Guideline for Applying Neo Confucianism thought in Product Design

by

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Abstract

This study aims to summarize the design principles in Neo-Confucianism and use them to develop a guideline for product design. This study provides new design opportunities under Neo-Confucianism thought by analyzing the relationship between Neo-Confucianism and traditional Chinese design. This study is focused on the thinking way of Neo-Confucianism, not the traditional design elements in it. Designers who do not know Neo-Confucianism can still design products with the guideline according to the design principles in Neo-Confucianism.

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Culture and design are two parts in my study. After five years product design learning, I understand more about the help of my teachers and classmates, I have made much progress.

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Chapter 1: Introduction

1.1 Problem statement

Culture is often ignored in design. This situation can be traced to the Industrial Revolution (Auerbach, 1999). Nowadays, it seems that all countries should accept the universal design principles and traditional culture is not important in design. This view is harmful to the diversity of design and reduces the design possibilities of many regions (Krippendorf, 2005). Especially in China, the country that fell behind the west design for a long time; with the development of the economy, traditional design ideas in China are disappearing. This leads to a strange situation; that the Chinese often do not make designs with Chinese characteristics. Another problem is that many Chinese designers have misunderstandings about culture. They just imitate the form of traditional Chinese design. The result is a strange hybrid of modern technology and traditional styling.

The style is outdated, but the ideas in traditional culture are still valuable. Japan, which is also a country with a long history, balances well between traditional culture and technology. Japanese designers get a lot of design ideas from Japanese traditional culture (Goto, Sasaki, & Fukasawa, 2004). They are not only focusing on the style of traditional design but also analyzing the way of thinking in traditional culture.

Neo-Confucianism is China's most important thought in the past millennium. By understanding the thinking of Neo- Confucianism, designers can find more inspiration for Chinese design than only focusing on the form of traditional design. However, there are several difficulties in the study of Neo-Confucianism.

Firstly, Neo-Confucianism is a complex system. Researchers who want to find design principles in it should have a comprehensive understanding of Neo-Confucianism.

That means analyzing the classic literature of Neo-Confucianism, as well as painting, poetry, architectural art, and ceramic art under the influence of Neo-Confucianism. If only analyzing one aspect, the researcher would have a superficial understanding of Neo-Confucianism, which is not so valuable for design.

Secondly, there is a huge gap between today's China and the one in the age of Neo-Confucianism. Many valuable ideas in Neo-Confucianism have disappeared (Zhang, 2015). Based on this situation, some stereotypes about Chinese design should be discarded; researchers should not be influenced by the image of China in the media and movies.

Thirdly, the written materials about Neo-Confucianism are difficult to read even for the Chinese (Jin, 2015). In China, the written language used today is different from the one in the age of Neo-Confucianism. However, those written materials are significant to culture. Appropriate interpretation of the written materials is a problem.

In summary, the study of Neo-Confucianism is valuable. However, a comprehensive understanding of it is needed in order to find the relationship between Neo-Confucianism and design.

1.2 Need of Study

Firstly, having a deep understanding of traditional culture is meaningful for the Chinese to make designs with Chinese characteristics. Neo-Confucianism contains many design concepts of ancient China, which are valuable for today's Chinese design (Zhang, 2016). Using culture elements in design will make Chinese design more distinctive.

Secondly, a guideline of applying Neo-Confucianism thought to product design is also valuable in business. For example, based on business needs, multinational

corporations hope to create brand languages considering regional cultures. However, most of the brand languages only focus on the visual effects; and they lack the understanding of the cultural thinking. This study is focusing on the thinking in Neo-Confucianism culture.

Thirdly, the study of Chinese culture can also provide a method for using culture in design, which can be applied to different cultures. Don Norman (2003) mentioned that he found the top design schools' curriculums were similar. Few programs introduced the way of using culture in design. Nowadays, people pay more attention to the cultural meaning of products (Moalosi, Popovic, & Hickling, 2010). Study how to apply thought in culture to design can fill the gaps in design school education as well as meet consumer needs.

In addition, there are lots of studies on Neo-Confucianism, but most of these studies only care about history. Few of them focus on the relationship between design and Neo-Confucianism. These studies are difficult to be applied to design.

In summary, previous studies have not dealt with how to apply Neo-Confucianism thought to product design. The study of the design principles in Neo-Confucianism is meaningful both for design and business for China as well as world-wide.

1.3 Objectives of study

The main objectives of this study are providing a reasonable framework of the design principles in Neo-Confucianism and creating a guideline for applying Neo-Confucianism thought to product design.

The relationships between Neo-Confucianism, traditional Chinese design, and product design procedure will be clarified. The guideline will provide designers the

principles for observing things, creating stories, and design expression with Neo-Confucianism thought. The following is a summary (see Fig 1.1) of what this study will focus on:

- Understand the concepts in Neo-Confucianism
- Analyze the paintings, poems, gardens, and ceramics in the age of Neo-Confucianism
- Determine the relationship between traditional Chinese design and Neo-Confucianism
- Summarize the design principles in Neo-Confucianism
- Organize the guideline of applying Neo-Confucianism thought to product design

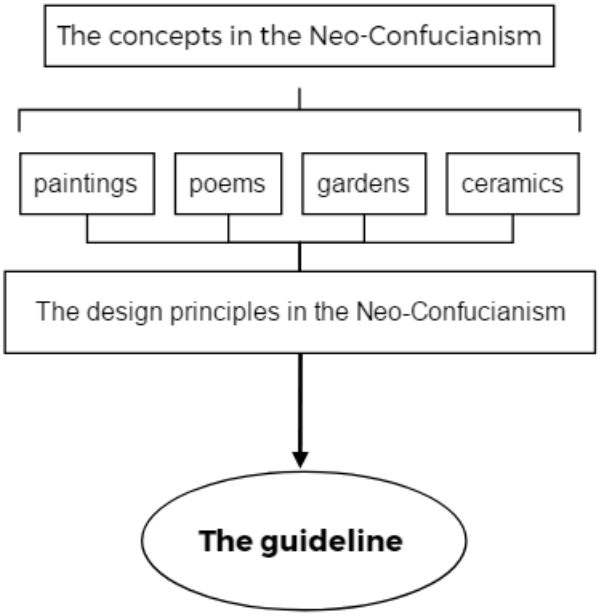

Figure 1.1 Objectives of study

1.4 Definitions of Terms

Li - a term used in Neo-Confucianism, which refers to the principle of natural phenomena (Mu, 2010)

Liu Bai - leaving room for the imagination, a widely used method in art and design of the Song Dynasty (Fei, 2014)

Medium - the matter in which something lives or acts, for example, land animals live in the air, and marine life live in the water (Gibson, 1979)

Metaphor - an expression, often found in literature, that describes a person or object by referring to something that is considered to have similar characteristics to that person or object (Cambridge Dictionary, 2020)

Morality - a set of personal or social standards for good or bad behavior and character (Cambridge Dictionary, 2020)

Neo-Confucianism - an ideological system about politics, culture, and philosophy that emerged in the Song Dynasty (960-1279 A.D) of China (Mu, 2010)

Noumenon - a thing as it is in itself, unable to be known through perception but postulated as the intelligible ground of a phenomenon (Collins, 2020)

Perspective - the way objects appear smaller when they are farther away, and the way parallel lines appear to meet each other at a point in the distance (Cambridge Dictionary, 2020)

Qi - a term used in Neo-Confucianism, which refers to the smallest unit that composes the material world (Mu, 2010)

Story - a description, either true or imagined, of a connected series of events (Cambridge Dictionary, 2020)

Substance - the solid which has a certain hardness, maintains the same shape, for example, the stratum (Gibson, 1979).

Surface - the interface between medium and substance (Gibson, 1979)

Symbol - an object or word that is used to represent something else or some feelings in this thesis.

The symbol of feelings - symbols that formalize emotions and subjective experiences for people to understand (Langer, 1953)

1.5 Assumptions

To establish a design procedure based on Neo-Confucianism, this study makes several assumptions as follows:

Firstly, this study admits the importance of culture in design and holds a view that different cultural regions can have different design methods. Therefore, some principles in the design guideline could be different from the universal design principles.

Secondly, for some concepts in Neo-Confucianism, this study considers them as different understandings of the world. The goal of this study is to create a design guideline. Therefore, it will not be discussed whether the concepts in Neo-Confucianism are scientific or not.

Thirdly, this study believes that Chinese traditional thought should be explained in a way that people nowadays can understand. Therefore, some concepts in the semiotics and ecological psychology are used as tools for describing the design principles in Neo-Confucianism to help people understand those principles.

1.6 Scope and Limitation

This study will cover the following:

- The concepts in Neo-Confucianism related to design. Since Neo-Confucianism is a complex system, this study only mentions the part related to design. The other parts of Neo-Confucianism are not discussed.
- The paintings, poems, gardens, and ceramics in the Song Dynasty were deeply influenced by Neo-Confucianism. They can cover most of the design ideas in Neo-Confucianism, so this study chooses to analyze them.

The limits of this study are as follows:

- This study can only be seen as an understanding of the design principles in Neo-Confucianism. It is a study from the perspective of design, which is not historical research.
- The purpose of this study is to explore the possibilities of designing using principles of traditional Chinese culture. Therefore, this study will establish design guidelines based on Neo-Confucianism.

1.7 Procedure and Methods

This study can be divided into four parts as follows and is illustrated in Figure 1.2:

- Reviewing Literature: analyzing the concepts in Neo-Confucianism and summarizing the design principles in it by analyzing paintings, poems, gardens, and ceramics in the Song Dynasty.
- Developing a guideline for applying Neo-Confucianism thought to the product design
- Examining the guideline approach through design practice

- Evaluation and summary

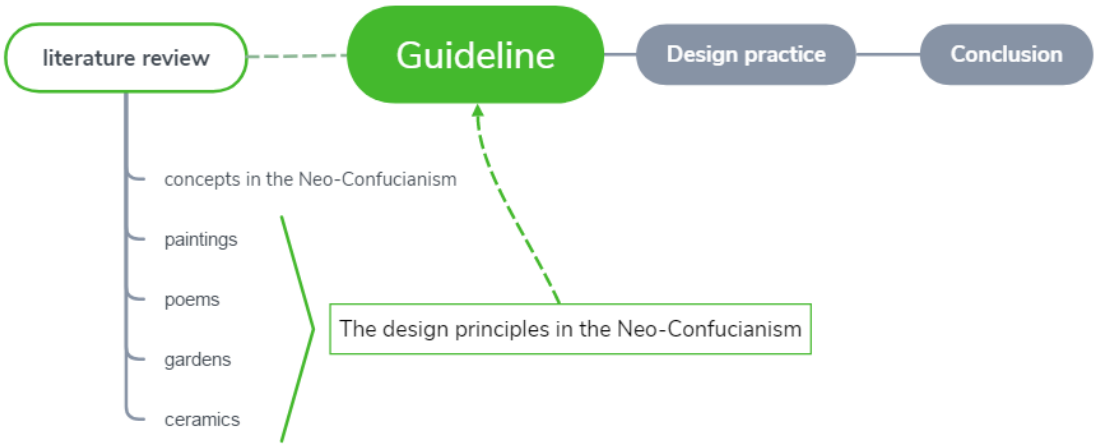

Figure 1.2 Procedure of this study

1.8 Anticipated Outcome

The anticipated outcome of this study is a design guideline that will help designers apply Neo-Confucianism thought to product design. This study will provide design opportunities through the thinking of Neo-Confucianism.

Chapter 2: Literature Review

2.1 Overview of this chapter

This chapter discusses the relationship between Neo-Confucianism and Chinese design in the Song Dynasty. It begins by an introduction of Neo-Confucianism, then analyzes paintings, poems, gardens, and ceramics in the Song Dynasty to find design principles in Neo-Confucianism (see Figure 2.1). Then, these design principles are summarized to lay a foundation for applying Neo-Confucianism thought to product design.

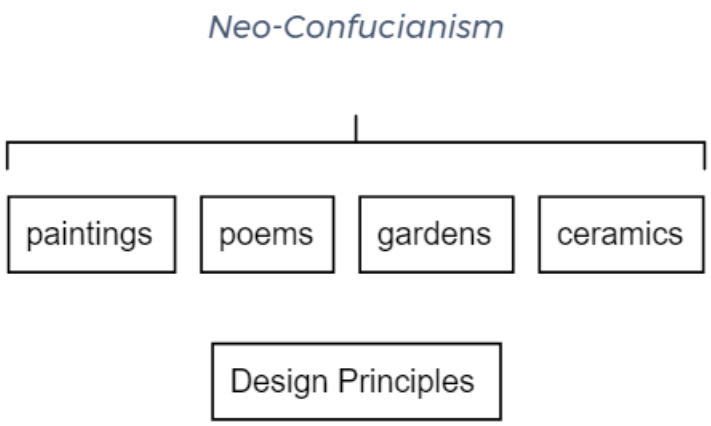

Figure 2.1 structure of Chapter 2

2.2 Introduction of Neo-Confucianism

2.2.1 History and significance of Neo-Confucianism

Neo-Confucianism is an ideological system about politics, culture, and philosophy that emerged in the Song Dynasty (960-1279 A.D) of China. It has been the most significant thought in China since the tenth century (Mu, 2010). Neo-Confucianism

is based on Confucianism, combined with the local religion of China, Taoism, and part of the Indian religion, Buddhism. This ideological system has had a profound impact on East Asia and is still alive today (Huang, 2009).

The research of Neo-Confucianism will help designers understand the behavior and thinking of people in East Asia. It it also intended to bring new design principles for western designers.

Neo-Confucianism originated in the Song Dynasty of China (Figure 2.2). The Song Dynasty was established after the Tang Dynasty (618-907 A.D). In the early years of the Song dynasty, as wars had just ended, people generally lacked faith and were confused about their life. To reverse this situation and build a stable and prosperous country, the Song Dynasty's rulers attached great importance to education. They tried to restore the orthodox status of Confucianism. At that time, Confucianism absorbed some contents from Buddhism and Taoism, which became Neo-Confucianism (Mu, 2010).

Figure 2.2 Map of the Song Dynasty (adapted from Historical Atlas of China， 1991)

The Song Dynasty was the peak period of economy and culture in China's feudal dynasties (Ebrey & Patricia, 1999). Neo-Confucianism influenced all aspects of the Song Dynasty, especially art and design. A set of design principles with ancient Chinese characteristics appeared at that time.

In the mid-13th century, Kublai Khan, the conqueror of the Mongols, destroyed the Song Dynasty (Ebrey & Patricia, 1999). Although the Song Dynasty fell, Neo-Confucianism remained the orthodox ideology of the following feudal dynasties in China until the fall of the Qing Dynasty in 1912.

Neo-Confucianism has had a great effect on East Asia and Southeast Asia (Figure 2.3). It had been the official ideology of ancient China for nearly one thousand years. Neo-Confucianism contains a unique world outlook which profoundly influenced the

literature, art, and design in East Asia. If designers knew more about Neo-Confucianism, they would obtain a set of new design principles and methods.

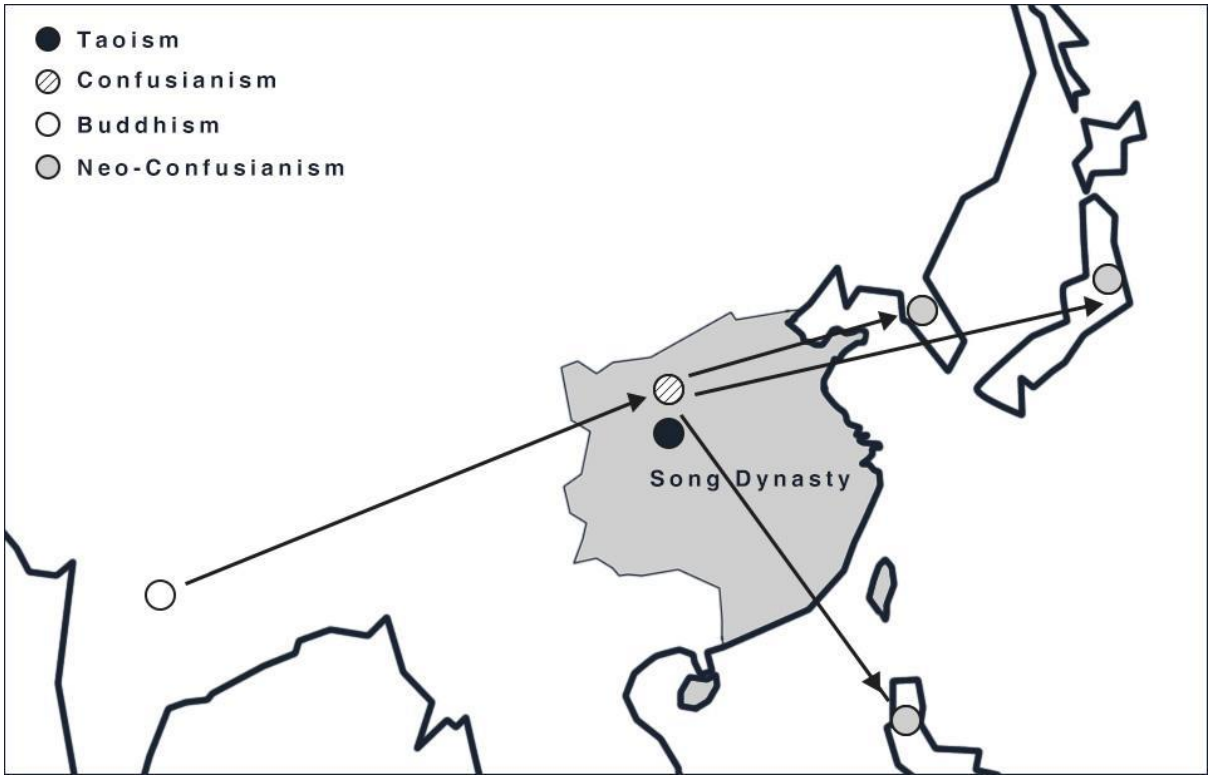

Figure 2.3 The Origin and Spread of Neo-Confucianism
(adapted from Historical Atlas of China，1991)

2.2.2 Contents of Neo-Confucianism

2.2.2.1 Ontology of Neo-Confucianism

Neo-Confucianists believe that the noumenon of the universe and the noumenon of morality are integrated into one. The word *noumenon* means “a thing as it is in itself, unable to be known through perception but postulated as the intelligible ground of a phenomenon” (Collins, 2020).

The world can be regarded as a combination of nature and morality (Mu, 2010), which shows in Figure 2.4.

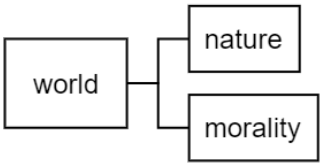

Figure 2.4 Neo-Confucianism Ontology

From this ontology, two terms, *Li* and *Qi* (Figure 2.5) were born:

- *Li* can broadly be defined as the principle of natural phenomena, which is invisible and abstract (Mu, 2010).
- *Qi* refers to the smallest unit that composes the material world. Under the influence of *Li*, *Qi* formed the whole world (Mu, 2010).

The term *Li* and *Qi* can be traced back to the writings of Cheng Hao (1032 – 1085), one of the founders of Neo-Confucianism. Since the Neo-Confucianists believe that the noumenon of the universe and the noumenon of morality are one, *Li* and *Qi* both have the moral attribute (Mu, 2010).

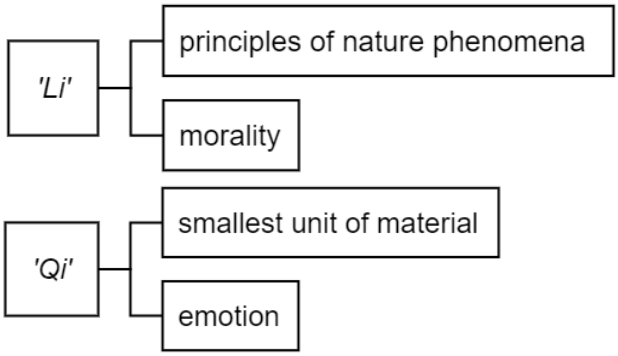

Figure 2.5 Li and Qi

For example, *Li* is a common word in the Chinese language, which means doing something according to moral norms and logic. On the contrary, "without *Li*" implies that something is illogical and morally disapproved.

Similarly, in the Chinese language, *Qi* is not only a physical unit but also an emotional concept. For example, to someone angry, the Chinese may say, “He has hot *Qi*.” To a stingy person, the Chinese would say, “He has small *Qi*.” To a generous person, the Chinese can say, “he has big *Qi*.” *Qi* is closely related to people's emotions and personalities.

2.2.2.2 Epistemology of Neo-Confucianism

Neo-Confucianism cares about the change of things and the relationship between subject and object. Neo-Confucianists dynamically observed the world (Figure 2.6). They did not believe that human senses could truly reflect the real world, nor did they think that there was an unchanging world. Observation is a dynamic process (Mu, 2010).

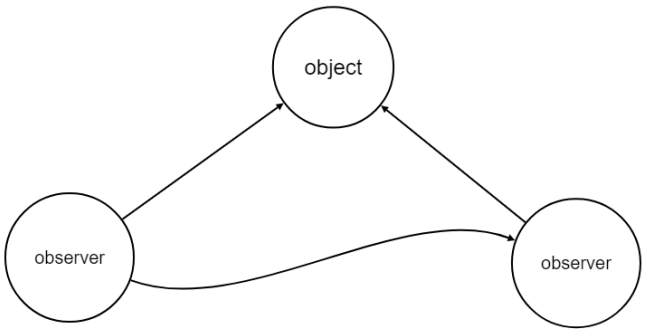

Figure 2.6 Dynamic observation

Neo-Confucianists accepted the existence of a continually changing universe. However, they did not admit that one's senses could truly reflect the world. Neo-Confucianists tended to express their feeling about the world without the limitation of senses.

Since they believed the origin of the world was the combination of nature and morality, Neo-Confucianists cared about morality in everything, which influenced their attitudes towards nature and human-made creations (Mu, 2010).

2.2.2.3 The Purpose of Neo-Confucianism

The purpose of Neo-Confucianists has two aspects. One is for individuals to achieve high morality. The other is to create an ideal world (Figure 2.7).

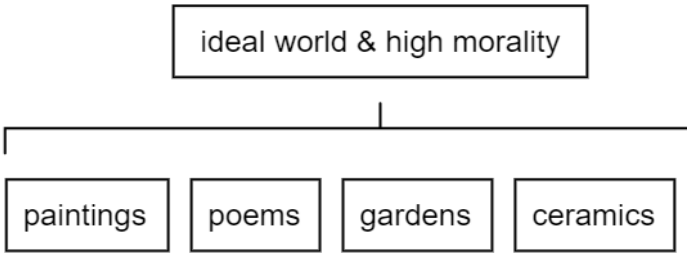

Figure 2.7 Ideal world and high morality

Therefore, intellectuals in the Song Dynasty needed to develop knowledge about how to regulate their behavior and social management. There is a famous saying in Neo-Confucianism classic *Da Xue*, “self-cultivating; family-regulating; state-ordering; then the land great governed” (Yan, 2015 p. 3).

This famous saying describes the relationship between personal cultivation and ideal society, which brings two results. Firstly, intellectuals in the Song Dynasty were concerned about personal cultivation. Secondly, they put the template of the ideal society described by Neo-Confucianism in their minds.

Based on that, intellectuals in the Song Dynasty always had two ideal models in their minds. One is high morality; the other is the ideal world. They took these ideal models as inspiration for their artistic works and design.

2.2.2.4 Summary of Neo-Confucianism's content

	Contents of Neo-Confucianism
Ontology	World is a combination of nature and morality.
	'Li' — Principles of nature phenomena; Morality
	'Qi' — Smallest unit of material; Emotion
Epistemology	A dynamic observing process
	Analyse the morality in everything
Purpose	Achieve high morality
	Create an ideal world

Table 2.1 Summary of Neo- Confucianism's content

Table 2.1 shows the summary of Neo-Confucianism's content. Neo-Confucianism influenced design in the Song Dynasty. It changed the way people looked at things and the way they expressed their feelings. The next step in this research is to analyze paintings, poems, gardens, and ceramics in the Song Dynasty, and the goal is to gather design principles relating to Neo-Confucianism.

2.3 Song Dynasty paintings

2.3.1 Overview of the Song Dynasty paintings

Song Dynasty paintings can be roughly divided into three categories: landscape paintings (Figure 2.8), flower and bird paintings (Figure 2.9), and figure paintings. Among them, landscape paintings are the most famous. The artists used many principles from Neo-Confucianism in their paintings. This section describes what these principles are and how people applied them to art.

Figure 2.8 Along the River During the Qingming Festival (part), Zhang Zeduan (1085-1045), Song Dynasty, The Palace Museum, Beijing

Figure 2.9 Five-colored parakeet on a blossoming apricot tree, Emperor Huizong (1082–1135, ruled 1100–1125), Song dynasty, Museum of Fine Arts, Boston

Because of the prosperity of the economy, the Song dynasty rulers set up painting academies and systematically trained professional artists (Gao, 2019). This promoted the theorization of the Song Dynasty paintings.

Song Dynasty paintings show a unique way of observing the world under Neo-Confucianism, which is valuable for analyzing the design principles in Neo-Confucianism.

2.3.2 Principles in the Song Dynasty paintings

2.3.2.1 Observation before painting

Unlike the oil paintings of the Renaissance, landscape paintings in the Song Dynasty lacked perspective (Figure 2.10).

Figure 2.10 Thousands of rivers and mountains, Wang Ximeng (late 11th–early 12th century), Song dynasty, The Palace Museum, Beijing

The term perspective (Figure 2.11) used here refers to the way objects appear smaller when they are farther away, and the way parallel lines appear to meet each other at a point in the distance (Cambridge Dictionary, 2020).

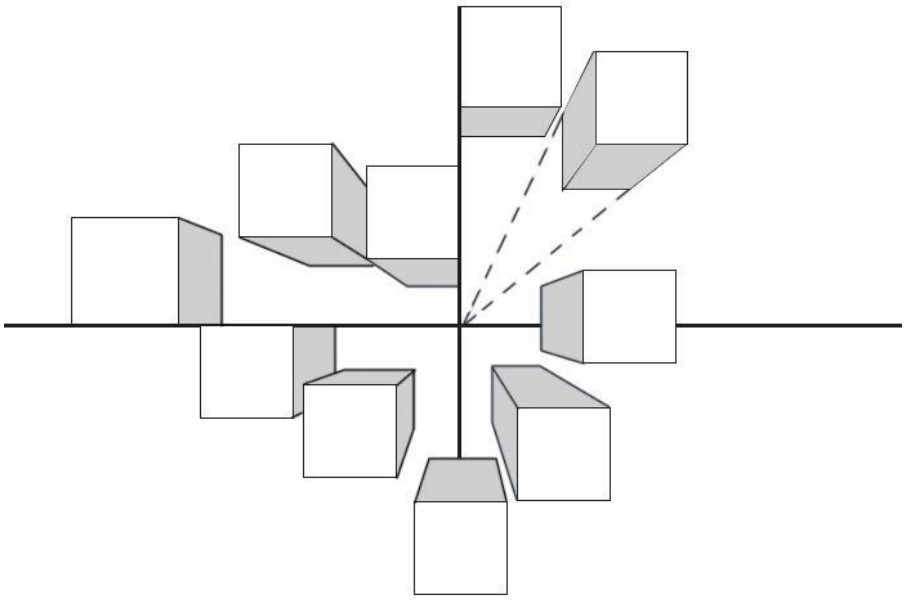

Figure 2.11 perspective

Otto Fischer (1943) was the first to use the term *scatter perspective* to explain Chinese landscape paintings. *Scatter perspective* is the method of using perspective in different places, then putting the results together in one picture. However, this opinion is still based on the term perspective to analyze landscape paintings of the Song Dynasty.

There is an explanation for why the artists in the Song Dynasty did not care about perspective. Shen Kuo (1089), a scholar in the Song Dynasty, said in his book *Meng Xi Bi Tan,* "If you look at the eave from the ground, you can't see the roof. But the artists draw the eave and the roof together. Because they have a real understanding of the house" (p. 137).

Zhang Zai (1075), a Neo-Confucianist in the Song Dynasty, described two kinds of knowledge (Figure 2.12). If people only use senses to observe the world， they will get "knowledge of senses". If people seek *Li* in the world, they will get "knowledge of virtue". (The full definition of *Li* is in Section 2.2.2.1.)

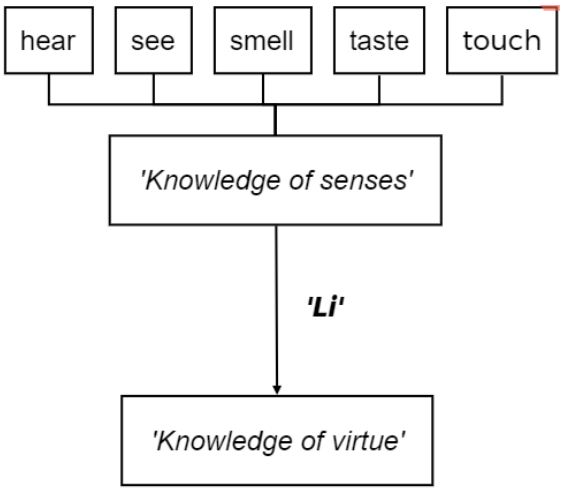

Figure 2.12 *Knowledge of senses* and *Knowledge of virtue*

The artists in the Song Dynasty were deeply influenced by Neo-Confucianism. The space they expressed in their paintings is not an imitation of real space. The artists added personal understandings of the world to their paintings (Jin, 2018). That is why landscape paintings in the Song Dynasty should not be analyzed by perspective (Figure 2.13).

Figure 2.13 An outing (part), Ma Yuan (1140–1225), Song dynasty, The Palace Museum, Beijing

Figure 2.14 Plum and bamboo, an unknown author, Song Dynasty, The Palace Museum, Beijing

Due to the influence of Neo-Confucianism, painters in the Song Dynasty tried to discover morality in the scenery. For example, when painting a plum blossom, the painter thought it was ‘brave’ (Figure 2.14). Since the painter's understanding of the plum blossom, the plum blossom in the painting is different from the real one.

2.3.2.2 Painting techniques

Artists in the Song Dynasty used a method called *Liu Bai* (Fei, 2014). It means to leave blank areas on the painting.

Figure 2.15 Fishing alone, Ma Yuan (1140–1225), Song dynasty, Tokyo National Museum， Japan

The Song Dynasty painter Ma Yuan was good at using this technique. In his famous work *Fishing Alone* (Figure 2.15), Ma Yuan used several wave lines to indicate the lake. Although he did not use ink to draw the lake, viewers can still feel the existence of it.

Liu Bai is inspired by the term *Qi* (The full definition of *Qi* is in Section 2.2.2.1.). Artists in the Song Dynasty believed that *Liu Bai* meant leaving space for *Qi* in the painting (Fei, 2014).

Liu Bai contains a unique beauty in traditional Chinese art. Guo Xi (1080), a famous artist in the Song Dynasty, said in his book *The Beauty of Nature*, "If you want to draw a high mountain, you should not draw the whole mountain. If you want to draw a long river, you should not draw the whole river" (p. 5). That means *Liu Bai* is a technique to make the work more expressive (Figure 2.16).

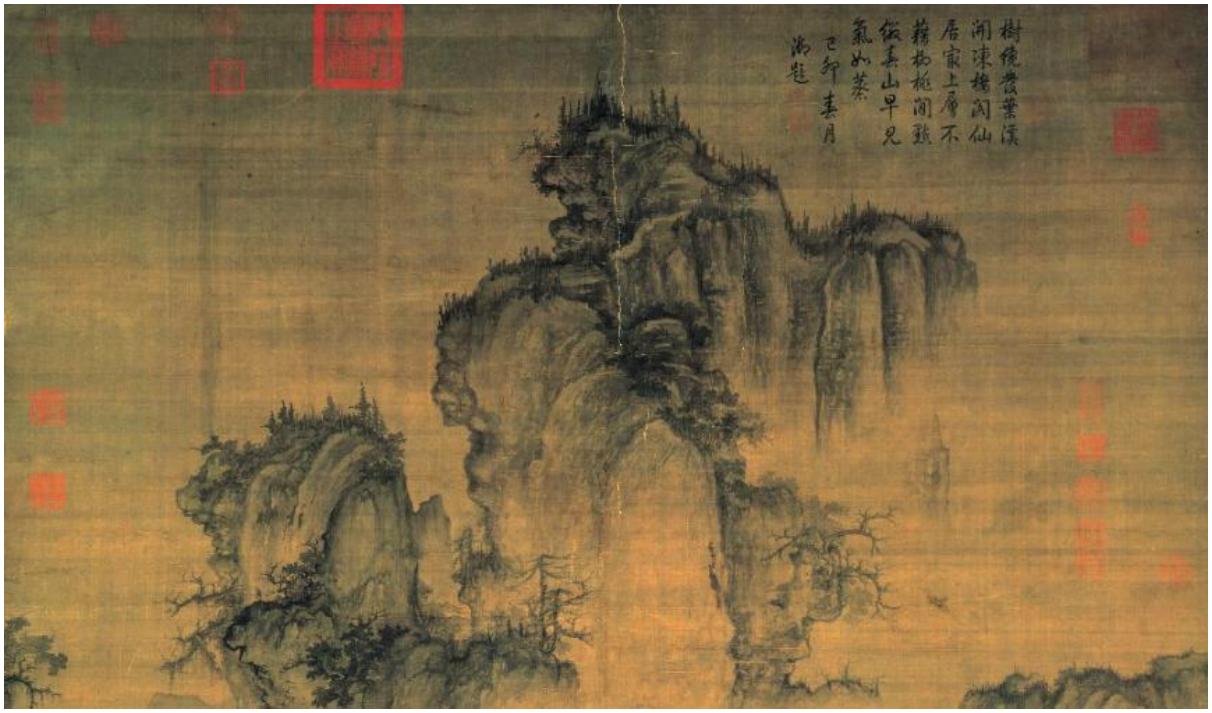

Figure 2.16 Early Spring (part), Guo Xi（1000-1090), Song dynasty, The Palace Museum，Taipei

Gestalt psychology can partly explain this technique (Figure 2.17). The perception of shape requires the grasping of the essential structural features to produce a 'whole', or gestalt (Kahane, 2015). However, gestalt psychology cannot explain the aesthetic of *Liu Bai*.

