



**A SEMIOLOGICAL ANALYSIS ON MOOD VISUALIZATION THROUGH
ARCHITECTURAL SKETCHES**

By

BLAKELY KENNEDY

**Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in
Fulfilment of the Requirements for the Degree of Master of Science**

December 2019

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Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment of the requirement for the degree of Master Science

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December 2019

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This thesis was motivated by an inquiry to systematically investigate the imagination thinking process in architecture using sketches and mood visualization. Three key themes, architecture, sketches and mood are outlined in framing the overall research framework. To date, there are little studies in architecture trying to investigate the relationships between sketches and the imagination of mood visualization.

This thesis aims to fill the knowledge gap by conducting a semiological analysis on mood visualization through sketches produced by architectural students. To do so, the thesis outlines three main research objectives: first, on sketches as an analytical tool; second, on mood visualization, and; third, on the imagination thinking process in architecture. An in-class experiment was conducted on 90 architectural students from both the undergraduate academic programme, Bachelor of Science in Architecture (BSc. Arch) and the postgraduate Master of Architecture (M.Arch) at the Faculty of Design and Architecture, Universiti Putra Malaysia. Two sets of data derived from the experiment, visual sketches and textual interpretation, were analyzed using the semiological system developed by the semioticians Charles Sanders Peirce and Ferdinand de Saussure.

In understanding the imagination thinking process among the architectural students, three analyses were conducted: on general mood idea and two semiological analyses of what we call, the mood sign analysis and mood signifier analysis. The findings showed that there was a preference among the students to problematize the visualization of moods within the design polemics of form and function. Some general commonalities on the students' interpretation and representation about moods were also identified from the experiment which in turn reflect the issue of maturity in their design thinking. Besides, the findings open up more perspectives about the imagination thinking process when dealing with an abstract idea, in this case, mood. While there are certain limitations in this study, it is hoped that the thesis will become a basis for future exploration on the researches about sketches and imagination thinking process that may benefit designers, educators and researchers alike.

Keywords: Sketches, Mood, Visualization, Imagination thinking, Semiology.



Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Master Sains

**SUATU ANALISIS SEMIOLOGI TERHADAP VISUALISASI MOOD
MELALUI LAKARAN SENI BINA**

Oleh

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Tesis ini didorong oleh persoalan untuk mengkaji secara sistematik proses pemikiran imaginasi menggunakan lakaran dan penggambaran mood secara visual. Menjawab persoalan tersebut, tiga tema utama iaitu seni bina, lakaran dan mood digariskan dalam tesis ini bagi membentuk kerangka keseluruhan penyelidikan. Sehingga setakat ini, masih kurang penyelidikan seni bina yang dijalankan bagi mengkaji perkaitan antara lakaran dan imaginasi penggambaran mood secara visual.

Tesis ini bertujuan untuk mengisi jurang pengetahuan tersebut menerusi analisa semiologi terhadap penggambaran mood secara visual dengan tumpuan khusus kepada lakaran yang dihasilkan oleh pelajar seni bina. Oleh yang demikian, tesis ini menggariskan tiga objektif utama penyelidikan: pertama, lakaran sebagai suatu alat analisa; kedua, penggambaran mood secara visual, dan; ketiga, proses pemikiran imaginasi dalam seni bina. Sebuah eksperimen dalam kelas telah dijalankan ke atas 88 orang pelajar seni bina daripada program akademik siswazah, Sarjana Muda Sains Seni Bina (BSc. Arch) dan program pascasiswazah, Sarjana Seni Bina (M.Arch) di Fakulti Rekabentuk dan Seni Bina, Universiti Putra Malaysia. Dua set data yang diperolehi menerusi eksperimen tersebut iaitu lakaran visual dan tafsiran teks telah didigitalkan dan diproses menggunakan perisian NVivo 10®. Data tersebut kemudiannya dianalisa dengan menggunakan sistem semiologi yang dibangunkan oleh Charles Sanders Peirce dan Ferdinand de Saussure.

