Chapter 2

Literature Review

It is important to explore Feng Shui influences on landscape architectures in the context of Hué, and to understand what is implied by Feng Shui applications and modern landscape design techniques. This chapter helps to define the scope of the research in relation to the relevant attributes of both Feng Shui applications and modern landscape design techniques.

This chapter comprises two parts:

Part One is to gain a basic understanding through a brief history and the concepts of Feng Shui of the Form School. This part focuses on how the Form School deals with the physical form of the site and the physical features of the surrounding environment.

Part Two is to explore modern landscape design techniques, focusing on the categorizations of Grant W. Reid (1993). Simplicity, Harmony, Unity, Proportion, Balance, Sequence, Interest and Emphasis are the techniques in modern landscape design which are taught world-wide, including in the curriculum of Ha Noi Architectural University, Ho Chi Minh Architectural University, and Faculty of Architecture of Hue, which is a branch of Ha Noi Architectural University.

2.1 Feng Shui: A brief review

Feng Shui is a traditional philosophy about landscape and building design based on a specific way of observing. Originating in China, Feng Shui has spread to many countries, including Viet Nam. Feng Shui has attracted many researchers to study its potentials. Essen (2000), for example, studied Feng Shui as a role in the development of Chinese science and technology. Bennett (1978) considered Feng Shui in terms of an astro-ecology relationship between life and surrounding environment. Lip (1979, 1985) explored Feng Shui as a model of ecology, geography and ecological design. Rossabach (1983) and Yu (1998) regarded Feng Shui as an ideal landscape model of human, linked man and his environment in harmony with

nature; Lip (1979) and Vuong (2004) focused on Feng Shui in terms of an ecological and functional effect in relation to landscape design, such as trapping sunlight, wind shielding, avoiding floods and well site location whilst keeping water at convenient reach for daily use. In short, these studies have shown that Feng Shui embraces a rational and logical foundation in relation to landscape design.

On a social landscape scale, for Xu (1990), Feng Shui carries essential functions of the process of landscape and building design, which is not only to maintain but also enhance the order of nature. The system of design is organized around a social structure in which humanity is central. Humanity, in such situations, is defined in biological, social, and spiritual terms. Feng Shui establishes the identification for this social structure, through the physical landscapes. For example, the model of a capital city can be understood as the first rank and in large-scale. That is to say within Feng Shui of capital city, there is Feng Shui of towns, within Feng Shui of towns there is Feng Shui of villages and so on. A sense of place makes possible through the way in which the landscape has been taken care of and well preserved. In this respect, Feng Shui can be regarded as the achievement of sustainable environment and communities.

As for man-made landscape scale, Vuong (1996) observed that Feng Shui can be understood as the process of architectural design choosing and determining living situations. In this process, the first is to choose a geographical place which can be satisfied physically and psychologically. The second is to utilise the physical attributes of the area, by taking the advantage and improving the natural conditions. Finally it is to add symbols and signs which aim to satisfy the spiritual needs of occupants.

As garden landscape scale, for Wydra (1978), the manifestation of Feng Shui makes sense by proposing essential meanings. In terms of topography, Feng Shui applications site the house above flood and spring overflows, protect the home from severe weather, place the most frequently used door facing the direction of the rising sun. In terms of vegetation, Feng Shui applications ensure healthy vegetation surroundings, namely maintaining a balance of vegetation neither too sparse nor too

overgrown, and replacing all trees and plants either die or need to be cut down. In psychological terms, Feng Shui applications screen out large ominous objects that face the property and ensure privacy by creating a threshold to separate the public domain from the private.

To understand the Feng Shui applications, it is worthy exploring some basic understandings of Feng Shui which are *Qi*, *Yin and Yang*, the *Five Elements* and their cyclical interactions, and the *Five Geographical Elements*.

Qi

Qi ("Khi") (Qi is pronounced 'chee' in English) is a basic principle of Feng Shui, means life energy or air circulation. Qi is categorized into Living Qi and Dead Qi. Living Qi is warm, active, and infuses life with energy. It is manifested by the existence of verdant plants, grassy shrubs, meandering streams, crowded residential areas, wealthy commercial districts or where healthy animals enjoy life (Figures 2-1, 2-2, and 2-3).



