty-eight Constellations. Chinese astronomy, very different from western astronomy, and the use in Feng Shui were also revealed. Each constellation stands for the primary one sitting in one of the Twenty-eight Mansions which have also been shown in the Chinese compass.

Nowadays, natural environments surrounding any domestic architecture may differ from one to another. Mountains and rivers may not be present in every place. Animals and objects involved in this model may retain no significances in a different cultural context. However, the value of this model is the consideration of making the connection in terms of celestial beings that the natural environment may replicate constellations in the universe. Techniques based on the underlying meaning may be used in a contemporary sense. Thus, the ideas rooted in ideal Feng Shui environment can apply to contemporary architecture. Different objects can be used instead of the Four Celestial Animals to make adjustment. For instance, to build up a good protection to the site for dwelling, many other objects, e.g. buildings and forests, could be considered instead of mountains. Also, to provide the meaning of bringing water into a place, ponds and sea can be used, instead of rivers. Thus, this model could be adapted to different environments and into contemporary architecture. Making the link between orientation, configurations, astronomy, and animals by the use of classification and connection is what the model attempted to achieve. The use of astronomy is the way the ancient Chinese sought to locate their place in the universe,

which is closely linked to conceptualising celestial animals and visualising constellations. Similar ideas have been shown to have arisen in many other ancient civilisations.

The second model for arrangement of house elements, such as the main entrance, kitchen, or bedrooms, was based on the classification of surnames. This model demonstrated how people's names were used as a criterion to decide the arrangement of house elements, by linking this subject with the Five Elements (the fundamental groups of substances in the world). The link of a person's name with a house does not seem to have been considered in any other architecture.

Dividing surnames into groups of five is an efficient technique based on the Chinese phonetics to classify people into different groups in Feng Shui. The Chinese phonetics is similar to the use of vowel in English. But fitting certain people in certain houses on this basis would have no meaning to modern educated people. However, in Feng Shui, many real and abstract objects including orientations, colours, planets and celestial animals could also be sorted into five classes and each class is linked to one of the Five Elements, i.e. Metal, Wood, Water, Fire, and Earth. Based on this linkage, orientation is embodied with the attribute of one of the Five Elements.

Similarly, each class of surnames could be correlated with orientation, by means of the Five Elements. Therefore, the relations of the Five Elements were also described in terms of a productive cycle and a destructive cycle, describing how a specific Element can give rise to or destroy another Element. Thus, every spatial arrangement and furniture placement would have a particular meaning in Feng Shui. Furthermore, the typical Chinese courtyard house, involving the use of centrality and the Magic Square, was identified to be the main construction in this Feng Shui model, consisting of four buildings. Inside each building, the member of the family allocated was to follow a hierarchical order in which males were considered superior to females. Thus, every person in a family could be located in different places reflecting the cultural background.

Orientation in space and time used to be the principal themes for the arrangement of interior space and the placing of furniture in traditional architecture. The third model, the Eight Houses Arrangement for determining spatial order in domestic architecture, based on a person's birth year, allows his/her favourable or unfavourable orientation to be derived. All human beings or houses are classified into eight different groups, each human being or house is correlated with one of the Eight Kuas. This way of closely linking each human being and house has never been shown in contemporary architecture either. Architects or interior designers can choose almost any kind or placement without any restrictions. No spatial arrangements or furniture placements could be judged as auspiciousness or inauspiciousness. Differently, in Feng Shui, the Eight Kuas are related to nine stars in the heaven. Each Kua has its specific placement of the nine stars in the eight orientations. From this model, several key concepts rooted in the ancient Chinese were identified as relevant to worldview, classification, social relations, and cultural force.

From these three models, a similar idea regarding the development of domestic architecture was found to be of more than a practical concern for inhabitation, domestic architecture further turns into a medium showing the intimate relationship between human beings, sky and the earth so as to satisfy human beings' spiritual needs. The attention to orientation with its specific meaning was also shown. Moreover, the classification and connection provides efficient approaches to design houses suitable for accommodation of specific needs. These approaches can be of help in re-thinking contemporary architecture and might be reapplied.

9.4 Cross-cultural Studies

Cross-cultural studies and comparisons were made in an attempt to share different ways of structuring the world and creating order in space. Three types of traditional architecture were discussed in order to compare the differences and similarities in the

aspects of worldview and the underlying concepts for constructing houses. All these examples seem to indicate one common paradigm to providing a connection with the world and all beings: a way of thinking which connects the classification system with physical orientation.

In an oral culture (as everywhere 5,000 years ago until a few centuries ago), people relied on memories for all their practical experience and theoretical knowledge. An efficient way to consolidate this experience and knowledge is to establish some rudimentary classification systems to share patterns of order between different realms. Although different cultures apply different classifications and connections, these differences could be explained as the influence of geographical location, climate changes, social behaviour and religion. These cultures do however reveal a similar idea in the use of a classification system dividing numerous objects in the world into certain categories. These categories could be further linked to each other.

In many early cultures, the use of architecture is more than a practical concern for inhabitation, it further turns into a medium showing the intimate relationship between human beings, sky and the earth so as to satisfy human beings' spiritual needs. Human beings transfer their views of the world into artificial domestic environments with similar or different techniques to present their ideas of the world in their domestic architecture. As a result, some principles applied to architecture in different cultures might be identical or similar, however, others might have been adjusted to comply with local conditions.

