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Perpustakaan Tuanku Bainun
Kampus Sultan Abdul Jalil Shah



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THE DEVELOPMENT OF INTERIOR FURNISHING DESIGN METHOD BASED ON SEMIOTIC THINKING



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XIE YIXUAN

SULTAN IDRIS EDUCATION UNIVERSITY

2023



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THE DEVELOPMENT OF INTERIOR FURNISHING DESIGN METHOD BASED
ON SEMIOTIC THINKING

XIE YIXUAN

THE THESIS PRESENTED TO QUALIFY FOR A DOCTOR OF PHILOSOPHY

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SULTAN IDRIS EDUCATION UNIVERSITY

2023



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ABSTRACT

The semiotic thinking design method aims to explain the design form, the relationship between design form and meaning, and the relationship between space and people in a specific and systematic way. This method is more comprehensive and opens up a new field of design method for the interior designers. The purpose of this study is to develop an interior furnishing design method based on a semiotic thinking method through three aspects, namely design syntactic, design semantic and design pragmatic. This method helps in overcoming the problem of design confusion, including from “lack of continuity”, “lack of meaning” and “crisis of feature”, and achieve the design effect of “design integration”, “design meaning” and “design differentiation”. In order to achieve a better design phenomenon summary and obtain design evaluation, this study used a qualitative approach involving 33 case studies on typical interior furnishing design case, and two semi-structured interviews (professional group and public group). As for design syntactics, the study results showed six basic use methods (surface structure) and three internal combination rules (deep structure) of design elements, able to deal with the problem of “lack of continuity” in interior furnishing design. Next, for the design semantics, the understanding and selective use of three design ideographic ways can improve the problem of “lack of meaning” in interior furnishing design. Whereas, for the design pragmatics, consideration of design function and design context can improve the problem of “crisis of feature”. This semiotic thinking design method can guide designers to carry out design practice through a more complete perspective. This method can also be used as a standard and general reference for the evaluation of interior furnishing design.





ABSTRAK

Kaedah pemikiran semiotik bertujuan untuk menjelaskan makna bagi sesebuah reka bentuk, menyatakan hubungan antara bentuk reka bentuk dengan makna, serta memperincikan hubungan antara ruang dan manusia dengan lebih spesifik dan sistematik. Kaedah ini adalah lebih komprehensif dan membuka suatu lapangan kaedah pemikiran baharu khusus bagi pereka dalaman. Tujuan kajian ini adalah untuk membangunkan kaedah pemikiran semiotik melalui tiga aspek iaitu sintaksis reka bentuk, semantik reka bentuk dan pragmatik reka bentuk. Kaedah ini membantu dalam mengatasi masalah kecelaruan reka bentuk merangkumi “kekurangan kesinambungan”, “kekurangan makna” dan “krisis ciri”, serta mencapai kesan reka bentuk melalui “integrasi reka bentuk” “makna reka bentuk” dan “pembezaan reka bentuk”. Kajian ini menggunakan pendekatan kualitatif yang melibatkan 33 kajian kes reka bentuk perabot dalaman tipikal, dan dua temu bual separa berstruktur ke atas kumpulan profesional dan kumpulan awam untuk menjelaskan fenomena dan menganalisis penilaian. Bagi sintaksis reka bentuk, hasil kajian menunjukkan enam kaedah penggunaan asas (struktur permukaan) dan tiga peraturan gabungan dalaman (struktur dalam) elemen reka bentuk, mampu menangani masalah kesinambungan dan integrasi reka bentuk perabot dalaman. Seterusnya, bagi semantik reka bentuk, pemahaman dan penggunaan terpilih tiga ideografi reka bentuk boleh memperbaiki masalah “kekurangan makna” dalam reka bentuk perabot dalaman. Manakala, untuk pragmatik reka bentuk, pertimbangan fungsi reka bentuk dan konteks reka bentuk boleh memperbaiki masalah “krisis ciri”. Pendekatan pemikiran semiotik ini boleh dijadikan panduan kepada arkitek serta pereka bagi menjelaskan makna dalam praktis reka bentuk perabot hiasan dalaman melalui perspektif lebih lengkap. Pendekatan ini juga boleh digunakan sebagai rujukan standard dan umum bagi penilaian sesebuah reka bentuk perabot dalaman.





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A Interview Records

CHAPTER 1

INTRODUCTION

This chapter is the introduction of the whole text. A brief background of the research components is presented in Section (1.2). problem statement addressed in Section (1.3). The research aim presented in Section (1.4), followed by the research objectives in Section (1.4.1) and research questions in Section (1.4.2). The scope and area of research is identified and introduced in Section (1.5). This is followed by the the significance of the research, which are described in Section (1.6). The expectation of research is discussed in Section (1.8). Finally, the main structure of the thesis is briefly outlined in Section (1.9).