Figure 2-1: Living Qi represented by verdant plants



Figure 2-2: Living Qi - represented by water

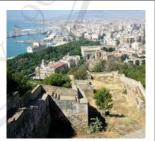
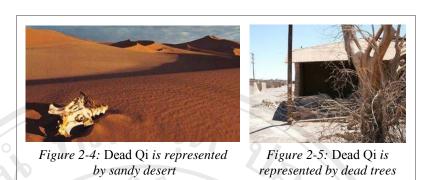


Figure 2-3: Living Qi - represented by wealthy commercial district

In contrast, *Dead Qi* is cold and still, signifying cessation of life. Visually it takes the form of sandy desert, desolate highland, arid soil, fetid water, worm-eaten plant, or withered trees (Figures 2-4, 2-5).

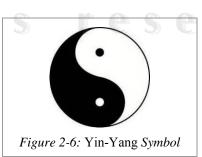


Feng Shui landscape relies on the existence of *Living Qi*, which represents the "cosmic spirit that vitalizes and infuses all things, giving energy to human being, life to nature, movement to water and growth to plants" (Eitel, 1873).

This can be expressed as the movement of life energy, air circulation or vital breath in space, which can be carried by the air, held by water, broken by wind, and blocked by barriers such as trees, buildings or mountains. In the other words, every element in landscape design needs to be arranged to induce this movement of Qi thoroughly. It is believed that the accumulation of $Living\ Qi$ is an essential condition for a good location and can be accumulated depending on two major criteria: guidance by water and not dispersed by wind.

❖ Yin-Yang

Yin-Yang ("Âm-Duong") are complementary opposites; one cannot exist without the other. For example, without cold, the concept of 'hot' does not exist; without life there is no death. They can be understood as continual change and balance, which are represented in the symbol of Yin-Yang (Figure 2-6). Yin-Yang symbolizes the notion of continual change. Yin exists within Yang, and Yang exists within Yin in a cyclical conjunction.



Yin-Yang reflects the natural way or the endless rhythm of the universe (Wydra, 1978). They also symbolize the notion of balance. It is believed that Qi in the universe is produced by changing but in balance between Yin-Yang. In other words, Yin-Yang can be used to manifest Qi. Too much Yin qualities, it produces Yin Qi; too much Yang qualities, it produces Yang Qi. But if it is too much Yin Qi or Yang Qi, it becomes unbalance, and creates Dead Qi. To achieve Yin-Yang in landscape design, it requires a balance in stillness and movement, unity and variety, objective and subjective reactions.

❖ Five Elements and two cyclical interactions

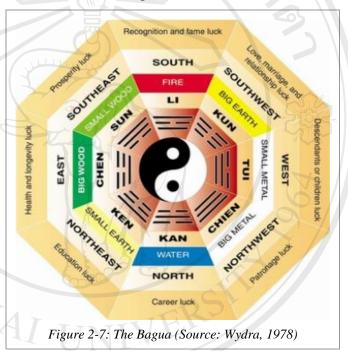
In ancient belief, cosmos comprises *Five Elements* ("Ngũ Hành"): namely *Metal*, *Fire*, *Water*, *Wood* and *Earth*. The *Metal* element can be found in the form of coins, silver, gold, steel and bronze, the colours of white, silver, or gold. The *Fire* element can be found by actual fire or the colour red. *Fire* is useful in appropriate proportion, if it is out of control it becomes destructive. The *Water* element can be found by the colours blue or black. The key is to keep the water fresh and moving. The *Wood* element can be found by the colour of green or the living plants which can attain the *Qi* by filtering the air to use. The *Earth* element can be found in the form of *Mountain*, *Earth* tones, and colours of yellow or brown.

Five Elements is alternate method to manifest Qi. These different elements react to each other both in positive and negative ways. When combined positively, they create Living Qi. When combined negatively, they create Dead Qi. The combination of Five Elements is aimed to achieve the harmony of Feng Shui.

