HOW THE DESIGN PROCESS CAN BENEFIT FROM KANSEI

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How the Design Process Can Benefit From Kansei
Tasarım Süreci Kansei'den Nasıl Yararlanabilir

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4) Design Decision Making
5) User Experience

ABSTRACT

This MA thesis tries to analyze how and in what way expected emotional reactions, in other words Kansei, of a target audience, influences a designers decision making process in the field of print design. The first part of this thesis is concerned with the broader understanding of design and the creative process (based on Karl Aspelund's Design Process model) and its prospective influence point concerning the implementation of the Japanese Kansei philosophy, that bares great potential for the improvement of User Experience (UX). This part of the thesis is concluded with a modified Design Process model named "Emotional Response Sensitive Design Process", that provides guidance and tools supporting a more Kansei-oriented design process approach.

The second part of this thesis has the goal to gain greater insight into how designers try to convey emotional messages through print design choices and which elements of design they utilize, in order to do so. Or, do they even consider the emotional response of the audience, when designing, and if so to what extent, do they let it influence their decision making process? Based on a survey conducted amongst designers, data was generated in order to support findings and conclusions. Understanding if there is a need for a higher predictability of the emotional viewer response and a corresponding design process model, will be the main focus of this thesis survey analysis.

ÖZET

Bu çalışmanın amacı hedef bir kitlenin, bir diğer adıyla Kansei olarak tanımlanan tahmini duygusal reaksiyonlarının, baskı tasarımı alanında tasarımcıların karar verme süreçlerine nasıl ve ne yolla etki etmekte olduğunu analiz etmeye çalışmaktır. Tezin ilk bölümü, tasarım ve yaratıcı süreç ile beraber (Karl Aspelund'un Tasarım Süreci modeli temel alınarak), Kullanıcı Deneyimi'nin (User Experience) iyileştirilmesinde büyük bir potansiyel ortaya koyan Japon Kansei felsefesinin uygulamaları konusunda olası etki noktalarını geniş kapsamlı olarak anlayabilmeye yönelik hazırlanmıştır. Tezin bu bölümü, "Duygusal Tepki Hassas Tasarım Süreci" olarak adlandırılan ve daha Kansei-odaklı bir tasarım süreci yaklaşımı için rehber ve araçlar sağlayan uyarlanmış bir Tasarım Süreci modeli içermektedir.

Çalışmanın ikinci bölümü ise tasarımcıların, tasarım sürecinde hedef kitlenin duygusal tepkilerini dikkate alıp almadıklarını, eğer bu duygusal tepkileri dikkate alıyorlar ise hangi ölçüde dahil ettiklerini, tasarımcıların hedef kitlenin duygusal tepkilerinin kendi kadar verme süreçlerine etki etmesine müsade edip etmediklerini, tasarımcıların baskı tasarımı seçimlerinde duygusal mesajları nasıl ilettiklerini ve hangi tasarım elementlerinden yararlandıklarını daha iyi anlayabilmeyi amaçlamaktadır. Tasarımcılar arasında yürütülmüş olan bir anket temel alınarak elde edilen veriler, bu çalışmanın bulguları ve sonucunu desteklemek amacıyla kullanılmıştır. Bu tez anketinin analizleri, izleyicilerin duygusal tepkilerinin ilgili tasarım süreci modelinde daha ileri bir tahmin edilebilirliğe ihtiyaç olup olmadığını anlayabilmeyi amaçlamaktadır.

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KEYWORDS

Emotional Design

Kansei

The Design Process by Karl Aspelund

Design Decision Making

Prediction of emotional responses

Emotional Response Sensitive Design Process

User Experience (UX)

INTRODUCTION

This thesis is based on two driving questions: How can we anticipate the emotional reaction of the target audience to our design work? And is there a way to predict these reactions more precisely?

The design community of today is raving about UX design and all its benefits and how it has and is still changing the way we are designing in all fields of design. To the Western society UX design is still new and fresh. But, as surprising as it might be, there is an ancient Japanese methodology that expresses one elementary part of UX design. Kansei! The instant emotional reaction towards anything and everything our senses are collecting data on. Experience, expectations, needs and feeling all together form our Kansei. Within mili seconds we can say if we feel comfortable or safe in an environment, or if we observe a brand to look luxurious, elegant, sporty, or flashy. Up until now only product developers and industrial designers have utilized the impactful theory of Kansei. The first part of this thesis will conclude in an extended design process model that will allow all forms of conceptual design work to profit from the methodology of Kansei. This model will allow a designer to get a better understanding of the emotional impact of his work on his viewers! This again will lead in the end to a higher user satisfaction and once again to a better UX.

As UX Design already has a huge omni presence in the daily working routine of designers, this thesis has analyze, through the collection of data in an online survey, if designers are maybe already intrinsically utilizing the methods of Kansei throughout their working process. The data collected provided evidence that there are some variances that can be capitalized for improving the design process specifically with the goal of gaining more predicability of the emotional responses of the targeted audience.

CHAPTER 1 - KANSEI

Chapter one explores the ideology of the Japanese ancient word Kansei and what impact it could have on the conceptual design world. It lays the ground work for the further explorations of the following chapter, that will link Kansei to an established Western concept of the design processes.

The following points give a brief overview of this chapter:

- the meaning and definition of the word Kansei
- the functioning method of Kansei and what sort of conclusions it leads to
- Kansei words and their potential impact on design

Presented in Table 1 are definitions of terminologies referred to throughout the thesis. The definitions are provided in order to ensure a better understanding of these terms in the thesis chapters.

Table 1 - Defining relevant Terms regarding Kansei Engeneering

Design Element	The design elements that compose the visual design of any design product, here specifically print media advertisements.
Emotion	A mental and psychological state associated with a wide variety of thoughts, feelings, and behaviors (Ekman, 1999; Russell, 1980). Affect can be referred to as a general concept of emotions (Fredrickson, 2001).
Kansei	A Japanese term that indicates psychological feelings and images held in the mind towards artifact, situation, surrounding (Nagamachi, 1999).
Kansei Engineering (KE)	A technology in product development that allows the measurement and association of Kansei within the design process (Nagamachi,1999).
Kansei Word	The word used to represent emotional impression towards a design, a situation or the surrounding (Nagamachi, 1999).
Primary Emotional Response	The emotional responses user's feel when first seeing a design product.

1.1 - ANALYSIS AND DETENTION OF KANSEI

Kansei is a Japanese term used to express personal impression towards artifacts, situations, and surroundings. As Kansei is a word, which is deeply rooted in the Japanese culture, there is no “direct” translation of Kansei into any other language. Therefore, Kansei has different interpretations in various literatures. Kansei is generally referred to as sensitivity, sensibility, feeling and emotion (Nagamachi, 1992;