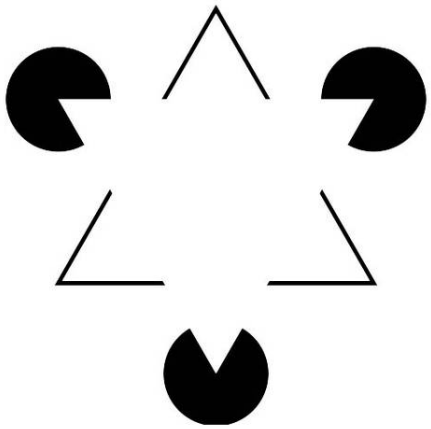

Figure 2.17 Kanizsa Triangle, Gaetano Kanizsa (1955)

The second function of *Liu Bai* is to create a sense of time flowing. Artists in the Song dynasty paid much attention to the time in their paintings. *Liu Bai* is the key to give an impression for the viewers that time is flowing (Fei, 2014).

If all the landscapes in the painting were drawn exactly as a camera image shows, the viewer would lose imagination about the scenery. *Liu Bai* makes it possible for people to imagine the time flowing in the painting. When viewers fixed their eyes on the blank space, they can add their understandings to it and image the dynamics of landscapes (Figure 2.18).

Figure 2.18 Dongting River, Ma Yuan (1140–1225), Song dynasty, The Palace Museum, Beijing

The second technique commonly used by artists in the Song Dynasty was the contrast of different scenery, that is, enhancing the contrast between close-up scenery and distant scenery (He, 2017). For example (Figure 2.19), Xia Gui intentionally enhanced the outline of close-up scenery.

Figure 2.19 Sailboat in a rainstorm, Xia Gui (late 12th–early 13th century), Song dynasty, Museum of Fine Arts, Boston

Guo Xi (1080) introduced a theory named ‘San Yuan’ to analyze the depth of space in the landscape paintings in his book *The Beauty of Nature* (p. 13).

This study uses three figures (Figure 2.20, 2.21 & 2.22) to explain the theory, which represents the ‘San Yuan’ theory of the Song Dynasty paintings. Figure 2.23 shows an example of applying the theory to the Song Dynasty painting.

Figure 2.20 ***Gao yuan***

Figure 2.21 ***Sheng yuan***

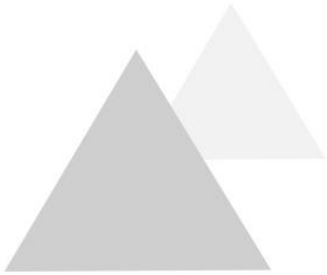

Figure 2.22 ***Ping yuan***

Figure 2.23 A cabin in the forest, Xia Gui (late 12th–early 13th century), Song dynasty, The Palace Museum, Beijing

It should be noted that there is still a big difference between Guo Xi's theory and perspective. Perspective is an imitation of what people see from a specific position and angle. However, Guo Xi's theory is describing a comprehensive experience of observation from different positions and angles.

The Song Dynasty paintings are based on Neo-Confucianism. Artists preferred to paint according to their understandings of the ideal world (Gao, 2019).

2.3.2.3 Evaluation criteria for paintings

Guo Xi (1080) mentioned two principles of evaluation for the Song Dynasty paintings:

- Let the viewers feel they were in the scenery of the painting.
- Make the viewers feel comfortable.

Although artists in the Song Dynasty did not care much about the appearance of nature, good landscape paintings still made the viewer have an immersive experience.

The Song Dynasty paintings are imitations of the ideal world. Good paintings can let people forget the pain in life for a while and feel comfortable.

2.3.2.4 Summary of principles in Song Dynasty Paintings

	Principles in Song Dynasty Paintings
Observation methods	Use a dynamic observing process
	Understand 'the knowledge of virtue'
	Discover morality in the scenery
Painting techniques	*'Liu Bai'* — Leave space for imagination; Feel time flowing
	The contrast of scenery & 'San Yuan' —— Show the depth of space
Evaluation criteria	An immersive experience
	A satisfied ideal world

Organization Observation

Table 2.2 Summary of Principles in Song Dynasty Paintings

The Song Dynasty paintings are based on Neo-Confucianism. The goal of artists in the Song Dynasty is to imitate the ideal world with paintings and make the viewers enjoy the beauty.

In summary, this section shows how artists observe the world and express their understanding of the world in art under the influence of Neo-Confucianism. These principles also can be applied to design. Table 2.2 shows the summary of principles in Song Dynasty paintings and connects with Figure 2.54 in section 2.7 as shown with the colors for Organization and Observation. The green highlights observation methods in Song Dynasty paintings, which are influenced by Neo-Confucianism, so this study

classifies them into the observation principles in Neo-Confucianism. The blue highlights painting techniques in Song Dynasty paintings, which show how people in the Song Dynasty arranged the space in their art works, so these techniques can be classified into the organization principles in Neo-Confucianism.

2.4 The Song Lyrics

2.4.1 Overview of this section

The Song Lyrics from the Song Dynasty were originally written to a certain tune, so they may also be called tuned poetry (Xu, 2013).

Poems are significant in culture. The Song Lyrics contain many principles of Neo-Confucianism. The goal of this section is to understand how Neo-Confucianists express their emotions by poems and summarize some principles in the end. Semiotics provides a new way for analyzing poems. This section will consult *the symbol of feelings* defined by Susanne K. Langer (1953) to help analyze the Song Lyrics.

2.4.2 Principles in the Song Lyrics

2.4.2.1 The *symbol of feelings* in the Song Lyrics

The Song Lyrics are full of metaphors and symbols. The authors usually did not express their feelings directly, which makes it difficult to analyze the Song Lyrics. Therefore, this study uses *the symbol of feelings* to analyze the Song Lyrics.

Langer (1953) said that the symbol has two functions, the first is to indicate what it refers to, and the second is to formalize emotions and subjective experiences for people to understand (see Figure 2.24). Art can be defined as creating *the symbol of feelings*, which means using the second function of the symbol.

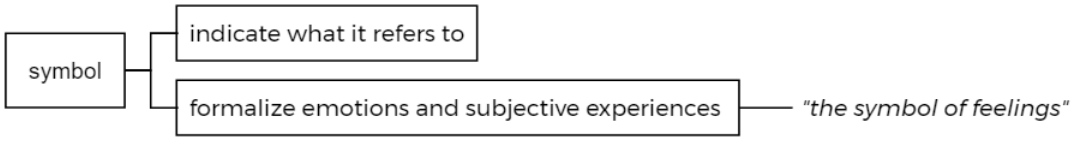

Figure 2.24 The *symbol of feelings*

In Langer's theory, poetry represents a fictional world, and the thing in this fictional world is not just representing its original meaning in the language. It is abstracted into *the symbol of feelings*. To explain it, Langer quoted a poem of the Chinese poet Wei Yingwu (737-791).

A FAREWELL IN THE EVENING RAIN

Is it raining on the river all the way to Ch'u?—

The evening bell comes to us from Nan-king.

Your wet sail drags and is loath to be going

And shadowy birds are flying slow.

We cannot see the deep ocean-gate—

Only the boughs of Pu-kou, newly dripping.

Likewise, because of our great love,

There are threads of water on our faces.

(Bynner, 1929, P. 207)

"A complete subjective situation is created by the things mentioned." Langer continued, "the bell, the shadowy birds, invisible ocean-gate—merge with it, and are consequently gathered up with it into the great love for which the whole poem is weeping" (Langer, 1953, p.215). There are numerous symbols in the Song Lyrics. The next part of this section is to analyze the skills of using them in the Song Lyrics.

2.4.2.2 Writing techniques of the Song Lyrics

2.4.2.2.1 Combination of symbols

In the Song Dynasty, few poets described things in the order of time, place and characters. On the contrary, they used a combination of parts to show the whole scenery in a free order (Xin, 2015). The author of the following poem combined different kinds of symbols to express the joy of harvest (Figure 2.25).

Tune: The Moon over the West River

Title: Home-going at Night from the Yellow Sand Bridge

Xin Qiji (1140-1207), Song Dynasty

*Startled by **magpies** leaving the branch in **moonlight**,*

I hear cicadas shrill in the breeze at midnight.

*The **ricefields**' sweet smell promises a bumper year;*

*Listen, how **frogs**' croaks please the ear!*

*Beyond the clouds seven or eight **stars** twinkle;*

*Before the hills two or three **raindrops** sprinkle.*

There is an inn beside the village temple.

Look! The winding path leads to the hut beside the brook.

(Xu, 2013, p.176)

Figure 2.25 Combination of symbols to represent the joy of harvest

Xin used different kinds of symbols in the scene of harvest. These symbols represent not only their original meanings in the language, but also the joy of harvest.

2.4.2.2.2 Replacement of the meaning

Sometimes the poet changed the meaning of symbols in the Song Lyrics (Xin, 2015). In this untitled lyric below, Li Yu used ‘rosy paint’ to describe the palace paint, but it is not hard to understand another meaning of it, the human face, which was also aging like the paint (Figure 2.26).

Tune: The Beautiful Lady Yu

Untitled lyric

Li Yu (937-978), Song Dynasty

When will there be no more moon and spring flowers;

For me who had so many memorable hours?

My attic which last night in vernal wind did stand.

Reminds cruelly of the lost moonlit land.

Carved balustrades and marble steps must still be there,

But rosy paint cannot be as fair.

If you ask me how much my sorrow has increased,

Just see the over brimming river flowing east!

(Xu, 2013, p.21)

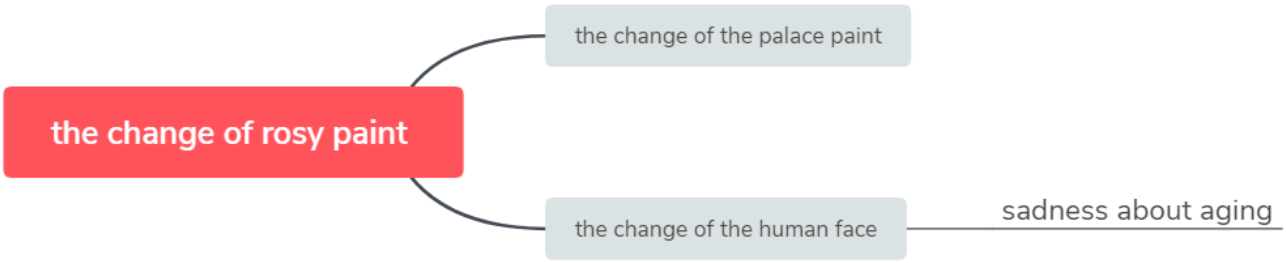

Figure 2.26 Replacement of the meaning to represent sadness about aging

Li used the change of rosy painting to represent the change of the human face, then expressed his sadness about aging.

2.4.2.2.3 Subjective feelings in symbols

Sometimes, it is difficult to divide the Song Lyric into the subjective part and objective part (Xin, 2015). For example, in the lyric below, the poet used symbols like

cuckoo and water to express subjective feelings (Figure 2.27). As a result, these symbols seem to have personalities.

Tune: Song of a Fair Maiden

Title: Midnight Song

He Zhu (1052-1125), Song Dynasty

The moon at midnight

Shines in mid-court on pear blossoms white.

Pear blossoms white

Can't stand the flood

Of cuckoo's tear and blood.

My lord, why should no message come from you?

The mulberries-shaded lanes have swallowed our adieu.

Swallowed our adieu,

The water seems to sob in streams.

(Xu, 2013, p.95)

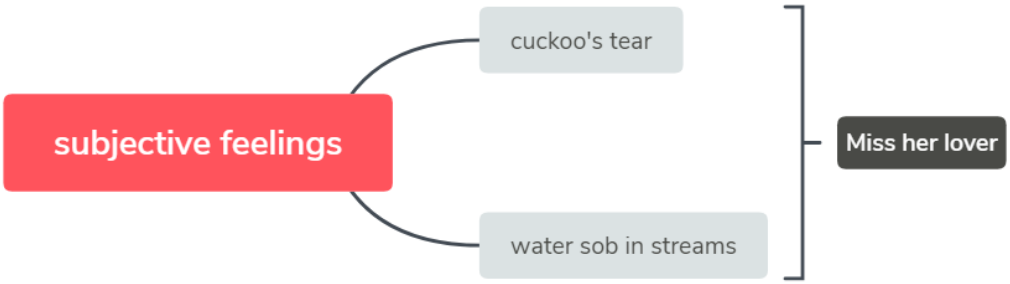

Figure 2.27 Subjective feelings in symbols

He Zhu used the cuckoo's tear and the cry of water to represent that the character in the lyric was missing her lover.

2.4.2.2.4 *Liu Bai* in the Song Lyrics

Liu Bai, as mentioned before in Section 2.3.2.2, can broadly be defined as leaving room for imagination (Figure 2.28). In the Song Lyrics, it means not to express the author's feelings directly. For example, in the lyric below, Su Shi used the endless river to compare with the heroes in history. However, he did not talk about feelings about the river, leaving room for reader's imagination (Figure 2.29). If Su Shi did write down his feelings about heroes, perhaps this lyric would not be famous in China.

Tune: Charm of a Maiden Singer

Untitled Lyric (part)

Su Shi (1037-1101), Song Dynasty

The endless river eastward flows;

With its huge waves are gone all those

Gallant heroes of bygone years.

Younger than they, I have my hair turned grey.

O moon, I drink to you who have seen them on the stream.

(Xu, 2013, p.68)

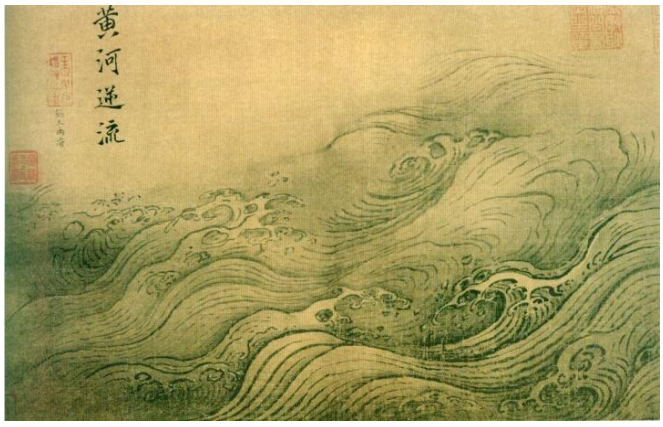

Figure 2.28 Counter current of the Yellow River, Ma Yuan (1140–1225), Song Dynasty, The Palace Museum, Beijing

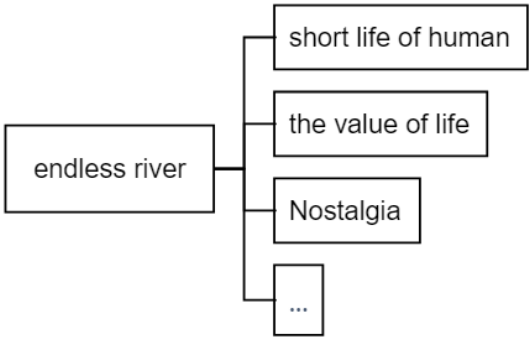

Figure 2.29 *Liu Bai* in the Song Lyrics

2.4.2.3 The formation of symbols in the Song Lyrics

2.4.2.3.1 Common symbols in the Song Lyrics

Some of the symbols in the Song Lyrics were frequently used. They also have some fixed meanings. This study attempts to make lists of the most frequently used symbols in six categories based on *300 Song Lyrics* (Xu, 2013).The purpose of the lists is to find the relationship between symbols and meanings in the Song Lyrics. Figure 2.30 shows the process. This study uses Replace Pioneer to Count the number of symbols in 300 Song Lyrics. Then, the symbols used more than 30 times (Table 2.3) are divided into six categories. Tables 2.4-2.9 represent six categories of symbols frequently used in the Song Lyrics and their most common meanings.

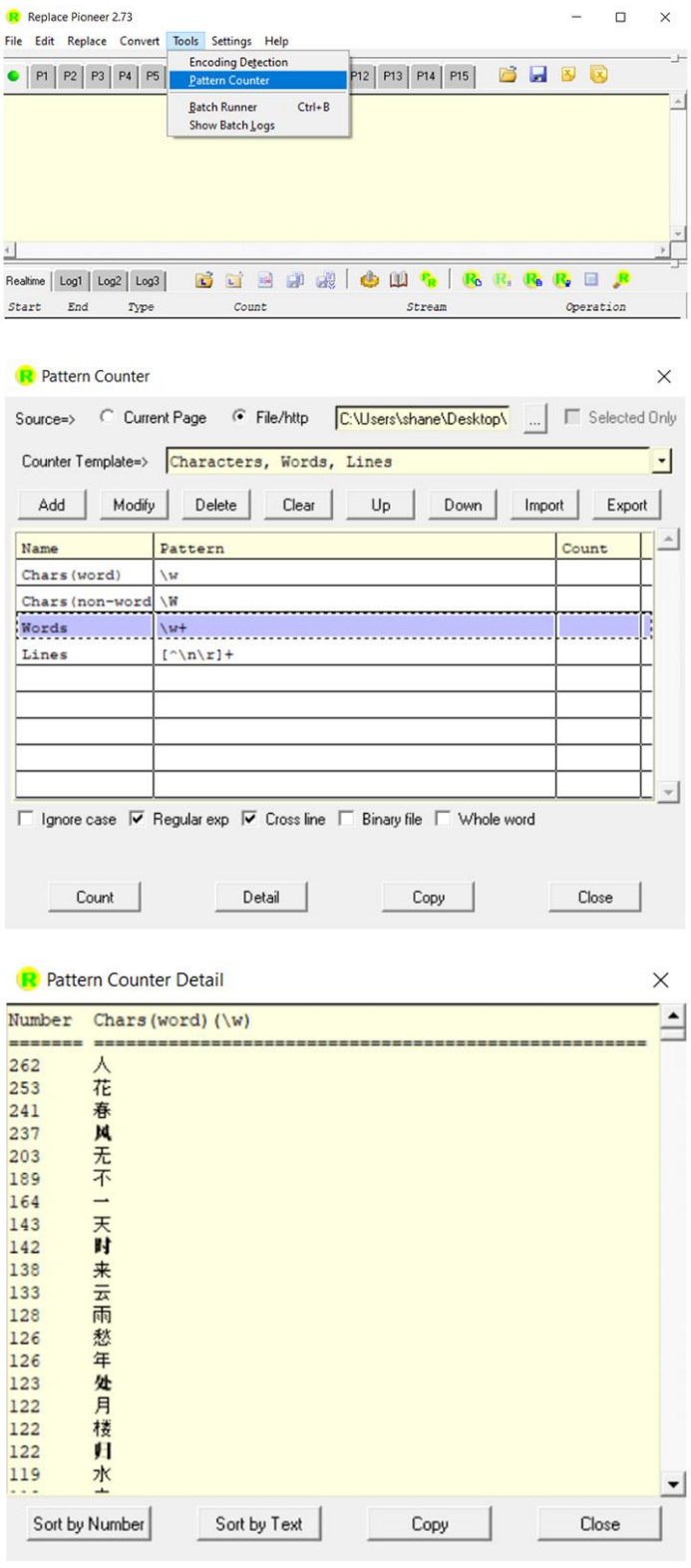

Figure 2.30 The process of making lists of the most frequently used symbols in 300 Song Lyrics

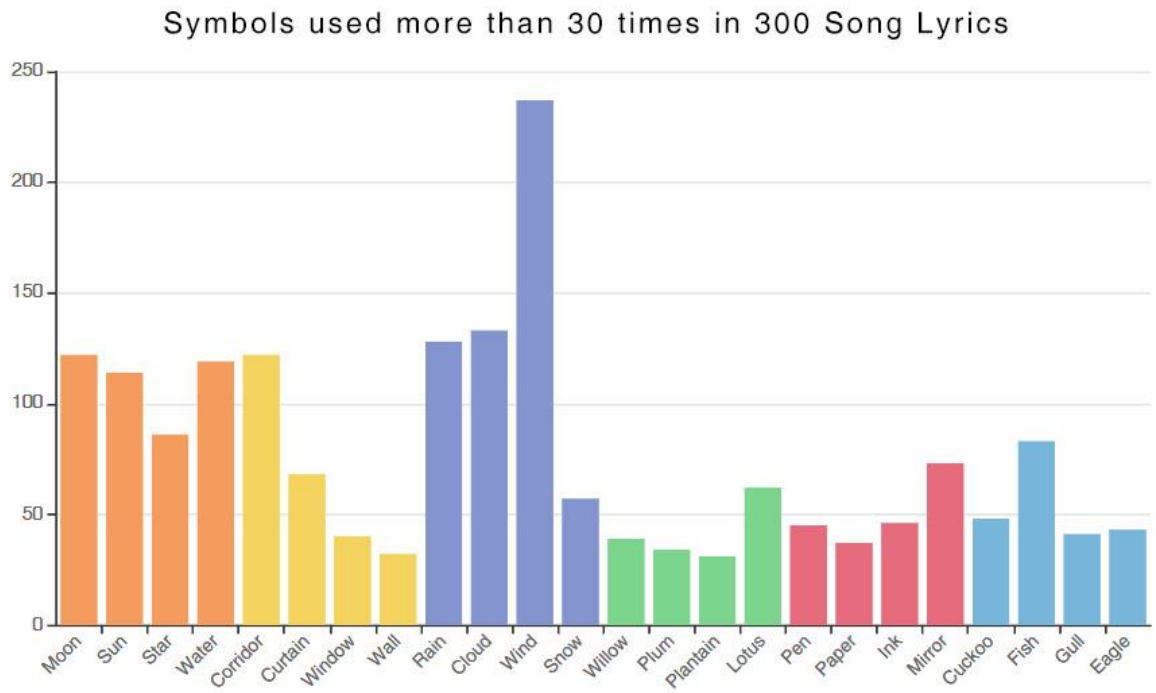

Table 2.3 The list of the most frequently used symbols in 300 Song Lyrics

symbols about time	
	meaning
moon	missing home
	sadness
	love
sun	human life
	fate
	power
star	good time
	ideal world
water	history
	time flying

symbols about space	
	meaning
corridor	fate
	short happiness
curtain	dream
	captivity
window	memory
	outer world
wall	distress
	desire

Table 2.4 Symbols about time & Table 2.5 Symbols about space

symbols about weather	
	meaning
rain	beauty
	sadness
cloud	calm
	fate
wind	variety
	impermanence
snow	loneliness
	purity

symbols about plant	
	meaning
willow	parting
	friendship
plum	solitary
plantain	frustrated
lotus	unsullied

Table 2.6 Symbols about weather & Table 2.7 Symbols about plant

symbols about daily supplies	
	meaning
pen	creative
paper	love
	friendship
ink	imagination
mirror	oneself
	fictional world

symbols about animal	
	meaning
cuckoo	sadness
fish	freedom
gull	lonliness
eagle	success

Table 2.8 Symbols about daily supplies & Table 2.9 Symbols about animal

2.4.2.3.2 The relationship between symbols and meanings in the Song Lyrics

Some symbols have physical characteristics associated with particular feelings (Figure 2.31). For example, the constant flowing of river made the poets imagine the progress of history. Under the influence of Neo-Confucianism, the poets sought *Li* in

everything（the definition of *Li* is in section 2.2.2.1), so they were good at finding physical characteristics in things related to some emotions or morality.

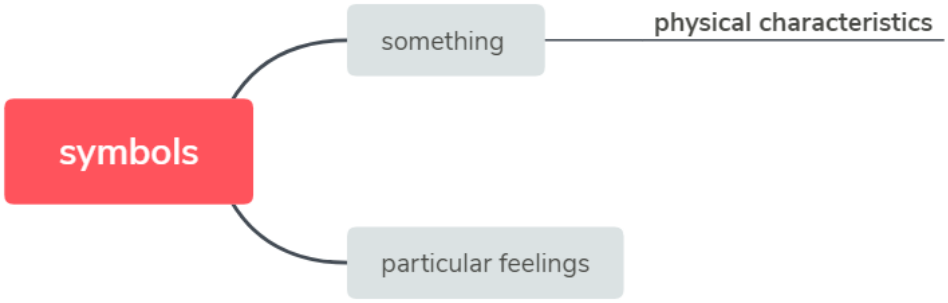

Figure 2.31 Physical characteristics associated with particular feelings

The poets in the Song Dynasty gave special meanings to some things after using them. For example, after a poet wrote a letter to his or her best friend, the letter paper become the symbol of their friendship. This kind of symbols are also common in the Song Lyrics, whose meanings are based on their functions (Figure 2.32).

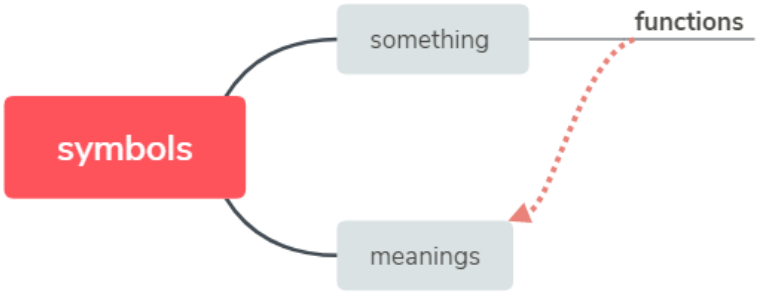

Figure 2.32 Meanings based on their functions

2.4.2.4 Summary of principles in the Song Lyrics

	Principles in the Song Lyrics
The elements of the Song Lyrics	*"the symbol of feelings"*
Writing techniques	Combination of symbols
	Replacement of the meaning
	Subjective feelings in symbols
	"Liu Bai" —— not to express the author's feelings directly
The formation of symbols	Physical characteristics associated with particular feelings
	Meanings based on their functions

Organization Observation

Table 2.10 Summary of principles in the Song Lyrics

The numerous symbols used in the Song Lyrics show the attitude of people in the Song Dynasty to the world. They tried to find the emotions and morality in everything, which is deeply influenced by the Neo- Confucianism. Table 2.10 shows the principles in the Song Lyrics and connects with Figure 2.54 in section 2.7 as show with the colors for Organization and Observation.

The relationship between the writing techniques of the Song lyrics and Neo-Confucianism is clear. The poets preferred to use a dynamic way to observe the world and cared about leaving room for readers' imagination in the lyrics.

2.5 The Song Dynasty gardens

2.5.1 The introduction of the Song Dynasty gardens

Song Dynasty was the peak time of Chinese garden design (Fei, 2014). Many intellectuals were passionately interested in building gardens, leaving some valuable records about garden art. There are still many relics of the gardens in southern China, especially in Suzhou (Huang, 1994).

2.5.2 Principles in the design of the Song Dynasty Gardens

2.5.2.1 The space in the Song Dynasty Gardens

There are similarities between the gardens and the paintings of the Song Dynasty. They both use a dynamic way to analyze the space, which makes it hard to analyze them with three-dimensional axis and perspective (He, 2017). The difference between the Song Dynasty gardens and European gardens can show it clearly (Figure 2.33 & Figure 2.34).

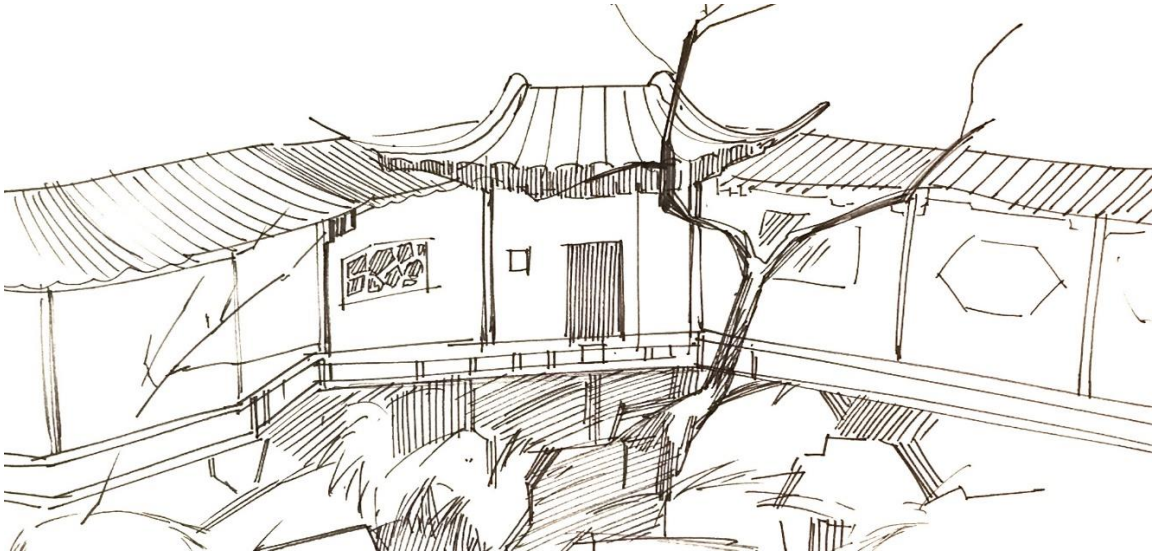

Figure 2.33 The corridor of the Canglang Pavilion (1041), Suzhou, China (adapted from Huang, 1994)

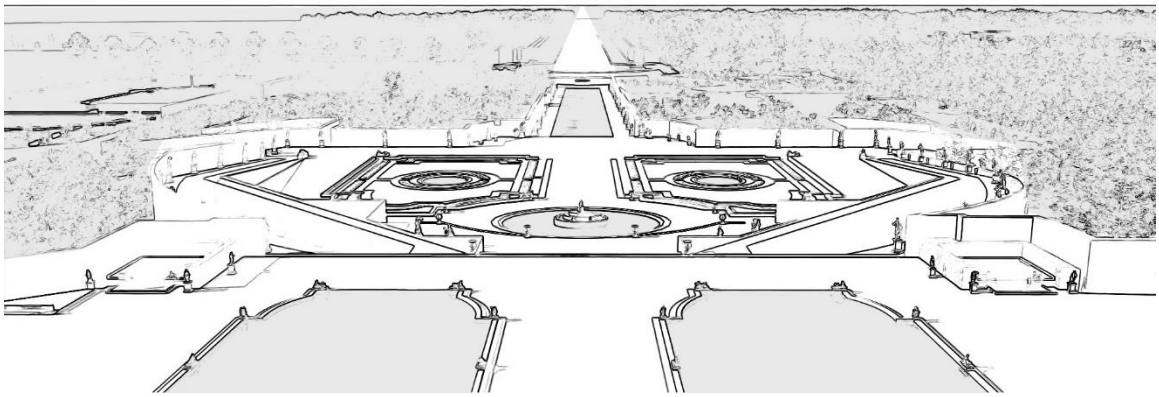

Figure 2.34 Parks of Versailles (1678), France
(adapted from Versailles Officials website, 2020)

2.5.2.2 Medium, Substances, Surfaces

Since it is hard to analyze the Song Dynasty gardens with perspective and three-dimensional axis, where should researchers start? This section attempts to use concepts in ecological psychology as a tool for analyzing the Song Dynasty gardens.

In the theory of ecological psychologist Gibson (1979), human's cognition of the environment can be divided into three parts: *medium*, *substances*, and *surfaces* (Figure 2.35).

Gibson uses the term *medium* to refer to the manner in which something lives or acts. For example, land animals live in the air, and marine life live in the water.

For Gibson, *substance* means the solid which has a certain hardness and maintains the same shape. For example, the stratum on the seafloor is "substance".