1.2 Research Background

1.2.1 Semiotics

Symbols are a big concept that can be defined as the names of all things (Leone, M. 2017, P112). Everything depends on symbols to convey its meaning and value of existence. From science to art, from material to emotion, they all have their unique symbol system (Chandler, D. 2017). Semiotics is a hot topic of social science research in the recent years (Wang, 2018, P1). This idea is shared by E. Basin (1974) in which “semiotic methods have gained wide application in art research and literary criticism” (P34). British philosopher and aesthetician C. Beardsley once said: “In a broad sense, semiotics is undoubtedly one of the most core theory of contemporary philosophy and many other fields” (Walter Lippmann, 1986). Semiologist Wang Mingyu wrote in 2007: Today, the development of the discipline has already surpassed the discipline itself (Wang Minyu, 2007, P104), and the discussion of semiotics is not limited to the original field of semiotics, but has become “the research on signs, or on the process of signs, or on the function of signs” (Li Youzheng, 2007, P45). As a humanistic analysis method, semiotics shows its unique charm in methodology and epistemology, and plays an important role in the research of many disciplines. According to Deni, M., & Zingale, (2017, P1293), “Design is one of the most productive fields of semiotics”. “Semiotics is an excellent artificial theory and therefore should have a substantial role in understanding designed phenomena” (Holt, M. 2017, P332). “In the last twenty years, Semiotics has been inserted in design university programs and semiotic methods and





tools have been implemented. The role of semiotics as a crossing discipline emerges and is gains value in design projects”. (Deni, M., & Zingale, 2017, P1293).

Semiotice is a science which deals with the realization and analysis of signs and symbols in all forms and aspects. These aspects include spoken or written language or non-linguistic forms such as physiologic and biologic signs, semantic signs, value systems, and all forms of motions, moods, conscious or unconscious (Prato and Pardo, 2013). In the Western cultural context, the study of semiotics has a long history. As early as the beginning of the 20th century, the study of semiotics had a great influence on the study of linguistics (Ahmadi, 2013), mainly concentrated in the Europe and the United States and other developed countries (Zhu, 2022). Since then, many scholars have recognized the value of semiotics and introduced semiotics into the literary theory and even the architectural field. The French linguist Roland Barthes’s “Semiotics Aesthetics” (1987) is an important book in the field of literary theory. According to Barthes (1987, P7), “the beauty is inevitable and essentially a symbol”, “semiotic thinking and symbolic behavior are the most representative features of human life” (Jiang, 2013). British scholars Ogden and Richards (1923) in their book “The Meaning of Meaning”, have deeply discussed the meaning of symbols. They believe that “Meaning is the relationship between people who use symbols, and people use symbols to communicate their thoughts about the world around them” (Vol. 29). In China, the semiotic theory was gradually studied since the mid-1980s and used in architectural design (Shu, 2002, P2).





1.2.2 Design Semiotic

In the field of design semiotics, many scholars have made many explorations and formed a lot of fruitful theoretical achievements. Designers are among those professionals who have shown a first and continued interest in the modern revival of semiotics (Nadin, 1987). Engineering, medicine, business, architecture, and painting are concerned not with how things are but with how things might be---in short, with design (Simon, 1982). Design principles are semiotic by nature. (Nadin, 1987). It has been proved that semiotics plays an important role in the interpretation and understanding of design phenomena, and it is practical and significant to intervene in design from the perspective of semiotics (Kazmierczak, 2003).



The design semiotics theory has effectively solved the “meaning crisis” faced by modern design and become the theoretical foundation of postmodernism. Meanwhile, it also provides theoretical support for deconstruction (Shu, 2002, P1). Semiotics is not only regarded as a discipline specialised in the study of meaning processes, it is also generating meaning through design works (Deni and Zingale, 2017, S1293). The design meaning has become a hot issue in the field of architectural design, product design and graphic design (Holt, 2017). In recent decades, the design process of architecture, products and furniture, the design styles and trends of thought, such as postmodernism, neo-modernism, structuralism and deconstruction, are all around the design meaning. But in the end, all the research on design meaning involves the issue of semiotics, which is the latest field to solve the problem of design meaning, and its core is to discuss the relationship between design form and meaning. If design is regarded as a “symbolization” practice, the common point of all semiotic-based design theories is to





find a design language, or at least a design grammar. This idea is shared by Matthew Holt (2017) in which “Whatever the case, the semiotic method to the study of communication, this is, to organized meaning-making, has had a profound influence on design methodology and pedagogy” (P333).