Many cultures reveal the viewpoint of regarding a house as a microcosm, or being at the centre of the universe. The house, regarded as the symbol of the world, was considered by the Native Americans, the Tukanoans, and the Chinese. The layout of the Haida house was developed to replicate the structure of the world, such as four poles supporting the roof at corners to replicate four quarters of the sky. This idea also has shown in the Tukanoan longhouse. The floor replicates the earth; posts the mountains; aisles rivers; the roof the sky. To the Chinese, the Forbidden City was

regarded as the centre of the world and replicated the North Star in the sky. These three examples showing how the ancient worldview influences domestic architecture in technologically primitive cultures.

Dividing the universe into three layers has been shown in the Native Americans and the Tukanoans. Both considered that the universe is comprised of the sky world, the earth, and the underworld. Similarly, the Chinese use three sections of a Kua in the Eight Kua to explain the relation between human beings and the world. Each Kua of the Eight Kuas is a symbol to explain that human beings live above the earth and under the sky.

Moreover, these cultures share a similar perspective in relation to the worldview, the earth, and their fellow creatures. Human beings sought to harmonise their inner world of cultural beliefs with the spiritual forces they perceived, to secure their place in this world and the world beyond. For instance, both Native Americans and the Chinese consider the sky as a father and the earth as a mother. All living beings are their children. Every person can find his/her position in the world. The connection between the world and a family's social order was established. Hence, this explanation fulfils the need of linking human beings with the universe.

This idea has used in spatial placement for locating each member of a family in many cultures. This arrangement has to follow a specific social order. Both Tukanoans and Chinese locate the household in the compartment at the rear of a house opposite to the main door. In Feng Shui, every person has a different priority to locate his or her compartment according to a hierarchical social order in tradition.

Many technologically primitive cultures have chosen to locate their houses along rivers. Examples discussed are such as the Haida house, the Tukanoans longhouse and houses to the Chinese in the ideal Feng Shui environment. Both the Chinese and the Native Americans further specify the layout of a house to face water (e.g. rivers or the sea) in the front and have a strong protection (e.g. forests or mountains) at the rear. However, different cultures may develop different explanations.

The use of water or the protection can be transformed as different formats to fulfil the same requirement. For instance, water to the Chinese is transformed as rivers, drains, or pools. The protection can be explained as mountains and buildings.

Four cardinal orientations and the centre are the universal way to identify orientations in space. Four cardinal orientations are often used to explain directions left, right, the front and the back. The centre is the most significant.

As shown in many cultures, most buildings are rectangular, which is consistent with the experience of front/back and left/right. This can be extended into the idea of three dimensions, including up/down. The right angle is given by gravity, proved by the spirit level and the plumb line. Three dimensions give a world where the axes are all at right angles. To replicate this concept, buildings are developed with straight materials like tree-trunks and with a construction system of alternating layers on the two axes. All the Chinese courtyard, the Haida house and Tukanoan longhouse are symmetrical buildings with a dominant central axis by means of approach, main entrance, and symbolic pole. The configuration of house plan as rectangular applies to the Native Americans, the Berbers, and the Chinese.

To have a sense of direction, there has to be alignment between two things, such as a house, bed or person and the surrounding environment or place on the planet. Bourdieu (1971) noted that direction for a person is the way a person faces, having a front and back, and left and right sides⁶. Hence, orientations will be reversed when one turns. The consideration of inversion is a way used by the Berbers to interpret their understanding of the world. Orientations (left/right, front/back) to exterior space and interior space are reversed.

The main entrance as the key to decide orientation for different significant considerations is showing in many cultures. Examples are the houses of the Tukanoans, Berbers and Chinese. They have chosen the orientation opposite the main

⁶ Bourdieu, Pierre. (1971) *The Berber House*. In: M. Douglas, (ed.), *Rules and Meanings: the Anthropology of Everyday Knowledge*. Harmondsworth, Penguin, 1973, pp. 98 – 110.

entrance as the most significant in a house. In the Chinese courtyard house, the householder is accommodated in a building opposite the main entrance to the front. This placement is also shown in the Tukanoan longhouse. In the Berber house, the wall of light is opposite to the main entrance. Two significant objects, the rifle (the symbol of the male point of honour) and weaving-loom (the symbol of all protection) are placed close to this wall. Hence, orientation opposite to the main entrance is the most significant. This consideration can be applied to houses with different configurations even it is a round, like the Yurt of the Mongolians.

Different cultures have varying worldviews, influenced by geographical location, climate changes, social behaviour and religion. However, these cultures reveal a similar idea in the use of classification systems to divide numerous objects in the world into certain groups. Each orientation further links with living beings (such as animals, or human beings) or natural phenomena (such as seasons, time) and other numerous objects. This is then applied to spatial arrangement in domestic architecture. Different orientations of the architectures thus replicate different meanings. The orientation might link with different celestial beings as a symbol presenting similarities and differences existing in spatial arrangements for architecture for different cultures.

Orientation to the Native Americans is more than a tool to point out direction, being linked with specific ancestral beings, natural phenomena and human behaviours. This is similar to the techniques used by the Chinese to interconnect social relations, cultural forces, and the natural environment. Many early cultures paid attention to orientation. Based on human beings' understanding on the world, each orientation was dedicated to a specific meaning.