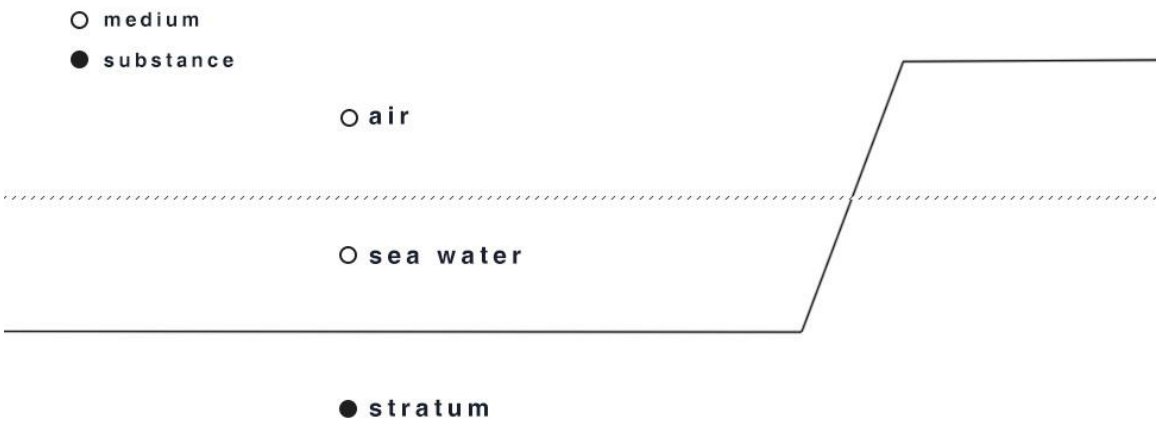

Figure 2.35 medium and substance (adapted from Gibson, 1979)

The term *surface* means the interface between *medium* and *substance* in Gibson's theory (Gibson,1979). For example, the ground is *surface* between air and stratum (Figure 2.36). Gibson mentioned that *surface* has textures. The textures imply the structure of the *substance* and show the interaction between *medium* and *substance*.

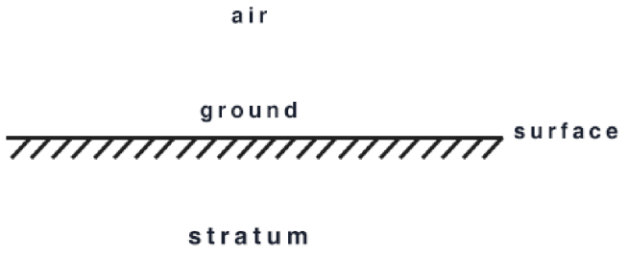

Figure 2.36 Surface (adapted from Gibson, 1979)

In human vision, *surface* has an outline. The edge between surrounding *medium* and *surface* can be clearly observed. As shown in Figure 2.37, the perception of contours is important for people to recognize the distance between objects (Gibson, 1979).

Figure 2.37 contours and distance between objects (adapted from Gibson, 1979)

The terms *medium*, *substance* and *surface* can better simulate the way people observed the world in the Song Dynasty. The next part of this section is to analyze the Song Dynasty Gardens based on these terms.

2.5.2.3 The visual guidance in the Song Dynasty gardens

Path restriction, visual field restriction, and visual depth are three methods of visual guidance in the Song Dynasty gardens.

Through the combination of doors, holes and corridors, the touring route in the Song Dynasty garden is restricted (Figure 2.38). The designers of the Song Dynasty gardens hoped that visitors would enjoy the garden's beauty in the same direction or even the same angle as them (Cui, 2014).

Figure 2.38 Touring route of the Canglang Pavilion (1041) (adapted from Huang, 1994)

Similar to the visual field restriction in the Song Dynasty gardens, a painter needs to choose the size of the paper first to pursue a suitable composition. In the garden, windows, holes, and doors have the function to regulate the view of tourists (Jin, 2018). This also shows that the designers paid attention to the contour of the surface (Figure 2.39 & Figure 2.40).

Figure 2.39 The round door in Canglang Pavilion (1041), Photographer: Chen Xiao

Figure 2.40 The window in Canglang Pavilion (1041), Photographer: Chen Xiao

It is common to use the contrast of the foreground, middle scene, and back scene in the Song Dynasty gardens to create visual depth as shown in Figure 2.41. Similar techniques are also used in the Song Dynasty paintings (see section 2.3.2.2 for details).

Figure 2.41 Visual depth in Canglang Pavilion (1041), Photographer: Yang Yu

These methods of visual guidance were collectively called *shifting scenes* (Jin, 2018). It means every time the tourist takes a step, he or she can enjoy new scenery. Under the influence of Neo-Confucianism, people always observe things dynamically.

2.5.2.4 Landscape design in the Song Dynasty Gardens

The designers used the parts to imply the whole (Fei, 2014). There are often some mini waterfalls in the Song Dynasty gardens, or a small lake, a few small rockery stones (Figure 2.42). These miniature landscapes only simulate a part of the vast natural scene. But tourists still can enjoy them according to their own imagination. This method is similar to the combination of symbols in the Song Lyrics (see section 2.4.2.2.1 for details).

Figure 2.42 Artificial waterfalls, Lion Forest Garden (1342), Suzhou, China, Photographer: Nicholas Zhang

Liu Bai, as mentioned in the sections of painting and lyrics, is a method to leave room for imagination, which is also used in the design of the Song Dynasty gardens (Figure 2.43). *Liu Bai* reflects the term *Qi* in Neo-Confucianism (see section 2.4.2.2.1 for

the full definition of *Qi*). From the perspective of Neo-Confucianism, *Qi* need enough space to flow like air. A garden without *Qi* flowing in it is not a good one (Fei, 2014).

Figure 2.43 The white wall in Canglang Pavilion (1041), Suzhou, Photographer, Zeqi Liu

If using the concept of medium, *Liu Bai* could refer to retain an amount of medium in the scenery, which provide more possibilities for the scenery. For example, in the snow scenery shown in Figure 2.44, if the garden does not leave enough space for the lake, the snow will lose its beauty.

Figure 2.44 Master of Nets Garden (1127), Suzhou, Photographer: Leon

Liu Bai is also an effective way to express time changing in the Song Dynasty gardens. The change of seasons can be reflected by the change of scenery in the medium.

2.5.2.5 The morality in the Song Dynasty Gardens

The intellectuals in the Song Dynasty sought for *Li* in everything (see section 2.4.2.2.1 for the full definition of *Li*). Therefore, they considered morality in the landscapes when designing gardens.

For example, the rockery and lakes in the Song Dynasty Gardens contain the designer's ideal. Confucius (770 – 479 BC), the founder of the Confucianism, said in his book *Lun Yu*, "The wise enjoy the waters, the benevolent enjoy the mountains" (Yang, 2017, p.29). It had a big influence on Neo-Confucianism in the Song Dynasty. Different combinations of landscapes suggest different moralities. Similarly, planting lotus in the garden meant that the garden owner was seeking for an unsullied character (Figure 2.45).

Figure 2.45 Lotus on the lake, Master of Nets Garden (1127), Suzhou, Photographer: Hugh Ardoin

Based on Neo-Confucianism, the designers of the Song Dynasty gardens were seeking for an ideal world and ideal personalities, which made the landscapes in the Song Dynasty gardens have both aesthetic meanings and moral meanings (Cui, 2014).

2.5.2.6 Summary of design principles in the Song Dynasty Gardens

	Design principles in the Song Dynasty Gardens
Visual Guidance	Path restriction
	Visual field restriction
	Visual depth —— the layers of scenes
Landscape design	Use parts to imply the whole
	"Liu Bai" —— retain an amount of "medium" in the scenery
Morality in the Garden	Consider morality in the landscapes
	Create an ideal world

Organization Expression

Table 2.11 Design principles in the Song Dynasty Gardens

The design principles of the Song Dynasty Gardens reflect the influence of Neo-Confucianism. The designers paid attention to *Li* and *Qi* in the gardens. Table 2.11 represents the design principles in the Song Dynasty Gardens and the color key at the bottom shows how they connect to Figure 2.54 in section 2.7.

The next section is to analyze the relationship between ceramics in the Song Dynasty and Neo-Confucianism.

2.6 The Song Dynasty ceramics

2.6.1 Overview of this section

The Song Dynasty was the peak time for Chinese ceramics art (Kai, 2012). The remaining ceramics of the Song Dynasty are valuable both in history and aesthetics. The goal of this section is to find the relationship between Neo-Confucianism and the Song Dynasty ceramics by summarizing the design principles of the ceramics.

2.6.2 Design principles of the Song Dynasty ceramics

2.6.2.1 Forms of the Song Dynasty ceramics

Figure 2.46 The Song Dynasty Ceramics (960-1279), The Palace Museum, Beijing

Neo-Confucianism encourages frugality. Therefore, the designers paid more attention to the refinement of the ceramics' outline instead of decoration (Figure 2.46). This is obvious in the comparison with the ceramics of the Tang Dynasty (618-907) as shown in Figure 2.47.

Figure 2.47 The Tang Dynasty Ceramics (618-907), The Palace Museum, Beijing

Previous studies about the Song Dynasty Ceramics focused on the mathematical analysis of the contours. However, they did not mention the thinking of people in the Song Dynasty. This study pays attention to people's understanding of design under Neo-Confucianism, and how this understanding influenced the shapes of the Song Dynasty ceramics.

As mentioned in section 2.5, people in the Song Dynasty cared about the boundary between medium and substance in design. In their opinion, contour is not an abstract shape, but the result of the interaction between substance and medium. Based on this view, form of the Song dynasty ceramic is the result of the interaction between air and ceramic. Figure 2.49 shows the interaction between substance and medium on Spring

vase (Figure 2.48). In terms of Neo-Confucianism, it is called the flowing of *Qi* (see section 2.2.2.1 for the full definition), which is a traditional Chinese way of thinking.

Figure 2.48 Spring vase, Song Dynasty, The Palace Museum, Beijing

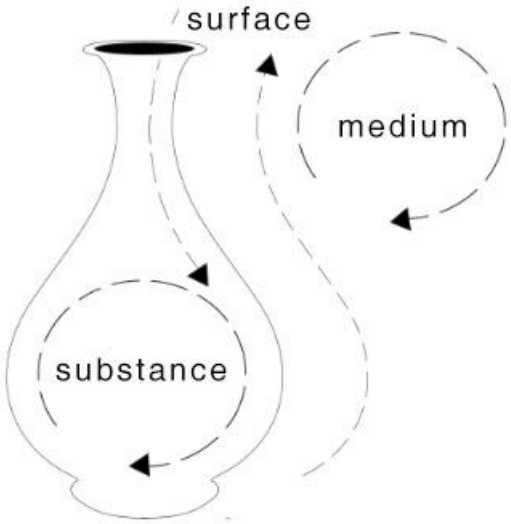

Figure 2.49 Interaction between substance and medium (adapted from Spring vase, The Palace Museum, Beijing)

2.6.2.2 Colors of the Song Dynasty ceramics

The Song Dynasty ceramics usually used low saturation colors. Under the influence of Neo-Confucianism, the intellectuals in the Song Dynasty worked to control their desires. They did not want to express their emotions directly, which was also reflected in the Song Lyrics. Figure 2.50 represents colors chosen from the image collection in Figure 2.46. People in the Song Dynasty preferred to choose humble grayness (Kai, 2012).

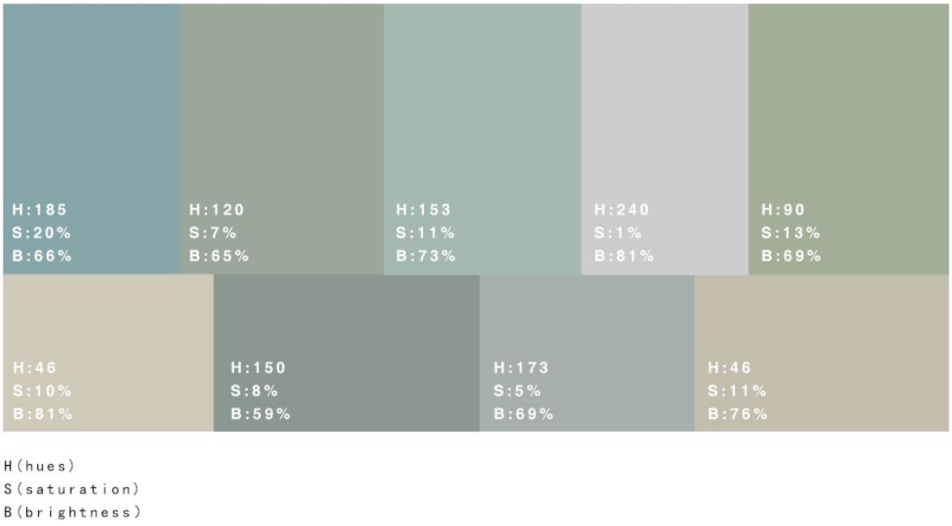

Figure 2.50 Color table of the Song Dynasty Ceramics (based on The Song Dynasty Ceramics, The Palace Museum, Beijing)

2.6.2.3 Textures of the Song Dynasty ceramics

People in the Song Dynasty were fond of the natural cracks in the making process of ceramics (Figure 2.51). They named it *ice crack* (Kai, 2012). The Neo-Confucianists preferred natural beauty, which deeply influenced the appreciation of the beauty in the Song Dynasty.

Figure 2.51 Sky Color Bowl, Song Dynasty, The Palace Museum, Beijing

2.6.2.4 Meanings of the Song Dynasty Ceramics

The Song Dynasty ceramics usually represent the ideal world. For example, the ceramic plate brought a sense of ritual to the dining (Figure 2.52). People felt calm when using it. The ceramics also represent the morality of the owner (Kai, 2012). As shown in Figure 2.53, the Moon White vase represents the honest of the owner.

Figure 2.52 DingYao white plate, Song Dynasty, The Palace Museum, Beijing

Figure 2.53 Moon White vase, Song Dynasty, The Palace Museum, Beijing

2.6.2.5 Summary of the design principles in the Song Dynasty ceramics

	Design principles in the Song Dynasty ceramics
Form	Less decoration
	The flowing of "Qi"—Consider the interaction between air and ceramic
Color	Use single color
	Use humble greyness
Texture	Use the nature texture
Meaning	Represent the ideal world
	Represent the morality

Expression Observation

Table 2.12 design principles in the Song Dynasty ceramics

The ceramic art in the Song Dynasty was deeply affected by Neo-Confucianism. Table 2.12 shows how Neo-Confucianism thought can be applied to product design, which is valuable for this study. The colors in this table relate to the design principles in Neo-Confucianism summarized in Figure 2.54.

2.7 Arrangement of the design principles in Neo-Confucianism

In summary, there are strong links between Neo-Confucianism and design in the Song Dynasty. The next step is to arrange the principles in Neo-Confucianism so that they can be applied to product design. For the purpose, this study divided the principles mentioned in Chapter Two into three parts: observation, organization, and expression. These were identified through the analyses of paintings, poems, gardens, and ceramics in Song Dyansty. Those analyses were shown in Table 2.2, Table 2.10, Table 2.11, and Table 2.12. The color scheme used in Figure 2.54 was used in those tables to build the relationship between the design principles summarized here and the principles in those tables.

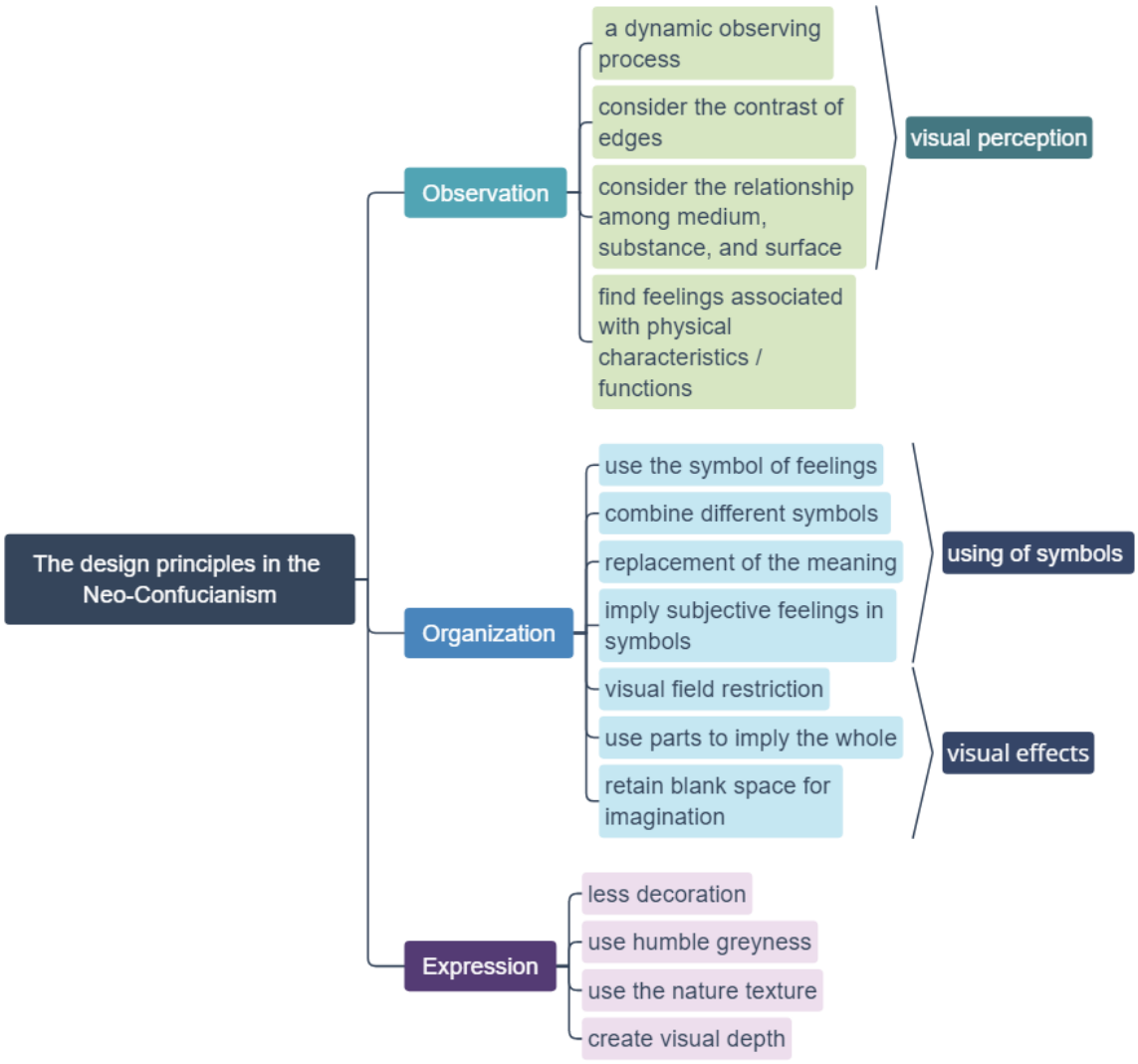

Figure 2.54 The design principles in Neo-Confucianism

By now, a foundation has been built for applying Neo-Confucianism thought on product design. The next chapter is about how to apply these principles to a suitable design flow. All details will be shown in it.

Chapter 3: Development of the Design Guideline

This chapter will show Neo-Confucianism Thought Application (NTA) process to improve the product design. Figure 3.1 shows the undergraduate industrial design process used in one project at Auburn University (Thomas, Windham, Sethi & Arora, 2020).

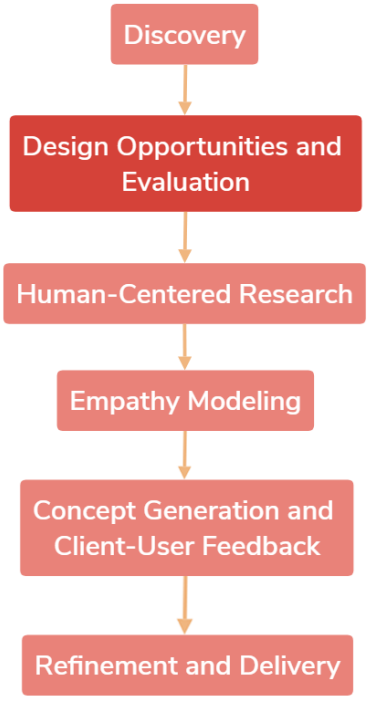

Figure 3.1 An undergraduate industrial design process at Auburn University (adapted from Thomas, Windham, Sethi & Arora, 2020)

The goal of the NTA process is to find more design opportunities by using the design principles in Neo-Confucianism, so in the design process illustrated in Figure 3.1 it is focused on Step 2: Design Opportunities and Evaluation.

For example, the guideline can be applied to the first step in the double diamond model created by Design Council of the UK (Figure 3.2). The NTA process can help designers use Neo-Confucianism thought to find design opportunities.

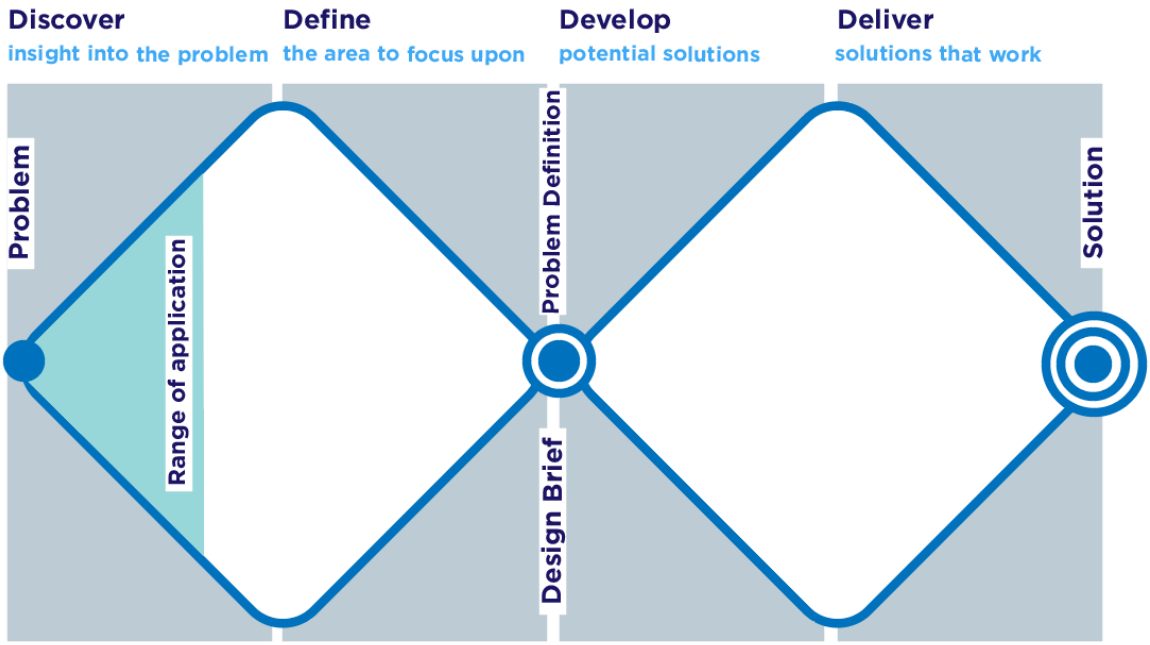

Figure 3.2 Double diamond model created by Design Council (adapted from Design Council)

Storytelling can make users better understand the products. In the process of product design, storytelling can also bring more inspiration to designers (Sethi, 2015). It is an important method for innovation (Dahlström, 2019). In Neo-Confucianism, storytelling plays an important role as well. People in the Song Dynasty would set a story before painting and designing. Su Shi (1037-1101), a famous poet of the Song Dynasty, said, “there is painting in poetry, and there is poetry in painting” (Bai, 2016, p. 54) The Song Dynasty poems contained unique story forms that reflected the influence of Neo-Confucianism, which shows that people in the Song Dynasty attached importance to stories in their poems (Sheng, 2019).

Since there are lots of metaphors and symbols in the Song Dynasty design, this study refers to the design flow created by Klaus Krippendorff (2005), which is based on using stories and metaphors for design (Figure 3.3). Figure 3.4 shows how the design principles in Neo-Confucianism are combined with the design flow.

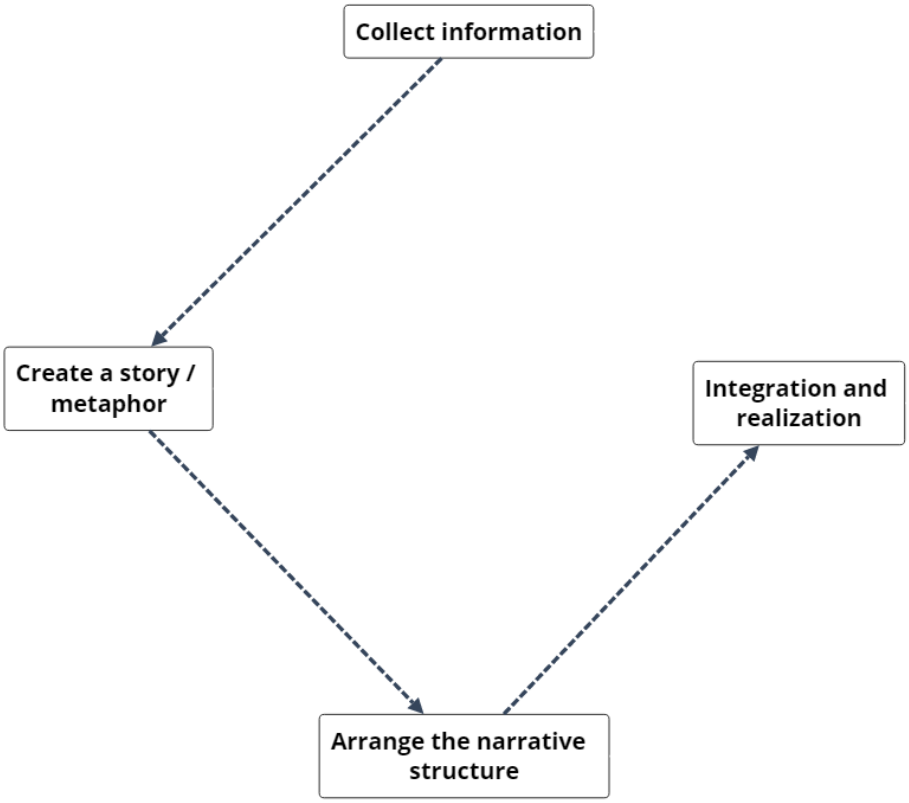

Figure 3.3 The design flow created by Klaus Krippendorff (adapted from Krippendorff, 2005)

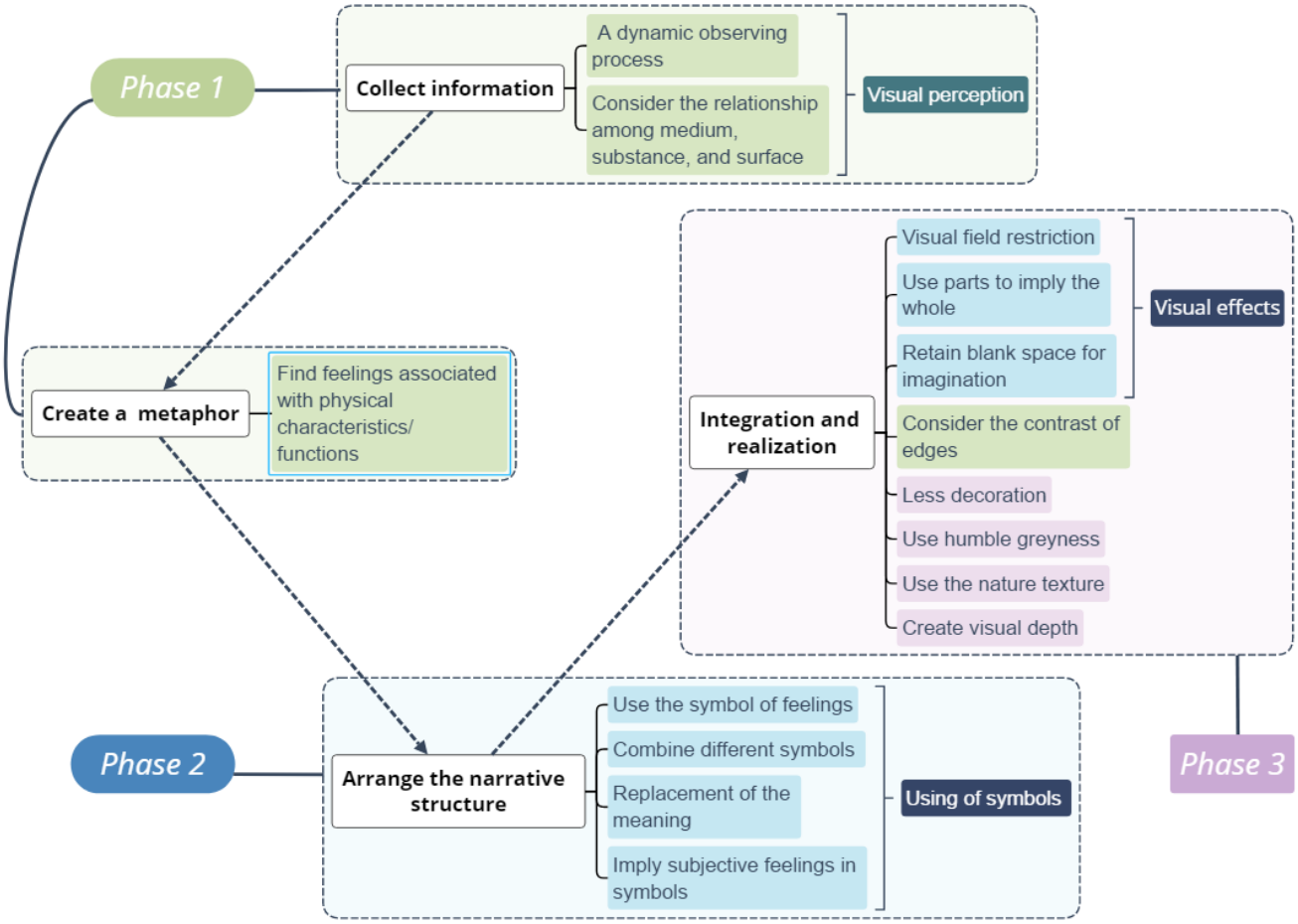

Figure 3.4 The structure of design process using principles in Neo-Confucianism

Based on the framework shown in Figure 3.4, the NTA process can be divided into three phases: preparation for creating a story/metaphor, arrangement of the narrative structure, and expression (Figure 3.5).