It is important to note that *Five Elements* are used differently between the Compass School and the Form School, the two Feng Shui schools of thought and practice.

The Compass School has assigned *Five Elements* into their directions and functions according to a tool named *Bagua* (Bát Quái). The *Bagua* is made

up of octagonal shape signifying the eight directions. Each direction represents one kind of luck, and has its own element (Figure 2-7). For example, the *North* is the sector of increasing the flow of income and success in employment and symbolized by *Water* element such as a lively aquarium, bubbling water fountain or rolling ball water feature, or may be represented by the colours of blue and black. The *East* brings good health and harmonious relationships, symbolized by *Wood* element such as lush green trees, shrubs or colours of green, and so on.



Whilst the Compass School acknowledges the locations and functions of the *Five Elements*, the Form School emphasizes characteristic attributes of *Five Elements* as the manifestation of *Oi*.

These characteristics are not the elements (*Metal*, *Fire*, *Water*, *Wood* and *Earth*), but rather a symbolic representation of *Qi*, such as *Fire Qi*, *Water Qi*, *Wood Qi*, *Earth Qi* and *Metal Qi* (Figure 2-8 – 2-12). These *Five Elements* which represent five different movements of *Qi* also have distinguishable characters, shapes and colours. Another way of creating *Living Qi* in the practice of Feng Shui is to reach for a harmonious balance among these movements and the combination of these elements through shapes, colours, textures and materials.

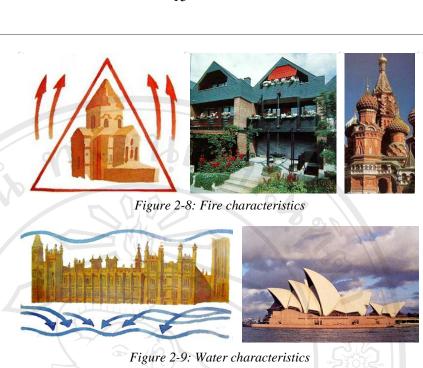




Figure 2-10: Wood characteristics



Figure 2-11: Earth characteristics



Fig 2-12: Metal characteristics

Each of *Five Elements* holds a distinct attribute and maintains definite mutual relationships of each other. The relationships are described by two cycles: *Productive Cycle* ("Turong sinh") – sequential cycle - and the *Destructive Cycle* ("Turong khắc") – non-sequential cycle (Wydra, 1978).

The *Productive Cycle* exists when one element produces another element or accomplishes a harmony with another element. In order to grow the trees, water has to assist, so in this case, *Water* and *Wood* exist mutually together. As the fire obtains a vital force through a tree, *Wood* and *Fire* depend on a relevant relationship. After a tree is burned, the ash goes back to the earth. Here, *Earth* and *Fire* are in a harmonious relationship. The hard iron is formed by the *Earth*; the *Metal* obtains vital force from *Earth*. The formation of *Water* is from melting *Metal*.

The *Productive Cycle* is a sequential cycle in which *Metal* produces *Water*, *Water* produces *Wood*, *Wood* produces *Fire*, *Fire* produces *Earth* and *Earth* produces *Metal*.

Every element has two roles in this cycle - producing another element, and in return, being produced by another element. When *elements* are combined, and work together in balance, *Living Qi* can be produced. The clockwise relationship of the *Productive Cycle* is shown in Figure 2-13.

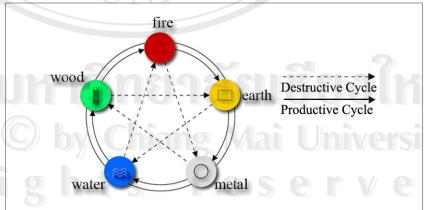


Figure 2-13: Productive and Destructive Cycles (Source: Wydra, 1978)

The *Destructive Cycle* is seen when one element destroys another element and when they have mutual relationship of aversion. *Fire* is controlled by *Water* and a strong fire can be put out by water. *Metal* is strong, but becomes powerless when it is melted by *Fire*. *Wood* is cut by the *Metal* and it goes through *Earth* and rises. *Water* is suppressed by the *Earth*. So that, the *Destructive Cycle* can be identified by the *Metal* destroys *Wood*, *Wood* destroys *Earth*, *Earth* destroys *Water*, *Water* destroys *Fire*, and *Fire* destroys *Metal*. Each element plays two roles in this cycle - destroying another element, and in return, being destroyed by another element. The *Destructive Cycle* is presented by the cross relationship as Figure 2-13 illustrates.