Measurement is a matter of relating the size of the body to the size of the world (geometry is literally measuring the earth, geo) and it involves number first counted on the fingers and operating on the system of ten because there are ten fingers. If numbers have particular qualities (associations), then these associations will be

reflected back into the use of the numbers for certain purposes: 6 feet lucky, 7 feet unlucky, or whatever. For instance, the measuring system to the Chinese can be interpreted as different meanings as discussed in Chapter 2. Different scales can be judged as auspicious or inauspicious aspects.

Duality is a useful and the most fundamental way of setting up distinctions and of selecting phenomena for attention. Hot and cold, dark and light, male and female, earth and sky are typical. Sun and moon is a pair that now seems more problematic, since we know they are so dissimilar in size and orbit, but at first it seemed that the two heavenly bodies dominated day and night. Linking these things orders the world and makes them more easily memorable. Yin Yang could be regarded as an unseen power behind them all, representing an abstraction of the idea of duality. A similar concept of duality has been demonstrated in the examples of the Berber house and the Tukanoan longhouse, while the concept of centrality has been shown in the examples of the Haida house as well as the Tukanoan longhouse.

Linking human bodies and houses has shown in these technologically primitive cultures. Examples are the Chinese, the Berbers and the Tukanoans. In the Berber house, the main pillar located at the centre of the house implies a female. The main beam supported by the pillar implies a male. The union of the beam and the pillar implies the establishment of a family. The Tukanoans consider a house as a universe-womb for a female deity. Similarly, the concept of personification used to describe the house as well as the world is also shown in Feng Shui. The house itself is treated as a whole human body. Different orientations replicate different organs or parts of a human body. These connections have been shown in the network according to the Five Elements and the Eight Kuas.

To sum up, many early cultures reveal that ancient peoples were concerned with the intimate relationship between human beings and the natural environment or the world. Architecture serves as a means of representation showing people's understanding of, and describing their relations with, the natural environment,

worldview, and social forces. Architecture not only provides the practical function for inhabitation but further turns into a medium to present their understanding of the world. The use of a classification system to divide things into certain groups is a universal phenomenon used by all cultures around the world. However, every culture establishes the classification and connection system in its own terms so that the result can be different from one to another.

9.5 Case Study Results

Two house design cases were explored at a detailed level to show how Feng Shui could be applied to the design (planning) of contemporary domestic architecture. The first house design case is a renovation case, focusing on the spatial arrangement of a house interior, with results on the orientations with auspicious or inauspicious meanings for each member of the family and on how to locate the main entrance, rooms and furniture within this concept of orientation. The Eight Houses Arrangement is used as the major principle. The table of the Eight Kuas of Person for the owner's family is completed accordingly. To decide on whether the owner's family is compatible with the location of the site is based on the requirement that both the Eight Kuas of Person and the Eight Kuas of House belong to the same category system, as mentioned in the Eight Houses Arrangement. The modification of the original spatial arrangement of rooms inside the house was also considered based on the Five Elements and the circulation of the Chi. Besides, an examination of the site was made, based on its shape, to see whether the Chi could flow into the site easily and be conserved inside.

The second house design case discusses how Feng Shui is applied to a new building in which involved a broader range of tasks than the renovation case. This example shows a house design expected to provide dual-functions, for both domestic use and working, involving the use of Feng Shui both for exterior and interior space in

architecture. The tasks include the design of the façade of the building, the division of a space into two for domestic and working use based on the idea of Yin Yang, the determination of the total number of floors and the number of floors for living, to comply with the Chinese tradition that some numbers have their auspicious or inauspicious sense, the use of house elements, such as windows, doors, garden, courtyard and Feng Shui pool, to enhance the circulation of Chi and bring the auspicious Chi into the house, the decision of orientations with auspicious or inauspicious attributes with respect to each family member living in the house, within the Eight Houses Arrangement, and how to arrange a suitable colour for each room applying the idea of the Five Elements.

Feng Shui provides a way of thinking about the intimate connection between human beings and, houses and the world. It includes what we call practical issues, expressing them in its own terms. The form or format of house elements might change with the advance of technology. However, the underlying meanings of these house elements rooted in the believers of Chinese domestic architecture in traditions might last much longer and therefore any new form or format of house elements could be reiterated based on these underlying meanings. The experience of living in the universe with harmony might be of benefit in many ways only if one believes in that world-system and its classification system. It is misleadingly modern and western to make a division between the practical and the superstitious. For believers, they are part of the same continuum which intends to establish a universal order in space and time.

9.6 Future Work

Having concluded the key tasks in this thesis, six further ones are described below for the reference of the continuation of this research.

Task 1: Would be a deep investigation on the classification system, considering a wide variety of subjects or objects such as colour, shape, and human body. Based on the viewpoint of Feng Shui, a lot amount of subjects or objects can be divided into various levels of classification, such as the division of two, four, five, eight, and so on. This would allow Feng Shui architects present the application of Feng Shui theory into a wide variety of subjects and objects, furthermore, representing how Feng Shui is linked into social relations as well as cultural forces.

Task 2: Comparisons of architecture from different cultures often only shows results of individual architectural styles, without detailing how the theory underlying each architectural style could possibly proceed. These design theories need to be further refined and searched.