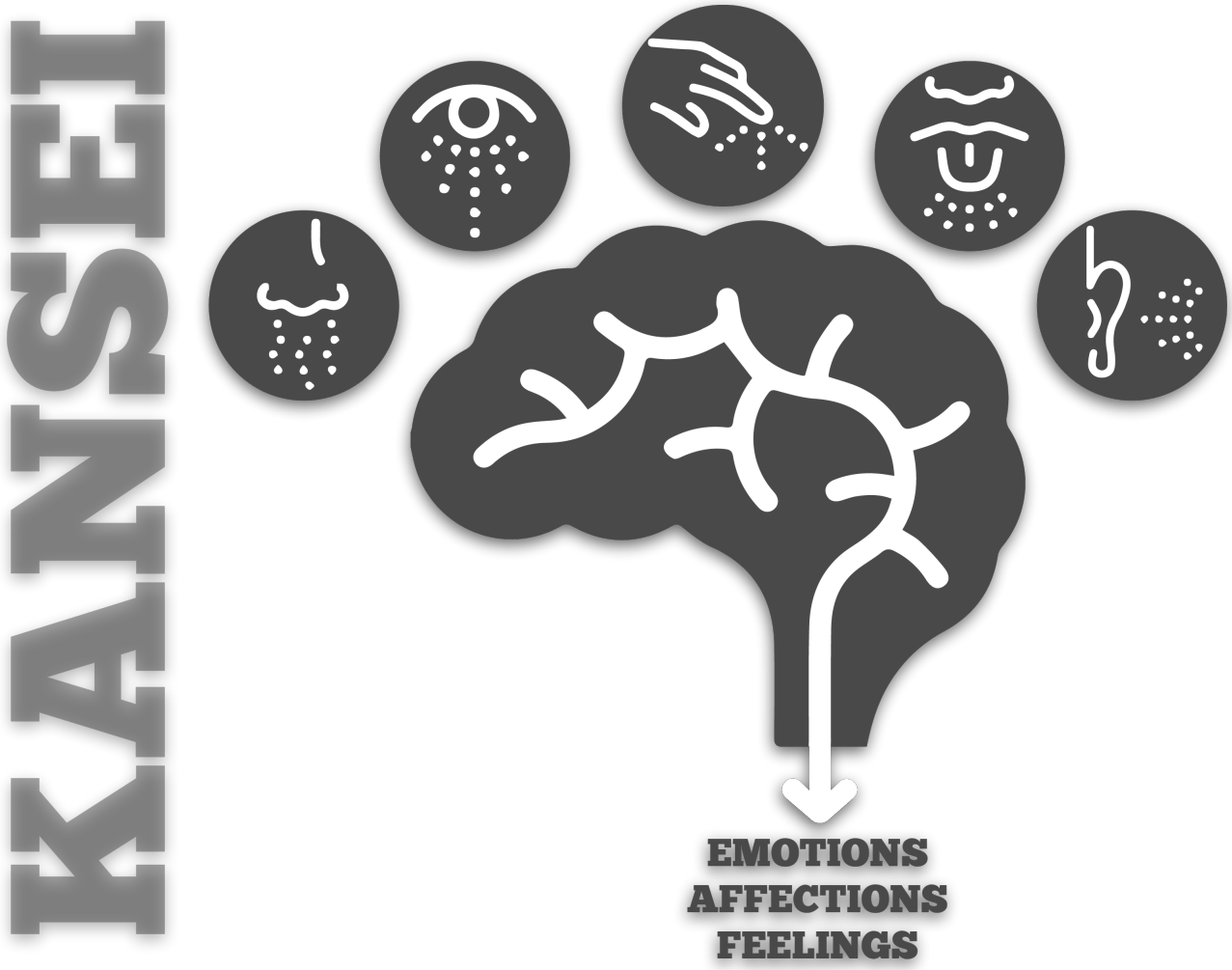


Figure 1.1 - Definition of Kansei - Infographic illustrating the internal Kansei process (by Justine McIlhargey)

Ishihara et al., 1993; Harada, 1998; Yoshikawa, 2000). Psychologically, Kansei means the mental state where knowledge, emotion, and sentiment are harmonized (Nagamachi, 2003).

Harada (1998) described Kansei as a mental function. Moreover, as a higher function of the brain, it is therefore implicit. Kansei begins with gathering the related sensory impressions such as feelings, emotions, and intuition. These are collected through the means of the five senses (i.e. vision, hearing, smell, taste and skin sensation). If the human senses are stimulated, they will trigger psychological cognition based perception, judgment, and memories. In the scenario of going into unknown territory, vision, smell, taste, and the resulting cognition would form a judgment on whether it is "a friendly environment", and if it is or feels "safe". This is Kansei! The Kansei advances from cognition, which is based on contributing sensations (Figure 1.1). As a result the Kansei process itself cannot be measured directly. What can be observed is not Kansei, but the causes and the consequences of the Kansei process (Nagasawa 2004). Therefore, Kansei can only be measured partially, by measuring sense activities, internal factors, psycho-physiological as well as behavioral responses (Harada 1998; Nagamachi, 2003; Ishihara et al., 2005; Lévy et al., 2007).

The term "Kansei" generally refers to an organized state of mind which withholds emotions and images towards a physical objects such as products or an environment. For example, 'luxurious', 'elegant', 'flashy', 'young' and sentence structures as in 'that dress looks luxurious and elegant', or 'that car looks flashy and youthful' are all Kansei words describing feelings towards a certain visual impulse. Kansei is generally expressed in the form of adjectives, nouns up to short sentence structures (Nagamachi, 2003). There is one general differentiation of Kansei. If a Kansei is an occasional change or impression, it is referred to as trend-related Kansei. If a Kansei practically does not change it is called a fundamental Kansei.

Emotions towards any type of design product have been recognized as the primary factor of consumer satisfaction

(Norman, 2004) and market success (Nagamachi, 2004). For many years, Japan has been ahead in developing new, innovative and successful products. Their design process heavily relied on their sensitivity towards the consumers implicit needs, in other words on the concept of Kansei. By implementing the technology, that we know as KE today. The principles for the implementation of Kansei involve several technical steps. These steps are custom-tailored to the research project and can utilize tools and methods from different discipline, such as marketing, psychology and statistics. Kansei studies typically consist of both qualitative and quantitative research methods. There are various ways of utilizing the KE techniques (Nagamachi, 1992; Camurri et al., 1999; Yamada et al., 1999; Takama et al., 2001; Bouchard et al., 2003; Guerin, 2004; Ishihara et al., 2005; Schütte et al., 2005; Lokman et al., 2009; Barone et al., 2009), and there are multiple ways of obtaining the desired information through the conduction of a focus group (Matsubara et al., 1999; Kim et al., 2003), self-report system (Schütte & Eklund, 2001; Ishihara et al., 2007a; Lokman et al., 2009) and ethnographic techniques (Shaari, 2010). Regardless of the obtaining strategy, the main aim is always the emotional aspect of the consumer experience with current products or product concepts.

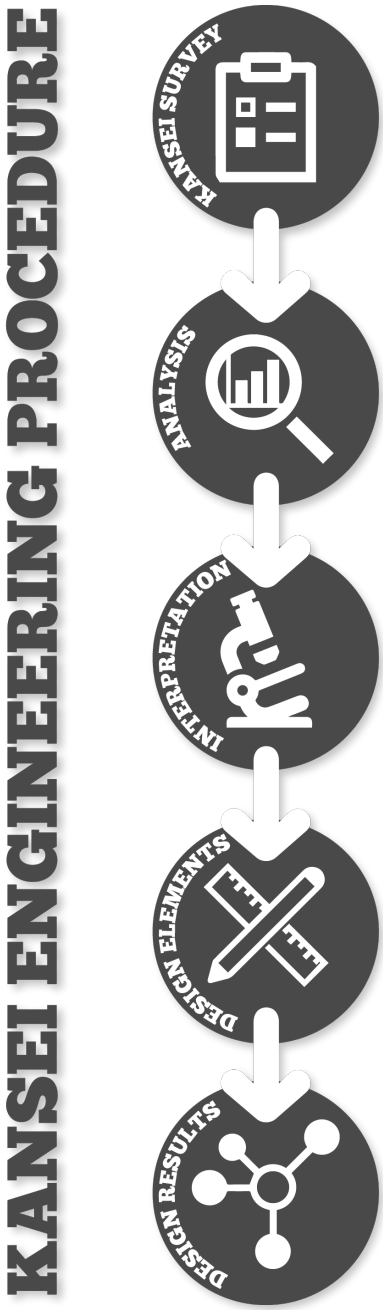


Figure 1.2 - Definition of Kansei Engineering (by Justine McIlhargey)

Figure 2 - Success model Miata from Mazda; version MX-5

KE (Figure1.2) has been proven to create successful products! One famous example of the KE technique and probably also one of the most famous examples is in the development of one of the most successful and up to date most sold sports car by Mazda (figure 2), named Miata (Nagamachi, 1999).

The concept has been mainly applied for the product development and industrial design, and its deep insight and ideology have been greatly neglected for the area of conceptual design. But why? In a world where UX is the buzzword and Kansei could serve as such a great tool to anticipate responses of the audience, it is surprising that its benefits for the design decision making, that have been successfully implemented into the design process for product and industrial design, have not been utilized in the field of conceptual design up till this day. As conceptual design work and its process is gaining importance through the mounting interest in UX, it is necessary to find new methods that allow a more successful outcome, through target group insight and anticipation. As Kansei provides

such a method, that has been utilized effectively in other design fields, it can lead the conceptual design process to a more tailor-made customer solution for all form of concept design fields.

Therefore, the main aim of this thesis is to conclude its findings into a model that allows designers to inflict their decision making processes of conceptual design work with a greater focus on the response of their target audience, therefore greater anticipation of the Kansei, which can lead to a more positive UX. A ‘perfect world’ example makes the potential of Kansei even more clear: If we could anticipate the Kansei of our target group to its fullest, a designer could understand needs and expectations of a target group and could therefore serve directly to those needs, which would result in the ultimate UX. So, in order to find effective methods that allow designers to consider and act upon these needs, which directly relate to Kansei, it is essential to find strong and meaningful impact points of Kansei upon the design process.