According to Choi (2001), this diagram (Figure 2-13) represents 'the cycle of harmony' where the elements rotate clockwise and place themselves in a productive relationship to one another. In the landscape design employing Feng Shui principles, the combination between the *Five Elements* should be conducted in the relationship of the *Productive Cycle*. The *elements* in a mutually destructive relationship have the force to destroy or control different *elements* which can be expressed as 'the cycle of control-domination'. The combination of *Five Elements* in the relationship of the *Destructive Cycle* could disturb the *Living Qi* and create *Dead Qi*.

Schools of thought in Feng Shui - The Compass and Form School

As discussed previously, the two main schools of thought and practice in Feng Shui are the Compass ("Bát quái") and the Form ("Hình phái").

The Compass School uses metaphysical speculations such as *Eight Trigrams*, *Heavenly Stems*, *Earthly Branches* and *Constellations* and composes elements in relation to the movement of the moon, the sun and the period of time. The practice of the Compass School can be understood as mysterious formulae and ideas (Vuong, 1996; Wydra, 1978). The

Compass School practices seem to have a limited possibility of integration with modern landscape design (Mak, 2002).

The Form School practices are more scientific approaches, in particular in site analysis and spatial arrangement (Mak, 2002; Yu, 1998; Xu, 1990). According to Xu (1990), the Form School practices relate to the site analysis, by examining the sources of rivers, landforms and terrains. According to Vuong (1996), the Form School practices are based on the geographical features which can be observed and used to determine the location and orientation of a building. The geographical features in the Form School practices are *Five Geographical Elements*, which are *Dragon Vein, Sand, Water, Cave* and *Direction*. In the Form School practices, it is believed that *Living Qi* on earth is linked with these *Five Geographical Elements*.

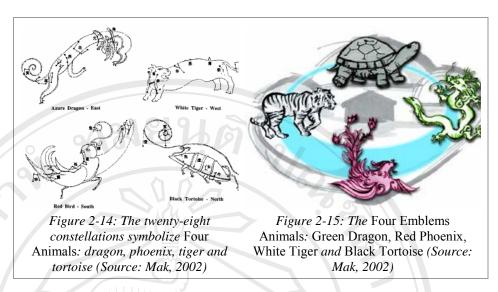
The scientific approaches of the Form School practices have been well recognised and widely accepted by researchers. For example, Xu (1990) stated that Form School practices are powerful tools in site analysis. Vuong (2004) used the Form School practices to analyse economic values of properties in villages in Hong Kong and found that the properties designed with Feng Shui applications always yielded the highest prices, in purchase or sale. Yu (1998) declared that the cities of Moscow and Washington also fulfilled the basic criteria of Feng Shui derived from the Form School practices. According to Mak (2002), the Form School practices can be applied to both the macro - such as a city or a selected site - and the micro - a garden or an interior layout - environment to achieve harmony between nature and humans.

The Form School practices include arranging the movement of Qi, through balance and harmony of Yin-Yang and to produce $Living\ Qi$ through the Productive Cycle in relation to $Five\ Elements$. In particular, the Form School employs the $Five\ Geographical\ Elements$ as basic components in spatial arrangement to manifest the $Living\ Qi$ as follow.

Dragon Vein ("Long mạch") means high topography or prosperous highland. Dragon Vein is represented by a mountainous geography or a mountain range in selecting a site. The first step in selecting the optimal site is to locate a Dragon Vein which means a site protected by mountains and located in high topography. When determining Dragon Vein in modern landscape design, the mountainous high topography can be substituted using a high building, or perennial trees, to rear of the site.