Task 3: Application of Feng Shui into contemporary architecture. Feng Shui presents a way of managing the design of domestic architecture. Distilling the similar concepts from the theory of Feng Shui into various branches of modern architecture could enrich their design views. These concepts include selecting the best place to build a house, choosing healthy building materials, and bringing balance and harmony to the life contained.

Task 4: Explanation of the fundamental theories in Feng Shui, e.g. Tao, Chi, Yin Yang toward a more scientific or sensitive way. Recently, more scientific investigations have put forward to identifying the evidences of Chi. These research results need to be utilised to substantiate these theories.

Task 5: This thesis mainly focused on the design of domestic architecture. However topics such as the design of landscape, graveyard, commercial buildings, etc would also be applicable to the domain of Feng Shui with different emphasis or technical perspectives. These topics would need to be considered so as to widen the applications of Feng Shui. More importantly, solid case studies need to be implemented at the same time to enhance the understanding and applications.

Task 6: A large amount of documents are written in classical Chinese literature. These documents contain almost all the theories, applications, and the Chinese worldview relevant to Feng Shui. A logical analysis of these documents and thus a systematic distillation of these large amounts of knowledge are significant. However, difficulties of understanding classical Chinese literature, and requirements on expertise on many subjects, such as Feng Shui and Chinese philosophy, might affect the progress of this task.

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Appendix A

The Chinese Chronology

Table A- 1 Table of the Chinese Chronology.

The Chinese Dynasties		Years
Chinese Name	Translation	
黃帝	Huang Di	2698 B.C. – 2333 B.C.
唐	Thang	2333 B.C. – 2233 B.C.
虞	Yu	2233 B.C. – 2183 B.C.
夏	The Xia Kingdom	2183 B.C. – 1751 B.C.
商	The Shang Kingdom	1751 B.C. – 1111 B.C.
周	The Zhou Dynasty	1111 B.C. – 221 B.C.
	西周 The Western Zhou Period	1111 B.C. – 770 B.C.
	東周 The Eastern Zhou Period	770 B.C. – 221 B.C.
	春秋 The Spring and Autumn Period	770 B.C. – 403 B.C.
	戰國 The Warring States Period	403 B.C. – 221 B.C.
秦	The Qin Dynasty	221 B.C. – 206 B.C.
漢	The Han Dynasty	206 B.C. – 220 A.D.
	西漢 The Western Han Period	206 B.C. – 9 A.D.
	新 The Xin Interregnum	9 A.D. – 25 A.D.
	東漢 The Eastern Han Period	25 A.D. – 220 A.D.
三國時代	The Three Kingdoms Period	220 A.D. – 265 A.D.
	魏 The Wei	220 A.D. – 265 A.D.
	蜀 The Shu	221 A.D. – 264 A.D.
	吳 The Wu	222 A.D. – 280 A.D.
晉	The Jin Dynasty	265 A.D. – 420 A.D.
	西晉 The Western Jin	265 A.D. – 317 A.D.
	東晉 The Eastern Jin	317 A.D. – 420 A.D.
南北朝	The Southern and Northern Dynasties	420 A.D. – 589 A.D.
隋	The Sui Dynasty	589 A.D. – 618 A.D.
唐	The Tang Dynasty	618 A.D. – 907 A.D.
五代十國	The Five Dynasties and Ten Kingdoms Period	907 A.D. – 960 A.D.
宋	The Sung Dynasty	960 A.D. – 1279 A.D.
	北宋 The Northern Sung Period	960 A.D. – 1127 A.D.
	南宋 The Southern Sung Period	1127 A.D. – 1279 A.D.
元	The Yuan Dynasty	1279 A.D. – 1368 A.D.
明	The Ming Dynasty	1368 A.D. – 1644 A.D.
清	The Qing Dynasty	1644 A.D. – 1912 A.D.
中華民國	The Republic of China	1912 A.D. – Now
中華人民共和國	The People's Republic of China	1949 A.D. – Now

Appendix B

The History and City Planning of Beijing

This appendix describes the historic background as well as the city planning of Beijing from the beginning of the Spring and Autumn Period (770 B.C.) to the end of Yuan Dynasty (1368 A.D.).

B.1 The Early Period

Ji and Yen were two countries ruling the area around Beijing in the Bronze Age¹. In ancient civilisation, a country was originally developed from a tribe unified by many inhabitants of primitive culture. China was a place governed as many different countries in history. In the Spring and Autumn Period (770 B.C. – 403 B.C.), the area around Beijing was belonged to a country called Ji, and later on it was governed by another country called Yen. The area of Beijing was called Ji and served as political centre for both countries. The country of Yen continually governed Ji during the Warring States Period (403 B.C. – 221 B.C.) until the Qin Dynasty (221 B.C. – 206 B.C.)².

¹ Ji (齊); Yen (燕).

² Qin Dynasty was founded by Qin Shihuang (秦始皇), the first Chinese emperor in history who unified China into a great country, conquered Yen in 206 B.C. Qin Shihuang had done several constructions for improving transportation and irrigation in this area. For example, a principal path was paved to connect Ji and the capital of Xianyang (咸陽). A canal of Dongxiang Qu (東箱渠) was built and the river of Gaoliang (高麗) was driven to irrigate farmland. Agricultural development drove economic progressing for Ji. The level of importance of Ji had been increased in the northeast of China.