1.2.3 Interior Furnishing Design

The challenge of interior furnishings design is that there are few theoretical studies related to semiotics. This is because interior furnishing design is a new direction under the environmental art design profession (Pan and Qiu, 2008). It was established relatively late and the theoretical research of interior furnishing design is still in the preliminary exploration stage (Qiao, 2014). At present, most of the existing research achievements are textbooks (Liu, Liu, & Yang, 2018; Pan, 2013), tool manual (Li, 2016; Huang, 2010) and introductions (Lu, 2021; Tao and Xue, 2018; Li, 2015). Although semiotics has made some achievements in the relevant fields of interior furnishing design (such as architectural design, product design, visual design, etc.), it has never been systematically discussed in the field of contemporary interior furnishing design, and a complete and mature interior furnishing design method has not been formed.

However, in practical applications, for the research of semiotic thinking in interior furnishing design, although there are few literatures about it and the concept of interior furnishing design based on semiotic thinking is not directly put forward, it is obviously showed in the excellent interior furnishing design cases. All of these provide important





samples for this study and provide a good reference and practical experience for the research of interior furnishing design methods.

For this reason, this study takes the interior furnishing design method based on semiotic thinking as the research object, the researchers hope to provide theoretical reference for the practice of interior furnishing design in the future.

1.3 Problem Statement

The development of economy and the communication and integration of society show a general sense of convergence from the cultural perspective (Zheng, 2021). The trend of “lack of continuity”, “lack of meaning”, and “crisis of feature” have become the three common problems that restricts the development of interior furnishing design (Xie, 2017).

First of all, the problems of “lack of continuity”, and “lack of meaning” in interior furnishing design are as follows: Bringing design elements together in a random way makes them lose the context in which they depend (Xie, 2017). Moreover, these designs have nothing to do with the local historical context, regional characteristics, and site environment (Xu, 2020). The interior furnishing design is a discipline with a strong systemic and thematic nature. It has an urgent need for “integrated design forms” (Liu, 2018) and “meaning of design” (Liu, 2018). Many interior furnishing cases lack a systematic and comprehensive understanding of this basic demand. The design





elements were pieced together indiscriminately, and the meaning of the design was missing. This is the first and second problem of interior furnishing design.

The second, the problems of “crisis of feature” in interior furnishing design are as follows: The phenomenon of worshipping everything foreign countries and blindly pursuing internationalism is increasingly obvious (Wang, 2022). “European style”, “Mediterranean style”, “Modernism”, and “Southeast Asian style” has been copied over the past 20 years in China. These designs are one-sided pursuit of visual form, each design form is very similar (Guo, 2018). These so-called interior furnishing design are often blind follow the trend, or copy everything indiscriminately and transplant mechanically. This is the third problem of interior furnishing design.



As a result, in this study, researchers try to obtain a relatively complete interior furnishing design method from the perspective of symbols. It provides the theoretical basis for reinterpreting and evaluating the interior furnishing design, and for creating the interior furnishing design works with visual unity, cultural meaning and own characteristics.

In this study, the researcher tries to find an interior furnishing design method that can solve and improve the above three problems, and through this method, finally achieve the design effect of “design integration”, “design meaning”, and “design differentiation”. From the point of view of semiotic thinking, it gives great inspiration to researchers. The design syntactics, design semantics, design pragmatics contained in semiotic thinking have correspondence to the solution of the above three problems.





1.4 Research Aim

The aim of this study is to provide guidance for the design practice of interior furnishing designers from three aspects of “design syntactics”, “design semantics” and “design pragmatics”, and to provide a reference for the public to understand and evaluate design. Although the research samples of this study are from China, but as a design method, this method can be used as a standard, which can be applied to other countries and regions.

1.4.1 Research Objectives



RO1 to analyze the interior furnishing design theoretical system based on semiotic thinking.

RO2 to develop an interior furnishing design method based on syntactics, semantics and pragmatics.

RO3 to solve or improve the problems of “lack of continuity”, “lack of meaning” and “crisis of feature” in interior furnishing design by the above design method (Objective 2), and achieve the design effect of “design integration”, “design meaning” and “design differentiation”.





1.4.2 Research Questions

Q1: What are the theoretical system of interior furnishing design based on semiotic thinking?

Q2: How to develop interior furnishing design methods based on “design syntactics”, “design semantics” and “design pragmatics”?