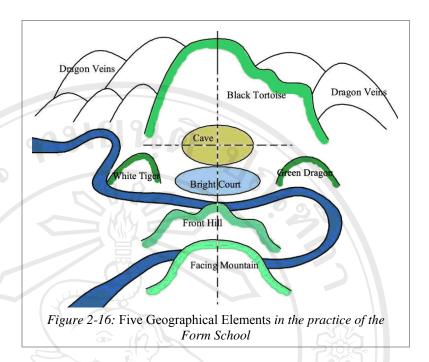
Water ("Thủy") means the flow of water at the site. It is recommended to have a water feature (river, stream, or lake) to the South, or at least in front, of the site, and the watercourse quality should be calm and smooth and not be fast or straight. When determining Water in modern Feng Shui applications, the flow of water also includes a pond, a fountain, a birdbath or even roads and streets that carry the flow of traffic at the site.

Sand ("Cát") means the encompassing hills. It represents the surroundings that protect the site from strong wind. Sand is represented by Four Emblem Animals which are Green Dragon, White Tiger, Red Phoenix and Black Tortoise. The origins of Four Emblem Animals theory came from the historical development of Chinese astronomy. Twenty-eight mansions are used to identify twenty-eight constellation groups (Figure 2-14). These twenty-eight mansions are grouped into four symbols, and each symbol contains seven mansions according to their shapes and directions in the sky namely Green Dragon, Red Phoenix, White Tiger and Black Tortoise representing East, South, West and North according to their directions in the sky (Figure 2-15).



Conceptually, a harmonious place where *Living Qi* appears should have "left *Green Dragon* bowing, right *White Tiger* sitting, front *Red Phoenix* flying and back *Black Tortoise* lifting" (Tå Thanh Long uốn mình, hữu Bạch Hổ ngồi chầu, tiền Kim Tước cất cánh, hậu Hắc Quy thúc thủ) (Figure 2-15), which means the place embraced by hills, backed by mountain, and welcomed by front screening mound. For *Red Phoenix*, it is further divided into two kinds: *Front Hill* and *Facing Mountain*. *Front Hill* is smaller and closer, whilst *Facing Mountain* is bigger and further away from the site. The location, which consists of all the animal symbols mentioned above, is believed to be able to maintain the *Living Qi*. If translating *Sand* into modern landscape design, trees, buildings, walls, or statues can play the role of *Four Emblem Animals*.

Cave ("Huyệt") means the niche, or the best location to place the house. To find the best location is the ultimate goal of Feng Shui practice. Cave should face a Bright Court, represented by the open space, or courtyard, in front. There are further organisations of Inner Bright Court that is enclosed by Table Hill, and Outer Bright Court by Facing Mountain (Figure 2-16). If translating Cave into modern landscape design, Bright Court could be a lawn, or a yard.



Direction ("Hướng") means the orientation of the main door of the house. In the Feng Shui practice, the best direction would be due south. As in the Form School practices, the four cardinal directions of East, West, South and North are referred as left, right, front and back. When combined with the Four Emblem Animals, buildings facing South can be organised as front Red Phoenix - South, left Blue Dragon - East, right White Tiger - West and back Black Tortoise - North (Figure 2-15).

In short, Feng Shui can be regarded as a rational and logical practice in its process of spatial arrangement. It is believed that the *Qi* appearance can be manifested through the place where the harmony exists. The key is to achieve the balance and harmony of *Yin-Yang* in combination of *Five Elements* and by manipulation of *Five Geographical Elements*, such as mountains, hills, water, open spaces or orientations. The Form School practices can be compatible with the modern landscape design, in particular through the flexible applicability of the geographical features. This inspires this research to explore the Form School practices in relation to the modern landscape design techniques.