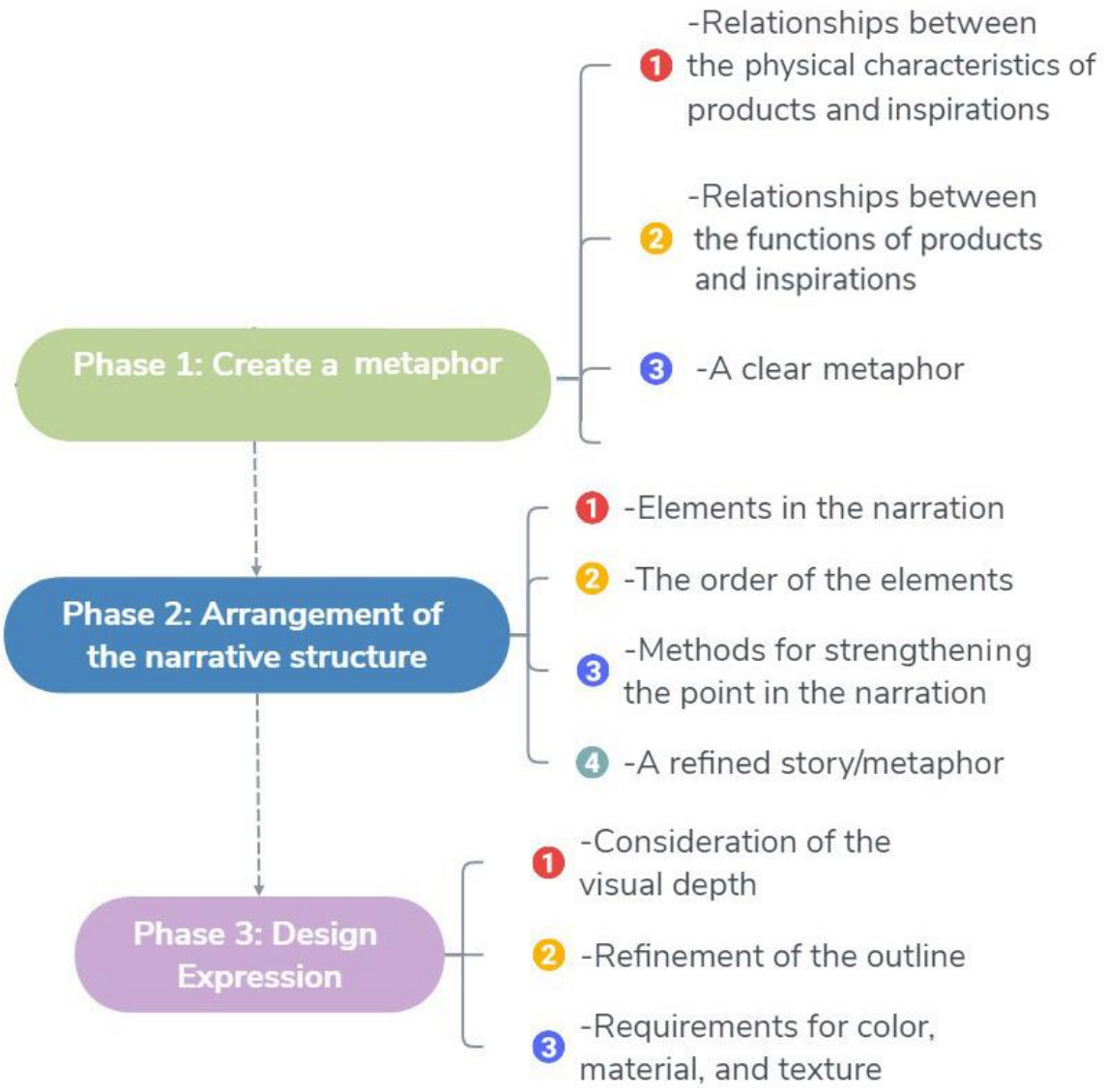

Figure 3.5 The Flow Chart of the NTA process

3.1 Phase 1: Preparation for creating a metaphor

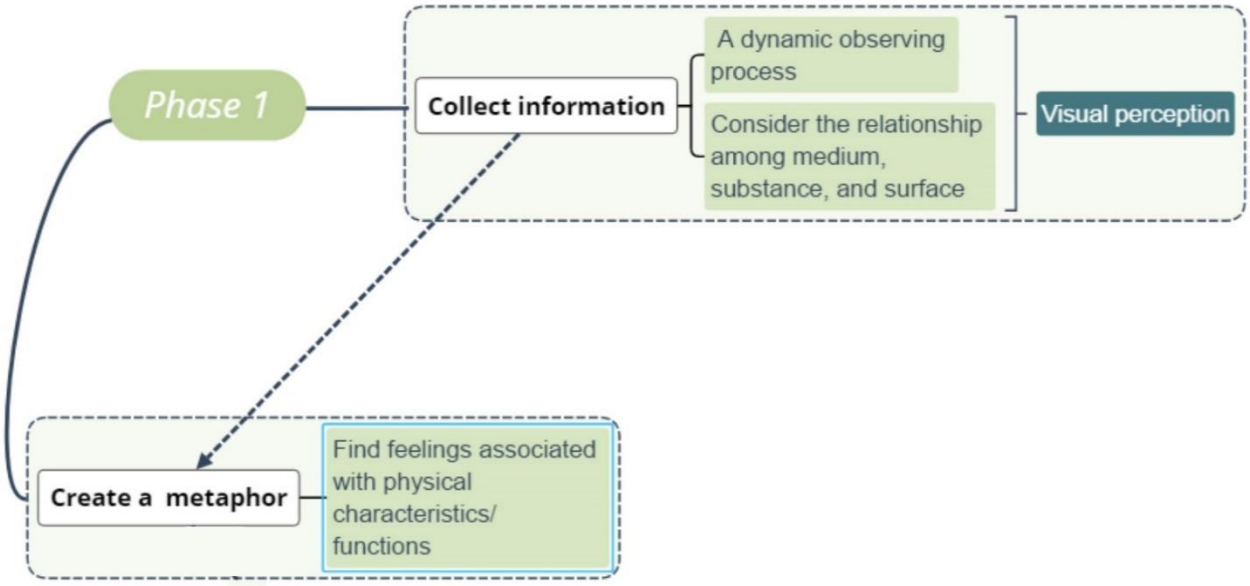

Figure 3.6 Design principles of Neo-Confucianism in Phase 1

The goal of Phase 1 is to create a metaphor about the product. Metaphor means an expression, often found in literature, that describes a person or object by referring to something that is considered to have similar characteristics to that person or object (Cambridge Dictionary, 2020). Under Neo-Confucianism, people in the Song Dynasty cared about the implications in everything. Using metaphors is an important design principle in Neo-Confucianism. Phase 1 is based on the observation methods of Neo-Confucianism (Figure 3.6). Designers should use a dynamic observing process, considering the relationship among medium, substance, and surface when collecting information. In addition, designers need to find feelings associated with physical characteristics or functions when creating a metaphor.

3.1.1 Collection of information

3.1.1.1 Observation in the physical characteristics of products

Designers should observe the physical characteristics of products and find some key points that can relate to natural phenomena, products or some feelings to use as their points of inspiration.

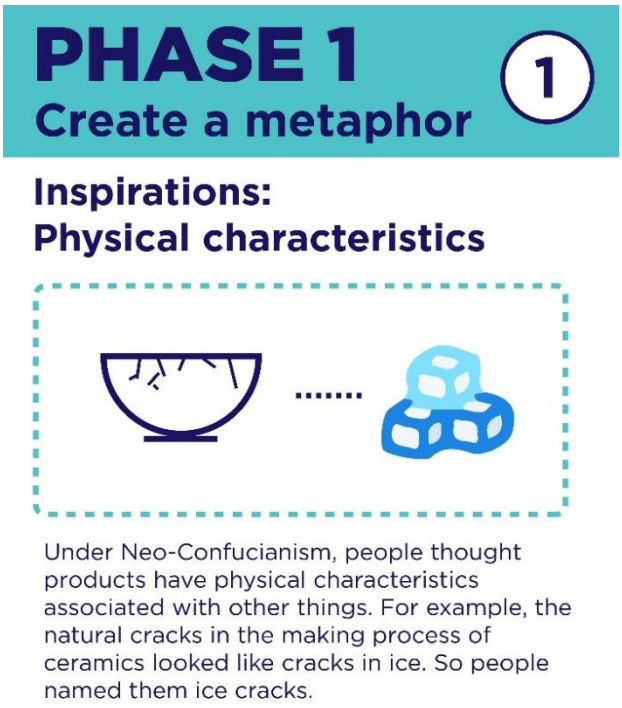

Figure 3.7 Example for observing the physical characteristics of products

Figure 3.7 shows an example for observing the physical characteristics of products in Song Dynasty. This type of design method is an important first step in recording a designer's observation in the NTA method. This part of work will help designers collect more information for creating a metaphor. Designers should pay more attention to the details of products. For example, the smell of the product reminds people of spring flowers.

3.1.1.2 Observation of the product's functions

Figure 3.8 Example for observing the product functions

Based on Neo-Confucianism, everything has an implicit meaning. Therefore, designers should find relationships between the functions of the product and inspiration. Figure 3.8 shows an example for this step.

Figure 3.9 Exercise for finding the relationship between the product and the surrounding space

In addition, designers should not only care about the product itself, but also be concerned the relationship between the product and the surrounding space, which is an important design principle in Neo-Confucianism. Figure 3.9 shows an exercise of doing this.

3.1.2 A clear metaphor

To create a clear metaphor, designers should use a sentence or two, or two or three pictures to summarize their observation of the product. It provides benefits, such as narrowing down the scope of design and letting the designers choose what they want to do most.

Figure 3.10 shows the template of using two methods to record the story or metaphor. The first one is using the simplest sentence which contains a subject, its

predicate, and an object. The second one is using two pictures to explain the relationship in the metaphor.

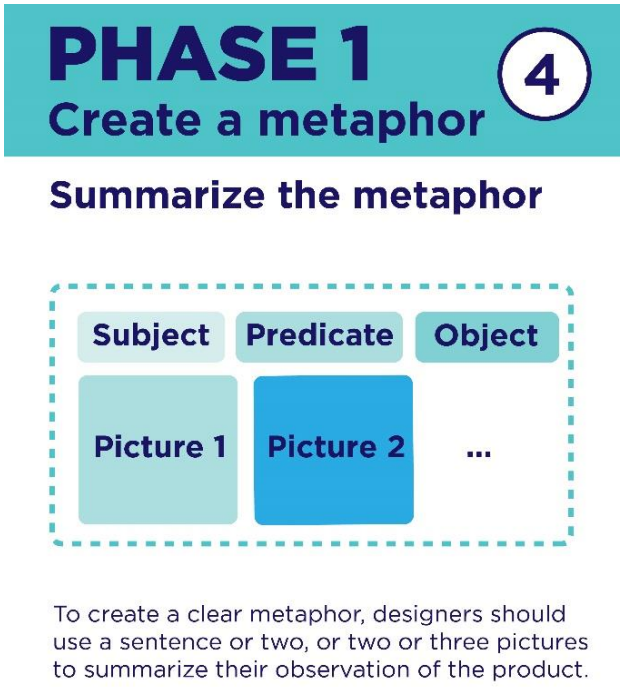

Figure 3.10 Template for a clear story/metaphor

3.2 Phase 2: Arrangement of the narrative structure

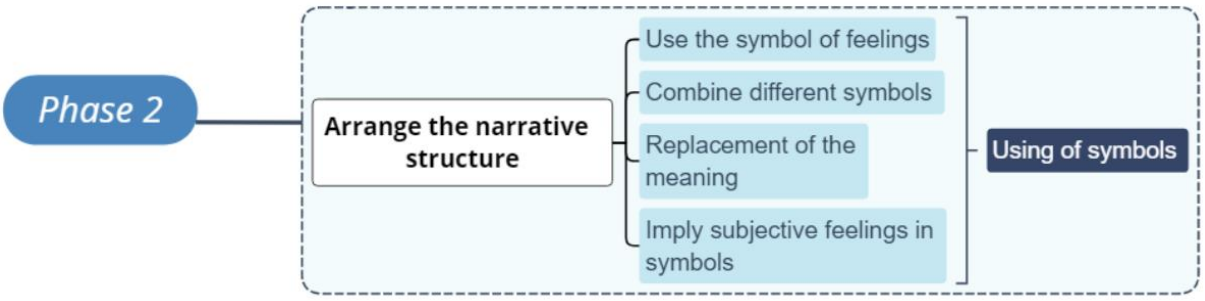

Figure 3.11 Design principles of Neo-Confucianism in Phase 2

Phase 2 is based on the organization methods in Neo-Confucianism (Figure 3.11). People in the Song Dynasty cared about the process of observation, They paid attention to what they see and what they feel at different time, which is an important principle in Neo-Confucianism. The goal of phase 2 is to enrich the metaphor into a story. A simple

metaphor cannot express this process of observation. By enriching metaphor into a story, designers can express the process of observation.

3.2.1 Elements in the narration

The first phase is about how to create a simple metaphor, and the second phase is about how to turn the metaphor into a story. Since people in the Song Dynasty used a dynamic way of observation, they paid more attention to what they perceived from the product at different time. Therefore, it is important to list all the possible perceived elements in the metaphor at first (Figure 3.12). Designers can list all the elements in the narration with three categories: senses, feelings and environment.

Figure 3.12 Template for listing elements in the narration

The order of symbols is important in the Song Dynasty gardens because what the tourists perceived in the Song Dynasty gardens was pre-designed in an order. People in the Song Dynasty paid great attention to the order of observation, which is an important

design principle in Neo-Confucianism.. Therefore, designers should carefully arrange the order of elements in the narration. By arranging the elements in the method described below, designers will have better understandings of the key points in the design.

Firstly, designers should divide the narration into three parts: beginning, middle and end. Secondly, designers should put the elements in the three parts (Figure 3.13).

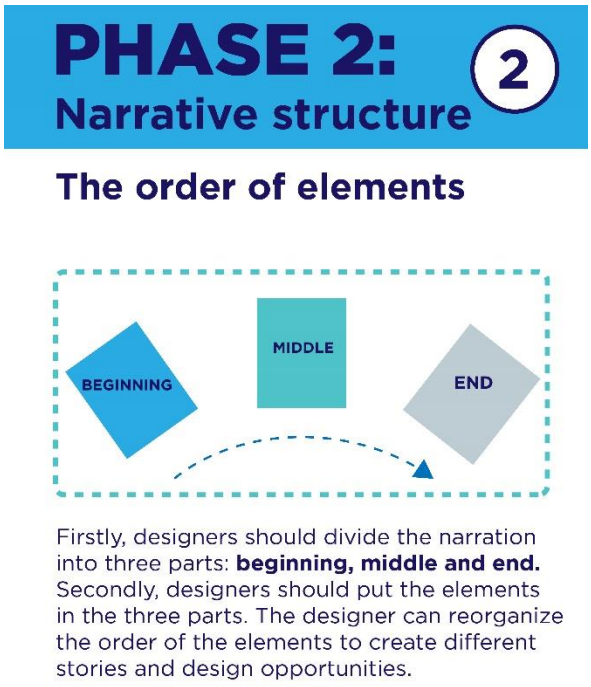

Figure 3.13 Template for the order of elements

For example, Figure 3.14 illustrates the concept of flowers with a beginning, middle and end in two different ways. There is no standard for the order if designers can make the narration in line with the original intention of the design.

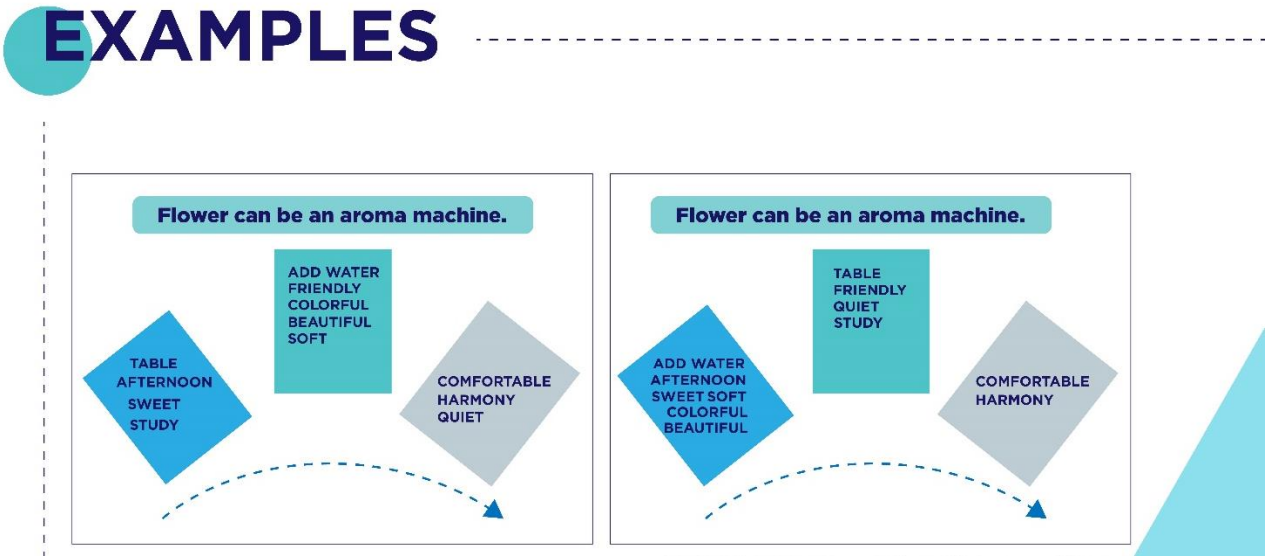

Figure 3.14 Two examples for the order of elements

3.2.2 Methods for completing the narration

After arranging the elements, designers should complete the narration with the writing techniques of the Song lyrics. Under Neo-Confucianism, people observed things in a dynamic process, and what they felt and thought when perceiving the scene were important.

There are three methods for doing this as below:

- Use different symbols (Figure 3.15). Designers can use different symbols together to describe a scene. This method is widely used in the Song Lyrics. In Neo-Confucianism, there are connections between things in the same scene. The interaction between natural phenomena and man-made creations was important for people in the Song Dynasty. People in the Song Dynasty usually described things affected by their surroundings. For example, to strengthen an element like bright sunlight, designers may add symbol like flowers with bright color in the sunlight to the narration.

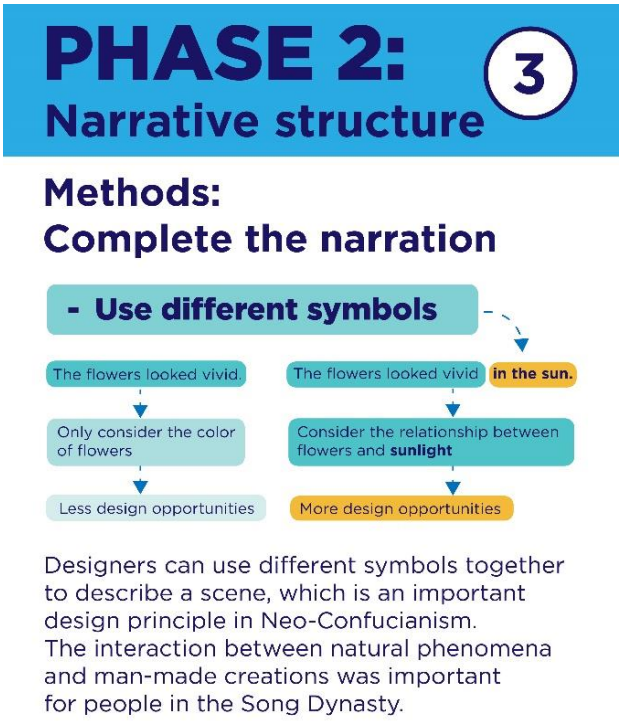

Figure 3.15 Use different symbols

- Use subjective feelings (Figure 3.16). This method is also widely used in the Song Lyrics. Designers can add subjective feelings to strengthen some key points in the

narration. For example, to strengthen an element like *hot*, designers can use words like *angry* to describe it.

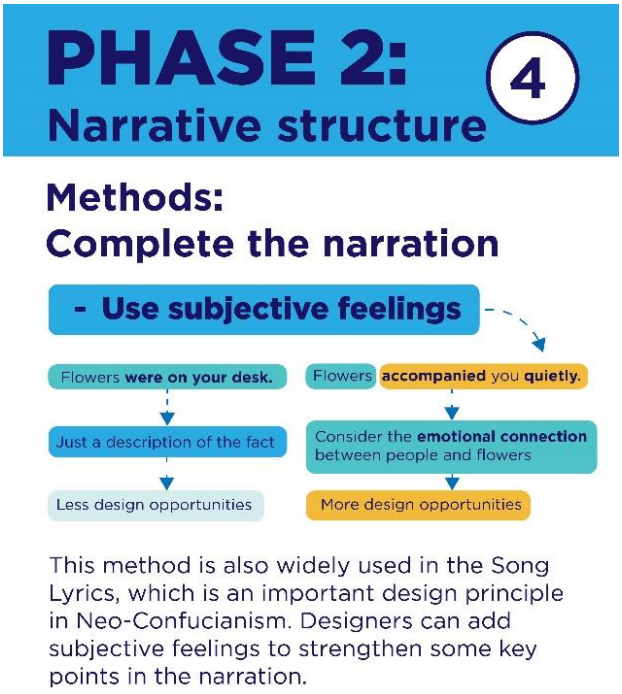

Figure 3.16 Use subjective feelings

- Leave room for imagination (Figure 3.17). Designers should avoid using a comprehensive description or expressing feelings directly, which is a design principle in Neo-Confucianism.

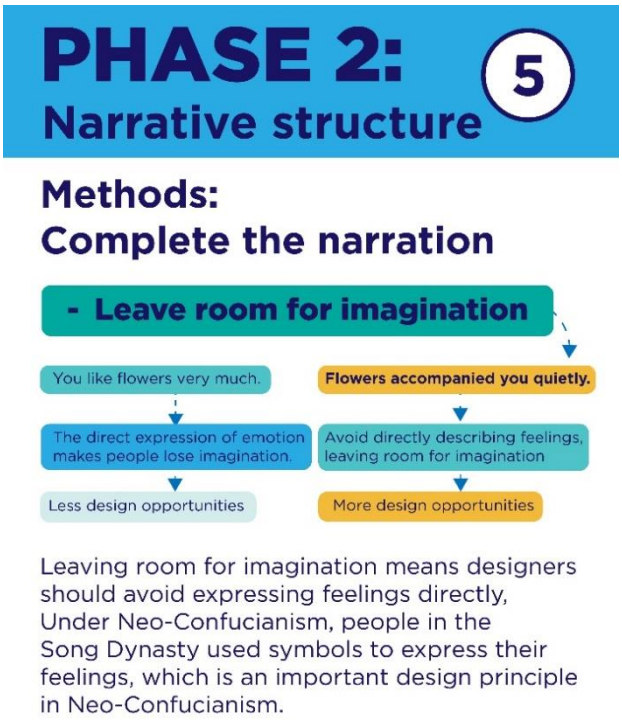

Figure 3.17 Leave room for imagination

Figure 3.18 shows an example of using these three methods in the narration based on the concept of flowers.

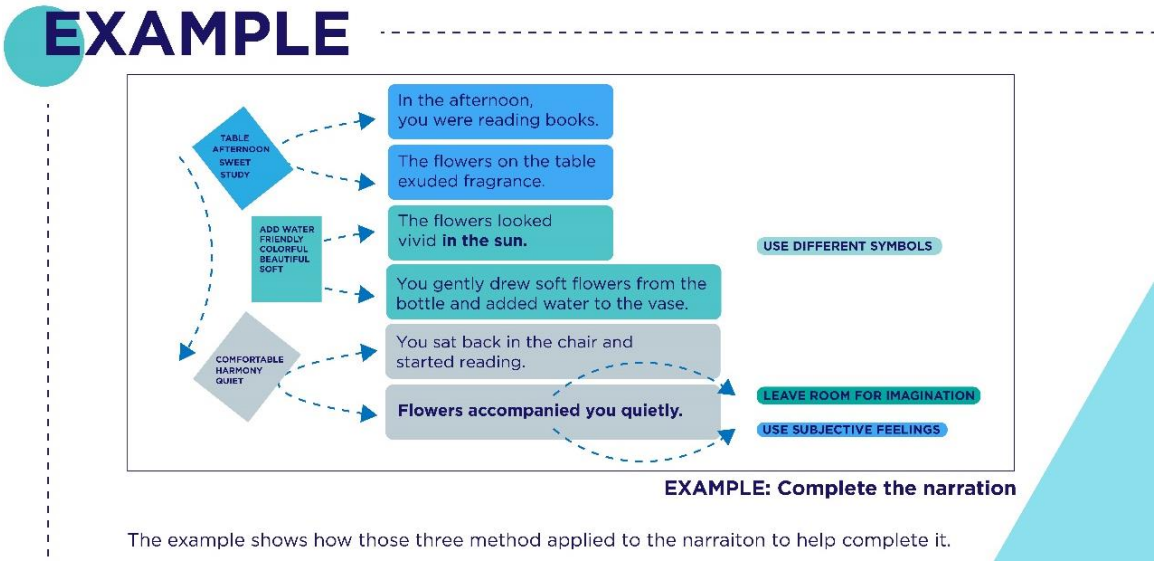

Figure 3.18 Example of using three methods in the narration

3.2.3 A refined story

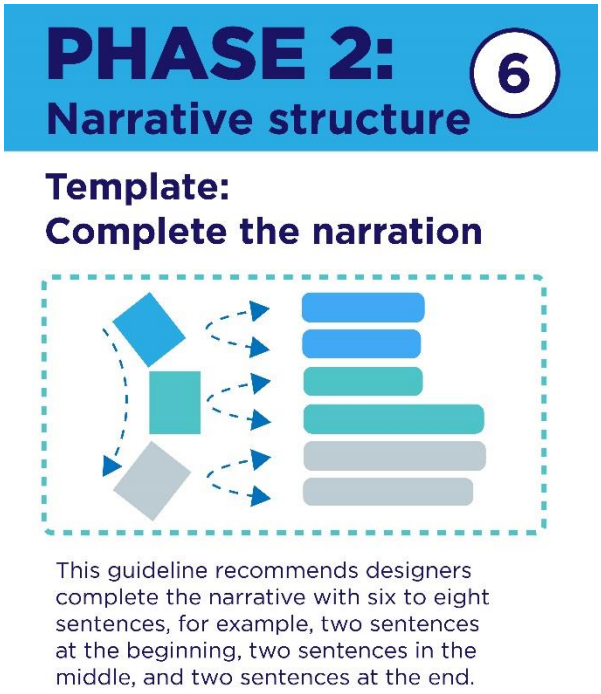

Figure 3.19 Template for competing the narration

The outcome of the second phase is a refined story based on the metaphor (Figure 3.19), which is the foundation for the next step. This guideline recommends designers complete the narrative with six to eight sentences, for example, two sentences at the beginning, two sentences in the middle, and two sentences at the end. This helps designers focus on the important parts. After the arrangement of the narrative structure, designers can understand the story better and find more design opportunities in the story.

Figure 3.20 shows two examples of the refined stories based on flower concepts.

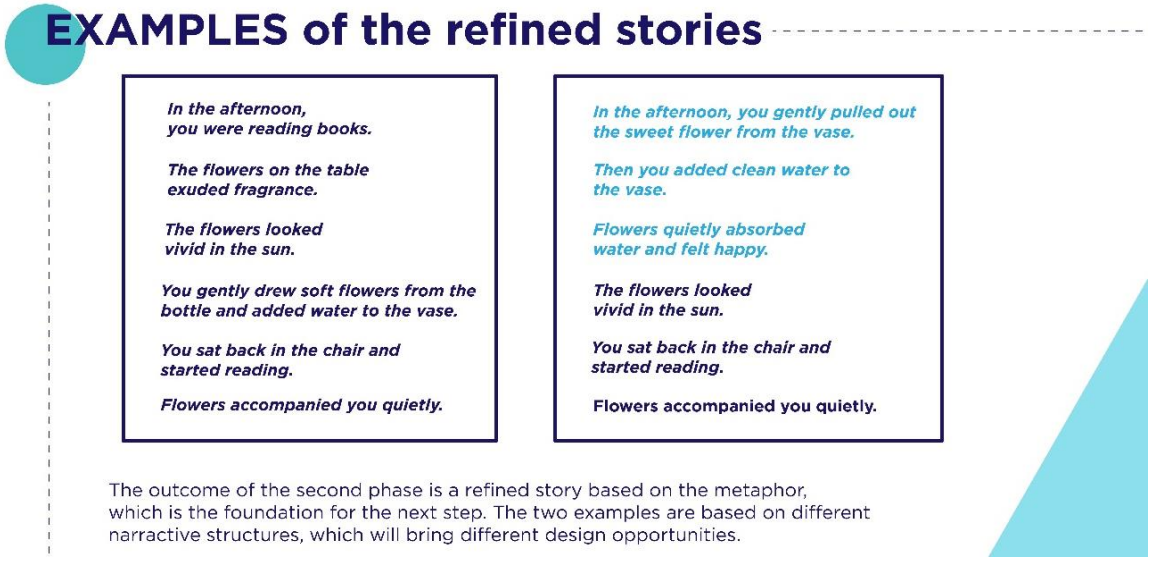

Figure 3.20 Examples of the refined stories

3.3 Phase 3: Visualization of the story

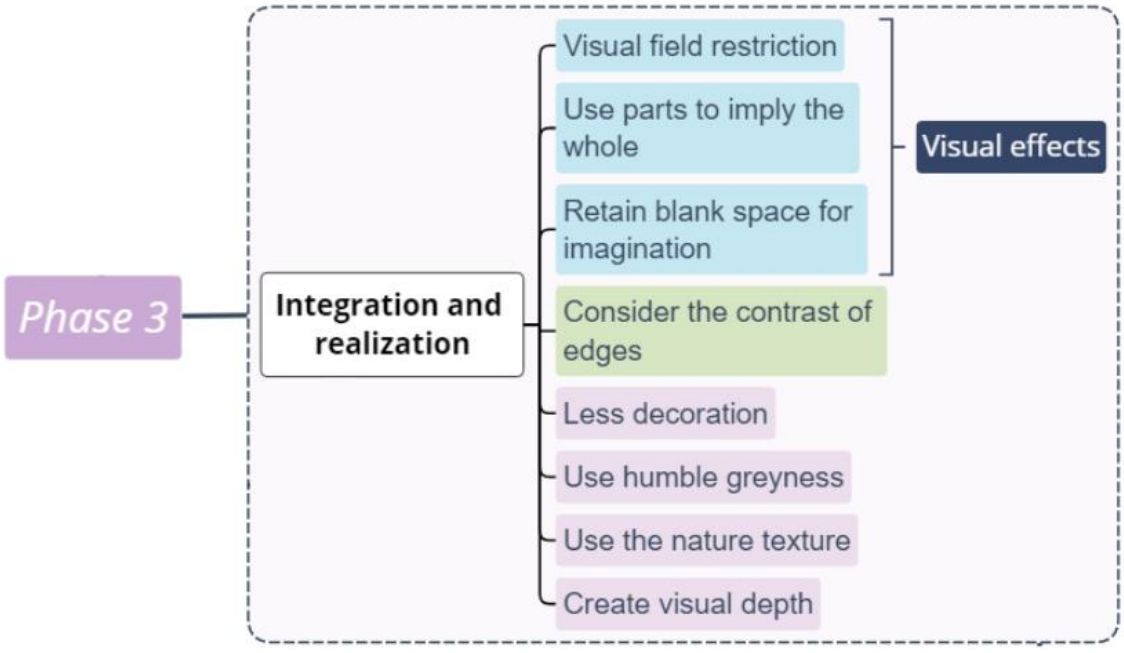

Figure 3.21 Design principles of Neo-Confucianism in Phase 3

Using the refined written stories from the previous phase, Phase 3 contains several design principles from observation to expression in Neo-Confucianism. Designers

should consider the drawing techniques in the Song Dynasty paintings when sketching and use the expression methods in Neo-Confucianism (Figure 3.21). The purpose of the section is to visualize the narrated story and find design opportunities from it.

3.3.1 Visualization of the narrated story

There are many expression methods in Neo-Confucianism. Designers can think about the visualization of the story based on those methods, which are meaningful for finding design opportunities based on Neo-Confucianism.

3.3.1.1 The internal space and the external space

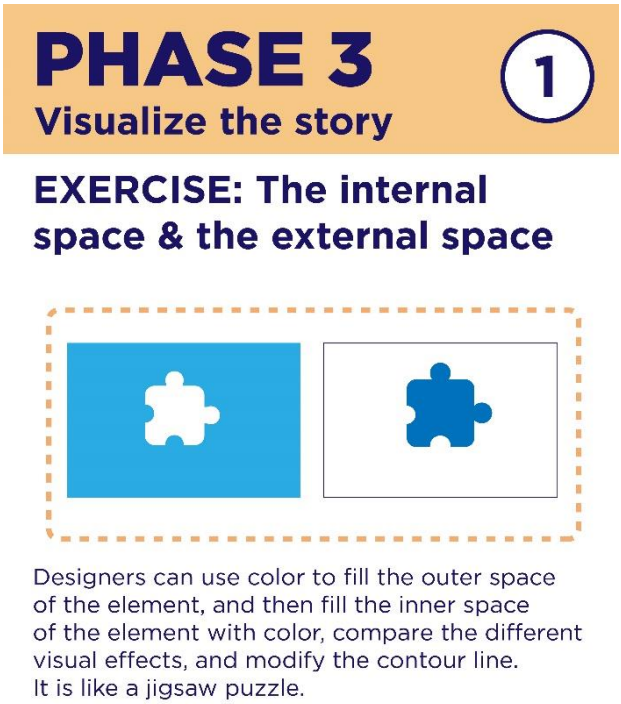

Figure 3.22 Exercise: The internal space & the external space

The internal space and external space are important in Song Dynasty Gardens (see Section 2.5). The outline is a visual clue that distinguishes the medium from the surface. Designers should consider the relationship between internal and external space of elements in the narration, which is an important design principle in Neo-Confucianism.

Figure 3.22 shows an exercise for this step. Designers can use color to fill the outer space of the element, then fill the inner space of the element with color, compare the different visual effects, and modify the contour line. It is like a jigsaw puzzle.

3.3.1.2 Consideration of the visual depth

Figure 3.23 Three kinds of visual depth

Visual depth is the focus point of Song Dynasty gardens and Song Dynasty paintings. It is an important design principle in Neo-Confucianism. Designers should consider the visual depth in the design expression, which is an important principle in the paintings of the Song Dynasty. Figure 3.23 shows three kinds of visual depth: Up & down, left & right, and front & back. Figure 3.24 shows an exercise for this step. Designers can select a product line draft, try to use three kinds of visual depth to express the space of the product.