Q3: How to solve or improve the problem of “lack of continuity”, “lack of meaning” and “crisis of feature” in interior furnishing design, and achieve the design effect of “design integration”, “design meaning” and “design differentiation”?



1.5 Scope and Area of Research

1.5.1 Theory Framework

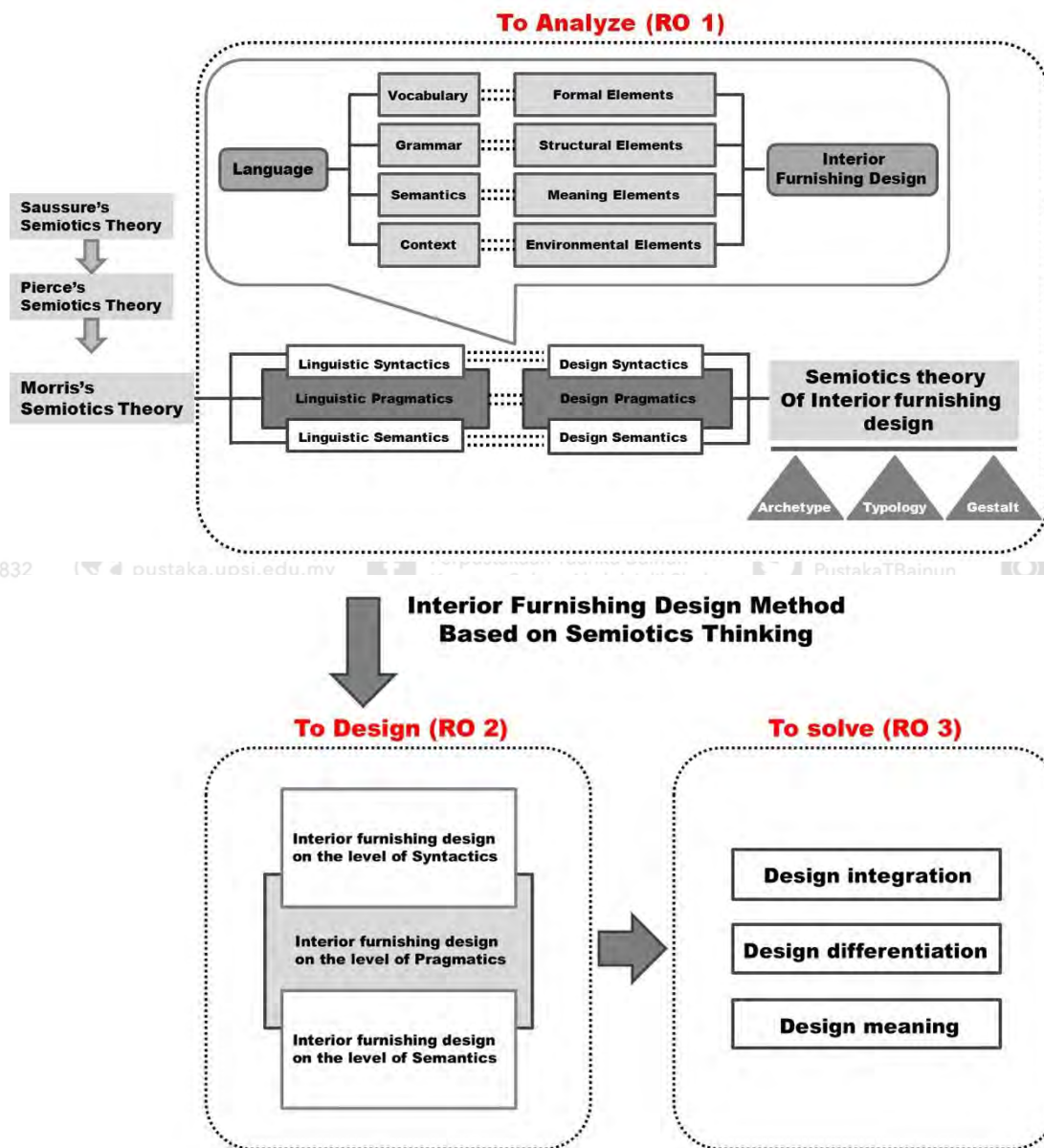


Figure 1.1. Theory framework

The whole theory framework (Figure 1.1) is divided into three parts, which correspond to the three research objectives of this research. At the same time, the main content of



the thesis is carried out in accordance with this logic and order. The first part is actually the chapter 2 of the thesis. In the research of semiotics, Saussure (Koerner, 1985) is the originator of semiotics. Peirce (Sebeok, 2001) is a semiotics pioneer as famous as Saussure. They put forward semiotics almost at the same time. Pierce and Saussure's theory plays a key role in the development of semiotics. The research scope of Saussure's semiotics theory is language symbols. While Pierce's semiotics theory is not limited to language, but includes the relationship between meaning and reference of all things in the world. It is applied to all kinds of semiotic phenomena, which is called generalized semiotics.