2.2 Modern landscape design techniques

A Feng Shui garden can be designed by using the applications from the Form School practices such as *Five Geographical Elements* and principles of *Qi*, *Yin-Yang*, and *Five Elements*. The harmony between the man-made architectures and the natural environment is represented through the role of Feng Shui garden, which is regarded as the smooth transition and elegant connection between artificial one and natural one. Through the element arrangement, modern landscape design can also reach the harmony and beauty of nature by using particular techniques in garden landscape.

Reid (1993) believed that people are able to stay in a concord with nature by using relevant techniques in modern landscape design. These techniques could be applied to all levels of landscape, from a simple garden edge to a complex classical design. Reid's modern landscape design techniques - *Emphasis*, *Sequence*, *Simplicity*, *Balance*, *Proportion*, *Interest*, *Unity*, and *Harmony* - have been taught in architectural schools of Viet Nam, namely Ha Noi Architectural University and Ho Chi Minh Architectural University using such techniques as a basis for landscape design. It is important to note that the modern landscape design tents to utilize its techniques, which are similar to the way in which Feng Shui practices use its application. Relevant techniques of modern landscape design can be examined as follows:

Emphasis means an organisation in which a visual power of one element is primarily to catch observers' attention (Figure 2-17). It is the arrangement from the most important to the less important elements in place. The parts of any combination should not be equal in their visual interest, specific parts should be different, maybe larger, or in contrast of colour, form, aroma, or texture than the surroundings. These points of emphasis can be a bench, special tree, a pool, full-flower plant within a flower garden, pieces of sculpture or other unique items that lead the observer to comprehend the garden's scene before exploring it for detail.



Figure 2-17: Unusual element or contrast is emphasis (Source: Reid, 1993)

Sequence means a connected series of spaces or events in landscape. A good sequence should have a point of beginning that indicates the principal approach (Figure 2-18). In landscape design, architects should consider how to create *Sequence* which can be utilized through direction, speed and mode of movement. The rhythms develop when line, form, texture, and colour are changed in relation to a particular direction or a point of focus. It can be achieved through repetition or by progression of elements' quality, such as using textures in raised ladder from fine to coarse. Sequence is used to direct the eye to a desired emphasis, which can help to connect the different design elements. Sudden changes or any barrier block will break the visual flow around the landscape.

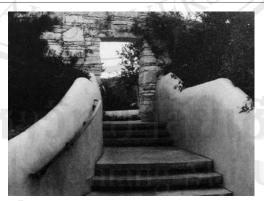


Figure 2-18: A clear sequence allows visitors to decide the path to follow (Source: Reid, 1993)

Simplicity means the reduction or elimination of non-essentials in a landscape. It is economy of line, form, texture and colour. It is a basic technique of order to bring clarity and purpose to design. A simple design seems to have more effect than an excessively ambitious one. This can be done by keeping the number of

objects in the landscape to a minimum, such as massing similar plants rather than placing them individually throughout the landscape, by using clean lines rather than complicated lines, and by using a limited range of plant species in a garden (Figure 2-19). Incorporating too many themes into one area causes a complicated design with high maintenance requirements (Figure 2-20).



Figure 2-19: Simplicity brings clarity and purpose, keeping design neat and focused



Figure 2-20: Placing plants individually in a landscape can make a garden cluttered and unfocused

Interest means the technique of increasing the feeling of curiosity or attraction. Interest can be referred as variety and discovery in garden landscape. Interest can be achieved by introducing a number of shapes, sizes, textures and colors as well as by inserting changes in direction, movement, sound, scent or light. Variety could be understood as high and low points of terrain, views of both inside and outside of a garden, large and small features, a mix of enclosed and open spaces, or a blend of coarse and smooth elements.



Figure 2-21: Doorframe is used to inspire discovery



Figure 2-22: Windows is used to restrict views create interest

For example, a quiet intimate place is after noisy active playground. Bright red flowers sway on a verdant lawn. Smooth flow of water meanders then pours into a pond by a sparkling waterfall. The concept of *Interest* can be comprehended through the use of unusual or unique elements or patterns of organization. It aims to simulate people to surprisingly discover garden landscape. Windows can be used to restrict views and create the impression of a space (Figure 2-21 and 2-22).