1.2 - USER EXPERIENCE AND KANSEI

UX can easily be called the buzzword in the design world of the current time. In the following, the connection of Kansei and UX will be explored and established, in order to grasp the gigantic potential of the Kansei concept.

Definitions of UX describe it as ‘every aspect of the user's interaction with a product, service, or company that makes up the user's perceptions of the whole. UX Design as a discipline is concerned with all the elements that together make up that interface, including layout, visual design, text, brand, sound, and interaction’ (usabilitybok.org). UX is often just limited to the idea of interface and web design. But, the idea of UX is much larger than that. When talking about UX in this thesis I am referring to the process of how people are reacting and interacting with design work in general. So, the understanding of UX is much broader. For this paper, it is relevant to understand the meaning of UX in Print Design and in what ways and due to which parameters we can measure and implement it into print design work.

The general framework of UX consists of three major factors. These are USABILITY, LOOK, and FEEL. This concept is a widely spread understanding of UX and is used and practiced by a multitude of design agencies.

1.2.1 - USABILITY

The factor of Usability in the context of Print Design had very different elements as in other design fields, as the actual user interaction can not be that easily traced, in comparison to Web Design, where clicks and visitors can be measured without an effort. The first element of UX in Print Design is the hierarchy of print design. It describes the way information is organized on a page. ’The primary task of Graphic Design is to create a strong, consistent visual hierarchy in which important elements are emphasized and content is organized logically and predictably’ (webstyleguide.com). It boils down to the basic idea of UX: the hierarchy of print design should make it easy for a

reader to use/understand the print design and its content. A clear and easy to read and understand print is also considered to be a UX! How eye-catching a print design is? How well does it leads the eye? How do the elements of the design convey the message? These are all factors that create a fantastic hierarchy of print design and lead lastly to a great UX. The second element is the idea of Consistency in print design. It contains the basic design rules of alignment, repetition and proximity. Consistency in the message and elements of design that are arranged together, in order to create a comprehensive design work as well as similarities that enable the user to understand and connect the message the designer is conveying with his work. The third element of usability in print design is legibility. Users in general tend to skim passages of text and pick out the most important pieces of information. So, the key is to allow the reader/user to quickly pick out these important part of information, and smoothly guide him through the text. The important information must be easy to read and access.

1.2.2 - LOOK

The second factor of UX is Look. This factor overlaps with the ideas of Kansei. The factor Look describes authenticity, plausibility, harmony as well as vibe and feeling of trust that can be evoked through a design work. By creating a design work that incorporates these elements of Look into the design, the user has a pleasant reaction, and therefore experience with the printed material. The notion of brand identity and recognition also play into the factor Look. As it is not just about presenting a product, service, or message, it is important to connect the content with the brand or company that is sending it to its target clientele. If a look can communicate authenticity, harmony, a good vibe, and feeling of trust, the Kansei of a user is likely to be positive. Here, we can very clearly see the connection of UX and Kansei. As UX aims at creating an overall good UX an elementary part of that is to create a look that makes user feel comfortable, interested and trustful. The factor of Look is clearly concerned with creating a visual impression upon the users that leads to a positive reaction, or as I would call it Kansei.

1.2.3 - FEEL

The third and last factor is Feel. This factor connects to the idea of Kansei in a different way. Feel is mainly concerned with the 'joy of use'. How do users interact and lastly react to the visual data they are presented with. In Print Design, it is more about understanding the reaction than the interaction, as the interaction itself is reduced to the viewing/reading of the printed material. So, the reaction towards the visual data is what print designers should be most concerned with. Where the Look factor is mainly based on creating a look that conveys certain feelings of comfort to the user, the factor feel goes beyond that. It is about conveying a targeted emotion through visual data, which exceeds the ideas of creating a general positive response. Kansei therefore fits these parameters even more. As Kansei in the factor of Looks was mainly a tools of understanding a general positive or negative response, the factor of Feel takes full advantage of the entirety of the users Kansei. The factor Feel talked about a sustainable emotional bond with the user rather then an instant reaction toward visual material. On prominent and successful brand that is beefing from the emotional bond with their users is Apple. Kansei words and expressions can allow a deeper insight into the success of the Feel factor in UX Design. The idea of the Feel factor and the ideology of Kansei are greatly overlapping. This factor of UX Design is the one that could benefit most for utilizing the many benefits of Kansei by implementing them into their design process.

1.3 - CHAPTER CONCLUSION

As the main aim of this thesis is to conclude its findings into a model that allows designers to focus on the emotional response of their target audience, chapter one is setting the groundwork. The chapter explored the methodology of Kansei and the internal process of how sense data is converted into emotions, feelings, and affections.

After establishing the theoretical framework, chapter one explores the linking points of Kansei and its influential benefits for anticipating users emotions, and therefore, for creating a more tailor made UX. Through the greater anticipation of the Kansei a more positive UX can be created! So, in order to tap into these benefits and to find effective methods that allow designers to consider and act upon these anticipated emotional responses, which directly relate to UX, it is essential to find strong and meaningful impact points of Kansei upon the western ideology of the design process. These points of impact will be established throughout the next two chapters of this thesis. Chapter one serves as a theoretical background.

CHAPTER 2 - THE DESIGN PROCESS

After looking into the meaning of Kansei and understanding its beneficial impact, if introduced into the design process, I will now analyze the design process itself. The main idea is to find linking points of Kansei and the reviewed model of the design process in order to concluded this chapter with a concept of a Kansei-induced design decision making process.

The following points give a brief overview, of the content of this chapter:

- Research review of the developments of the methodology of the design process
- Introduction and analysis of 'The Design Process' by Karl Aspelund
- Finding evidence of touching points of Aspelund's Design Process and the ideology of Kansei
- Exploration of these touching point leading to methods and tools to influence the design decision making process

2.1 - RESEARCH BACKGROUND

Within this chapter of the thesis, I would like to firstly introduce the development of design process from the past, as it is essential in order to analyze in what way emotions are affecting the decision making process of designers. Goldschmidt study in 1999 explored the design process and the relationship of it with corresponding design outcomes. Different theories have supported these findings. The aim of many design scholars was to find some effective concept for the designers to follow serving as a depiction of their path of creation. The general idea was that the design processes could be divided into different stages. In 1965 Archer was the first to introduce his design process model named 'Analysis-Synthesis Model' (Archer, 1965). Archer models is based on a three main stage devision of the design process. These stages were the analytical, creative and executive stage. His idea was that the analytical stage described the phases of problem analysis and that the creative and executive stages described the phase of design synthesis. Based on this model, he claimed that designers firstly analyze the issue at hand extensively for then to most effectively synthesize the solution. As Archer's concept was mainly focused on the cogitative approaches and rational steps, Jones (1984) expanded the 'Analysis-Synthesis Model' by linking it with intuitive, experience, and rigorous logical approaches. His introduced 'Systematic Design Concept' suggests that the design process includes both logical analysis and creative thought, throughout the process of problem solving. His guideline of the concept application was a three-stage design process divided into analysis, synthesis and evaluation. The general idea behind this three-stage concept was that designers come up with ideas and solutions while considering real life limitations and logical judgment.

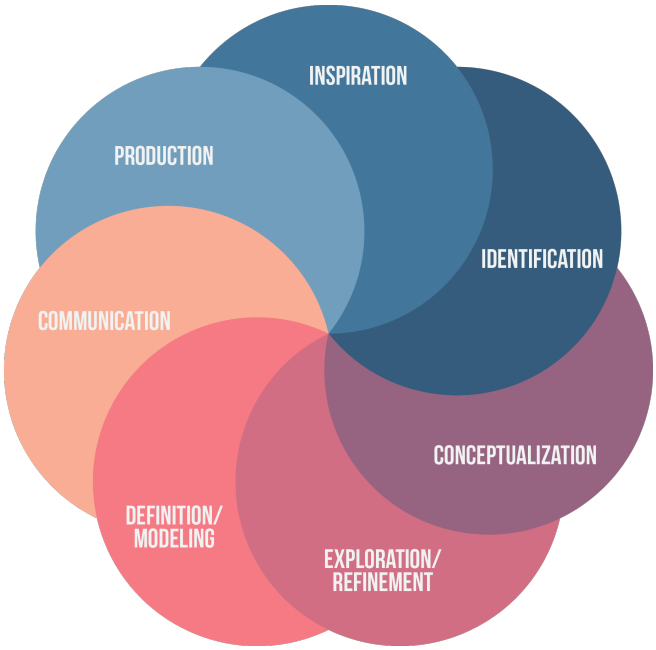
Soon, it became evident that these design models were mostly based on logical flow with a linear process. In 1967, Lucian reconsidered the ideas of Jones concept and fused it with observation data of the actual working process of designers. His main suggestion was that in real design practice the three-stage systematic design concept is not a linear process, then rather a continuous cycle of repetition of the stages.