Influenced by Pierce's semiotics, American philosopher Morris studied semiotics from the perspective of behavioral science. The greatest contribution of Morris's semiotic theory is that he divides semiotics into three sub-disciplines, namely, Syntactics, Semantics, and Pragmatics (Morris, 1938). And then, this research also discussed the 3 theoretical bases of design semiotics, which are archetype theory, typology theory, and gestalt theory.

Due to the great similarity between language and interior furnishing design in the four groups of relationships: vocabulary in language and formal elements in design (Collins, 1998), grammar and structural elements (Liang, 1954; Liu, Huang and Liu, 1986), semantics and meaning elements (Gao, 1995), context and environmental elements, this study refers to Morris' semiotics division method (Morris, 1938), and discusses the interior furnishing design method based on semiotic thinking from 3 aspects: Syntactics, Semantics and Pragmatics. Finally, achieve the design effect of design integration, design meaning and design differentiation.





1.5.2 Conceptual Framework

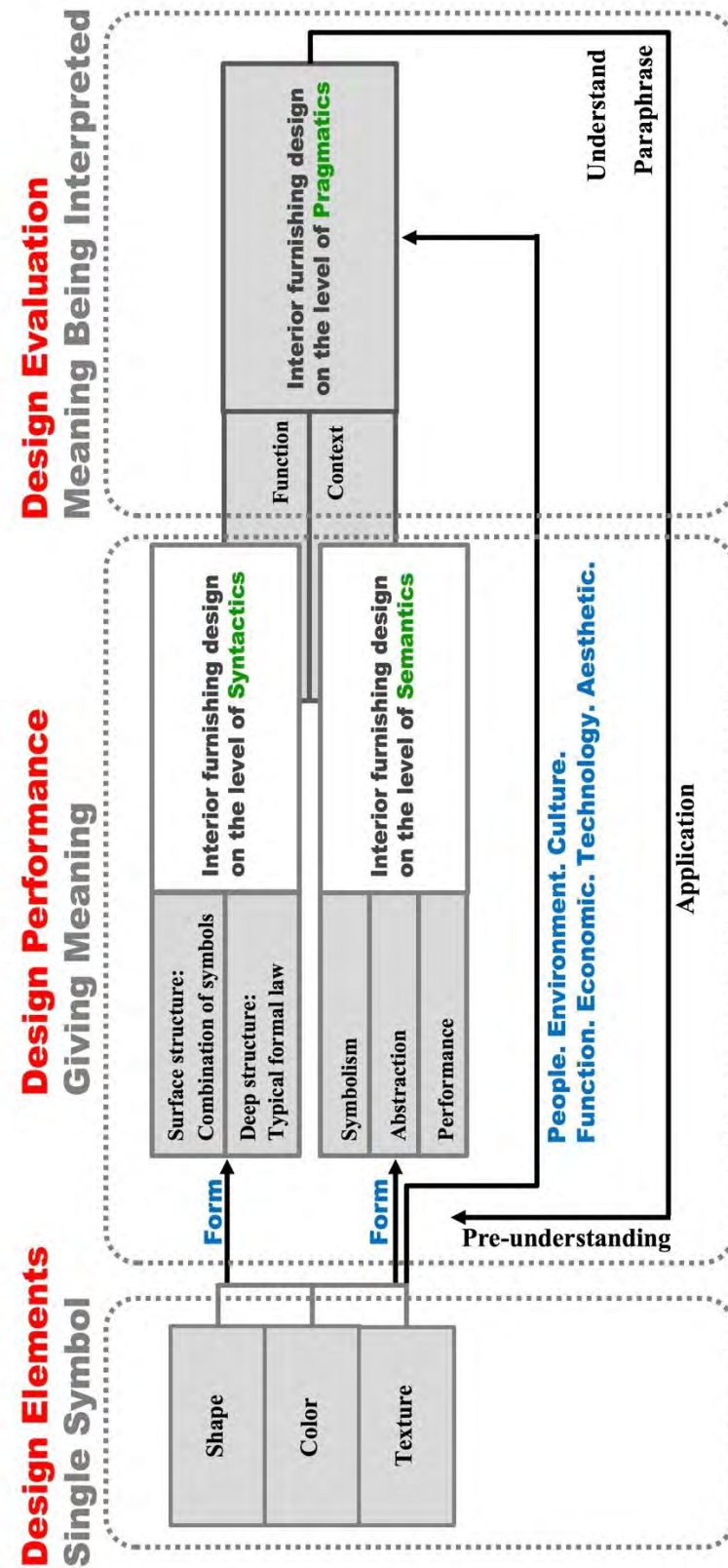


Figure 1.2. Conceptual framework





Conceptual Framework, this is an interior furnishing design model based on semiotic thinking (Figure 1.2). The elements of interior furnishing design, such as shape, color and texture, can be regarded as symbol.