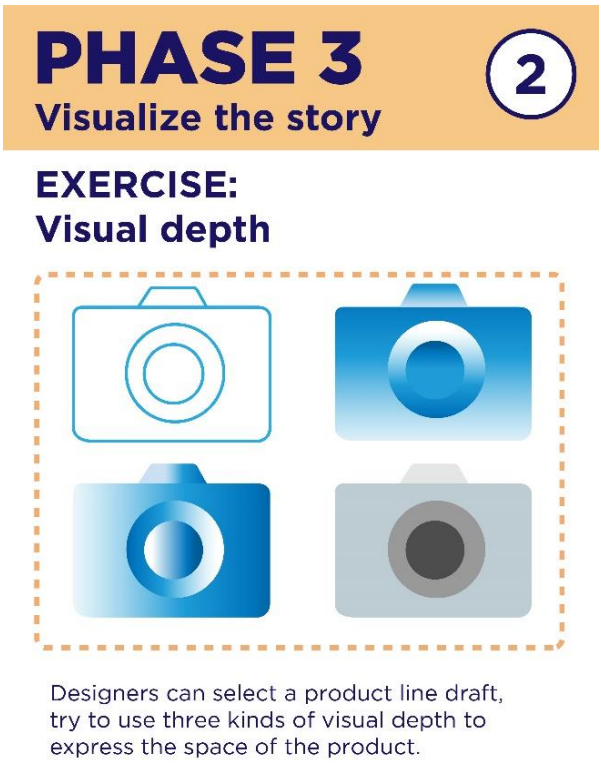

Figure 3.24 Exercise: Visual depth

3.3.1.3 Consideration of the contrast

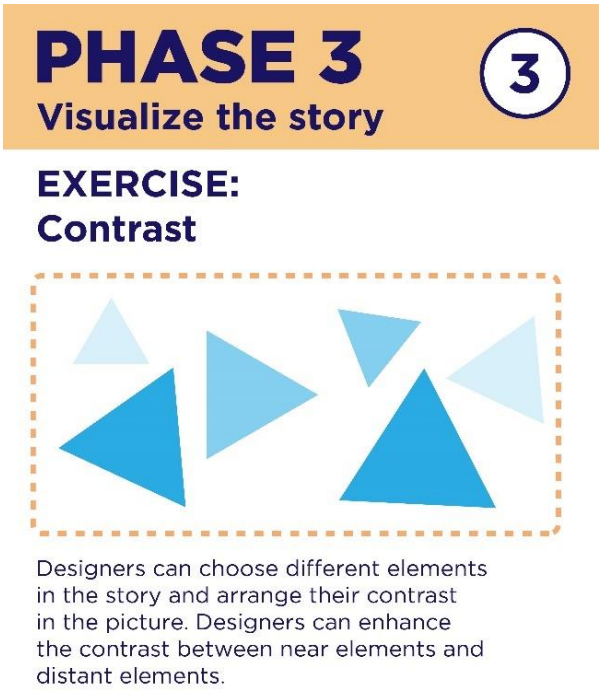

Figure 3.25 Exercise: Contrast

The contrast of different scenery is a technique commonly used in Song Dynasty based on Neo-Confucianism, which means enhancing the contrast between close-up scenery and distant scenery. Figure 3.25 shows an exercise for this step. Designers can choose different elements in the story and arrange their contrast in the picture. Designers can enhance the contrast between near elements and distant elements.

Figure 3.26 Template for visualization of the narrated story

Based on the principle of dynamic observation in Neo-Confucianism, designers should do sketches in the order of the narration and visualize physical, emotional and sensorial aspects of the story (Figure 3.26). This method helps designers to think more about how people perceive information in the scene.

3.3.1.4 Example graphic visualization of the story

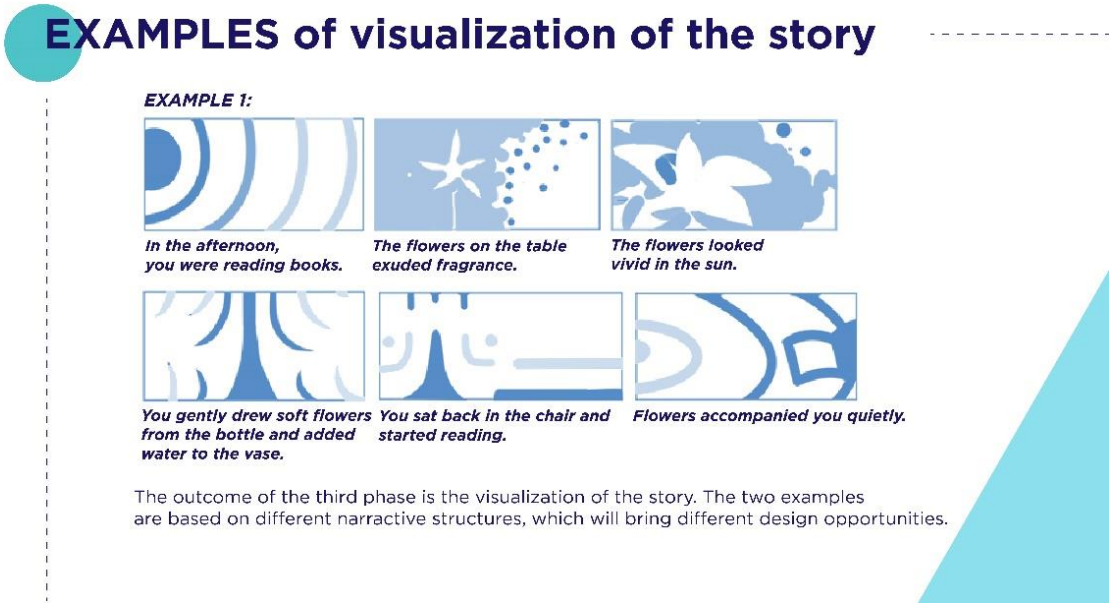

Figure 3.27 Example graphic visualization of the story (1)

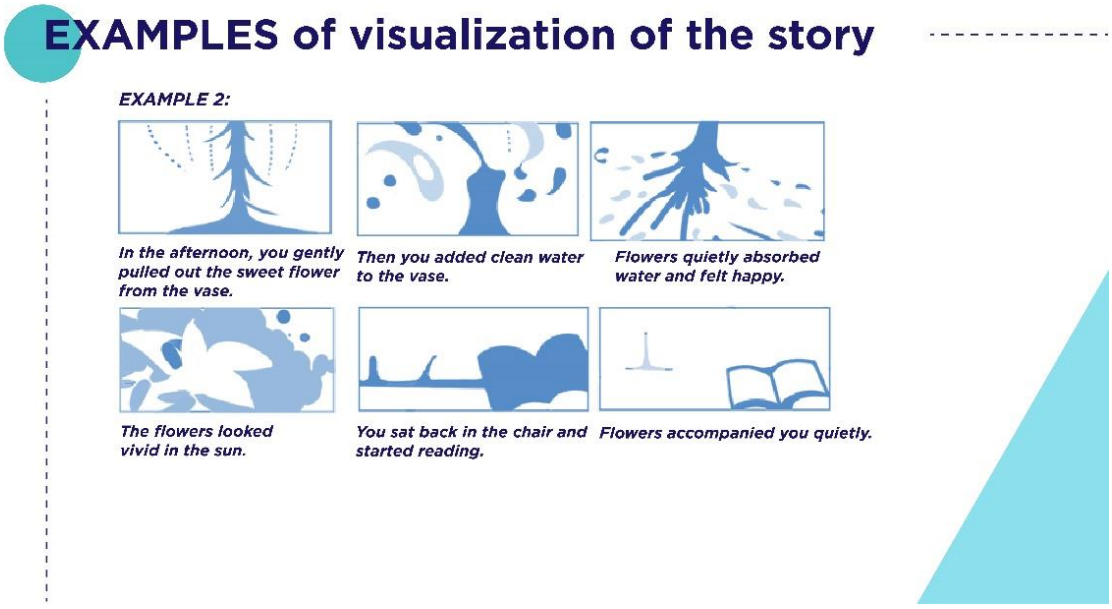

Figure 3.28 Example graphic visualization of the story (2)

Figure 3.27 and Figure 3.28 are two example graphic visualization of the stories. Based on those two graphic visualizations, designers can find different and multiple design opportunities in their stories.

3.4 Design opportunities and further steps

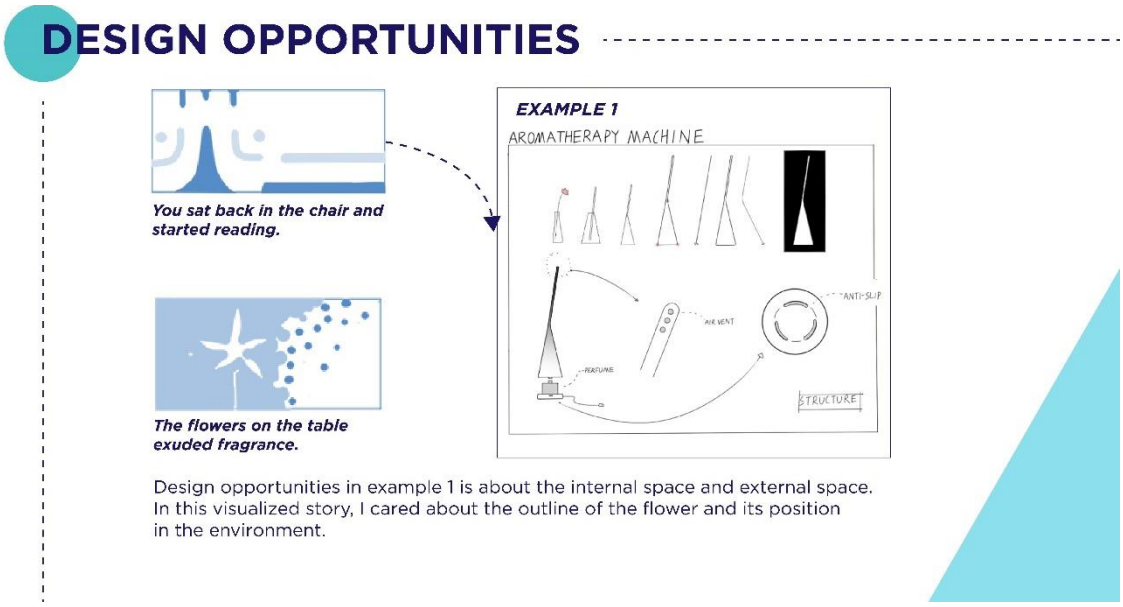

Figure 3.29 Design opportunities based on graphic visualization of the story (1)

Figure 3.29 shows a concept product design based on graphic visualization of the story (1), which is inspired by the internal space and external space of flowers.

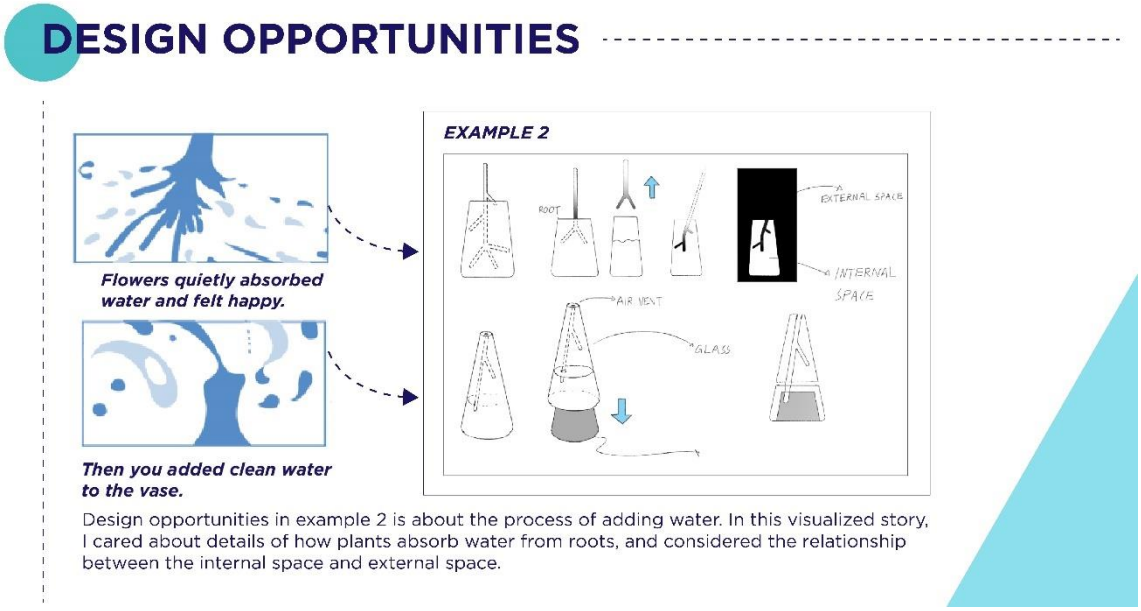

Figure 3.30 Design opportunities based on graphic visualization of the story (2)

Figure 3.30 shows a concept product design based on graphic visualization of the story (2), which is inspired by the details of how plants absorb water from roots.

These two visualized stories are based on the same metaphor but different narrative structures. Therefore, the arrangement of narrative structure is meaningful for finding more design opportunities.

Using these NTA methods, designers are able to create a series of rich written and graphic visualizations of stories that can then be transformed through other design methods such as brainstorming, storyboarding and sketching to develop a variety of design concepts (through illustration and prototyping) based on the story.

3.4.1 Requirements for color, material, and texture

While these final aspects of Neo-Confucianism thought become elements that the designer will more fully include/apply closer to the end of the product development process, they should also be considered in the discovery phase of the design process

where NTA is implemented. Under the influence of Neo-Confucianism, people in the Song Dynasty tended to express feelings in an implicit way (see section 2.6). Therefore, designers should use humble greyness and avoid using too much decoration in the product. In addition, designers also need to use natural texture, which accords with the aesthetic orientation of Neo-Confucianism.

3.5 Tools for using the guideline

This study provides two tools for designers to use this guideline in product design (see appendix for the full-size version).

First is a booklet summarizing the essential information about Neo-Confucianism thought and each step of the NTA process. It also contains examples for using this guideline shown in Chapter 3. Designers who want to use the guideline but do not have time to read this thesis can refer to the booklet instead (Figure 3.31).

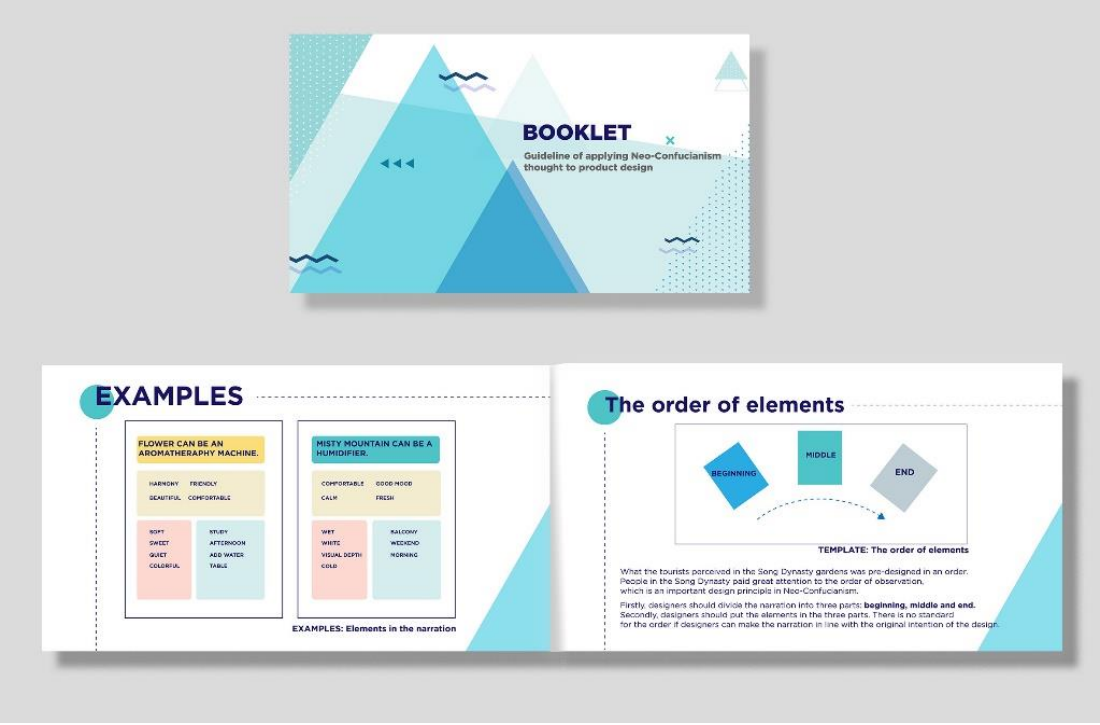

Figure 3.31 Booklet for guideline of applying Neo-Confucianism thought to product design

Second is a set of cards for using this guideline, which summarize essential templates, methods, and exercises in NTA. These template cards can be used by designers who want to use the guideline directly without understanding of Neo-Confucianism thought (Figure 3.32).

Figure 3.32 Template cards for guideline of applying Neo-Confucianism thought to product design

Chapter 4: Application of the Guideline

Several examples of implementation of the Neo-Confucianism Thought Application (NTA) process are explored in this chapter. Two designs of humidifiers illustrate how different stories can be developed using similar Neo-Confucianism thought processes. The two examples show how a single product brief can result in different stories and different design opportunities by starting with different narrative structure.

4.1 Phase 1 in application: Create a metaphor

The goal of Phase 1 is to create a metaphor about the product. Under Neo-Confucianism, people in the Song Dynasty cared about the implications in everything. Using metaphors is an important design principle in Neo-Confucianism.

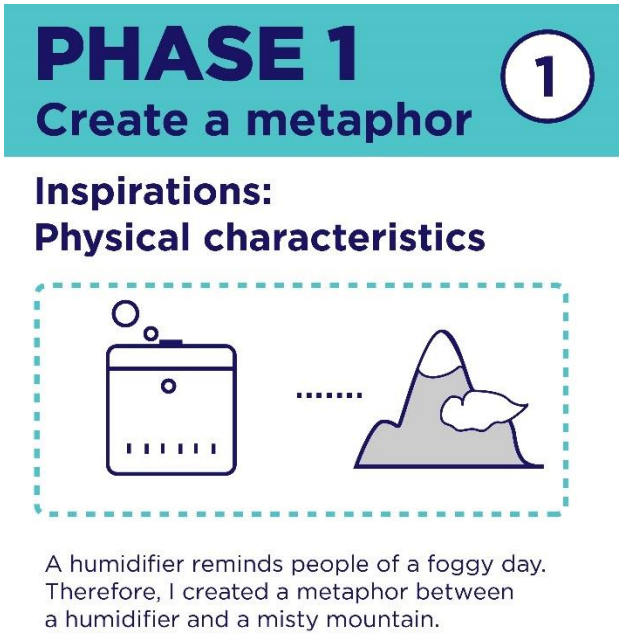

Figure 4.1 Inspirations: Physical characteristics

A humidifier reminds people of a foggy day. Figure 4.1 shows the metaphor of a humidifier and a misty mountain. Designers can also draw inspiration from dewdrops on

a leaf in the morning or rain drops on a window (Figure 4.2). In neo-Confucianism, natural phenomena were valued in artistic creation and design. People in the Song Dynasty tended to use natural beauty as a metaphor for man-made creations.

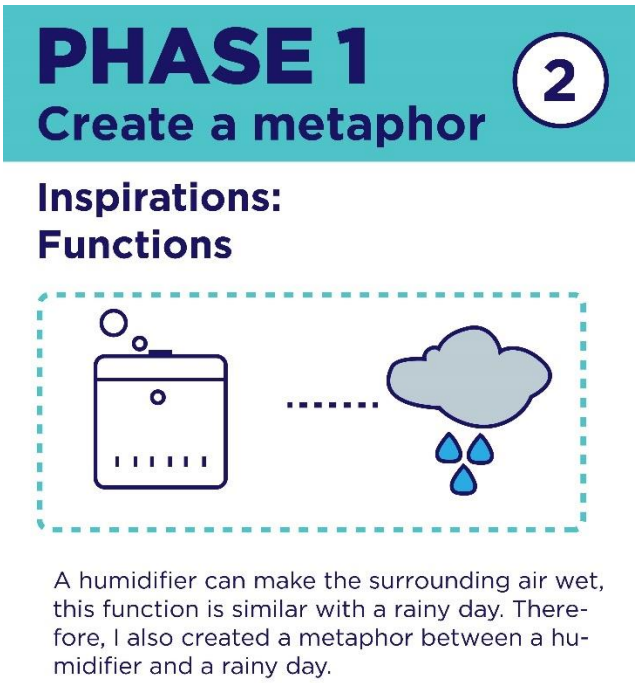

Figure 4.2 Inspirations: Functions

Designers should do the exercise to consider the relationship between the product and the surrounding space (Figure 4.3), which is an important design principle in Neo-Confucianism. In this project, the surrounding space of the humidifier may contain sofa, TV, lamp, book and so on. Doing this exercise can help designers understand more about the environment of the product.

Figure 4.3 Exercise: Surrounding space

As shown in Figure 4.4, designers should use a sentence or two, or two or three pictures to summarize the metaphor. It provides benefits, such as narrowing down the scope of design and letting the designers choose what they want to do most. In this project, a metaphor was created between misty mountain and the humidifier.

Figure 4.4 Summarize the metaphor

4.2 Phase 2 in application: Arrangement of the Narrative structure

The goal of phase 2 is to enrich the metaphor into a story. A simple metaphor cannot express this process of observation. By enriching metaphor into a story, designers can express the process of observation, which is an important principle in Neo-Confucianism.

Figure 4.5 List elements in the narration

Designers can list all the elements in the narration with three categories: senses, feelings, and environment. As shown in Figure 4.5, the possible elements in the narration are listed.

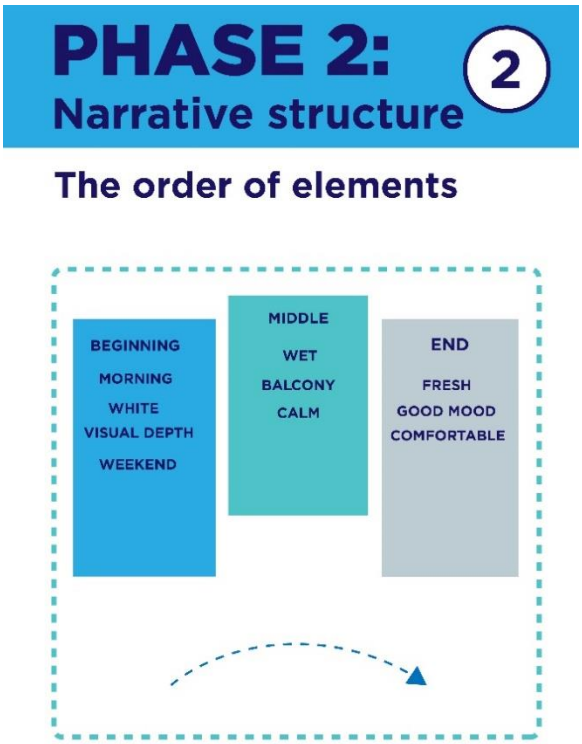

Figure 4.6 The order of elements (1)

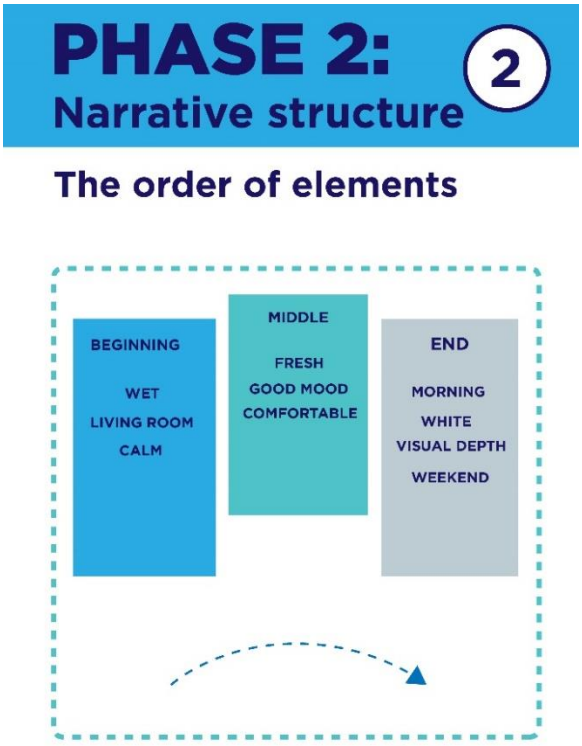

Figure 4.7 The order of elements (2)

Organizing elements into different orders can bring different design opportunities. As shown in Figure 4.6 and Figure 4.7, this project chooses two different orders of elements, which result in different stories based on the same brief metaphor (Figure 4.8 & Figure 4.9).

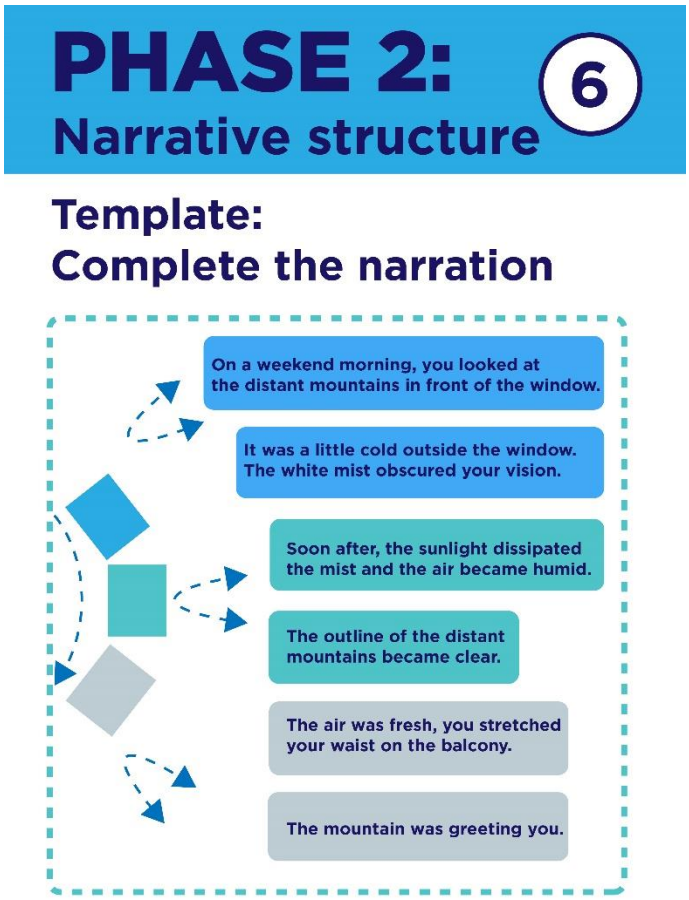

Figure 4.8 Complete the narration (1)

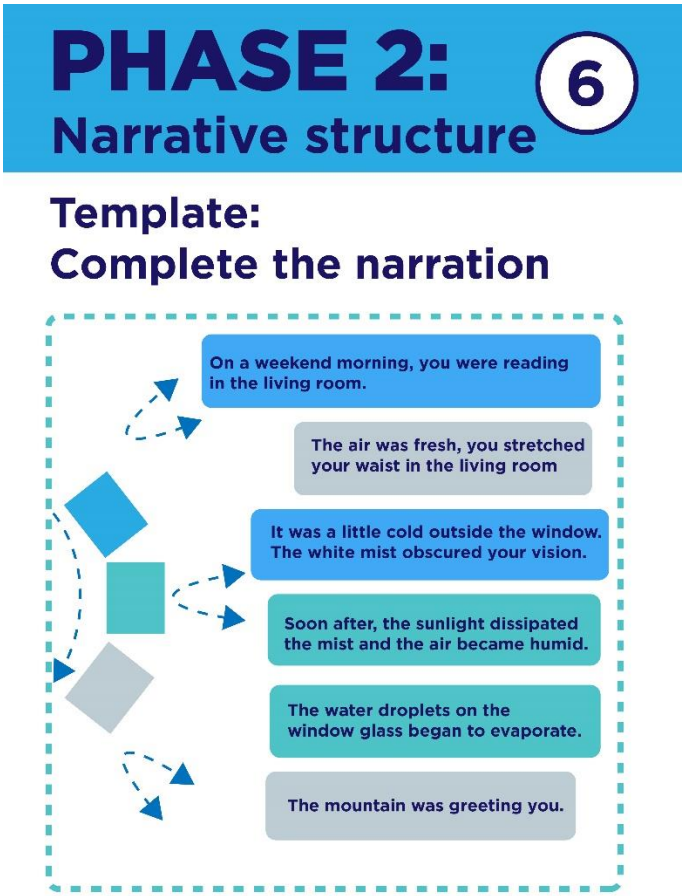

Figure 4.9 Complete the narration (2)

Based on the metaphor between misty mountain and humidifier, two stories about watching the distant mountains on a weekend morning were generated. This story shows the change in natural scenery. Under the influence of Neo-Confucianism, people in the Song Dynasty sought design inspirations from natural landscapes.

4.3 Phase 3 in application: Visualization of the story

The purpose of this section is to visualize the narrated story and find design opportunities from it. In this project, two different stories result in two different visualizations (Figure 4.10 & Figure 4.11), which bring different design opportunities.

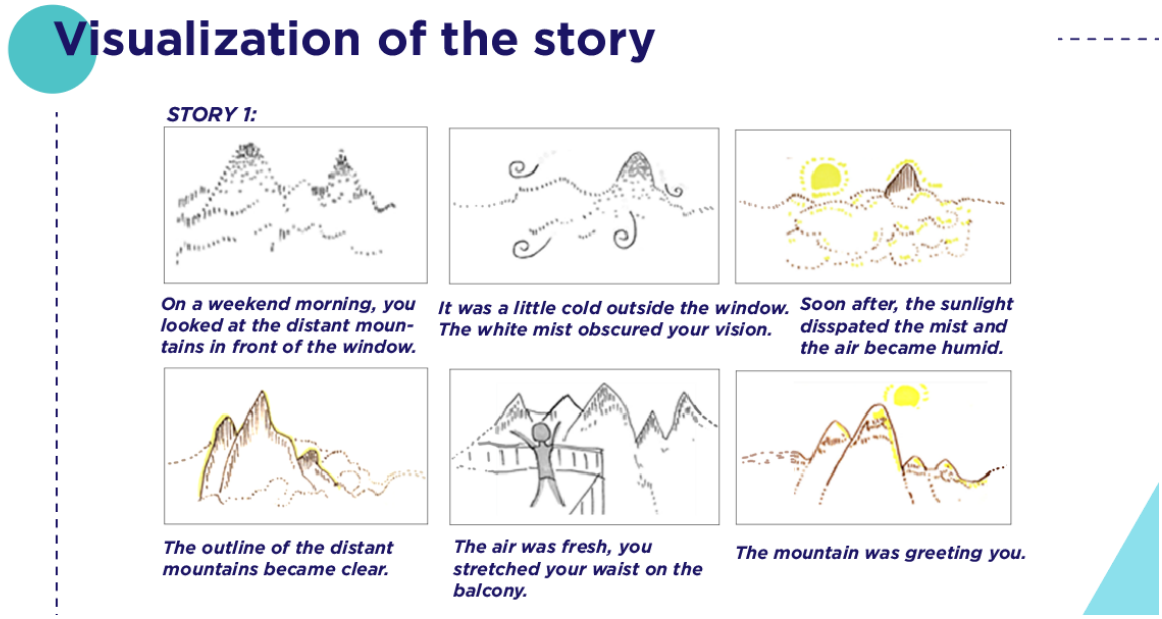

Figure 4.10 Visualization of the story (1)

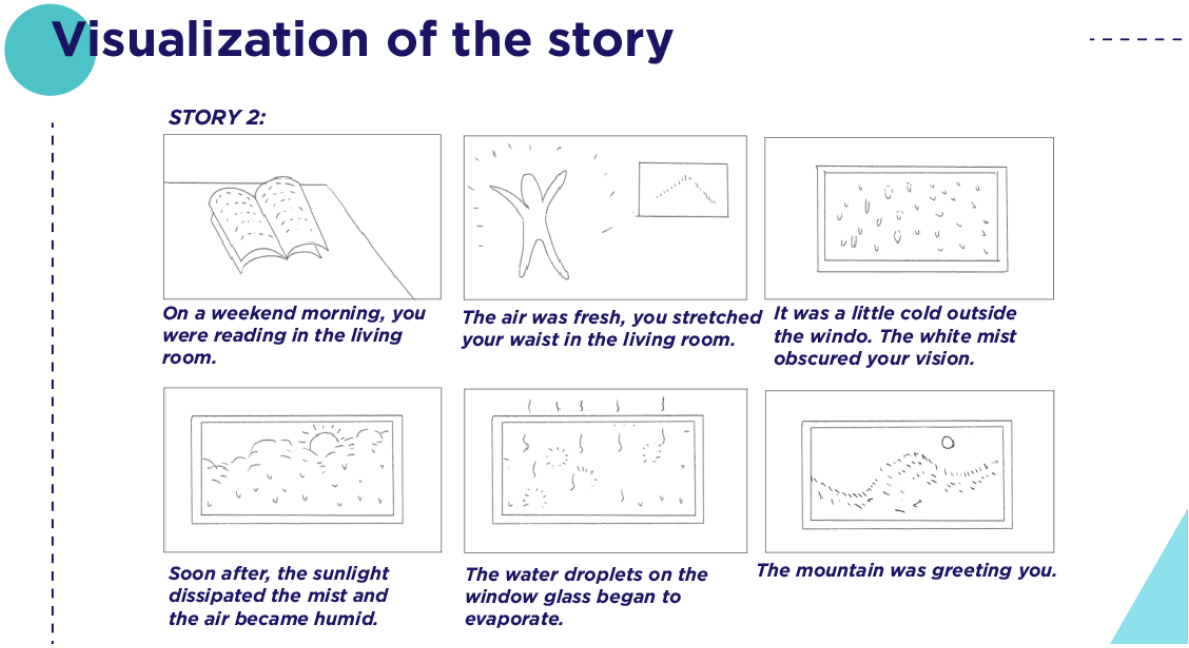

Figure 4.11 Visualization of the story (2)

The visualization of story 1 (figure 4.10) is focused on an outside scene. It is a story about watching the distant mountains on a weekend morning. The visualization of

story 2 (Figure 4.11) is focused on an indoor scene about watching the water droplets on the window.