This process was determined by a repetitive translation of information, which included requirements, constraints, and experience into potential approaches and evaluation during the entire design process. This resulted in the argument that after all the design process is a non linear practice. Hillier, Musgrove and O' Sullivan (1984), on the other hand, proposed that the act of problem solving is the main responsibility of designers. As they said that problem analysis was depended on more than cognition and the problem analysis enclosed designers knowledge they argued that design is an activity of conjecture and analysis. The conjecture mode describes the designers cognitive process for outlining the concept and then using artistic approaches (analogy, metaphor, sudden flashes of insight, etc.), to find new ideas. Whereas, the analysis mode describes the designers rational and scientific thinking process in order to analyze the consequences of these new ideas. The Conjecture Analysis Model later inspired Akin (1998), to propose a study that argued, that the design process should include physical and mathematical, as well as the personal knowledge and skill set which enable designers to solve multi-constraint design problems. Meanwhile, Csikszentmilyi (1996) published a work that suggested a different methodology of the design process that consists of multi-directional research and thinking processes. His Deign process is defined in five steps: Preparation, where problems of interest are emerged; Incubation, in which ideas are further developed at the level of consciousness as well as connections being made; Insight, where a more complete concept is being thought out; Evaluation, which describes the actual decision making of the most valuable concept/idea; and Elaboration, where the insight is being turned into a physical object. In his opinion, the model of design process is a generally well structured path leading to creation. Nevertheless there are harsh critics, which argue that the design processes can not be standardized. Austin and Devlin (2003), for example, proposed that the deign process is a process of discovery. The aim of the process might be something predetermined, however, the path that lead to that aim is unknown. They claimed that the creative problem solving process is a non-sequential, nonlinear approach, and that there is no such concept that could clearly define steps

or stages, due to the fact that it involves new resources as well as innovative thinking. Their hypothesis was strengthened by Best's (2006) work, who endorsed Austin and Devlin's studies. Best pointed out that the design process is depending on different needs of clients and users. Therefore, it has been realized that the design process is more diverged from the early concepts. The current belief postulates a more multi-directional and non-linear process approach.

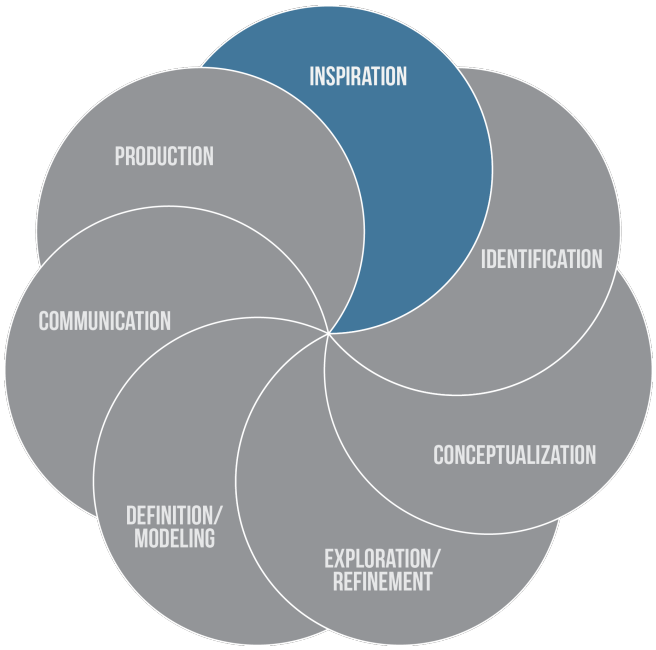
2.2 - THE DESIGN PROCESS BY KARL ASPELUND

After reviewing how the idea and therefore the design process concept has developed over the last decades, I would like to introduce the design process concept, this thesis will use as a base for discussing how and in which way Kansei could improve the anticipated emotional reactions of the viewer. Even though it might be arguable if a stage-structured model, really captures the complex design process in all detail, it is necessary for this research, as it offers firstly a theoretical structure to base the research on, and secondly still provides the closest possible insight into a working mind of a designer. In order to analyze the impact of the anticipated emotional reaction of the target audience, it is of importance to first understand the process of a design project. This thesis will base its analysis of the design process on the work and publication of Karl Aspelund (Aspelund, 2010). So, within this section, his ideas and methodology of the deign process will be described and replenished in a way, so that later on links to the findings of the survey can be easily made. The methodology of Aspelund was chosen,



because it is one of the most respected and most well know design process methods and is taught at over 40 universities in the US alone. Additionally, the content not only reflects on methodology, but also allows conclusions about a general design thought process of a designer. The content of his book 'The Design Process' will be reworked within the next section with a specific attention to potential design considerations towards the anticipated emotional reaction of the audience, specifically for print media advertisements.

2.2.1 - STAGE 1: INSPIRATION



The fist stage of Aspelund's Design Process concept is 'Inspiration'. The main idea he is describing, is firstly that inspiration itself serves as the first stepping stone for the act of creation.

The main teachings he is conveying within this first chapter of his book are:

A. Go out and actively seek for inspiration, rather then waiting for it to happen

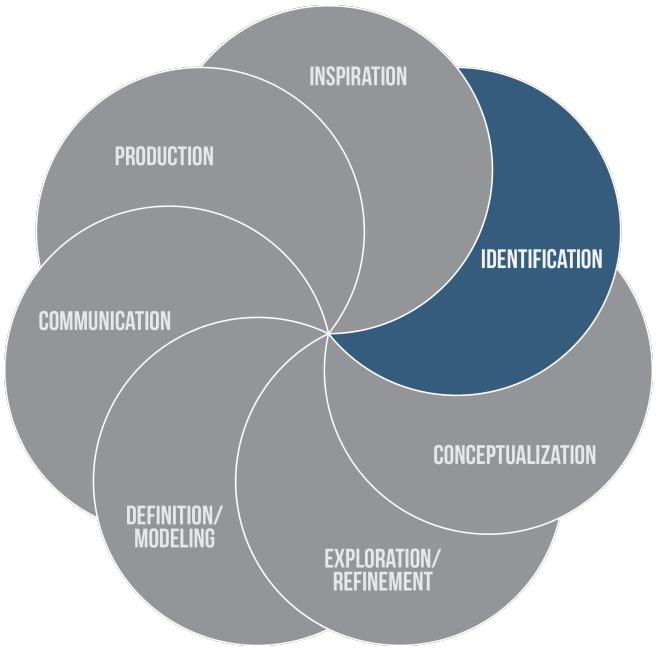
B. Choose your source of inspiration carefully in order to steer the force of your inspiration in a direction that leads to the most beneficial path for your creative process

C. Do not get to monotone in your source of inspiration. Being continuously on the look out for stimulation leads to a broader and more multifaceted inspirational approach

D. Playtime for your mind and spirit are important tools to boost ideas and channel inspiration

2.2.2 - STAGE 2: IDENTIFICATION

The second stage of the design process is Identification. This chapter mainly focuses on the constraints that a designer faces when creating a concept for a design project. After finding inspiration it is mandatory to boil down the phantasy to a real life project that meets a multitude of constraints both 'inherent' and 'imposed. Identification of the design problem, that needs solving, is the key element of this stage. “Each problem has its own list of constraints, some more fixed than others. The constraints come up at different stages, and sometimes they are not apparent until after the final design is already in the hands of the end user. These constraints will, more than any other aspect, define the project as the idea or the solution, which begins to evolve” (Karl Aspelunds, 2010, p.41).