From a semiotic thinking perspective, there are two levels in interior furnishing design. The first level focuses on the research of design form, which is discussed by Design Syntactics and Design Semantics. They both belong to design performance. Design Syntactics studies the combined use of design elements; In “Design Syntactics”, researchers divide it into two sub-levels: surface structure and deep structure. Surface structure is basic use methods of design elements, which is about the local effect of design. While the deep structure is internal combination rules between design elements, which is about the overall effect of design. while Design semantics studies the relationship between the form and meaning of symbols. With the help of Pierce’s theory, researchers have summarized the three ideographic ways of symbolism, abstraction, and performance.

The second level is the relationship between design and people, including factors such as environment, culture, function, economy, technology, and aesthetics. This part belongs to Design Pragmatics. Design Pragmatics is about the relationship between space and people. Design Pragmatics focuses on people’s understanding of space, and how people evaluate design.) “Design Pragmatics” includes two parts: the context and function of design. It belongs to design evaluation and interpretation.

Design evaluation and interpretation includes three parts: understanding, explanation and application. Understanding is based on “pre-understanding”, and after



the whole process of understanding, interpretation and application, a new “pre-understanding” will be formed, which will act on the next understanding. Just loop like this.

At last, “Design Pragmatics” covers “Design Syntactics” and “Design Semantics”, which is the basis of the former and runs through the design process.

1.5.3 Definition of the Term

1.5.3.1 Symbols

“A symbol is the most fundamental unit of semiotics”(Leed-Hureitz, 1993; Fiske, 1990). Symbols are codes that carry information, which is “emotional disclosure and external representation of information” (Shao, 2015). In Saussure’s semiotics, the symbol is defined as the unity formed by “signifier” and “signified” (De Saussure, 1980). Zhao Yiheng gave a clear definition of symbols: symbols are perceived as carrying meanings (Zhao, 2012). The categories of symbols are numerous, and it can even be said that human society is a symbolic society, “a symbol is anything which can be used to express meaning” (Van Leeuwen, 2005, p.4), everything in people's daily life can be a symbol. The American philosopher Peirce, C. S. also stated this point: “Although we can not say that the universe is entirely composed of symbols, it is certain that the universe is full of symbols”.

In this study, symbols refer to specific design elements in interior spaces, such as colors, materials, patterns, forms, ornamentations, and even sounds, smells, and text. Design elements all can be seen as symbols.

1.5.3.2 Semiotics

The definition of “Semiotics” in Western works is generally: “Semiotics is the study of signs”(Ball, 2010, P6). This definition actually came from Saussure. Saussure proposed to establish a discipline called “Semiotics” more than a hundred years ago. Saussure regarded the study of semiotics as a part of social life. In 1993, Zhao Yiheng defined semiotics as: The theory of meaning (Zhao, 2012). Semiotics studies the nature of symbols, the development of symbols, the various meanings of symbols, and the relationship between symbols and human activities. Applying the principles of semiotics to specific fields, departmental semiotics has emerged, such as design semiotics.

In this study, semiotics is the study of symbol (design elements) and their meaning-making practices and representations. This study mainly discusses the semiotic theory related to interior furnishing design. It comes from saussure’s and Pierce’s basic semiotic theories, and Morris’s division of linguistic syntactics, linguistic semantics and linguistic pragmatics. The final drop point in the “Design Syntactics”, “Design Semantics”, and “Design Pragmatics” of these three aspects of research.



1.5.3.3 Semiotic Thinking

Compared with the very grand category of semiotics, the discussion of semiotic thinking is a smaller and more specific study. Semiotic thinking is a way of thinking and designing using some of the principles of semiotics. The discussion of semiotic thinking is about the study of the coding rules between symbols, that is, the study of the method and law of the form generation of design (Shu, 2002).