4.4 Design opportunities

Since this project has two different visualized stories, the design opportunities in them are different. As shown in Figure 4.12, the visualized story 1 brings design opportunities about using the shape of the misty mountain on the humidifier.

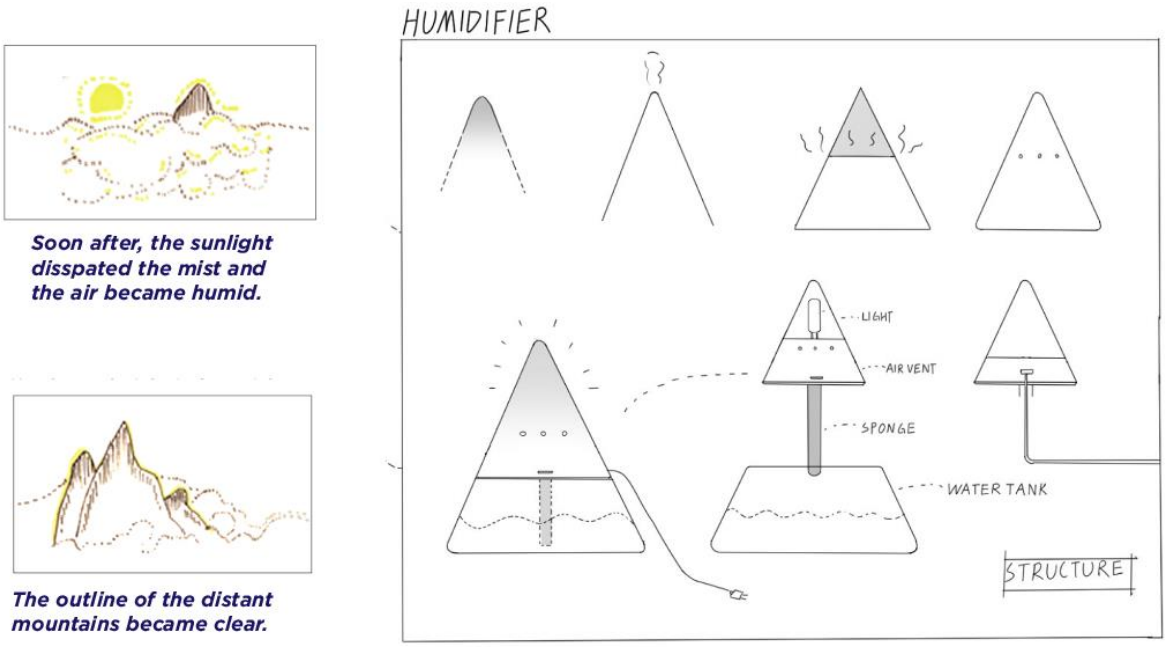

Figure 4.12 Example of design opportunities in story 1

As shown in Figure 4.13. the visualized story 2 results in design opportunities about the concept of water droplet evaporation. Different visualized stories can bring different design opportunities.

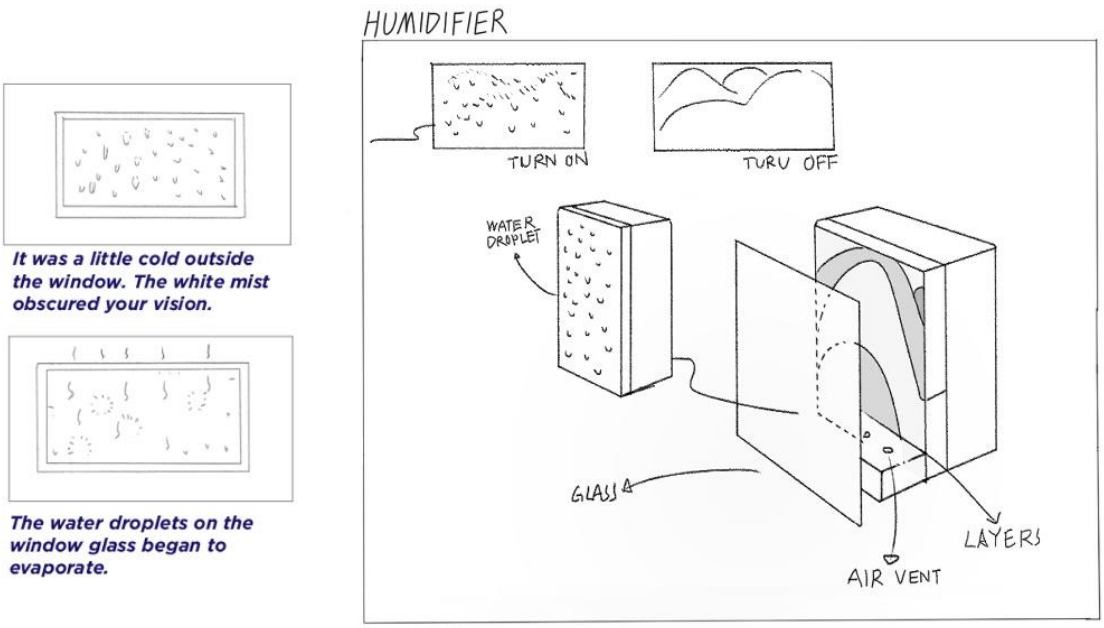

Figure 4.13 Example of design opportunities in story 2

4.5 Other projects based on Neo-Confucianism thought

Some other projects are listed below to show this guideline can be widely used in the early stage of product design. First is a project about heater. Figure 4.14 to Figure 4.17 shows the process from creating a metaphor to visualization of the stories in this project. Two concepts inspired by the visualized stories are shown in Figure 4.18.

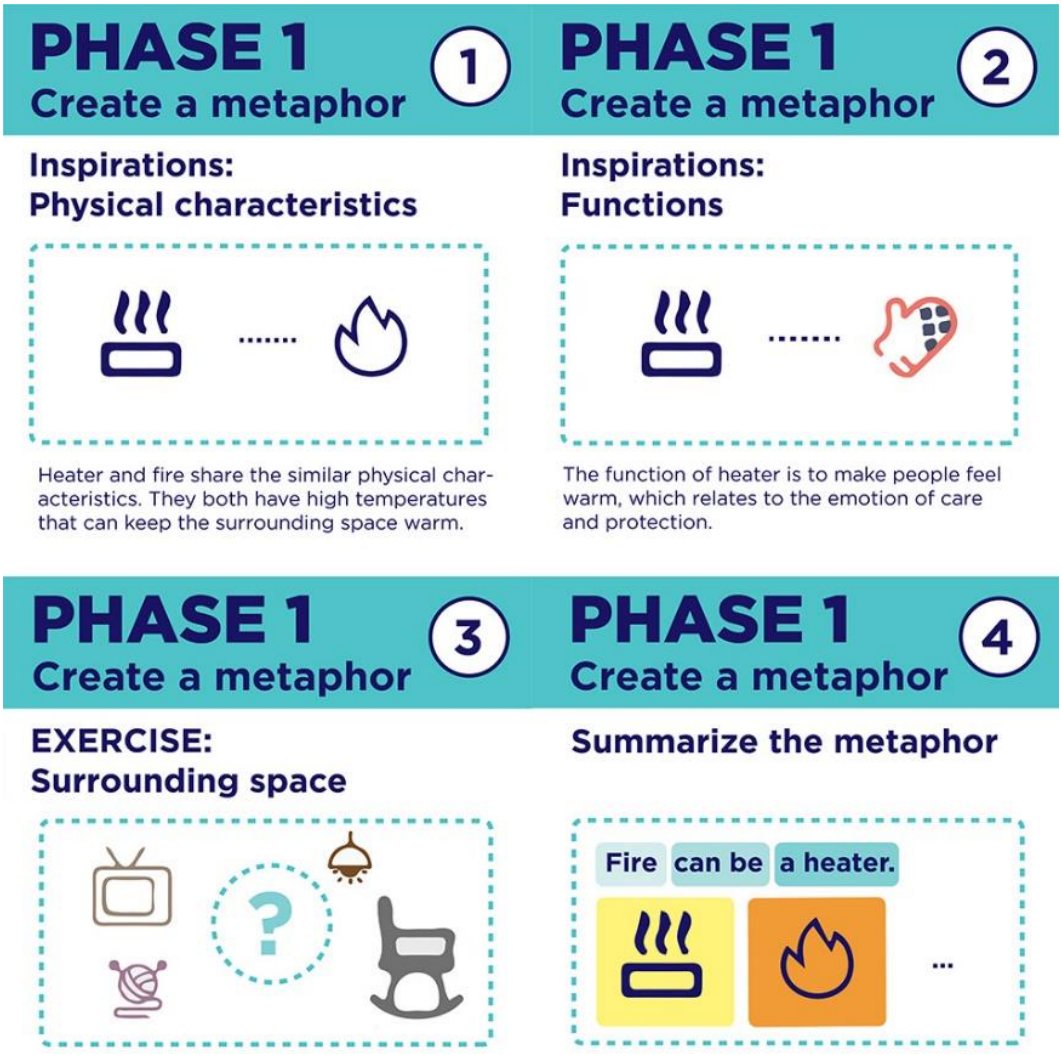

Figure 4.14 Phase 1 of the project about heater

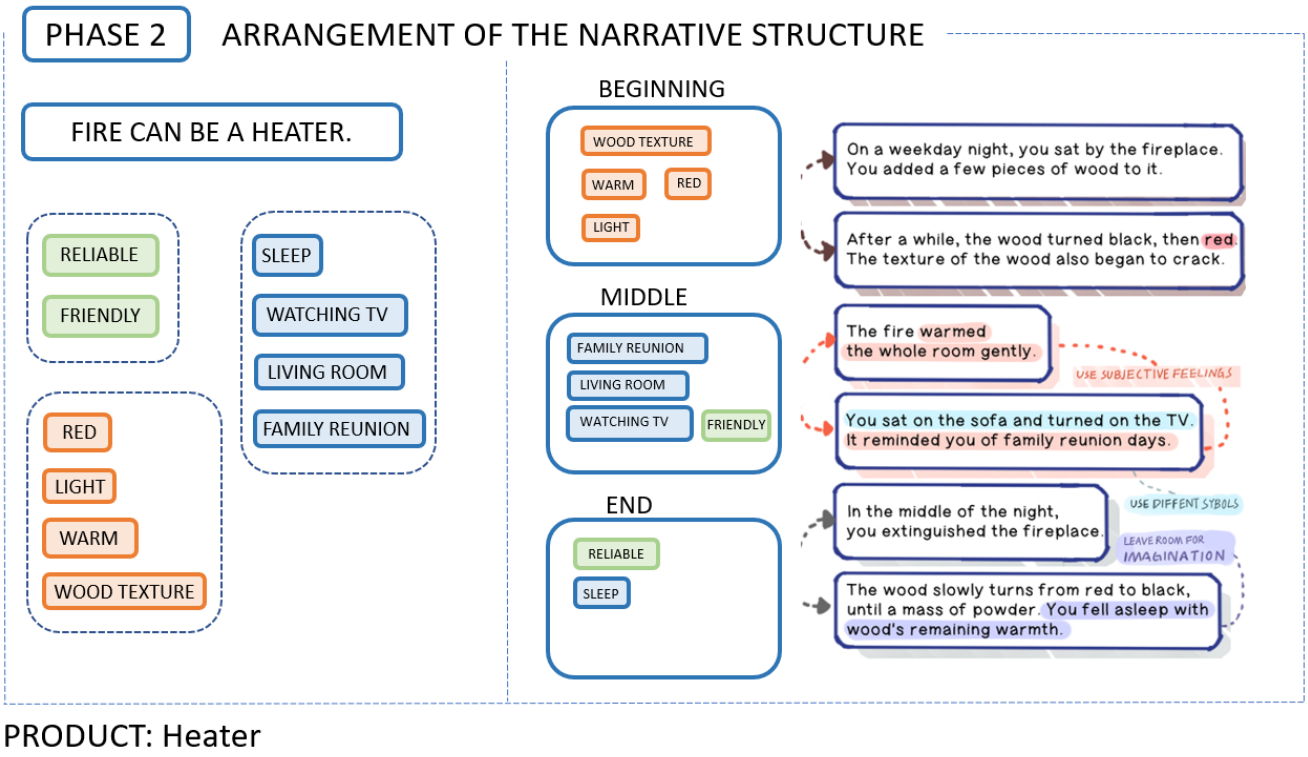

Figure 4.15 Phase 2 of the project about heater

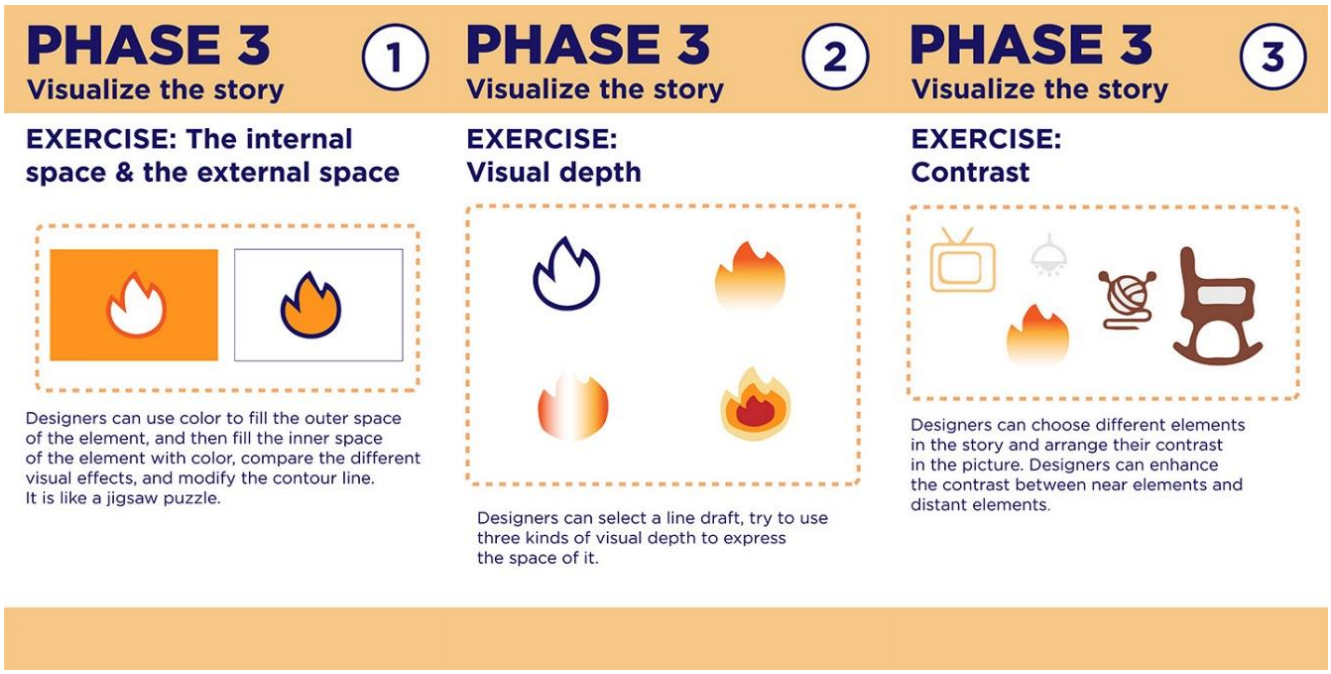

Figure 4.16 Phase 3 of the project about heater

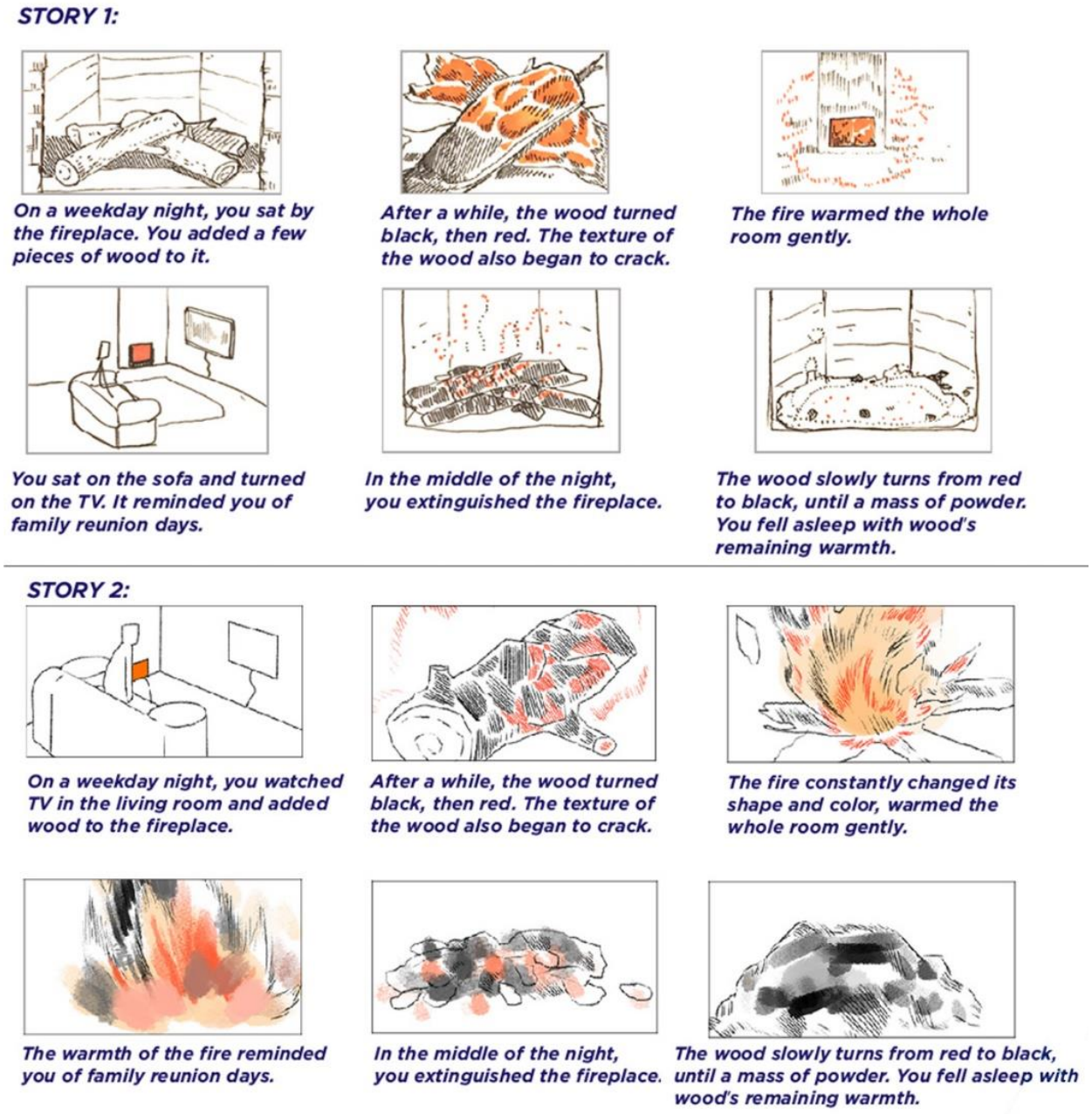

Figure 4.17 Visualized stories about heater

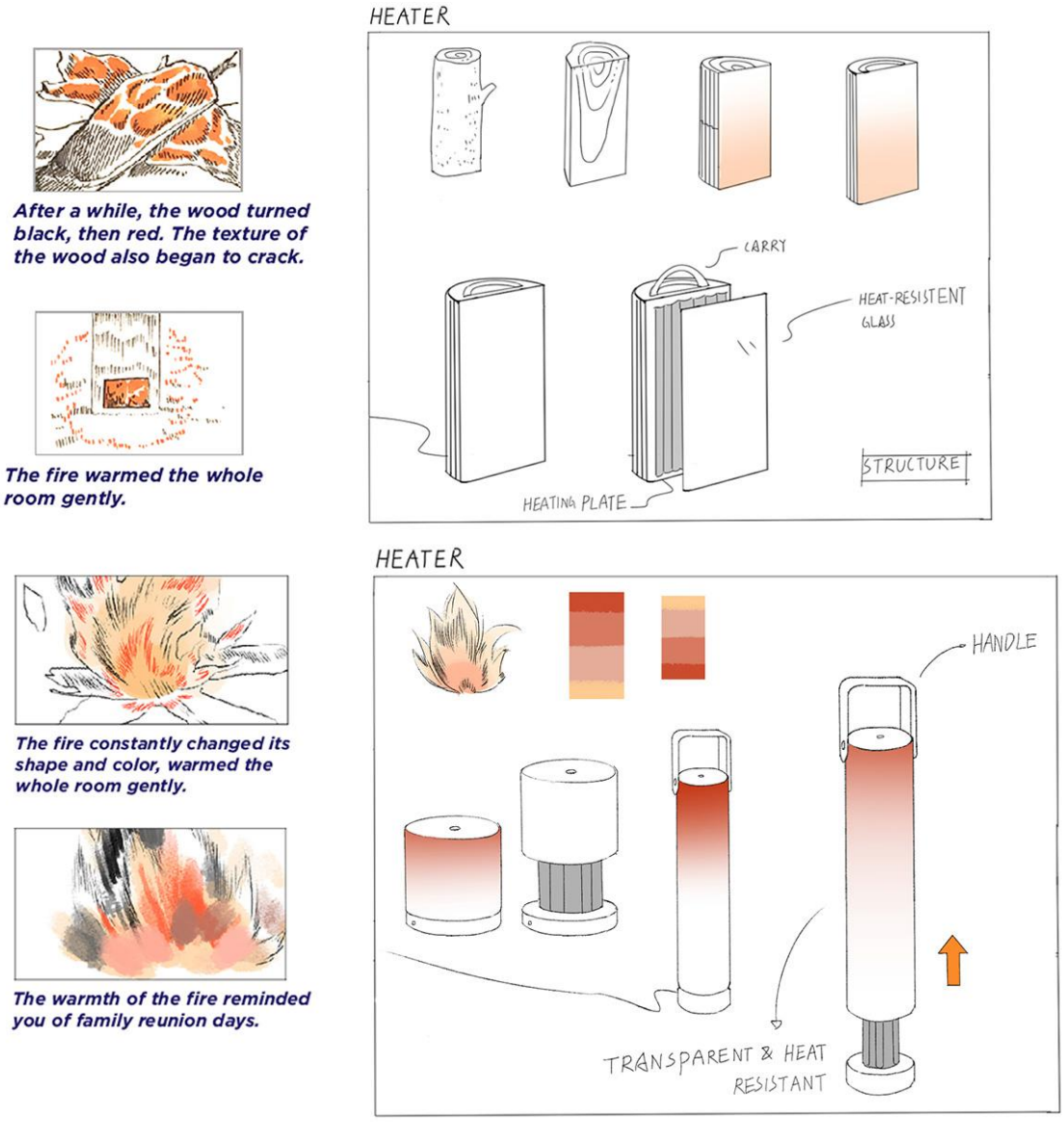

Figure 4.18 Design opportunities about heater

The second project is about aromatherapy machine. Figure 4.19 to Figure 4.22 shows the process of using this guideline to create visualized stories. Figure 4.23 shows two concepts inspired by the visualized stories.