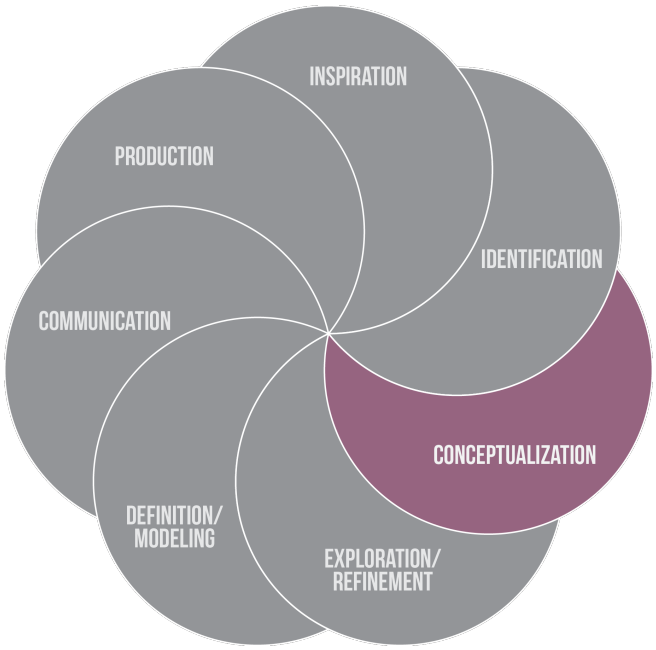
The inherent constraints summarize the essential nature of an object and determine its characteristics. Therefore, the inherent constraints define the functionality of the designed object. The other category of constraints are the imposed constraints, which summarize a much lager and complex section of constraints. In general, imposed constraints can be described as choices made by the designer that determine the end result of the project, which are non-essential element of the objects nature. These constraints can be material, color, shapes, etc., which influence the general appearance of the object, but still allow it to be recognized as an object of their class.

After determining the categories of constraints, Aspelund digs into the areas of constraints and defines them into three main and overlapping areas of imposed constraints, that designers should consider in order to understand the constraints of

their design to a deeper level. These areas are mainly determined by needs and desires of either the end-user, the designer, or the producer. Due to the outlook of this research, the text will further elaborate on the area of constraints concerning the end-user, as this is the first touching point of influence of the end-user on the actual design process. The end-user constraints are the most obvious according to Aspelund, as their needs and wishes are directly impacting the design decision making process. These end-users can be a client, but also users, viewers, interactors, builders, co-workers, or even people that are just indirectly affected by the design work. So, understanding these needs and wishes is an essential part of comprehending the end-user constraints. At this point, Aspelund analyzes in more detail what these constraints are and what they are containing. As this paper focuses mainly on the creative process of print media advertisement understanding the end-user, therefore the viewers/target group the print design is directed to is an elementary part of creating a end result that meets these goals.

What is firstly the intent and what do I want my potential customer to know, learn or feel about my product or brand? Considering the response of the target group in the early stages of the design process can outline certain constraints very clearly, and lead to a more focused approach of reaching this target of audience response.

2.2.3 - STAGE 3: CONCEPTUALIZATION



The stage of Conceptualization evolves around the idea of understanding the design idea to a deeper level and with such a clarity that transforms it from being an idea to gaining actual tangibility. Communication of non-existent designs and making creative thoughts understandable for others, as well as self-assessment of the quality and possibility of execution of the design idea are core for this stage in the design process.

The main teachings he is conveying within this first chapter are:

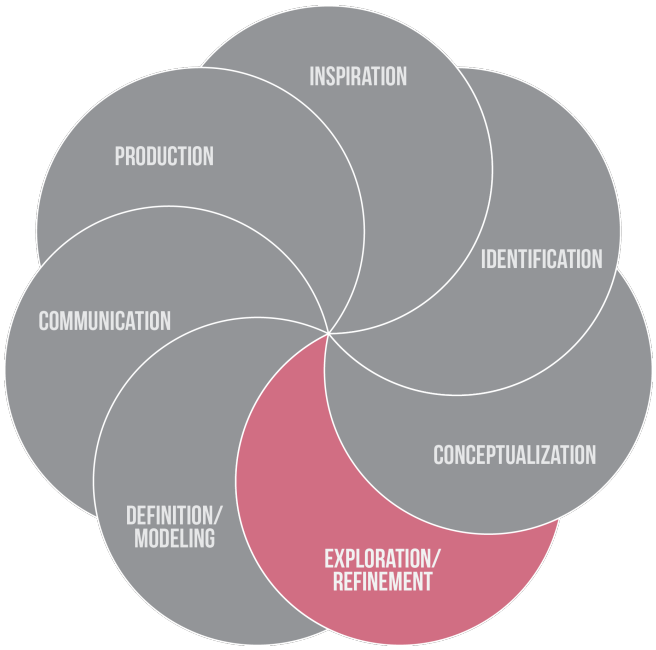
A. Exploring the benefits of making environmental friendliness a inherent constrain of your project

B. Presenting the idea of utilizing the Gestalt concept through filling the gaps of the idea and intuitively forming a totality or Gestalt of the design project concept

C. Brainstorming as an effective tool to make thoughts and ideas visual and utilizing these in a playful, non-judgmental and error free personal zone

2.2.4 - STAGE 4: EXPLORATION/ REFINEMENT

This chapter explores methods in order to refine concepts and come to a more and more conclusive and whole concept. Aspelund starts by creating a link between the idea of how an alchemist goes about his work, trying anything and everything worth trying, and how a designer should further explore and refine his concept, by examining and questioning everything. Further, he discusses some elements/methods that support the process of this stage. Methods of support can be, Observing and Testing, Sketching, Reflection as well as Dialogue with different people that can provide new insight and perspective. Turning back to the core of this thesis, Aspelund provides another linking point of the emotional response of the target audience and the possible influence on the design decision making process. The idea of dialogue can be utilized in a very effective manner in order to understand the effects of the print design on viewers. The communication with the target group can verify if the design meets the goal and if emotional triggers have been utilized in the right way. This method can be used as a reinsurance before stepping into



the definition and modeling stage. Going back to the idea of KE and its methodology. The use of a focus group is a favorable method. Usually, the focus group is confronted with the final prototype of the product, which already costs the company a lot of time and money. The major advantage of introducing this method so early on in the design process, is based on the working