The Qin Dynasty was collapsed in 206 B.C. Administration of the area changed. Ji became part of a county called Youzhou³ governed by the small country of Yen. Generally, the inhabitants of this area were mixed with various northern nomads, such as Qidan, Gaoli, Tujue and so on⁴. Ji remained a commercial centre during the Han Dynasty (206 B.C. – 220 A.D.), the Three Kingdoms Period (220 A.D. – 265 A.D.), the Jin Dynasty (265 A.D. – 420 A.D.) and the Southern and Northern Dynasties (420 A.D. – 589 A.D.).

In the Sui Dynasty (589 A.D. – 618 A.D.), Ji was governed by a district called Zhuojun⁵ which was a significant border area for China to guard against northern nomads and to expand territory to the northeast. Chinese emperors started to emphasise the development of Zhuojun. However, the land in the northern area of China was less infertile than in the southern area. Starting with military use, water transportation for commodity and provision between north and south had been developed. Several great canals were built by a Chinese emperor⁶ in the Sui Dynasty for improving water transportation. One canal called Yongji Qu⁷ connected Ji and the capital⁸ located in the south, the first to connect the north and the south of China in history. This canal was built in 608, and was used to send warships between the north and south of China.

The district of Zhuojun was defined with the collapse of Sui Dynasty. In the Tang Dynasty (618 A.D. – 907 A.D.), this district was called Youzhou instead, and belonged to a county called Fanyang⁹. Ji was the principal city of Youzhou. Out of strategic necessity, the Chinese emperor started to accredit envoys to guard this area. An envoy called An Lushan (703 A.D. – 757 A.D.) who was originally a northern nomad, in 755 revolted against China and crowned himself as emperor of Dayen (the

³ Youzhou (幽州).

⁴ Qidan (契丹); Gaoli (高麗); Tujue (突厥).

⁵ Zhuojun (涿郡).

⁶ The Chinese emperor was Sui Yangdi (隋煬帝) (560 A.D. – 618 A.D.).

⁷ Yongji Qu (永濟渠).

⁸ The city of Luoyang (洛陽) was the capital for the Sui Dynasty.

⁹ Fanyang (范陽).

Great Yen)¹⁰. An Lushan changed the name from Fanyang to Dadu¹¹ (the Great City) as the capital. After his death, another envoy called Shi Siming¹² (703 A.D. – 761 A.D.), revolted against China and established a country called Yen. Shi Siming changed the capital from the name of Dadu to Yenjing in 759. The rebellion by An Lushan and Shi Siming was ended in 763. The area around Beijing was considered significant to China and northern nomads since the Sui Dynasty. Northern nomads established their capital in this place¹³.

The importance of the location of Beijing was mentioned by ancestral scholars, in the writings called *Huozhi Liechuan*¹⁴, for example. The author Sima stated that ‘Yen¹⁵ was a city located between Bo¹⁶ and Jie¹⁷. This city was linked to the countries of Qi and Zhao in the south and the nomadic territory of Hu to the northeast. The area of Liaodong¹⁸ was at the top. The territory occupied a wide range. Populations of this area were few and scattered, and it faced many attacks. The inhabitants were thought to be fierce and thoughtless. Products of the area included fish, salt, Chinese dates and chestnuts. The city was connected to Wuhuan and Fuyu at the north, furthermore, it was conveniently linked to Huihe, Zhaoxian (the area around Korea at present) to the east (Sima, the Han Dynasty)¹⁹.’ The above reveals five features of Yen (Beijing) which may summarise why Beijing was significant to the Chinese.

¹⁰ An Lushan (安祿山); Dayen (大燕).

¹¹ Dadu (大都).

¹² Shi Siming (史思明).

¹³ Yenjing (燕京).

¹⁴ *Huozhi Liechuan* (貨殖列傳).

Huozhi Liechuan is an ancient literature described economy activities including biographies of several successful business men and features of productions in different areas during the Spring and Autumn Period (770 B.C. – 403 B.C.) to the early of Han Dynasty.

¹⁵ Beijing was called Yen as mentioned above.

¹⁶ Bo means the bay of Bohai (渤海).

¹⁷ Jie means an area called Jieshi (碣石).

¹⁸ Liaodong is the area located at the east of Liaohe (the River of Liao).

¹⁹ Qi (齊); Zhao (趙); Hu (胡); Liaodong (遼東); Wuhuan (烏桓); Fuyu (夫餘); Huihe (穢貉); Zhaoxian (朝鮮).

夫燕亦勃，碣之間一都會也。南通齊、趙，東北邊胡。上谷至遼東，地踔遠，人民希，數被寇，大與趙，代俗相類，而民難捍少慮，有魚鹽棗栗之饒。北鄰烏桓，夫餘，東綰穢貉，朝鮮。

Sima, Qian (the Han Dynasty) *Shi Ji Juan Yi Bai Er Shi Jiu Huozhi Liechuan Di Liu Shi Jiu* (Historical Record Vol. 129 *Huozhi Liechuan* No. 69) [online]. Available from: <http://www.ck.tp.edu.tw/~swhsiao/docs/h1/129.txt> [Accessed 10th February 2002].

1. The location of Yen (Beijing) was well connected with other countries.
2. Transportation had been well developed, so the wealth-creating products of this area were able to be transported to other places.
3. Commercial activities were very frequent.
4. The character of the local inhabitants tended to be valiant.
5. Battles continually happened in the area.