Balance can be achieved in symmetrical and asymmetrical balance of vision. Formal designs often display symmetrical balance, where left and right sides of the view are the same (Figure 2-23). Informal designs generally display asymmetrical balance, where left and right sides of the view are not the same (Figure 2-24). Formal balance is often calm and quiet creating a sense of peace and stillness; whilst, informal balance is dynamic and natural, creating a sense of curiosity and movement. Balance refers to the stability of the landscape, and can be realized by creating equilibrium between the parts that make up the whole. One form of balance relates to layout along a central axis. Another way is in the vertical dimension. This axis can be either informal or formal in its arrangement. In all cases, the elements being balanced must both hold the same importance to the eye.



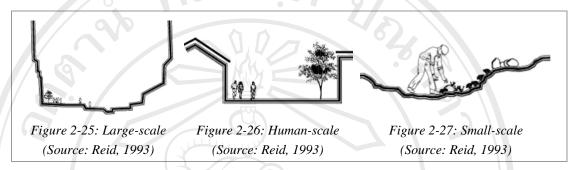
Figure 2-23: Symmetrical balance (Source: Reid, 1993)



Figure 2-24: Asymmetrical balance (Source: Reid, 1993)

Proportion means the relative comparison of heights, lengths, numbers, areas, masses and volumes. No particular element or feature should overpower others. Proportional relationships between elements are essential in evoking emotional responses. Large-scale refers to a space or a set of objects, which scale is beyond comparison to the human body which can convey wonderment and amazement (Figure 2-25). Human-scale refers to a space or a set of objects, which scale is easily

compared to the human body, which can bring a sense of recognition and comfort (Figure 2-26). Small-scale refers to a space or set of objects, which scale is comparatively smaller than the human body, which can give a sense of dominance or perhaps a desire to nurture smaller objects, such as dwarf bonsais, miniature plants, or birdhouses (Figure 2-27).



Unity seeks to achieve a cohesive overall appearance and a perception of the landscape as a whole. Observers can sense a visual flow from one part of the landscape to another; features of one part are echoed in others. The old rock is preserved as a whole; however, it is formed from several smaller interlocking pieces (Figure 2-28). Unity can be achieved through the collaboration of various landscape features by a theme of colours, forms, or textures. Repetition of a landscape feature can be introduced to the garden, but too much repetition could become monotonous and may not stimulate reactions in the observer.



Figure 2-28: The quality of oneness but in cohesion can create unity (Source: Reid, 1993)

Harmony means a state of accord between elements and their surroundings. Key is to maintain smooth transitions and strong connections with sufficient buffers between elements. It is believed that natural materials used in garden landscapes are more harmonious than artificial products. Harmony can also be regarded as the natural transition that allows slow and gradually changes (Figures 2-29 and 2-30).

Transition can be achieved by gradual ascent or descent and the arrangement of different elements with gradated textures, forms, colours, or sizes. An example of a good transition could be understood as an effect of arranging large trees to medium trees to shrubs and to bedding plants. Transition is methods which can create illusions in the image of a garden. For example, a transition from taller to shorter plants can give a sense of depth and distance, making a garden seems larger than it really is.



Figure 2-29: The transitions are insufficient and connections between elements, desultory elements in separate locations make unharmonious landscape



Figure 2-30: Harmony in garden created by the accord among elements and their surroundings

In short, this chapter has explored how to achieve Feng Shui by using modern techniques. Reid's landscape design techniques enhance the natural beauty of a garden landscape. They transform a garden into an artistic picture with stylized backgrounds, themes and main topics in which all the elements are in natural harmony. Reid's techniques are directed towards observers' visual senses. People recognize the beauty of landscapes designed with Reid's techniques. These techniques provoke visual experiences and emotions. Similarly, Feng Shui applications support and interact with one another creating a natural pleasant style. The harmony between nature and man-made architectures is cherished in Feng Shui gardens. Within this harmony, the significance of Feng Shui applications influences the beauty of the garden through the visual, emotional, and spiritual realms of the garden.