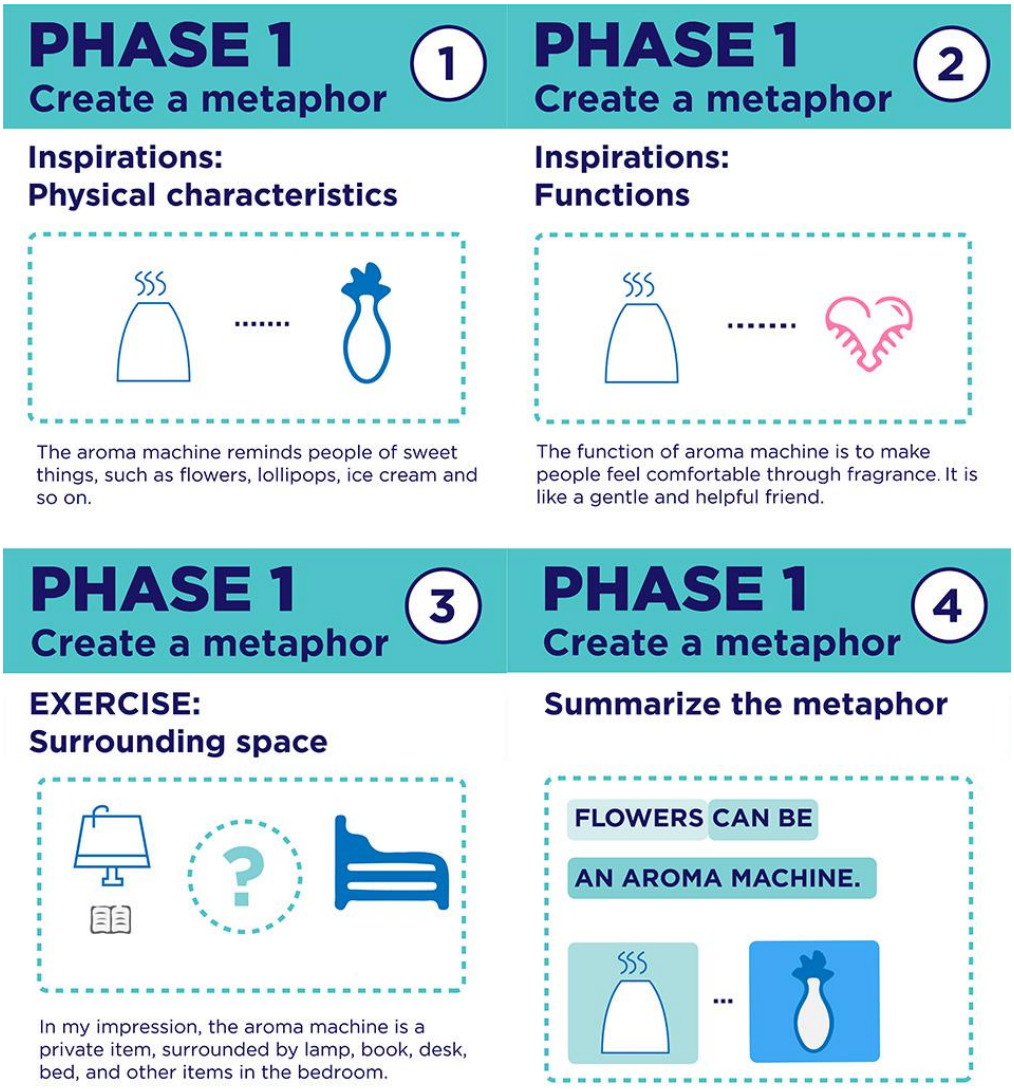

Figure 4.19 Phase 1 of the project about aroma machine

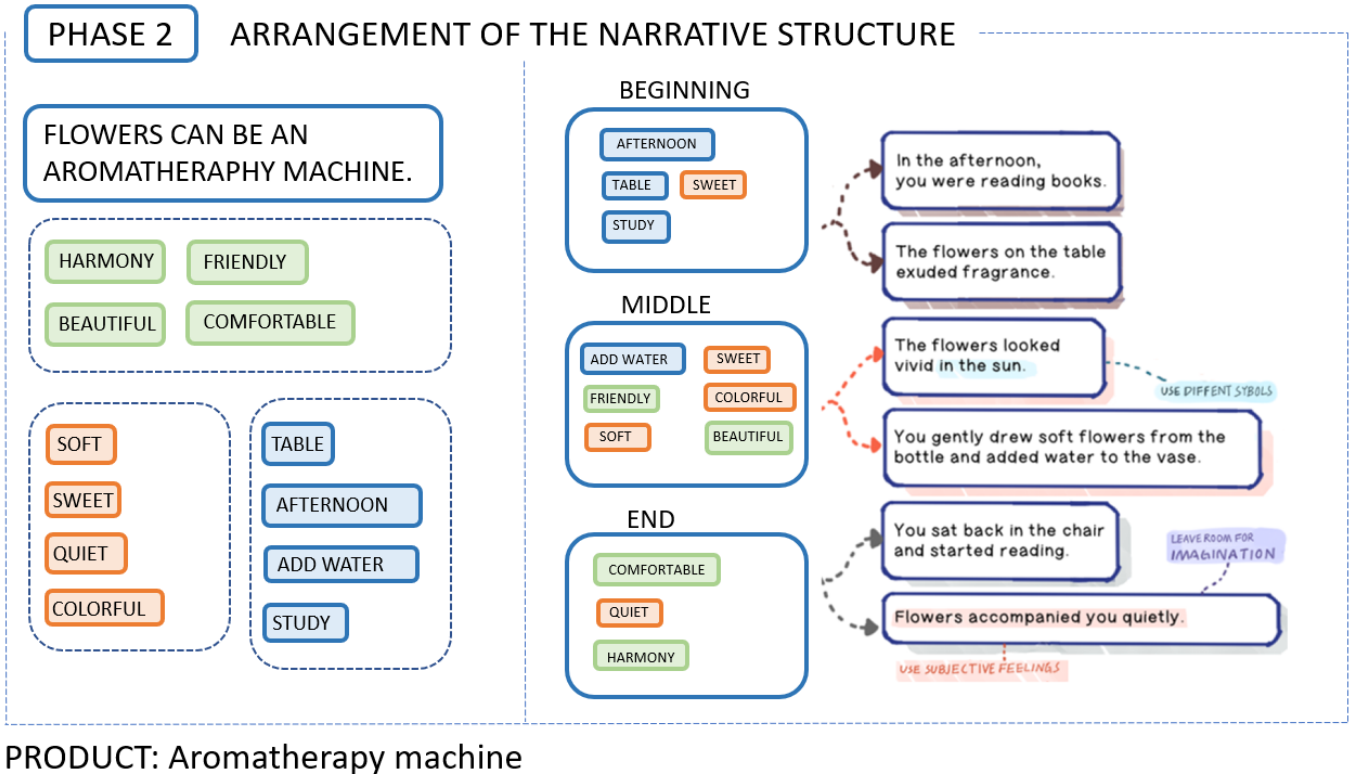

Figure 4.20 Phase 2 of the project about aroma machine

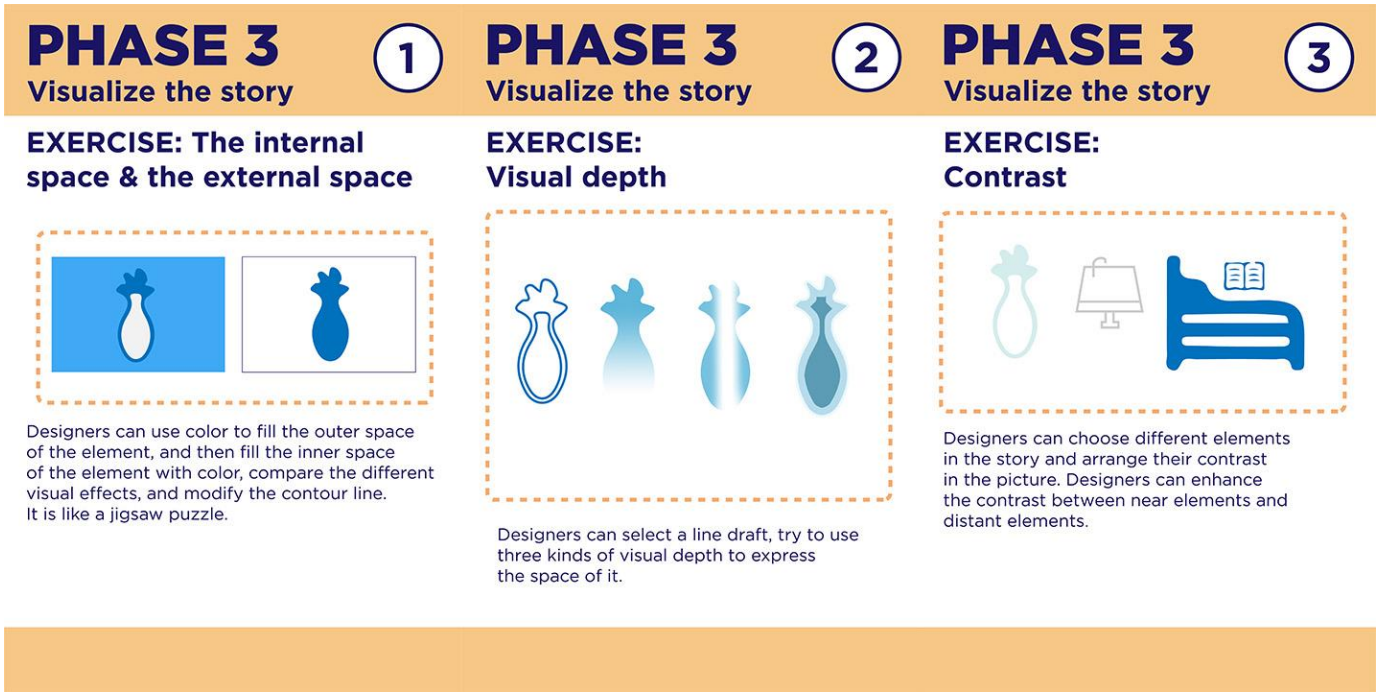

Figure 4.21 Phase 3 of the project about aroma machine

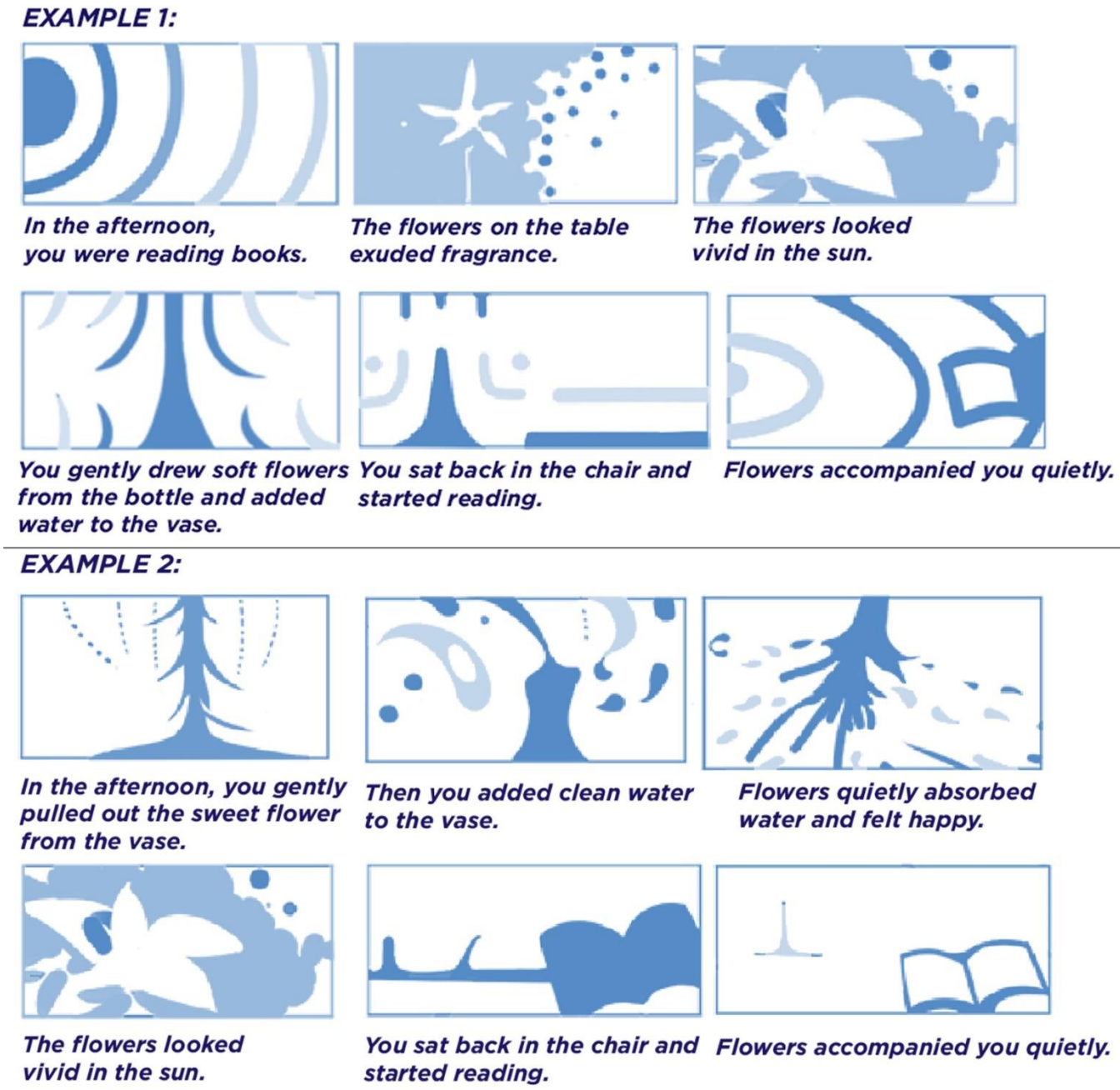

Figure 4.22 Visualized stories abouht aroma machine

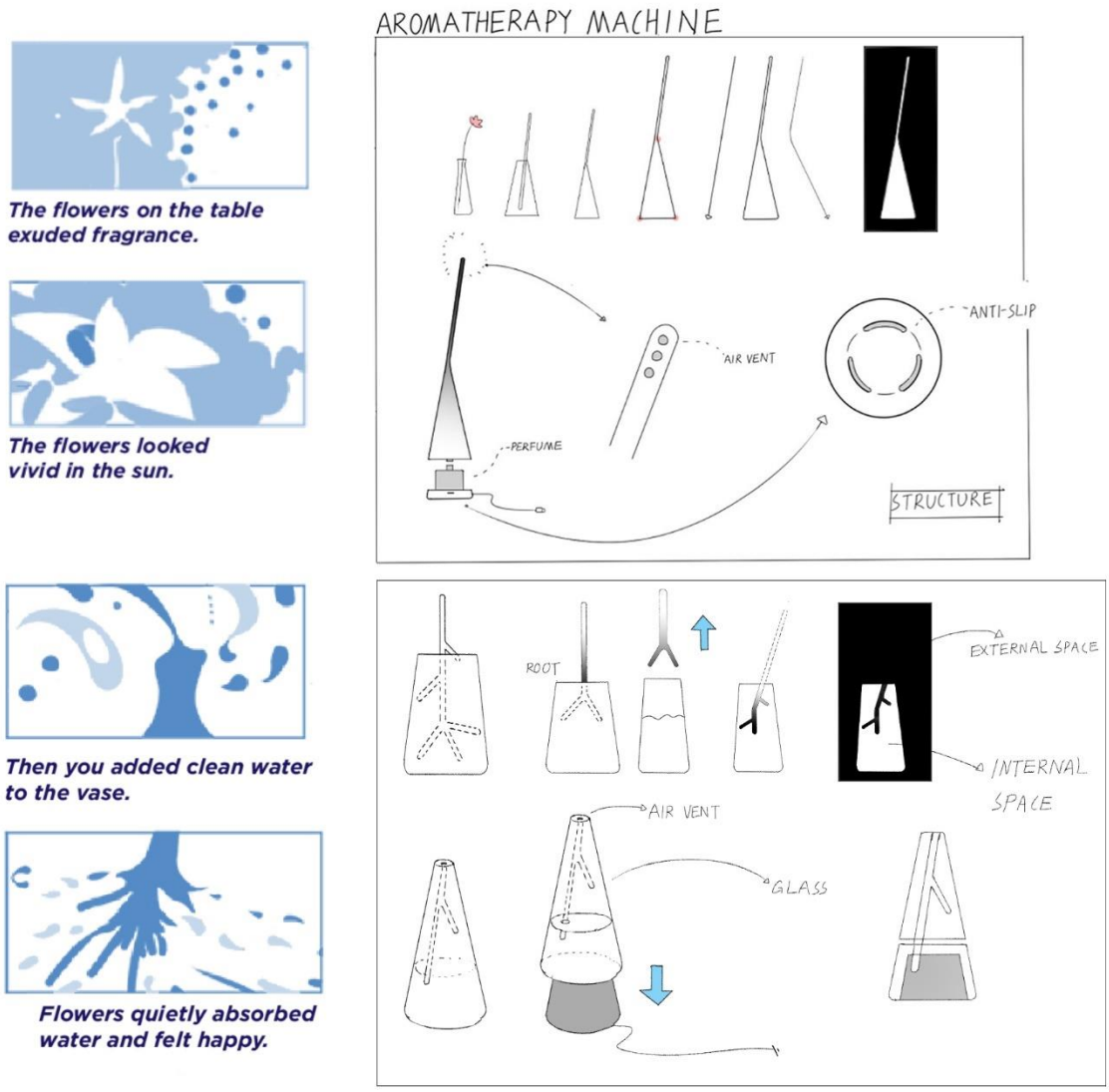

Figure 4.23 Design opportunities about aroma machine

Figure 4.24 to Figure 4.26 are some renderings to show the design concepts. Under Neo-Confucianism, people in the Song dynasty preferred to use humble greyness and less decorations, which are shown in the figures below.

Figure 4.24 Rendering for the concept design of humidifier

Figure 4.25 Rendering for the concept design of heater

Figure 4.26 Rendering for the concept design of aroma machine

4.6 Summary

This chapter attempts to use the guideline based on Neo-Confucianism to provide visualized stories for designers. As shown above, different visualized stories bring different design opportunities. When using this guideline, designers should pay attention to the design principles in Neo-Confucianism mentioned in Chapter 2. The way designers observe things, organize information and express things should be based on Neo-Confucianism thought.

Chapter 5: Conclusion

This thesis sorts out the design principles of Neo-Confucianism by exploring the paintings, poems, gardens and ceramics of the Song Dynasty, and combines the design methods of storytelling with these design principles to form the guideline based on Neo-Confucianism that can be applied to product design.

This guideline aims to find more design opportunities by providing a visual story at the early stage of product design. The designer can use this story as a source of inspiration for creating multiple design concepts.

This study summarizes the design principles of Neo-Confucianism into three parts: observation, organization, and expression. These design principles are reflected in the guideline and the final design practice. A designer who does not know Neo-Confucianism can still design products with the guideline according to these principles.

This study mainly explores the way of thinking in Neo-Confucianism, not the application of traditional design elements. Traditional forms of design may be outdated, but the way of thinking behind them is still valuable today. When thinking about cultural factors in design, designers should pay more attention to the way of thinking, not just a style of modeling.

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Chapter 7: Appendix

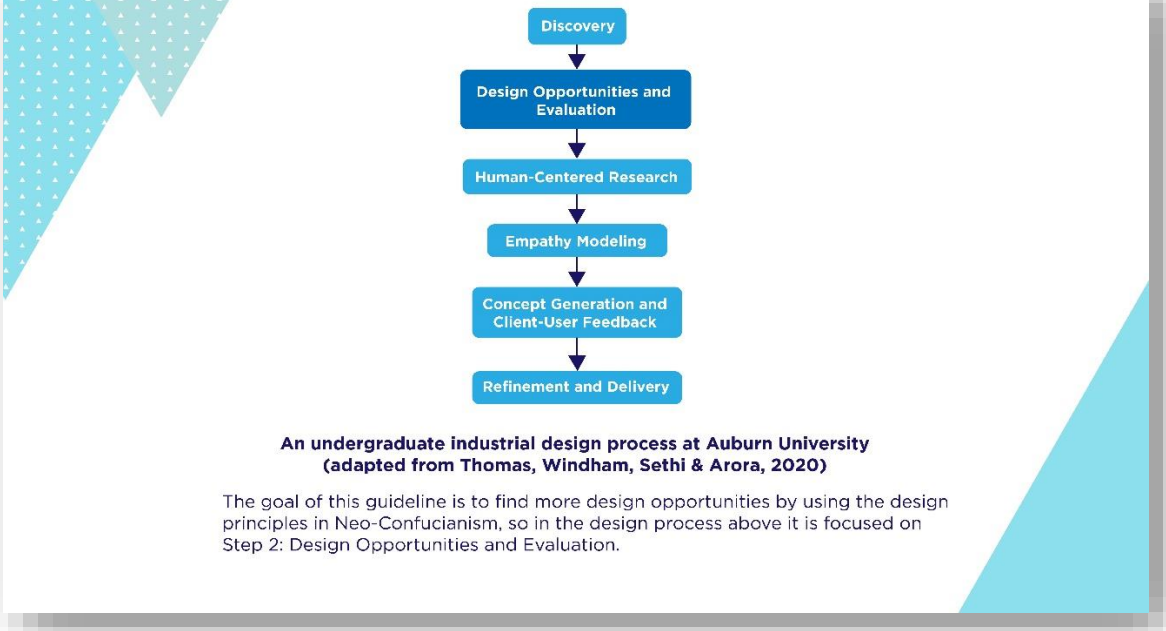
7.1 Booklet for guideline of applying Neo-Confucianism thought to product design

The full version is on the website below for designers to use.

https://www.behance.net/gallery/100850065/Booklet-for-applying-Neo-Confucianism-to-product-design?

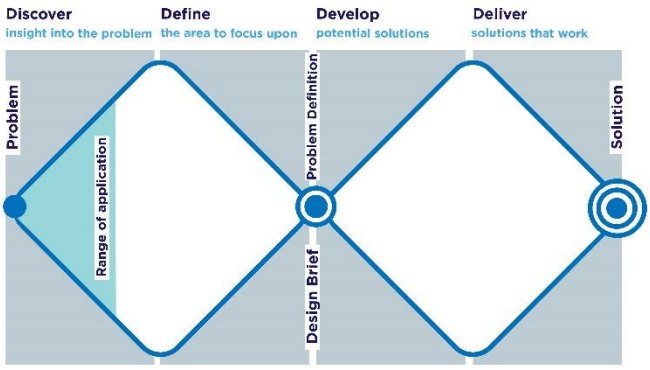
BOOKLET

Guideline of applying Neo-Confucianism thought to product design



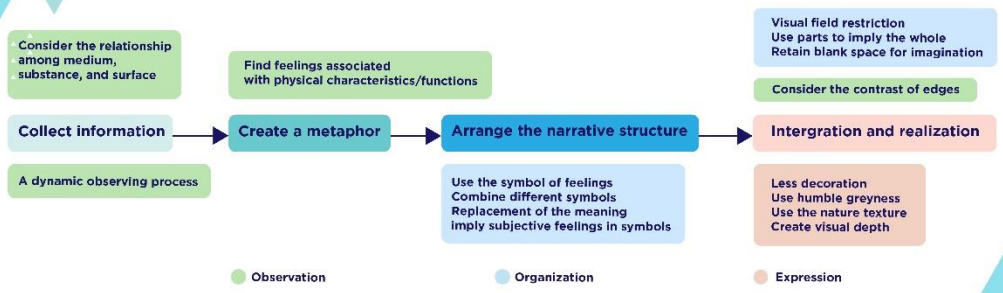
An undergraduate industrial design process at Auburn University (adapted from Thomas, Windham, Sethi & Arora, 2020)

The goal of this guideline is to find more design opportunities by using the design principles in Neo-Confucianism, so in the design process above it is focused on Step 2: Design Opportunities and Evaluation.



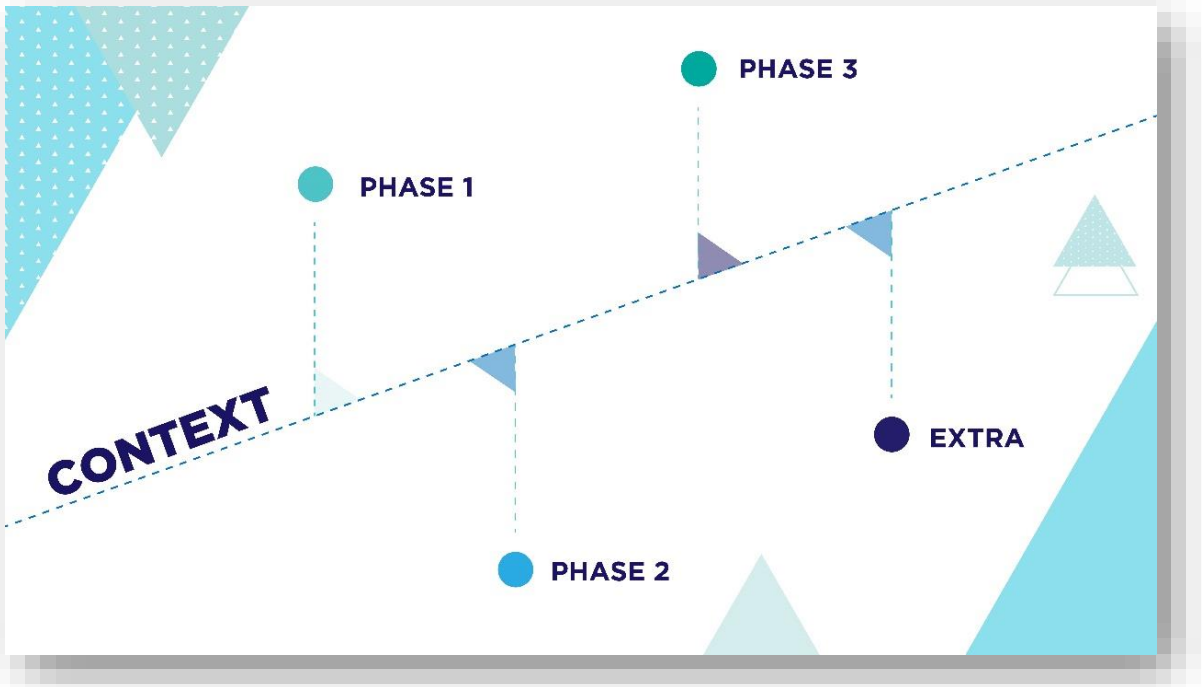
Double diamond model created by Design Council (adapted from Design Council)

The guideline can be applied to the first step in the double diamond model created by Design Council of the UK.



The design flow created by Klaus Krippendorff (adapted from Krippendorff, 2005)

This guideline refers to the design flow created by Klaus Krippendorff (2005), which is based on using stories and metaphors for design. The figure shows how the design principles in Neo-Confucianism are combined with the design flow.


PHASE 3
PHASE 1
CONTEXT
EXTRA
PHASE 2

HOW
PHASE 1: Create a metaphor
WHY

WHY

People in the Song Dynasty cared about the implications in everything. Using metaphors is an important design principle in Neo-Confucianism.

Use metaphors in product design can help designers come up with more ideas (Krippendorff, 2005).

Metaphor - an expression, often found in literature, that describes a person or object by referring to something that is considered to have similar characteristics to that person or object (Cambridge Dictionary, 2020)

HOW

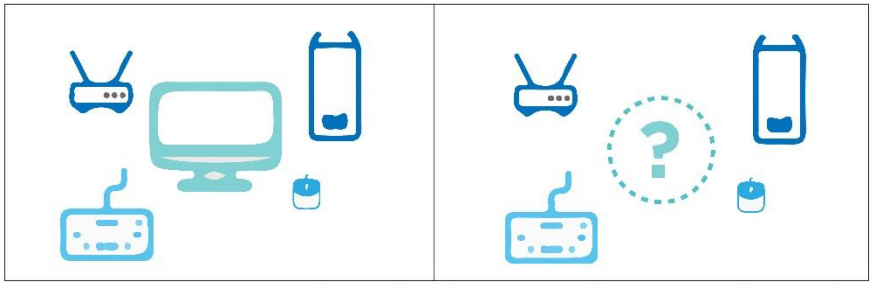
Physical characteristics

Under Neo-Confucianism, people thought products have physical characteristics associated with other things. For example, the natural cracks in the making process of ceramics looked like cracks in ice. So people named them ice cracks.

Functions

Some products have meanings based on their functions. For example, in Song Dynasty, after a poet wrote a letter to his or her best friend, the letter paper became the symbol of their friendship. This kind of metaphor are common in the Song Lyrics under the influence of Neo-Confucianism.

EXERCISE: Surrounding space

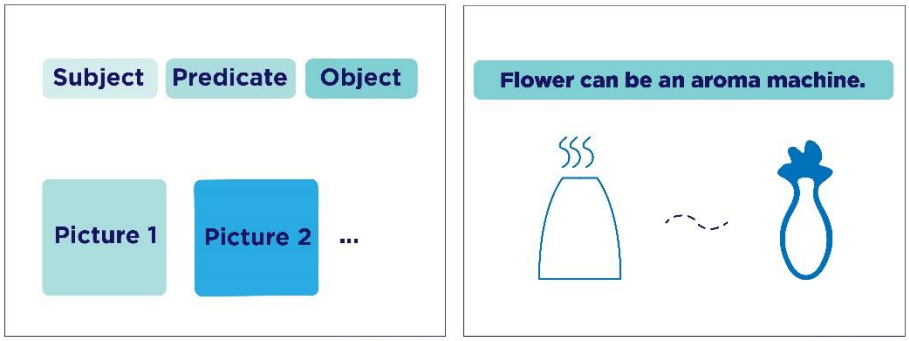


Example: The surrounding space of computer

Designers should not only care about the product itself, but also be concerned the relationship between the product and the surrounding space, which is an important design principle in Neo-Confucianism.

Here is an exercise for doing that. Try to use different pictures to show the surrounding space of the product, but not the product itself. Then ask other people if they can guess what the product is by those pictures. The goal of this exercise is to help designers understand more about the surrounding space of the product rather than only care about the product itself. This can help designers create a better metaphor.

How to summarize the metaphor?



Template **Example**

To create a clear metaphor, designers should use a sentence or two, or two or three pictures to summarize their observation of the product.
It provides benefits, such as narrowing down the scope of design and letting the designers choose what they want to do most.

PHASE 2:

Arrangement of the narrative structure

HOW

WHY

WHY

People in the Song Dynasty cared about the process of observation. They paid attention to what they see and what they feel at different time, which is an important principle in Neo-Confucianism.

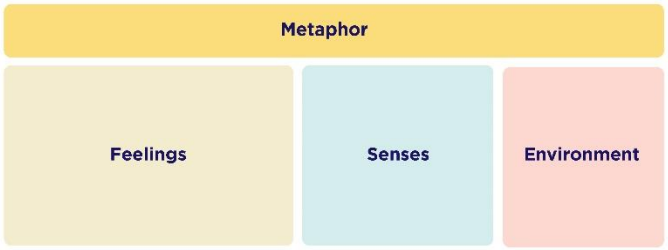
A simple metaphor cannot express this process of observation. By enriching metaphor into a story, designers can express the process of observation, which is important in Neo-Confucianism.

Story - a description, either true or imagined, of a connected series of events (Cambridge Dictionary, 2020)

Symbol - symbol means an object or word that is used to represent something else or some feelings in this booklet.

HOW

List elements in the narration

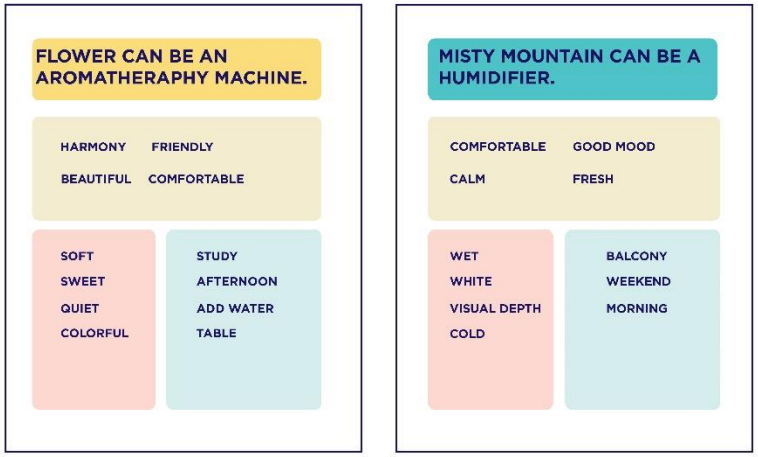


TEMPLATE: Elements in the narration

Since people in the Song Dynasty used a dynamic way of observation, they paid more attention to what they perceived from the product at different time. Therefore, it is important to list all the possible perceived elements in the metaphor at first.

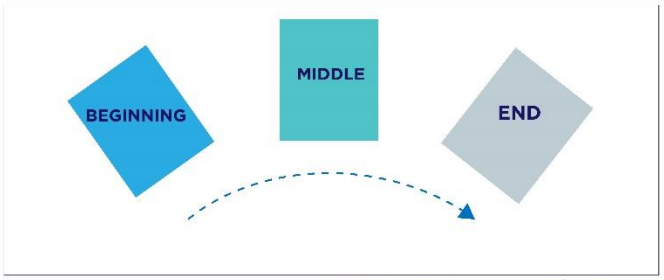
Designers can list all the elements in the narration with three categories: senses, feelings and environment.

EXAMPLES



EXAMPLES: Elements in the narration

The order of elements

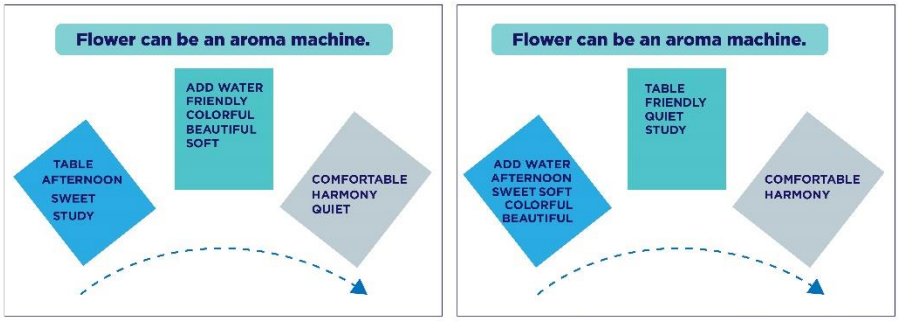


TEMPLATE: The order of elements

What the tourists perceived in the Song Dynasty gardens was pre-designed in an order. People in the Song Dynasty paid great attention to the order of observation, which is an important design principle in Neo-Confucianism.

Firstly, designers should divide the narration into three parts: **beginning, middle and end.** Secondly, designers should put the elements in the three parts. There is no standard for the order if designers can make the narration in line with the original intention of the design.

EXAMPLES



EXAMPLES: Elements in the narration

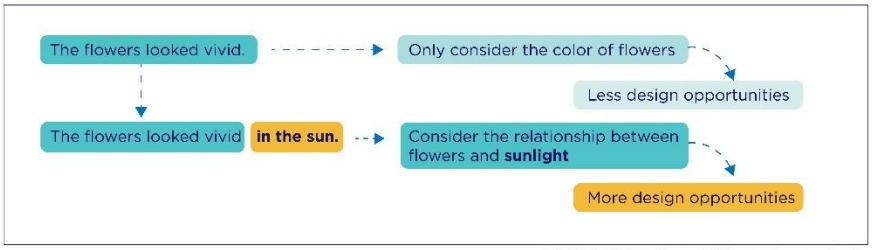
This booklet shows two different arrangements based on the same metaphor to show how different description orders can affect subsequent design outputs.

Methods for completing the narration

In the Song Lyrics, in order to enhance metaphor's expressive power, people used the following methods to enrich metaphor, these methods are based on the design principles in Neo-Confucianism.

- **Use different symbols**
- **Use subjective feelings**
- **Leave room for imagination**

Use different symbols

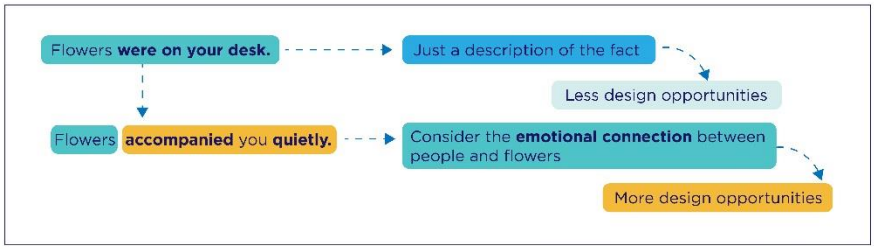


EXAMPLE: Use different symbols

Designers can use different symbols together to describe a scene, which is an important design principle in Neo-Confucianism. In Neo-Confucianism, there are connections between things in the same scene. The interaction between natural phenomena and man-made creations was important for people in the Song Dynasty.

The example shows how to use different symbols in the narration and how will it affect the further design opportunities.

Use subjective feelings

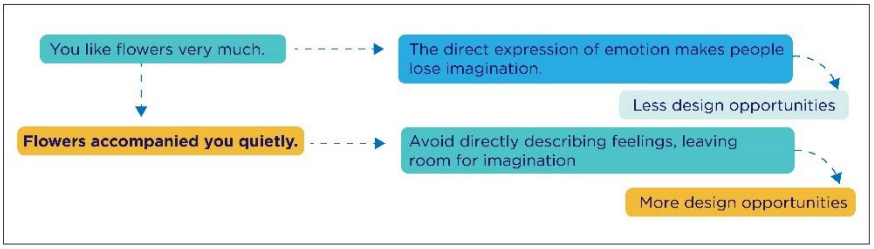


EXAMPLE: Use subjective feelings

This method is also widely used in the Song Lyrics, which is an important design principle in Neo-Confucianism. Designers can add subjective feelings to strengthen some key points in the narration.

The example shows how to use subjective feelings in the narration and how will it affect the further design opportunities.

Leave room for imagination

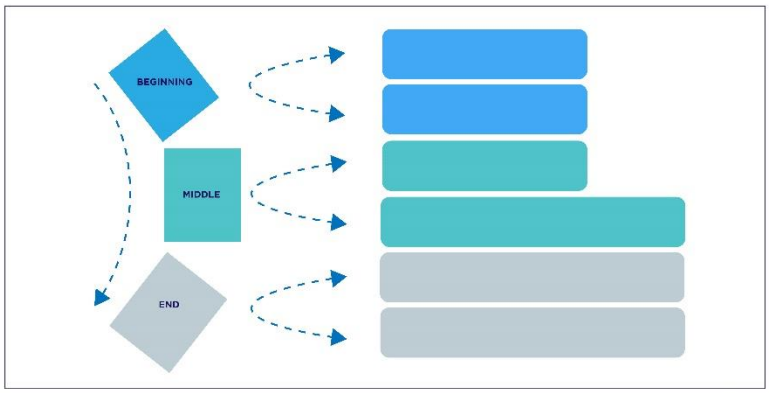


EXAMPLE: Leave room for imagination

Leaving room for imagination means designers should avoid expressing feelings directly, Under Neo-Confucianism, people in the Song Dynasty used symbols to express their feelings, which is an important design principle in Neo-Confucianism.

The example shows how to leave room for imagination in the narration and how will it affect the further design opportunities.

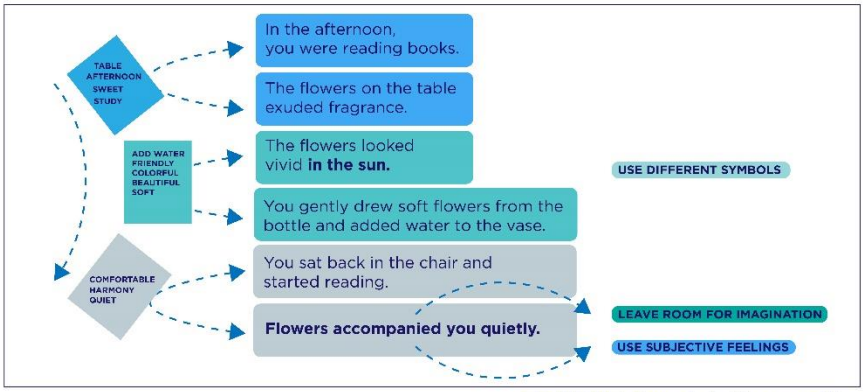
Template of completing the narration



TEMPLETE: Complete the narration

This guideline recommends designers complete the narrative with six to eight sentences, for example, two sentences at the beginning, two sentences in the middle, and two sentences at the end. This helps designers focus on the important parts.

EXAMPLE



EXAMPLE: Complete the narration

The example shows how those three method applied to the narraiton to help complete it.

EXAMPLES of the refined stories

In the afternoon,
you were reading books.

The flowers on the table
exuded fragrance.

The flowers looked
vivid in the sun.

You gently drew soft flowers from the
bottle and added water to the vase.

You sat back in the chair and
started reading.

Flowers accompanied you quietly.