Figure 5 - Image of GE's Artistry series of kitchen appliances

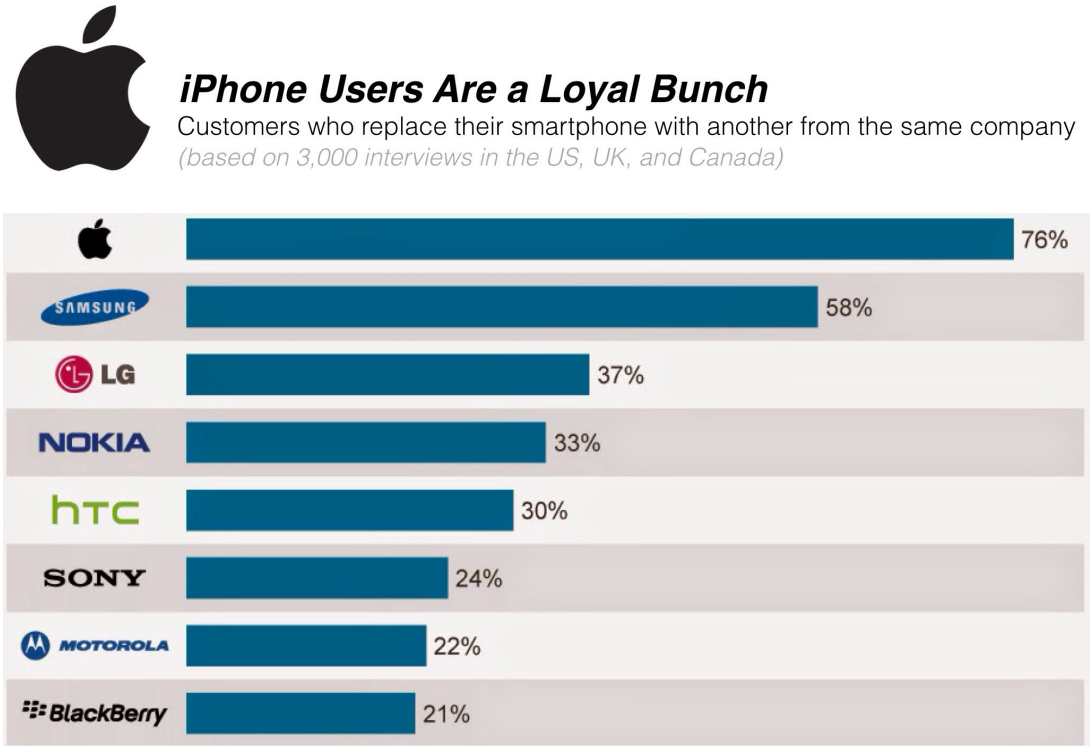


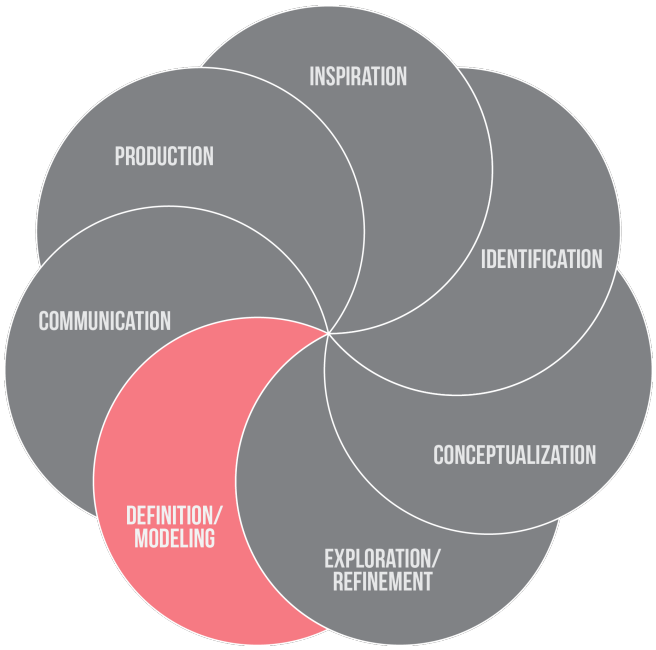
Figure 6 - Chart showing the loyalty of Apple customers compared to other competitors of the sector

process of print design. Rather than producing and experimenting with different material etc. in print design mockups are much easier, fast and cheaper to create. This advance should be seized in order to create more targeted and successful emotional messages in print.

2.2.5 - STAGE 5: DEFINITION/ MODELING

Within this chapter, Aspelund explores the necessary steps of creating a real life object of design, based on the exploration of the concept in the earlier stages. The idea of distinguishing what the project/object of design exactly and precisely is, can be considered as the primary decision making process within the design process itself, and one may say as the primary function of a designer. After exploring the concept to a deeper level, it is necessary to make smart choices and take decisions that maintain the idea of the project, while fulfilling the constraints of the project itself. Aspelund states that at this stage it is no longer about a concept of an idea, but about creating a 'real' object.

In the section 'A Hierarchy of a Design's Needs', Aspelund addresses different levels of design needs, that have to be dealt with in the process of defining a design concept and making it viable. He makes a comparison to Maslow's Hierarchy of Needs (Figure 3), which describes the nature of motivation of humans through needs and



distinguishes them into lower and higher needs. He claims that designs have those kinds of needs as well. Other than Maslow's needs for humans, the needs of a design should always meet all the needs all up the way to the highest one. His needs are listed below according to priority:

1. FUNCTIONALITY

As a most basic need of design Aspelund names Functionality. Further more, it is the most basic requirement according to him. This should be something checked and checked again, in order to ensure that it meets the requirements and standards of its category as well as on its own.

As this hierarchy of design needs is highly relevant to the understanding of how and in what way designers decision making process might be impacted by anticipated emotional reactions of the target audience, there will be some elaboration made and information added specifically to the design needs of print design.

Regardless of the distribution format of the advertisement design, the basic function of advertisement is based on the simple principle of supply and demand. Creating an urgency targeting the customer for the product or service a client is providing. Many of the principles and concepts of advertisement today are based on the research of the earlier mentioned Abraham Maslow (Figure 3). His categorization of the human needs related to physiological requirements, safety, love, self-esteem and self-actualization create the basic framework of inducing the idea of urgency and necessity to target customers through advertisement. Due to the suggestion that potential customers can satisfy these needs more quick, easy and economical, the

Figure 3 - Illustration Design of Abraham Maslow's Hierarchy of Needs from the 1940's

Maslow needs can be utilized in order to serve to the purpose and primary functionality of advertisement 'Urgency'. This induction of a primary human need into advertisement is a clear link of anticipation of customer reactions and the design process at large. If the goal is to tap into those needs, the corresponding emotions have to be evoked due to strategic design decision making and a visualization of the

advertisement that conveys exactly these

Figure 4 - Image of a 2013 Ford Taurus

emotions.

The proven effect of this method is demonstrated by an interesting analysis, of how the perception of design is linked to the Maslow's Hierarchy of Needs, has been conducted by Yalch and Brand (1996). They investigated in two experiments how consumers evaluated different brands of shavers and toothbrushes, varying in functional and aesthetic features according to satisfying needs related to the levels of the Maslow hierarchy of needs. Consumers rated the plain functional products to be equivalent to the more aesthetic products in criteria concerning the satisfaction of basic needs. When rating the higher levels of needs the aesthetically styled products were clearly favored. The experiments showed that consumers were willing to pay up to 30% more for the aesthetic shaver and 22% more for the aesthetic toothbrush compared to their functional equivalents.

Additional examples show the importance of product design (Bloch, 1995; Kotier and Rath, 1984), but the journals provide only little insight on empirical research showing how consumers consider and perceive different design features in connection to their needs and motivation. It has become more then evident that design can act as a major competitive advantage (Business Week 1988,1990,1993). Successful examples like the Ford Taurus (Figure 4) and Black & Decker's revitalization of GE's small appliance business (Figure 5) are living proof of the powerful impact of great design on sales. Companies like Apple (Figure 6) have understood this importance and the opportunity to not compete in the harsh low price sector, but to elevate their products through innovative and attractive product designs. This way the Apple products do not just serve to the lower level needs of pure functionality, but actually can

possibly satisfy high level needs of self-realization.

Important to fulfill the function of selling the product or service marketed, differentiation of the marketed product in comparison to already existing similar products and services on the market, can be elementary. This issue is usually tackled by information regarding development, quality and durability of the product or service. This can be achieved through a number of different methods like celebrity endorsement, side-by-side comparison, or emphasis of facts of outperformance, just to name a few.

2. RELIABILITY

If the first level of design needs is met by ensuring functionality, Aspelund explains that it is now important to ensure this functionality and to make it reliable for the end user. He points out that if there are any concerns regarding the reliability of the design concept, it will result in an unhappy user! Considering all possible scenarios in order to ensure a reliable product or service is a fundamental examination.

So, what is expected from a reliable print advertisement? As mentioned, the basic function of an advertisement is to create turn over. Creating demand! But, in order to create a reliable advertisement, there are other factors that need to be considered. An advertisement can create great initial sales (one time purchases), but to ensure a more longterm reliability the basic functionality is not enough for an insurance of a long standing customer relationship. So, these factors of reliability are firstly customer loyalty, as well as secondly creating a brand image that is on trend and allows the business longterm success.

3. USABILITY

Aspelund claims that the design of the object should allow the user to use the object instantly without having to relearn how to use an object that we may have already interacted with in the past. Clarity and the possibility of making mistakes

without causing real damage are critical elements of usability.

4. PROFICIENCY

Aspelund explains the design need of proficiency as designers not only creating an object, but further more a system in which the object can operate. In other words, this level is concerned with the UX of a design. The term Proficiency is not limited to the idea of technology, but can rather be expanded and applied to social and political issues and views. The idea is to create a design concept, that opens a new door and allows user to view and experience something in a new way or even challenge their way, of perception. Aspelund states that the consideration of how a design concept can improve an existing system or how a new one can be created, are designs that change UX or even lives.

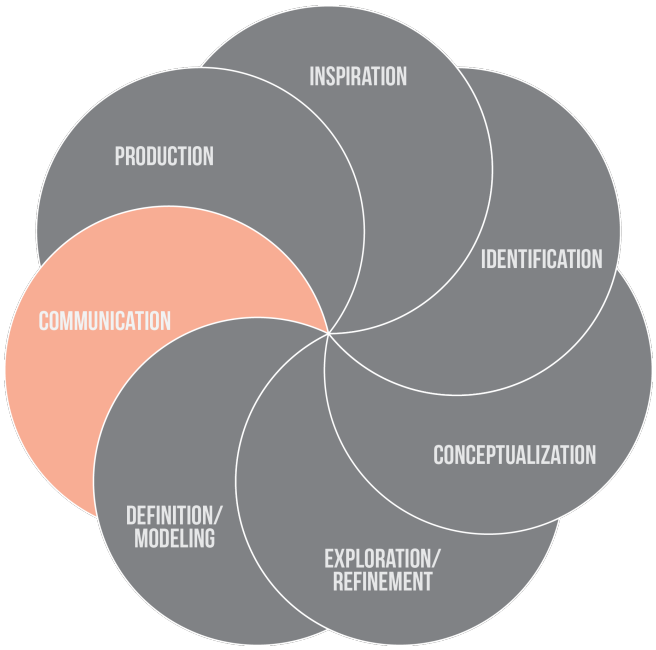
5. CREATIVITY

The level of Creativity goes beyond the one discipline can achieve. Design at this level is about more than just creating and designing more objects or products, it is about changing the environment and righting the wrongs (Ralph Caplan, 2005).