B.2 The Middle Period

In this period, Beijing was governed by several northern nomads located next to China. Beijing changed its role from military use to political centre. Figure B-1 shows different layouts of cities on the site of Beijing in this period in terms of different dynasties (Liu, 1999)²⁰. During the period (916 A.D. – 1125 A.D.), position 1 shows the layout of the city in the country called Liao (916 A.D. – 1125 A.D.) marked as a dotted line with a rectangular shape. Within position 1, a small rectangle dotted outlines a palace city placed at the southwest corner of the city. Next to the city, a river flowed from the west to south. During the period (1115 A.D. – 1234 A.D.), position 2 was the city in the country of Jin. A larger dashed-dotted line encloses the previous city in the country of Liao. This larger city wall was extended towards the east, south and west, with gates on each side of the wall. A river flowed through the city from northwest to southeast. The outline of the city in the Yuan Dynasty (1279 A.D. – 1368 A.D.) is shown in position 3. This city is marked as a dotted line with a rectangular shape, placed to the northeast of the previous cities. Inside position 3, a palace city used by emperors was located on the south with a river flowing into the city from the northwest. This fed several large lakes within the city and the palace city. Position 4 shows the outline of the city in both Ming Dynasty (1368 A.D. – 1644 A.D.) and Qing Dynasty (1644 A.D. – 1912 A.D.). This city is marked as a solid black line composed

²⁰ Liu, Li (1999) The building of the city of Beijing in the Ming dynasty (1368 – 1644). *Edinburgh Architecture Research 26* [online] Edinburgh. The Department of Architecture, The University of Edinburgh. Available from: <http://www.caad.ed.ac.uk/publications/ear/li Liu.html> [Accessed 15th January 2002].

of two squares placed to top and bottom. The square placed on the top was located lower than the city wall of the Yuan Dynasty. The palace city was located at the centre of the square at the top. The other square placed at the bottom was overlapped with the area of the previous cities (position 1 and 2). Two large altars were placed at the south. The location of the palace city was not changed in the Yuan, Ming and Qing Dynasties. Diagrams of the development of Beijing are shown below.

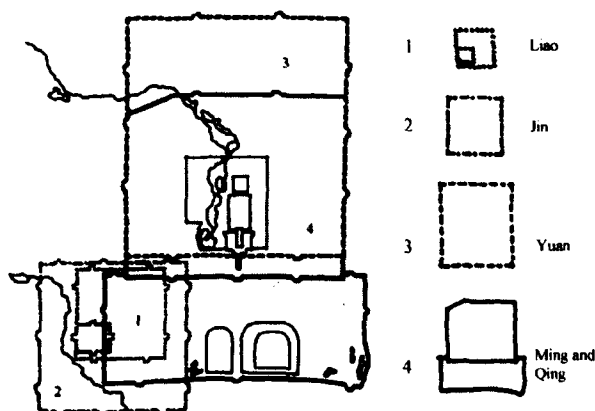


Figure B- 1 The layout of cities on the site of Beijing in different dynasties.

(Source: Liu, L., 1999)

The Country of Liao (916 A.D. – 1125 A.D.):

The collapse of the Tang Dynasty caused unrest in China for years. The country of Liao was founded by a northern nomad called Qidan²¹ who established the city of Nanjing²² on the site of the city of Youzhou in the Tang Dynasty. The country of Liao set up four subordinate capitals apart from the principal capital. Beijing was one of the subordinate capitals located in the south part of the country Liao. Thus, Beijing was called Nanjing (meaning the South Capital) and changed its name to Yenjing in 1012.

Nanjing (Beijing) was to be a significant city in the northern part of China in terms of politics, economy, culture and religion. Within the city of Nanjing (position 1

²¹ Qidan (契丹) was a nomadic tribe in ancient north China (around Inner Mongolia).

Li. Jinhui (2001) DNA Match Solves Ancient Mystery. *China: facts & figures 2001* [online]. China, China Internet Information Center. Available from:

<http://www.china.org.cn/english/2001/Aug/16896.htm> [Accessed 5th February 2002].

²² Nanjing (南京).

in Figure 8-3), a small palace city was built called Danei²³ at the southwest part (Yi, 1999)²⁴. Features of this palace city are described below.

1. Both Nanjing (Beijing) and Danei were rectangular in shape. Danei was placed at the southwest corner of Nanjing. The west wall of Danei shares the same wall with Nanjing.
2. There were two gates placed at each side of the four walls in Nanjing while there was one gate in each of the four walls in Danei. The gate in the west wall of Danei became the southwest corner gate of Nanjing.
3. The location of Danei at the southwest corner provided an easy way out, accessing the main gate to south and the gate to west without crossing the urban area (Schinz, 1996)²⁵.
4. The gate placed on the east wall of Danei was the principal gate, normally open all the time, while the other gates were closed in most of time. The east gate connected a large main road, in parallel to the direction of east, in connection with directed to the gate placed on the east wall of Nanjing²⁶. Business activities were busy on the main road.
5. Several halls²⁷ were built in Danei.
6. The palace city of Danei also contains lakes for boating and a large playing ground for polo or parade.
7. Outside the Danei, the city planning of Nanjing was based on parallels in which the pattern was analogous to a checkerboard.
8. Nanjing includes twenty-six divisions. Many Buddhist temples were built within the city. The east and north parts of Nanjing were designed for different propose. The north part of the city was generally for commercial

²³ Danei (大内).