In the existing research, the discussion of the concept of “semiotic thinking” is very rare. Only Shubo (2002) mentioned “semiotic thinking” in architectural design in his master’s degree thesis. Compared with previous studies on syntactics, semantics and pragmatics, the concept of “semiotic thinking” synthesizes the main contents of syntactics, semantics and pragmatics in semiotics, and discusses specific design methods within the scope of specific interior furnishing design.

In this research, interior furnishing design method based on semiotic thinking refers to regard the design elements as a single symbol, the interior furnishing design as a symbol system. And the theory of semiotics is used to guide the design, thus forming a specific design thinking mode.

1.5.3.4 Interior Furnishing Design

“Interior furnishing” can be understood literally as furnitures and decorations. It can also be understood as the display and arrangement (Qiu, 2013). With the footsteps of



civilization from ancient times to modern times, the connotation and meaning of interior furnishing are not limited to literal meaning. It has become a category of design that reflects contemporary people's spiritual life, cultural development and aesthetic tendency. (Pan and Qiu, 2008). Interior furnishing design belongs to the field of environmental art design. In recent years, as a new direction of interior design, as an important complement to the traditional "hard-packed" design, the interior furnishing design has become an independent professional direction (Xie, 2018) .

In this study, interior furnishing design in the broad sense refers to the construction and planning of spatial themes, in the narrow sense refers to the design and collocation of specific furnishings. Finally, it forms a theme space with visual integration, design differentiation and cultural meaning.

1.6 The Significance of the Research

In the background of "lack of continuity", "lack of meaning" and "crisis of feature", this study analyzes the interior furnishing design theoretical system based on semiotic thinking, develops an interior furnishing design method based on syntactics, semantics and pragmatics, solves or improves the problems of "lack of continuity", "lack of meaning" and "crisis of feature" in interior furnishing design, and achieves the design effect of "design integration", "design meaning" and "design differentiation". This provides a new perspective and method for the theoretical research, practical application and design criticism of interior furnishing design with semiotic thinking.

1.7 Expectation of Research

The first, First, this study tries to find the semiotic characteristics of interior furnishing design by defining the relationship between language and interior furnishing design, and further introduce semiotic theories from linguistics and architecture into interior furnishing design. This makes interior furnishing design based on perceptual experience develop into scientific semiotic design based on cognitive science. This also leads to interior furnishing design change from perceptual aesthetic design to rational form creation under the guidance of semiotics theory.

The second, this study is an exploration of a design method for interior furnishing design. The purpose is to develop an interior furnishing design method theory covering syntactics, semantics and pragmatics. This method theory can comprehensively consider and evaluate design from the design form, the relationship between design form and meaning, and the relationship between space and people.

The third, this study tries to solve and improve the problems of “lack of continuity”, “lack of meaning” and “crisis of feature” in interior furnishing design, and achieve the design effect of “design integration”, “design meaning” and “design differentiation”.

1.8 Thesis outline

This thesis is divided into six chapters.

The first chapter is introduction. About research background, research aim, scope and area of research, the significance of the research, expectation of research.

The second chapter is a literature review, introduces the semiotic thinking and interior furnishing design related theories, existing research and research gaps. Meanwhile, it also responds to research objective 1 and research question 1 (Figure 1.3).