After elaborating on the concept of the design need hierarchy, Aspelund continues the chapter with another stimulating string of thoughts. He introduces it as the 'Anatomy of an Idea'. How essential it is to understand the elements of the design as well as their serving functions. Analyzing the purpose of these elements, is the focal point of this section. He separates the elements of design into two major groups. The first group contains the elements that are connected to the physical appearance and the second group deals with the intangible assets and elements of a design, such as philosophy and emotional responses. "The idea contains more than just a shopping list of things; it is greater than the sum of its parts. You need to consider what the statement is in each case" (Karl Aspelunds, 2010, p.125), Aspelund explains. The statement can be physical, material, but also and more importantly it can be an emotional statement or relationship with a viewer/ audience/user. The concept of elements, or as Aspelund calls it Anatomy of the Design

create a very strong symbolism especially for the print media design. In Print Design, we also talk about elements of design, such as font, shapes and forms, colors etc. If we categorize these elements according to the 'Anatomy of the Design' idea, these visual physical elements would be considered tangible assets. The individual element of the design have to be evaluated for their philosophical, emotional value, as well as the entire composition of elements, and how they are working together in order to create that emotional messages that the designer wants the viewer to receive. This method is highly relevant considering Kansei as a guideline. Kansei clearly wants to understand the impact of the individual elements of the design work, and how small changes of the design can create changes in the perception of the audience. These small changes and their impact need to be explored and further refined for gaining the most effective outcome in anticipating the emotional response of the target group. This method of Aspelund's 'Anatomy of the Design' can create real benefit when fused with the ideology of Kansei.

2.2.6 - STAGE 6: COMMUNICATION



This stage deals with creating a successful communication of the concepts design message. The art of communicating an idea is what design itself is about and due to this rudimental connection it is considered as one of the key issues of design, according to Aspelund. He makes clear that communication is something that should be considered throughout the design processes and not just within this stage, as it poses such an elementary part of a design idea. Aspelund divides the act of communicating a message via media into three phases, or moments. The encoding phase is the first. It contains the creation of a message using conventions of language and images. The second phase is the message itself, in which the form, or content of this message, is developed, and a physical object is created through skill and technique. The final phase is the decoding by audience, which deals with the audience of the design work making sense of the design message and places it within a context. And, this is where the main responsibility of a designer lies, to make sure that this message that is created, or coded can be decoded correctly by the target audience and put into the relevant context. Unclarity and ambiguity should be eliminated at any cost, because they can lead to a confused audience. Aspelund points out the importance of understanding the target audience, and creates another strong linking point of design process and decision making with the anticipated emotional perception of the audience in mind. He states that it is critical to understand the audience of the design project. What are their needs, their perspectives and what possibilities are there to deliver to these needs? Again and more evident than before, the linkage of considering what and how the message is conceived and understood by the audience is a part of the design process at large. As

he points out at the very beginning of this stage, this consideration of communication is something that should be a constant concern during the entire process of the design project. These needs and perspectives he is mentioning can be expanded upon. Especially in the field of advertisement, this factor weighs in even more heavily as we are not just trying to create an urge to buy a product or service, but in most cases also try to create a longterm customer relationship with the brand of this product or service.

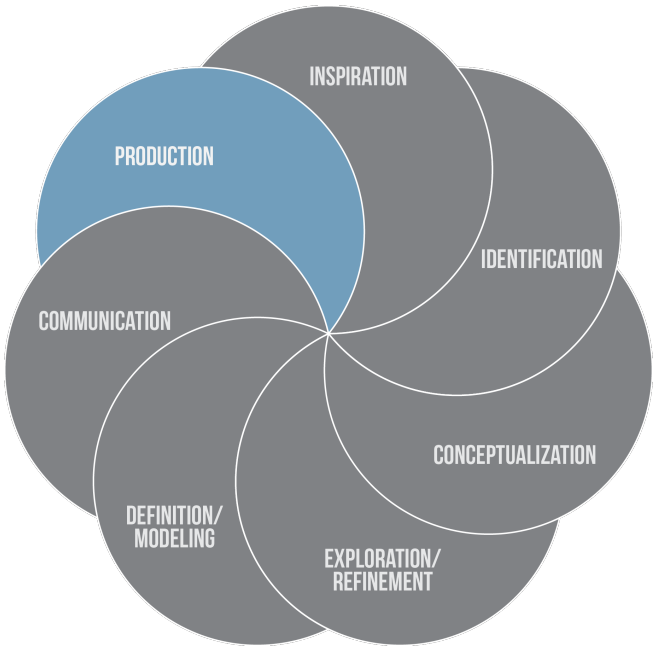
In the next section of the stage explanations, Aspelund elaborates on what and who the audience really is. As a single project has to deliver multiple audiences, it is important to serve to their varying needs and expectations. The first audience group Aspelund points out, are the clients. As the client is the initiator of the design issue at hand, his/her their needs should be carefully considered. It is about the continuation of a dialogue, in which the client defines the needs, and the designer provides the methodology and techniques to satisfy these needs. A client can be an individual, small business or an entire corporation. Depending on the size of the corporation, the communication changes drastically. Due to the fact that in dealing with a corporation as a client a designer is in dialogue with multiple stakeholders that are involved with the project, information and therefore communication becomes very much compartmentalized. This is an issue that should be monitored carefully by all participants involved, in order to ensure a steady flow of information to everyone involved, so Aspelund states. Another consideration I would like to add at this point to the audience groups of Aspelund are the target group. The client may be the initiator, but he/she might not be the person the concept design is created for. So here again, we have a strong linking point for our search of impact point on the design process for creating more focused anticipated emotional design reactions of our target audience. As Aspelund is talking about needs and expectations of these different audience groups, it serves exactly to the purpose of understanding the Kansei of the target group towards the design concept, or finished product/print design. The evaluation and analysis of these needs and expectations can serve as a milestone in understanding

the target audiences Kansei, and therefore their emotional reaction towards the design work itself. Manufactures are the next group of audiences that need to be considered. The communication between designer and manufacturer boils down to very particular matters, like material and diagrams. Aspleund describes it as a job that mainly focuses on oversight as well as availability of the designer to solve issues and answer questions. A third group of audience can be associates. Aspleund makes clear that dialogue is an essential part of successful team work in design, and that after all it will be easiest to adapt and understand the needs and communication language of your associates, as the entire team is sharing a common gaol of finishing a project.

Aspelund continues this chapter with an analysis of the delivery process of information as well as presentation forms and considerations to make in order for a successful presentation of the concept to mainly the audience group of clients.

2.2.7 - STAGE 7: PRODUCTION

The last chapter and therefore the last stage of the design process, according to Aspelund is the production. In this chapter, he talks about the importance of the interaction of designers and the production team, as well as to benefit from their experience and knowhow. His main advice is to not underestimate the gain of focusing on creating a prototype, which can serve the purpose to finalize the overall concept and idea. The decision making process of this stage is all about handling final choices and sending it off for production. Experience earned through each design process of every project leaves a designer with more fuel for the project to follow.



2.3 - CHAPTER CONCLUSION

In this chapter, the general design processes of Aspelund has been introduced. Additionally, major linking point of the concept of Aspelund and the ideology of Kansei, and therefore emotional reaction anticipation of the target audience have been established. This chapter made the connection of the design process and the ideology of Kansei clear and has lead to interesting additions, that will be further explored, put into a framework and formulated into helpful tools within the next chapters.