²⁴ Yi, Ting *et al.* (1999) *Zhong Guo Feng Shui Yu Jian Zhu Yan Jiu* (Geomancy and the Selection in Architecture Placement in Ancient China). Taipei, Yi-shu-chai, pp. 168.

²⁵ Schinz, Alfred (1996) *The Magic Square: Cities in Ancient China*. London, Edition Axel Menges, pp. 276.

²⁶ Social Science On Line (2000) 'Rise of Qidan', *Travel in Beijing* [online]. China, Social Science On Line. Available from: <http://www.e-travel.net.cn/jj14.htm> [Accessed 5th February 2002].

²⁷ These halls were such as Yuanhe Dian (元和殿), Zhaoqung Dian (昭慶殿), Jianing Dian (嘉寧殿), Lingshui Dian (臨水殿), and Changchun Dian (長春殿).

used. One major building²⁸ placed in the east of the city was mainly used for accommodating foreign visitors.

The Country of Jin (1115 A.D. – 1234 A.D.):

The country of Jin founded by another northern nomads of Nuzhen²⁹ who took over the country of Liao in 1123. The country of Jin established the capital in Nanjing and extended the city construction in 1151. The new city was called Zhongdu³⁰ (the Central Capital) to be the ruling centre of the country. The area of Beijing started to become the capital of a country. The extension of the city was mainly forward to the east, west and south directions (the position 2 in Figure B-1). Features of the Central Capital are described below.

1. Zhongdu contained three sections, i.e. an outer city, an inner city³¹ and a palace city³². The outer city was located in the north of central Zhongdu while the inner city was located in the south, including the palace city (Yi, 1999)³³.
2. An imperial way³⁴ within Zhongdu was located on the central axis of the city in the north/south direction. This imperial way linked the south entrances of the outer, inner, and palace city³⁵.
3. The principal hall for the emperor was located at the centre of the palace city. Buildings inside the palace were magnificent.
4. The country of Jin emphasized the transport links of Zhongdu for both land and water transportations.

²⁸ This building was called Youngping Quan (永平館).

²⁹ Nuzhen (女真).

Nuzhen was the ancestral tribe for the ethnic group of Manchu who later built up the Qing Dynasty in 1616.

³⁰ Zhongdu (中都).

³¹ The inner city was called Huangcheng (皇城).

³² The palace city was called Gongcheng (宮城).

³³ Yi, Ting, *et al.* (1999) *op. cit.*, pp. 168.

³⁴ The imperial way was called Yudao (御道).

³⁵ The imperial way directs to the gate of Fengyi Men (豐宜門) of the outer city, the gate of Yingtian Men (應天門) of the inner city and the gate of Yiyang Men (宜陽門) of the palace city.

5. To improve water transportation, several floodgates and canals were built to adjust the water levels or direct the river to the land³⁶.
6. A bridge called Lugou Qiao³⁷ with the length of 266 meters was a famous artwork built in 1189. This bridge was supported by one hundred and forty stone poles with four hundred and eighty-five different types of lion carvings above, a rare work of great architectural beauty.

The Yuan Dynasty (1271 – 1368):

The city of Zhongdu was destroyed by fire when Mongolians captured the city in 1215. The first emperor of the Yuan Dynasty³⁸ rebuilt this city to be its capital called Yenjing in 1260. Yenjing was established for a military purpose in order to attack China (which belonged to the South Sung Dynasty), in the south with a good position. This city of Yenjing was changed to Zhongdu in 1264 and was called Dadu (means the Great Capital) since 1271. Dadu was located at the northeast of Zhongdu to the country of Jin (the position 3 in Figure B-1). Three principal officers³⁹ were in charge of the city planning of Dadu (Yi, 1999)⁴⁰. Figure B-2 shows the map of Dadu in the Yuan Dynasty (Du, 2002)⁴¹.

³⁶ For example, the river of Gaoliang He (高粱河) flew to the land of Tungzhou (通州).

³⁷ Lugou Qiao (蘆溝橋).

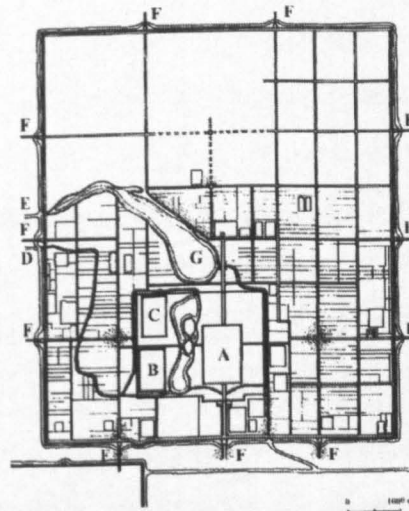
³⁸ The emperor was called Hubilie (忽必烈). Hubilie (1215 – 1294) was the founder of the Yuan Dynasty.

³⁹ Liu, Bingchung (劉秉忠); Guo, Shoujing (郭守敬); Zhao, Bingwen (趙秉溫).

Liu, Bingchung (1216 – 1274) was an officer specialised in cosmology, geography and almanac. Guo, Shoujing (1231 – 1316) was a traditional Chinese scientist who was taught by Liu, Bingchung.