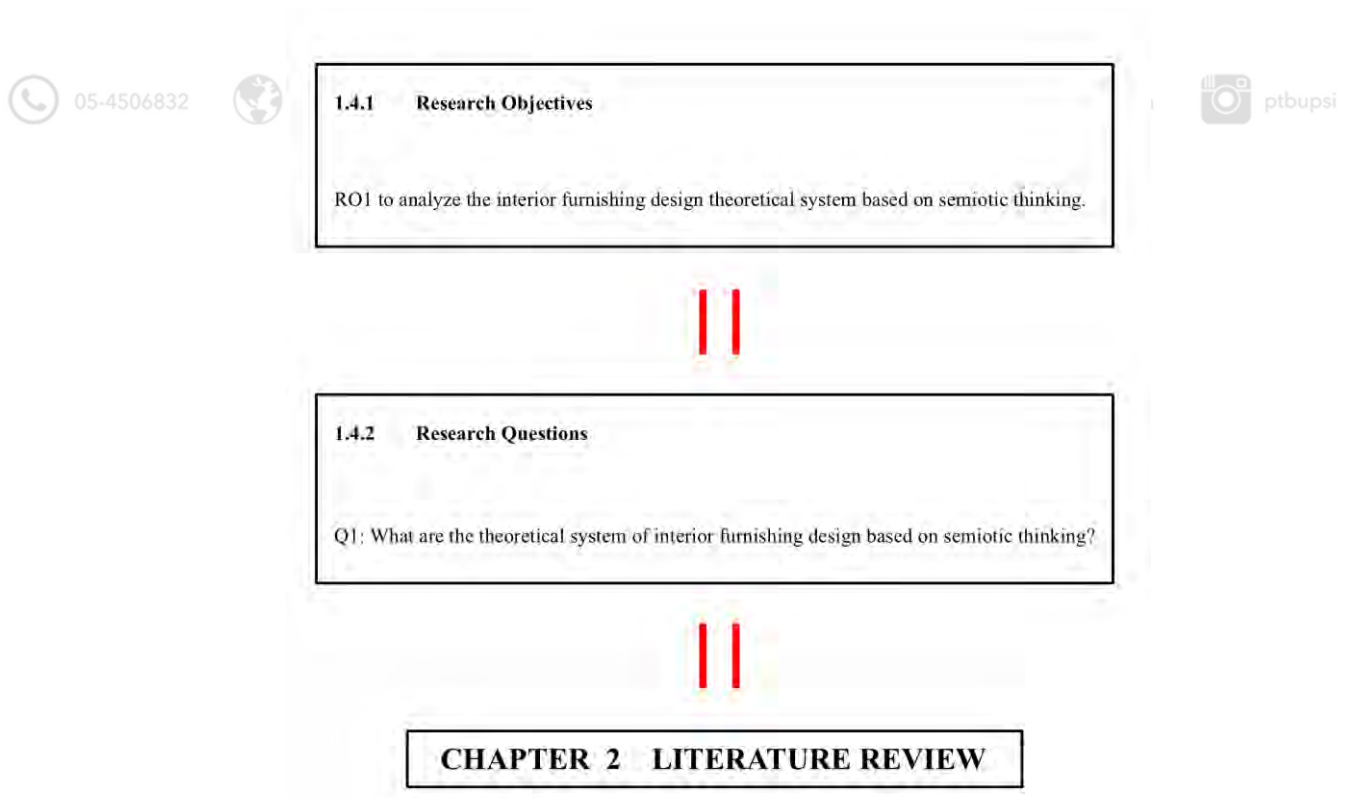


Figure 1.3. The corresponding relationship between research objective 1, research question 1, and chapter 2

The third chapter introduces the methodology used in this research, including research design, research method, research sample, research instrument, procedures of data analysis.

The fourth chapter is results and discussion, which is divided into Result I, Result II and Result III. The results are from case studies and semi-structured interviews.

The fifth chapter is the development of new method. This chapter is a summary of the findings from chapter 4, developing a new method, and verifying the theory and method through the design practice of researchers. Among them, 5.2 The development of a new method responds to research Objective 2 and research question 2 (Figure 1.4). 5.3 Theories and method verification responds to research Objective 3 and research

**1.4.1 Research Objectives**

RO2 to develop an interior furnishing design method based on syntactics, semantics and pragmatics.

**1.4.2 Research Questions**

Q2: How to develop interior furnishing design methods based on "syntactics design", "semantics design" and "pragmatics design"?

**CHAPTER 5 THE DEVELOPMENT OF NEW METHOD (Section 5.4)**

- 5.1 Introduction
- 5.2 Summary of Findings
- 5.3 Implications of the Study Findings
- 5.4 The Development of a New Method
- 5.5 Theories and Method Verification
- 5.6 Chapter Summary



Figure 1.4. The corresponding relationship between research objective 2, research question 2, and 5.4 of the chapter 5



1.4.1 Research Objectives

RO3: to solve or improve the problems of “lack of continuity”, “lack of meaning” and “crisis of feature” in interior furnishing design by the above design method (Objective 2), and achieve the design effect of “design integration”, “design meaning” and “design differentiation”.

**1.4.2 Research Questions**

Q3: How to solve or improve the problem of “lack of continuity”, “lack of meaning” and “crisis of feature” in interior furnishing design, and achieve the design effect of “design integration”, “design meaning” and “design differentiation”?

**CHAPTER 5 THE DEVELOPMENT OF NEW METHOD (Section 5.5)**

- 5.1 Introduction
- 5.2 Summary of Findings
- 5.3 Implications of the Study Findings
- 5.4 The Development of a New Method
- 5.5 Theories and Method Verification
- 5.6 Chapter Summary

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Figure 1.5. The corresponding relationship between research objective 3, research question 3, and 5.5 of the chapter 5

The sixth chapter is the last chapter and the conclusion of the whole thesis. Specifically, it includes research conclusion, research contribution, novelty of research, research limitations, and future recommendation.