Bagi memahami proses pemikiran imaginasi dalam kalangan pelajar seni bina, tiga analisis telah dijalankan iaitulah idea umum mengenai mood diikuti dua analisis semiologi, analisis isyarat mood (*mood sign*) dan analisis penanda mood (*mood signifier*). Hasil analisis menunjukkan wujud kecenderungan dalam kalangan pelajar untuk mengatasi masalah penggambaran mood secara visual dengan merujuk kepada polemik antara bentuk dan fungsi. Beberapa persamaan umum mengenai tafsiran dan perwakilan mood juga dikenalpasti daripada eksperimen yang dijalankan, yang

seterusnya menggambarkan isu kematangan tentang pemikiran reka bentuk dalam kalangan pelajar terbabit. Selain itu, hasil kajian juga telah membuka lebih banyak perspektif mengenai proses pemikiran imaginasi semasa mengendalikan idea yang bersifat abstrak, dalam kes ini, berkaitan idea mood. Walaupun terdapat batasan tertentu dalam kajian ini, adalah diharapkan agar tesis ini akan menjadi asas bagi penerokaan penyelidikan selanjutnya tentang lakaran dan proses pemikiran imaginasi yang dapat memberi manfaat kepada pereka, pendidik dan penyelidik berkaitan.

Kata Kunci: Lakaran, Mood, Penggambaran secara visual, Pemikiran imaginasi, Semiologi.



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This thesis was submitted to the Senate of Universiti Putra Malaysia and has been accepted as fulfilment of the requirement for the degree of Master of Science. The members of the Supervisory Committee were as follows:

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CHAPTER 1

INTRODUCTION

This chapter introduces the background study and the problem statement for the thesis. Next, the chapter discusses the research gap this thesis attempts to fill. With the known research gap, the next part of the chapter introduces the research questions and the research objectives, that will be the basis for the entirety of the thesis.

1.1 Background study

From early cave paintings to the decorative walls of Egyptian art, all the way to the Renaissance period where sketches are used to illustrate historical arts such as the Mona Lisa, sketching has been an integral part of human history. Sketching is a visual skill that is typically produced in a rough and quick manner. It facilitates in ‘externalizing’ the designers’ internal idea and translating their subjective imagination into an objective representation. Explaining the imaginative idea without clear tangible representation can be easily misconstrued or misunderstood by others. As such, sketches help in this regard for visually representing an imaginative idea. Looking at its potentiality, sketches have been used as a medium for design communication and pedagogical material in design education to encourage idea’s development.

As a medium for idea’s development, sketches have been adopted mostly during the early stage of the design process. Design disciplines like fashion, graphics animation, advertising, product design, and architecture rely on sketches to develop initial ideas. In architecture, initial ideas refer to a series of design processes to seek appropriate solutions due to the constraints of an environmental site, cost budget and clients’ demand (Lawson 2005). As the design process takes time for reflection and reevaluation, numerous ideas are kept reiterating; revisiting and refining to the point of achieving a satisfactory solution. This makes sketching a skill, an important skill for an architect while handling an architectural project.

In an architectural project, a lot of references and inspirations are deployed to propose a good design idea. Mood is a kind of design idea associated during the architectural process as an attempt to create specific ambience and spatial experience (Pallasmaa, Mallgrave, and Arbib 2013; Pallasmaa 2014). Mood is a psychological state, constantly being experienced by a human while comprehending their surrounding reality. Mood is used as a measure of well-being as it influences humans’ daily behavior (Morris 1989; Desmet 2015). Managing a well-balanced space between experience and form expression in architecture thus is necessary to cultivate good environmental stimuli on human moods. As mood is something of an abstract, kind of subjective feeling, expressing mood in a visual form is intriguing yet a challenging task. Sketching helps in this regard to represent imaginative thinking about mood, using semiology to decipher the thinking pattern. Using the signification of sign-signifier-signified, semiology opens up multiple interpretations about the *designed* moods in architecture.

1.2 Problem statement

This thesis has extracted three key elements from the research background that will be the basis for the problem statement. First, sketches are seen as a communication and pedagogical tool in architecture. In architecture, abstract ideas are able to be translated and externalized into something that is physical. With this in mind, this brings us to the second key element. Mood can be seen as a concept in architecture. As mood is a subjective phenomenon, there are various meanings that can be extrapolated from mood. This leads to the third element, about semiology. Semiology can be used to analyse different interpretations of mood.

The purpose of choosing mood as the main focus of this research is to grasp a fundamental understanding of how mood can be objectively represented through sketching. Psychologically speaking, mood is the driving factor on how we interact, behave and respond to our everbusy lives. Mood can determine whether we would be in a gloomy state for an hour, or be estatic for the entire week. As mood is prevalent in our lives, understanding how the product of our environment can affect us is key to fully understanding the mood phenomenon.

In Malaysia, there are little studies conducted trying to understand mood visualization through sketches. Since architecture is a creative education field, there are many pedagogical approaches to study about abstract concept. The visualization of an abstract concept such as mood is challenging yet intriguing to be investigated in this case. As such, there is an opportunity to fill the research gap that paves the way for the conduct of this study.