In the afternoon, you gently pulled out
the sweet flower from the vase.

Then you added clean water to
the vase.

Flowers quietly absorbed
water and felt happy.

The flowers looked
vivid in the sun.

You sat back in the chair and
started reading.

Flowers accompanied you quietly.

The outcome of the second phase is a refined story based on the metaphor, which is the foundation for the next step. The two examples are based on different narractive structures, which will bring different design opportunities.

PHASE 3: Visualization of the story

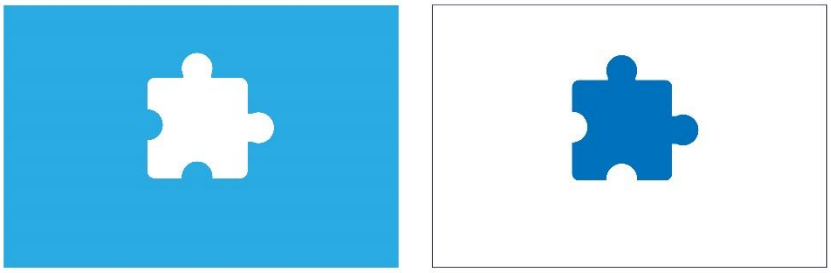
HOW

WHY

WHY

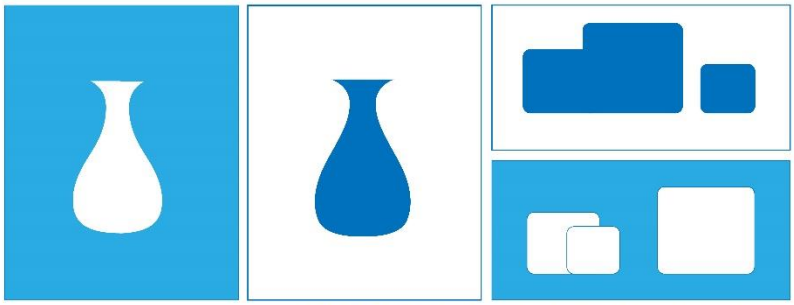
- There are many expression methods in Neo-Confucianism. Designers can think about the visualization of the story based on those methods, which are meaningful for finding design opportunities based on Neo-Confucianism.
- Visual depth is the focus point of Song Dynasty gardens and Song Dynasty paintings. It is an important design principle in Neo-Confucianism.

EXERCISE: The internal space and the external space



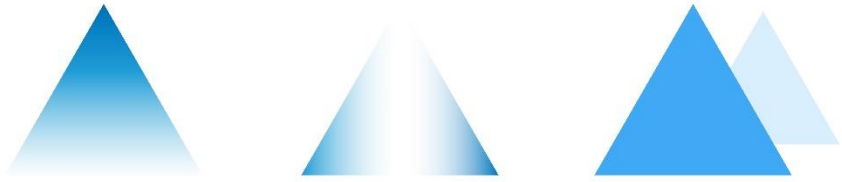
Designers should consider the relationship between internal and external space of elements in the narration, which is an important design principle in Neo-Confucianism.
Here is an exercise for doing that. Designers can use color to fill the outer space of the element, and then fill the inner space of the element with color, compare the different visual effects, and modify the contour line. It is like a jigsaw puzzle.

EXAMPLE



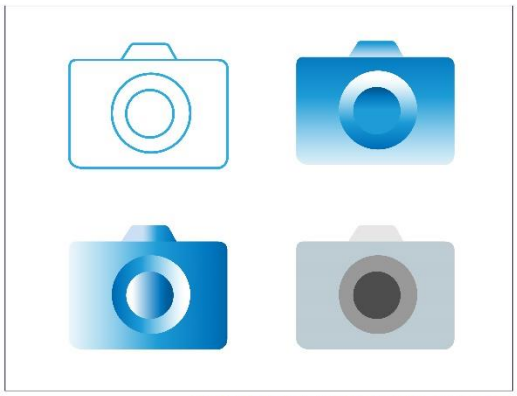
EXAMPLE: The internal space and the external space

EXERCISE: Visual depth



Designers should consider the visual depth in the design expression, which is an impotant design principle in Neo-Confucianism. The figure above shows three kinds of visual depth: Up & down, left & right, and front & back.

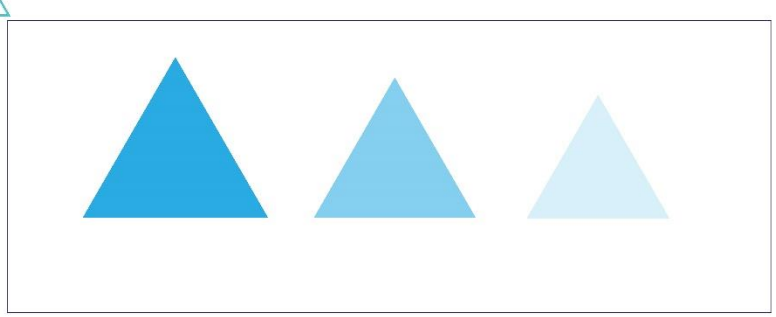
EXAMPLE



EXAMPLE: Visual depth exercise

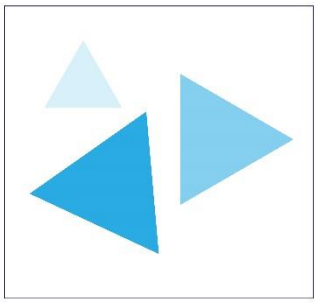
Here is an exercise for doing that. Designers can select a product line draft, try to use three kinds of visual depth to express the space of the product.

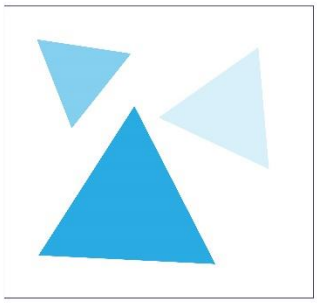
EXERCISE: Contrast



The technique commonly used in Neo-Confucianism is the contrast of different scenery, that is, enhancing the contrast between close-up scenery and distant scenery.

EXAMPLE





EXAMPLE: Exercise of contrast

Here is an exercise for doing that. Designers can choose different elements in the story and arrange their contrast in the picture. Designers can enhance the contrast between near elements and distant elements.

EXAMPLES of visualization of the story

EXAMPLE 1:

In the afternoon, you were reading books.

The flowers on the table exuded fragrance.

The flowers looked vivid in the sun.

You gently drew soft flowers from the bottle and added water to the vase.

You sat back in the chair and started reading.

Flowers accompanied you quietly.

The outcome of the third phase is the visualization of the story. The two examples are based on different narractive structures, which will bring different design opportunities.

EXAMPLES of visualization of the story

EXAMPLE 2:

In the afternoon, you gently pulled out the sweet flower from the vase.

Then you added clean water to the vase.

Flowers quietly absorbed water and felt happy.

The flowers looked vivid in the sun.

You sat back in the chair and started reading.

Flowers accompanied you quietly.

EXTRA

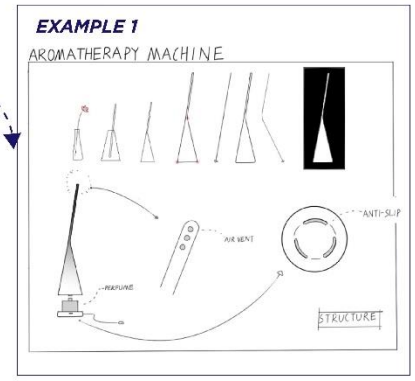
- COLOR, MATERIAL, TEXTURE
- DESIGN OPPORTUNITIES

DESIGN OPPORTUNITIES

You sat back in the chair and started reading.

The flowers on the table exuded fragrance.

EXAMPLE 1



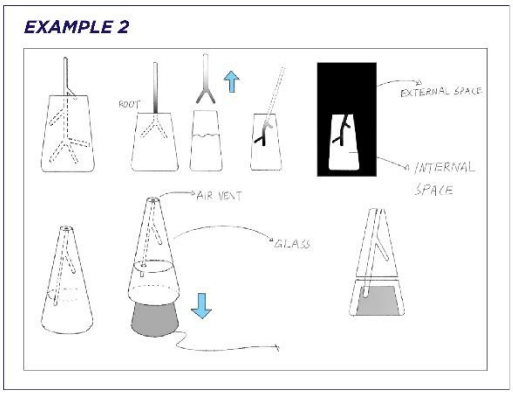
Design opportunities in example 1 is about the internal space and external space. In this visualized story, I cared about the outline of the flower and its position in the environment.

DESIGN OPPORTUNITIES

Flowers quietly absorbed water and felt happy.

Then you added clean water to the vase.

EXAMPLE 2



Design opportunities in example 2 is about the process of adding water. In this visualized story, I cared about details of how plants absorb water from roots, and considered the relationship between the internal space and external space.

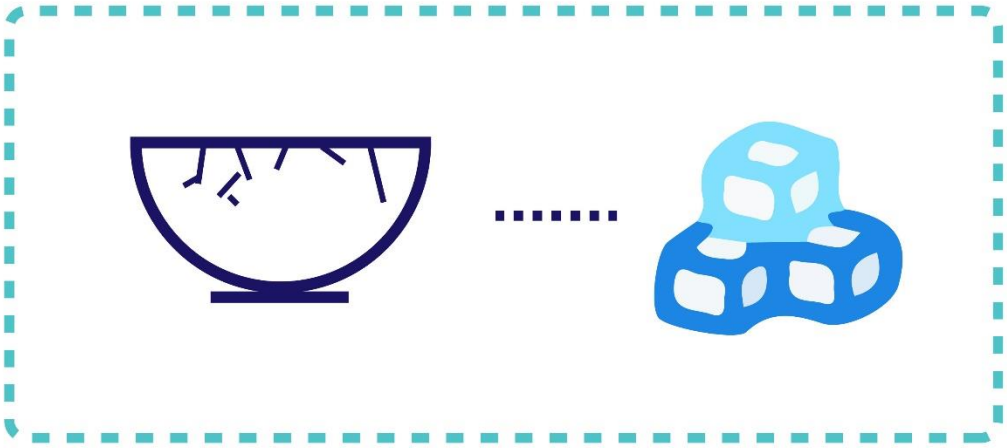
COLOR, MATERIAL, TEXTURE
Under the influence of Neo-Confucianism, people in the Song Dynasty tended to express feelings in an implicit way.
Designers should use humble greyness and avoid using too much decoration in the product.
Designers also need to use natural texture, which accords with the aesthetic orientation of Neo-Confucianism

7.2 Template cards for the guideline of applying Neo-Confucianism thought to product design

PHASE 1
Create a metaphor

1

Inspirations:
Physical characteristics

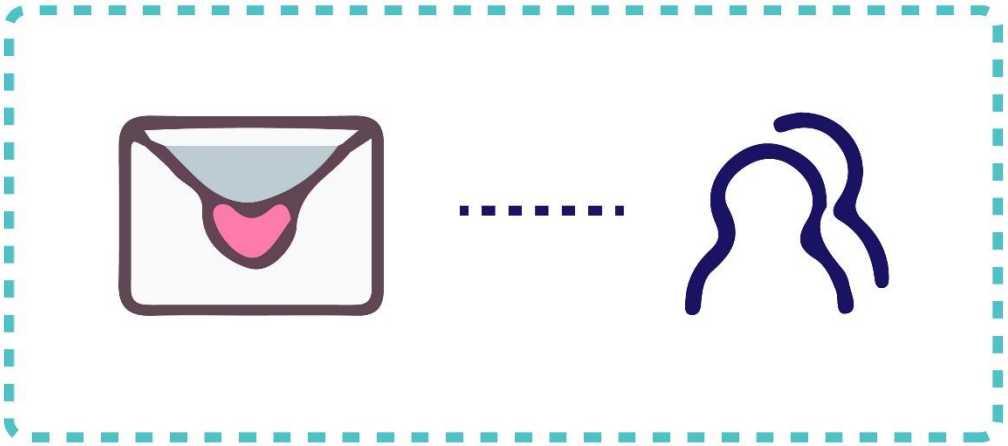


Under Neo-Confucianism, people thought products have physical characteristics associated with other things. For example, the natural cracks in the making process of ceramics looked like cracks in ice. So people named them ice cracks.

PHASE 1
Create a metaphor

2

Inspirations: Functions

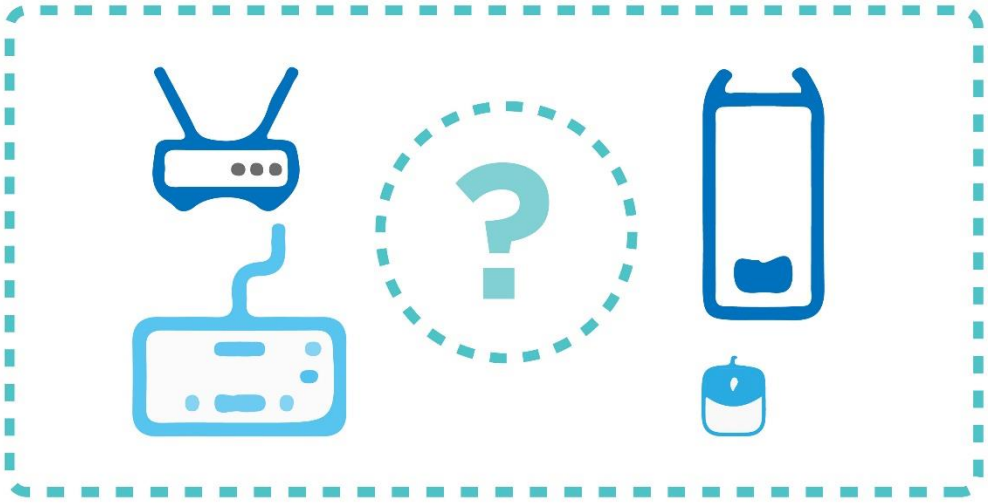


Some products have meanings based on their functions. For example, in Song Dynasty, after a poet wrote a letter to his or her best friend, the letter paper became the symbol of their friendship. This kind of metaphor are common in the Song Lyrics under the influence of Neo-Confucianism.

PHASE 1
Create a metaphor

3

EXERCISE:
Surrounding space

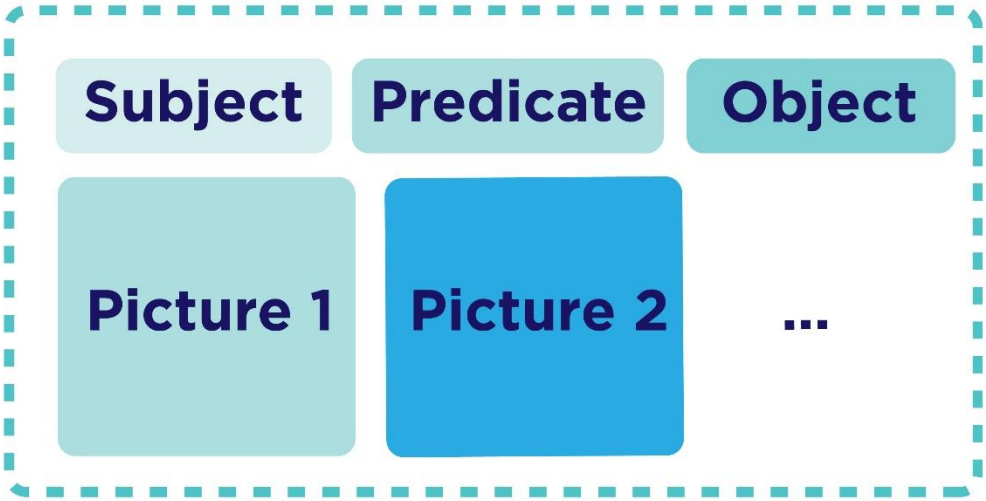


Try to use different pictures to show the surrounding space of the product, but not the product itself. Then ask other people if they can guess what the product is by those pictures.

PHASE 1
Create a metaphor

4

Summarize the metaphor

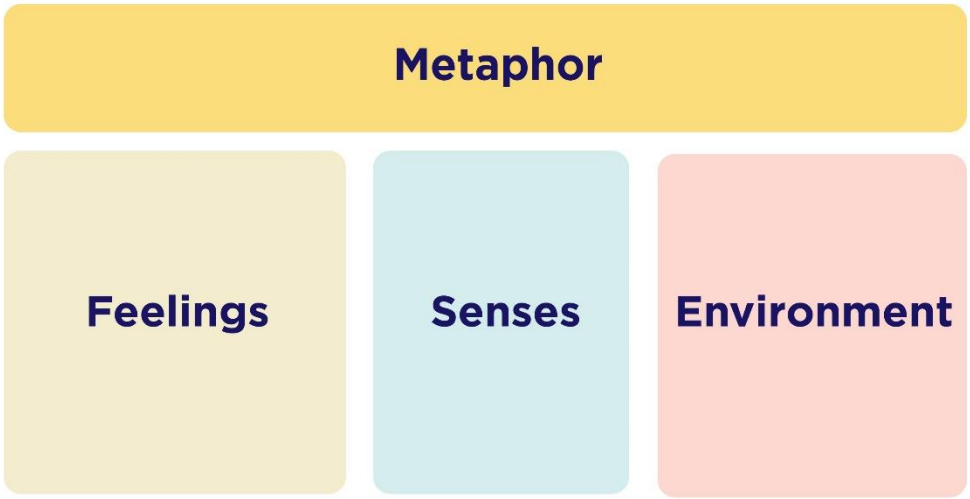


To create a clear metaphor, designers should use a sentence or two, or two or three pictures to summarize their observation of the product.

PHASE 2:
Narrative structure

1

List elements in the narration

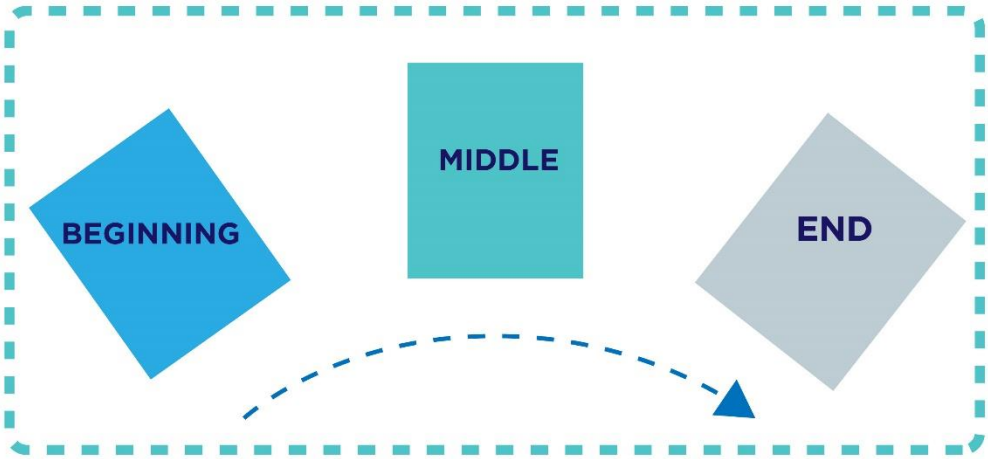


Designers can list all the elements in the narration with three categories: senses, feelings and environment.

PHASE 2:
Narrative structure

2

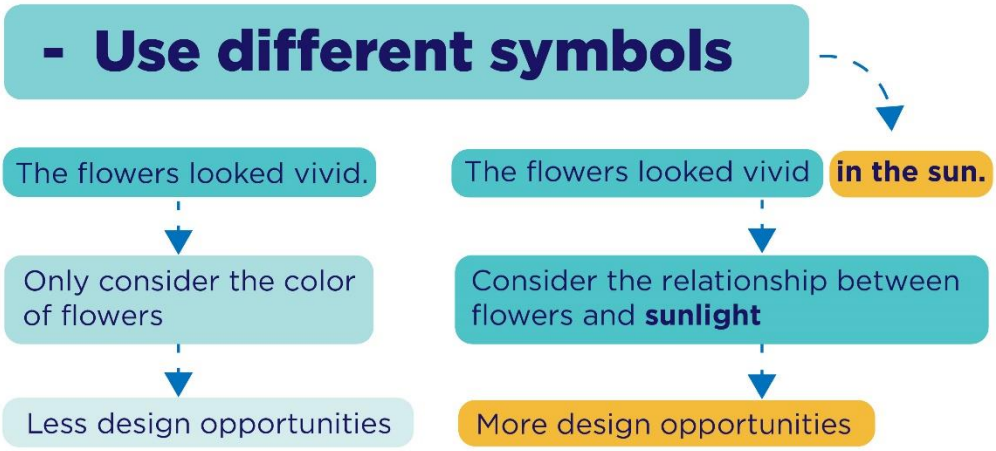
The order of elements



Firstly, designers should divide the narration into three parts: **beginning, middle and end.** Secondly, designers should put the elements in the three parts. The designer can reorganize the order of the elements to create different stories and design opportunities.

PHASE 2: 3
Narrative structure

Methods:
Complete the narration



Designers can use different symbols together to describe a scene, which is an important design principle in Neo-Confucianism.
The interaction between natural phenomena and man-made creations was important for people in the Song Dynasty.

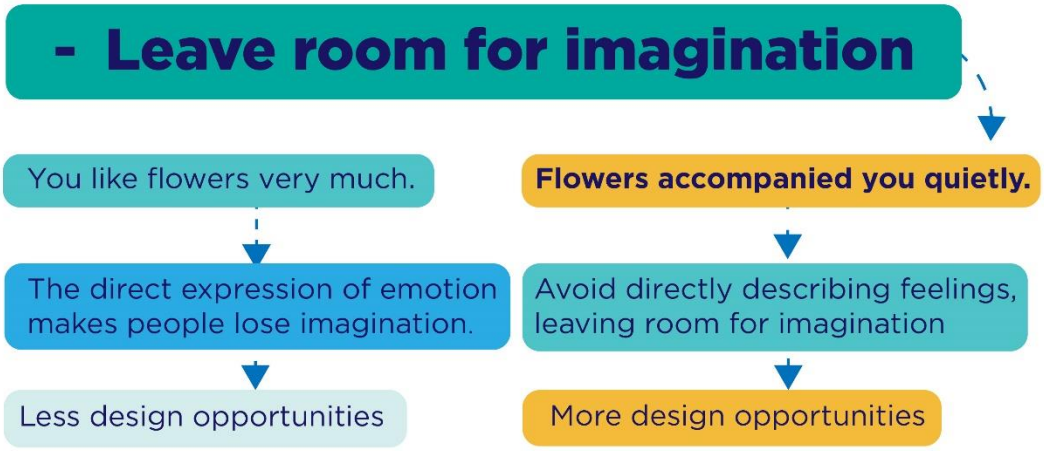
PHASE 2: 4
Narrative structure

Methods:
Complete the narration

This method is also widely used in the Song Lyrics, which is an important design principle in Neo-Confucianism. Designers can add subjective feelings to strengthen some key points in the narration.

PHASE 2: 5
Narrative structure

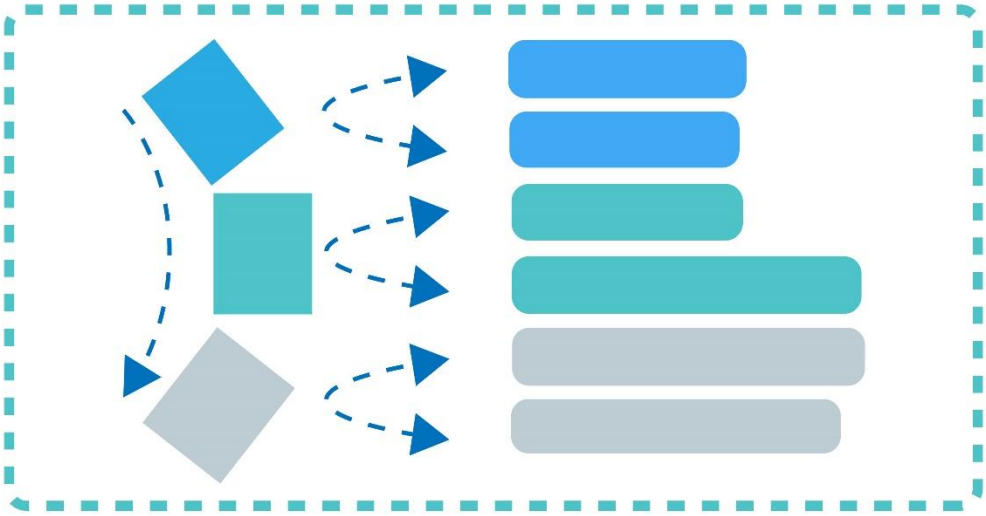
Methods:
Complete the narration



Leaving room for imagination means designers should avoid expressing feelings directly, Under Neo-Confucianism, people in the Song Dynasty used symbols to express their feelings, which is an important design principle in Neo-Confucianism.

PHASE 2: 6
Narrative structure

Template: Complete the narration

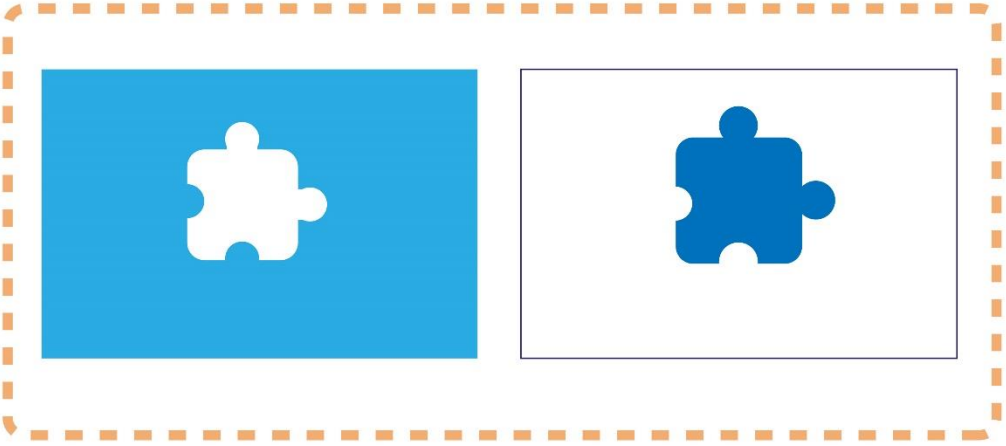


This guideline recommends designers complete the narrative with six to eight sentences, for example, two sentences at the beginning, two sentences in the middle, and two sentences at the end.

PHASE 3
Visualize the story

1

EXERCISE: The internal space & the external space

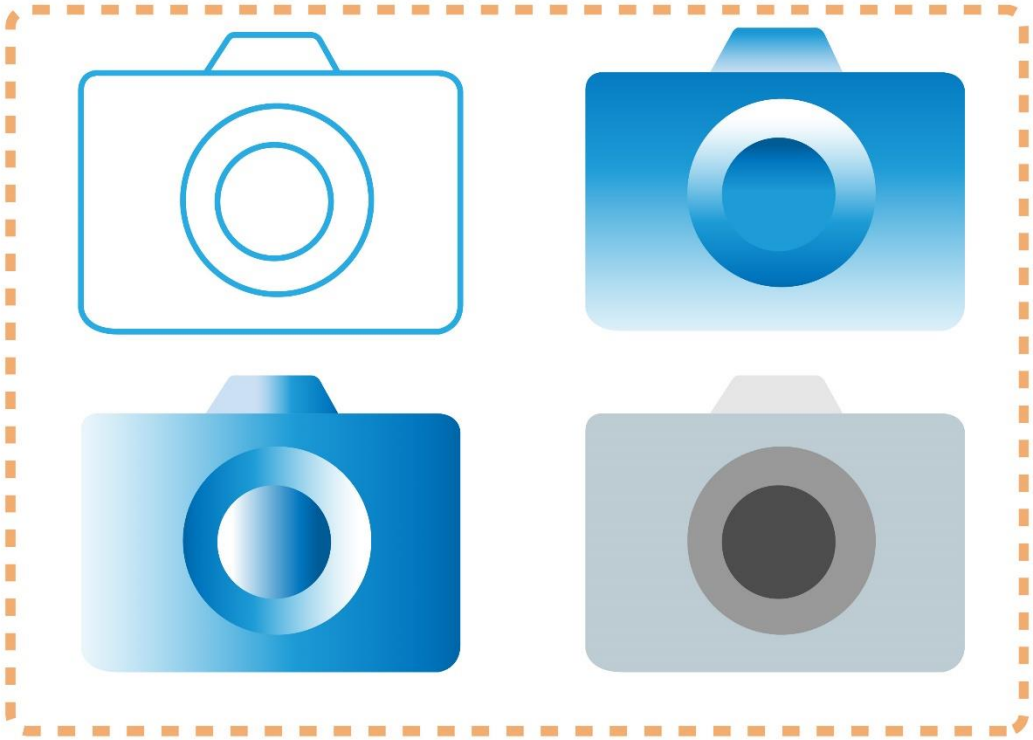


Designers can use color to fill the outer space of the element, and then fill the inner space of the element with color, compare the different visual effects, and modify the contour line.
It is like a jigsaw puzzle.

PHASE 3
Visualize the story

2

EXERCISE:
Visual depth

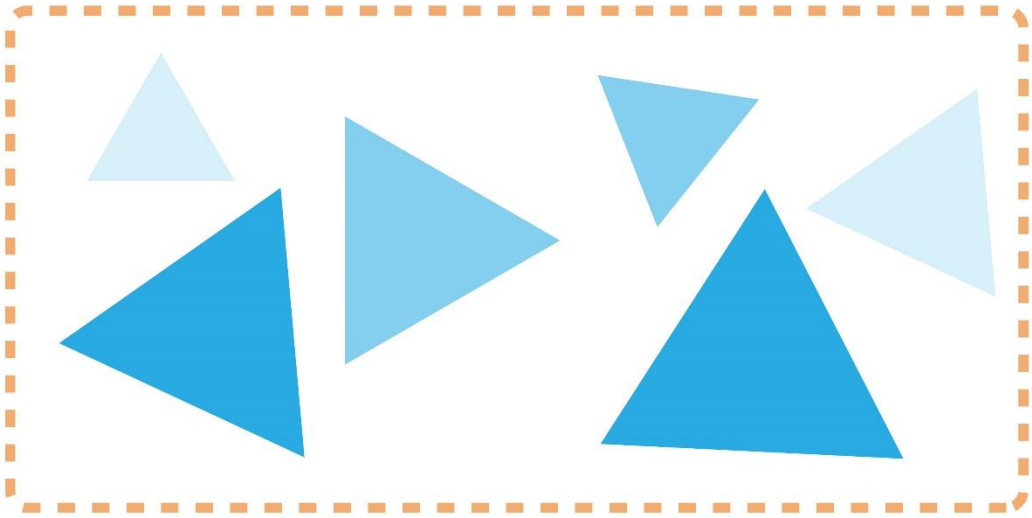


Designers can select a product line draft, try to use three kinds of visual depth to express the space of the product.

PHASE 3
Visualize the story

3

EXERCISE:
Contrast

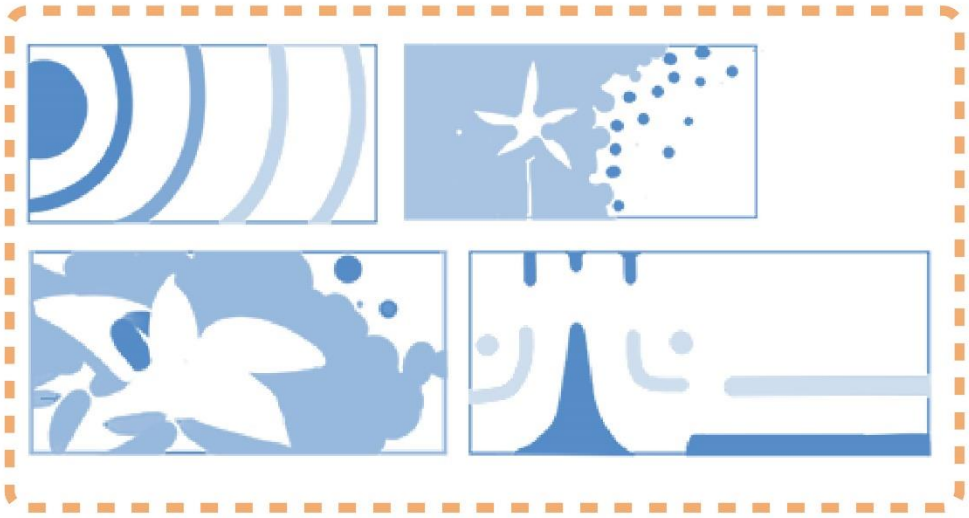


Designers can choose different elements in the story and arrange their contrast in the picture. Designers can enhance the contrast between near elements and distant elements.

PHASE 3
Visualize the story

4

Visualization of the narrated story



Designers should do sketches in the order of the narration and visualize physical, emotional and sensorial aspects of the story. This method helps designers to think more about how people perceive information in the scene.