⁴⁰ Yi, Ting, *et al.* (1999) *op. cit.*, pp. 170.

⁴¹ Du, Cunfeng (2002) 'Architecture in Yuan Dynasty', *Architecture Traditionnelle de Chine* [online]. Available from: <http://go3.163.com/zhhgjzh> [Accessed 20th January 2002].



- A: The palace city: Danci
- B: The palace: Lungfu Gong
- C: The palace: Xingsheng Gong
- D: The inlet channel: Jinshui He
- E: The river: Gaoliang He
- F: Gate
- G: The lake: Jishui Tan

Figure B- 2 The map of Dadu in the Yuan Dynasty.

(Source: Du, C., 2002)

Features of this city are described below.

1. The outer wall of Dadu formed a rectangle, its long side to north-south and short side to east-west.
2. There were eleven gates on the outer wall. The east, west and south walls had three gates each. The north side had two gates. Significant numbers were 11, 3 and 2.
3. Parallel roads placed inside Dadu were of two types in accordance with direction. One type of road called Gandao⁴² ran in the north-south direction and was about twenty-five metres in width. The other type was called Hutong⁴³, ran in an east-west direction, and was six to seven metres in width. The distance between any of two Gando or Hutong was fifty paces (about sixty metres)⁴⁴. The use of parallel streets in city planning was thus presented. The significant number involved was 50 (fifty paces).
4. A palace city was located on the central axis. This palace city was divided into three sections. Danci (position A in Figure B-3) was a palace for

⁴² Gandao (幹道).

⁴³ Hutong (胡同).

⁴⁴ Hina Virtual Museums (2002) *Dadu of Yuan and Beijing of Ming and Ching* [online]. Hina Virtual Museums. Available from: <http://www.kepu.com.cn/big5/civilization/architecture/history/hst209.html> [Accessed 5th February 2002].

emperors located to the east of the lake⁴⁵. The palace in position B was for the empress dowager and the crown prince, located to the west of the lake. The palace in position C was for other members of the royal family located to the north of the lake (Schinz, 1996)⁴⁶.

5. The idea of applying the central axis to the layout of the city is a significant feature of Dadu. Both Danei and Dadu share the same central axis running in a north – south direction. An imperial way was located on the central axis, linking the entrance of Danei with the south gate of Dadu. Design features included the use of a central axis, the use of north-south direction and the placement of the palace facing south.
6. An inlet channel⁴⁷ (position D) flowed into Huangcheng from west to east and this was a man-made river, constructed according to the ideas of Feng Shui. As mentioned in Section 3.2, an ideal Feng Shui site must contain a river flowing by. The channel was to achieve this principle.
7. Dadu was divided into fifty divisions with streets placed parallel. This placement was based on the idea of the Magic Square. According to the Magic Square, the use of parallels is the principal method of dividing space. Each room was given a number, and the number five was placed at the centre. The number fifty was a secret code called Dayen Zhi Shu⁴⁸ supposedly created by uniting a heaven code of ‘five’ with an earth code of ‘ten’ (Hsu, 1993)⁴⁹. The number fifty thus expresses an idea of creating the world from heaven and earth. The use of fifty divisions in Dadu was generated from the secret code of Dayen Zhi Shu (Yi, 1999)⁵⁰. The use of the number 50 thus occurs here again.

⁴⁵ The lake was called Taiye Chih (太液池).

⁴⁶ Schinz, Alfred (1996) *The Magic Square: Cities in Ancient China*. London: Edition Axel Menges. pp. 290.

⁴⁷ The inlet channel was called Jinshui He (金水河).

⁴⁸ Dayen Zhi Shu (大衍之數) means the great number made by deduction.

⁴⁹ Hsu, T. (annot.) (1993) *Zhou I, the Book of Changes*. Taipei: Di-qiu, pp.539 – 541.

⁵⁰ Yi, Ting, *et al.* (1999) *op. cit.*, pp. 172.

8. Naming each division followed the *I Ching* (Book of Changes). For example, a division called Chien-shou Fang⁵¹ comprised by three words in Chinese was placed at the northwest of the city. Fang means division. The orientation of northwest was related to the Kua of Chien according to the *I Ching* (Book of Changes). The Chien Kua implies a status related to peace and security which was the meaning of the word Shou in Chinese. The idea of orientation and the correlated meaning of the orientation according to the *I Ching* (Book of Changes) was thus the way to designate the name of each division.
9. An inlet channel⁵² was to improve water transportation, connecting a lake⁵³ located to the north of the palace city Danei (position G) and the Grand Canal (called Bei Yunhe⁵⁴). The Grand Canal was a significant waterway connecting the south to the north in China. The lake was the principal wharf to the city of Dadu and was connected to the river of Gaoliang He⁵⁵ (position E) flowing into Dadu from west. This channel provided the benefits of goods and provisions transported to Dadu from the south of China.

⁵¹ Chien-shou Fang (乾守坊).

⁵² The inlet channel was called Tunghui He (通惠河) which was built by Guo (Guo, Shoujing) in 1292.

⁵³ The lake was called Jishui Tan (金水潭) or called Haizi (海子).

⁵⁴ Bei Yunhe (北運河).

⁵⁵ Gaoliang He (高粱河).