1.3 Research gap

There is a sentiment that manual sketching will eventually be phased out and be replaced by the digital sketching. In a symposium titled 'Vital Signs: Is Drawing Dead', organized by Victor Agran and George Knight, many ranging from professors to architects shared this belief (Hayes & Cook, 2012, pp. 8–10). Another issue regarding the use of sketches is the decline in which they are being underutilised in the design field (Hare, 2004). However, opposite of this worrying perspective, there are optimistic views of how sketches will strive on and co-exist along with the digital sketching. Gabriella Goldschmidt argues that while manual sketching has cognitive and end-result benefits over the digital sketching, both sketching types can work together in a symbiotic manner (Goldschmidt, 2017). Manual sketching can be used to externalize the image, and the digital sketching can take the externalized image and refine it further. Further benefits of manual sketches include allowing the designers to think critically on how to externalize their ideas in a manner that is clear and presentable (Gadelshina, Cornwell, & Spoons, 2019).

Sketches are vital in not only for externalizing ideas but are a good medium to understand and observe critical thinking and learning growth. Currently, researches on sketches involve understanding the cognitive benefits sketching has for designers of different experience, which will be further discussed in Chapter 2. As such, there is limited research regarding sketch and how it can facilitate the visualization of mood. The current researches of mood within architecture also mostly revolve around post-occupancy evaluation and lighting comfort (Küller *et al.*, 2006; Yildirim, Hidayetoglu and Capanoglu 2011; Gou, Lau, and Qian 2013). There are little studies trying to explore mood as a semiological concept in an architectural design process. It is within this perspective that this thesis aims to analyze moods' visualization using architectural sketches as a way to understand design thinking patterns.

1.4 Research questions

To fulfill the research gap, the thesis proposes the following research questions:

- How can sketches be used as analytical data for understanding mood?
- How do the sketches visualize the design of mood in architecture?
- How can we analyze the thinking pattern of architectural students?

1.5 Research objectives

The main objective of the thesis is to understand the thinking pattern of architecture students when given a task to visualize mood through sketching. To answer the research questions set, the thesis sets out the following research objective:

- To determine if sketches can be used as analytical data for understanding mood.
- To determine how sketches visualize the design of mood in architecture.
- To analyze the thinking pattern of architectural students.

1.6 Research scope and limitations

As this study attempts to understand the thinking pattern of architecture students, the scope of the research will be limited within the field of architecture education. Architecture is a reliable field for this research in which mood can be contextualized as an idea concept in design. Furthermore, in architecture education, we are able to observe a student's sketching skill and how it has changed over the course of their academic life.

Further limitations include the data analysis method. As there are different methods of semiology being taught, this thesis will focus on Ferdinand de Saussure and Charles Sanders Peirce's semiotics. Both semiotics were chosen due to each of them providing a suitable analysis to understand abstract idea and image issues, as evidenced from the previous researches (Kauppinen-Räsänen & Jauffret, 2018; Kucuk, 2015; Zhang & Sheng, 2017).

1.7 Significance of study

The significance this thesis can bring forth is the fundamental understanding of how mood can be objectively represented through sketching. Furthermore, by allowing the use of manual sketching to be done, we can observe how students can think in a critical manner to externalize and visualize using mood as their concept.

This study also contributes to the additional knowledge within the pedagogy of architecture by providing insight on how students are able to think when given a subjective material as a drawing concept. As mood plays an important role in a person's subjective well-being, understanding how mood design can be externalized is an important contribution that cannot be overlooked.

1.8 Study organization

In order to answer the research questions and achieve the research objectives laid out, the thesis will be structured as follows:

In Chapter 1, the background study, problem statement, research questions, and research objectives are introduced. This is followed up with research scope, limitations and the significance of the study.

In Chapter 2, an extensive literature review will be conducted on the topics of mood, sketch and semiology. The topics are based on the research questions set in Chapter 1.

In Chapter 3, a research methodology is created based on past researches that were from the literature review conducted. This includes data collection method and data analysis method.

In Chapter 4, the data collected and analyzed are then discussed in detail in relation to the research questions and research objectives.

In Chapter 5, an overall summary of the study is presented, accompanied by recommendations for future studies.

1.9 Summary

In summary, the background study and the problem statement is introduced. The research gap is then identified, as well as the research questions and research objectives. This chapter concludes with the research scope, limitations and study organization.

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