The major linking points of the Design Processs by Aspelund and the Kansei ideology detected were:

A. Identification - the end-user constraints as inherent constraints of the design project and therefore as rudimental part of the design concept

B. Exploration & Refinement - focus group studies for a better understanding of the target audience and a more holistic concept outcome

C. Definition & Modeling - the Maslow Hierarchy of Needs as tool for creating a functional print design that create an urge

D. Definition & Modeling - the “Anatomy of a Design” Concept for understanding the tangible assets of the design as well as their intangible implications as individual elements and as a composition

E. Communication - the process of message coding and decoding in order to avoid misunderstandings and redundancies

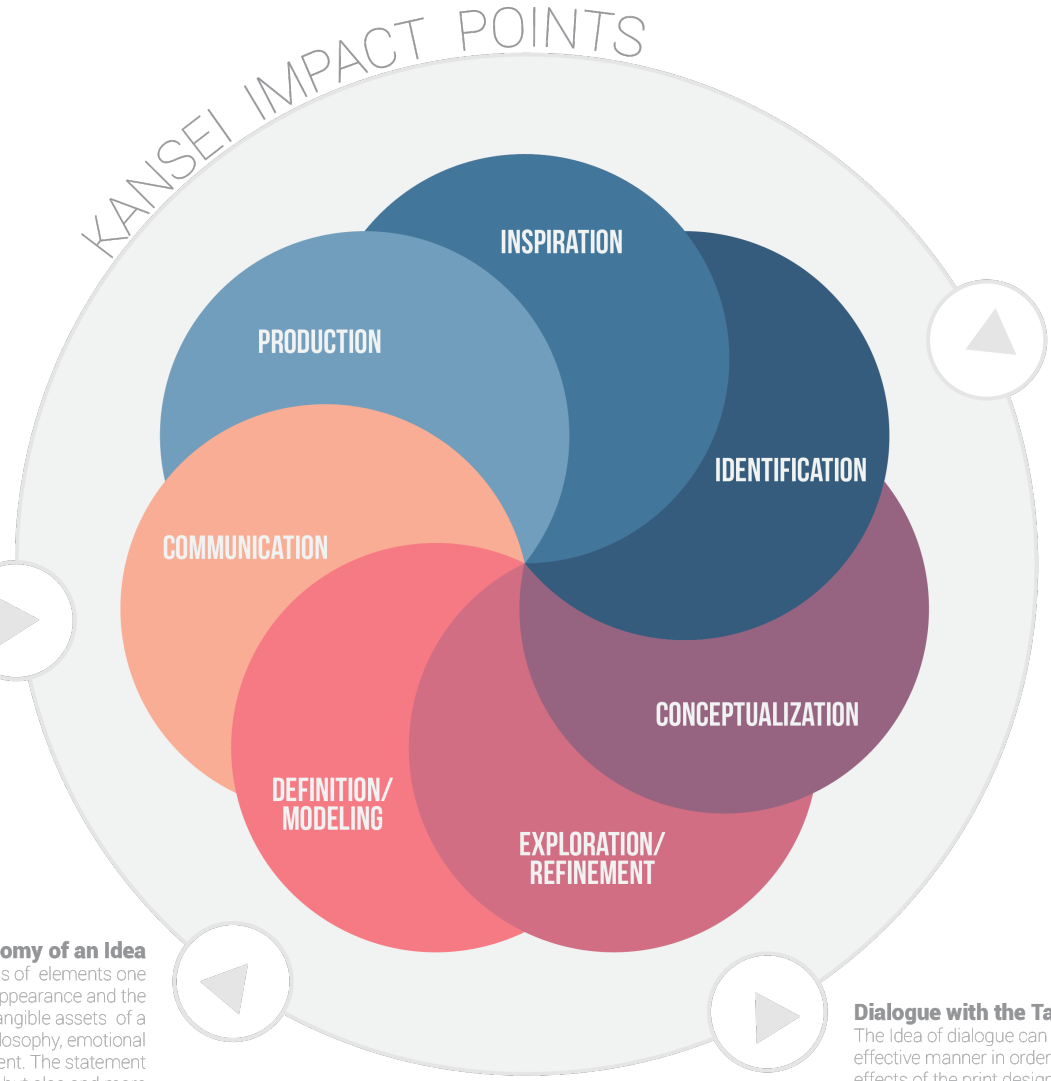
F. Communication - exploration of the target audience needs and exceptions towards the design concept/print design for altering a custom made communication strategy

CHAPTER 3 - EMOTIONAL RESPONSE SENSITIVE DESIGN PROCESS

Chapter 2 actively fuses the links of the ideology of Kansei and the Western design process concept of Aspelund. The idea is to create connections and tools that can lead a designer to a more beneficial approach toward their design process in the aspect of UX.

In this chapter, the most effective impact points of Kansei on the design decision making process will be discussed, with the goal of creating a guide, which allows designers to focus their design process on a more user emotional oriented experience. Based on Karl Aspelund's Design Process concept, the different stages of importance will be revisited in more detail as in the previous chapter (Figure 7). Idea is to manifest and explore the possibilities of Kansei for the design process and how it can enhance the UX from an emotional stand point.

EMOTIONAL RESPONSE SENSITIVE DESIGN PROCESS



Target Group Constraints
What is firstly the intent and what do I want my potential customer to know, learn or feel about my product or brand? Considering the response of the target group in the early stages of the design process can outline certain constraints very clearly and lead to a more focused approach of reaching this target of audience response.

Understanding your Audience
What are their needs, their perspectives and what possibilities are there to deliver to these needs?

Anatomy of an Idea
There are two groups of elements one represents the physical appearance and the other deals with the intangible assets of a design such as philosophy, emotional responses and statement. The statement can be physical, material but also and more importantly it can be an emotional statement or relationship with a viewer/ audience/ user.

Maslow's Hierarchy of Needs
The induction of a primary human need into advertisement is a clear link of anticipation of customer reactions and the design process at large. If the goal is to tap into those needs the corresponding emotions have to be evoked due to strategic design decision making and a visualization of the advertisement that conveys exactly these emotions.

Dialogue with the Target Group
The Idea of dialogue can be utilized in a very effective manner in order to understand the effects of the print design on viewers. The communication with the target group can verify if the design meets the goal and if emotional triggers have been utilized in the right way

Figure 7 - Kansei-induced Design Process "Emotional Response Sensitive Design Process" by Justine McIlhargey

3.1 - STAGE 2: IDENTIFICATION

As explained in chapter 1, the Identification stage mainly deals with the analysis of inherent and imposed constraints of a project. These constraints are the main driver for a multitude of decisions, that influence the design concept, as well as the final outcome heavily. By creating constraints, the designer set the framework of his concepts! If the goal of a designer is to evoke certain emotions through his/her design work, it is valuable tool to consider those in the early stages of the design process. By laying out the intended emotional respond of the target audience in the Identification stage, the designer can explore and shape his identified constraints according to these emotional response aims of the design work. This will not only allow a more focused approach, but by making it an inherent constraint the imposed Kansei can be fused with the very nature of the design concept. This technique allows designers to firstly consider, explore, and later refine the intended Kansei and make it an essential part of their design process. Due to this, a more satisfactory UX can be initiated, or the UX can be driven by designers. This means through the Kansei constraints, a designer can actively influence and drive the emotional response of their target audience, and therefore guide the emotions of the user along a certain target Kansei.

Questions that guide the processes of the IDENTIFICATION stage

How do I want the user to feel about the message of this ad?

How do I want my user to feel about the brand?

What are the values I want to communicate through this ad?

What message am I sending via this ad?

What do I want the user to learn about my product/ brand?

Answering these questions will firstly clarify the aimed Kansei for the advertisement champaign and in a second set will allow the designer to infuse and shapes the inherent as well as imposed constraints for the project accordingly.

3.2 - STAGE 4: EXPLORATION/ REFINEMENT

As mentioned in the previous chapter, the stage of Exploration and Refinement has the goal to firstly ensure the totality of the concept, and secondly to ensure that the concept meets its target. There is a variety of different methods that support the stage. There are two methods of interest, regarding Kansei, which are reflection as well as dialogue. Dialogue can be utilized in a very effective manner in the context of inflicting the design process with the ideology of Kansei. The method allows designers to understand, test, and discuss the emotional effects of his print design concept on viewers, with the potential viewers/target group. Due to this dialogue, designers can verify or pretest their Kansei design concept. Adjustments of the concept elements, that deliver confusion, misunderstanding, and wrong interpretation, are an essential part for this stage, that still allows flexibility and changes. The communication with the target group can identify, if emotional triggers have been utilized in the right way and send a consistent and understandable message. Pretesting will lead to a more successful outcome as well as saving time and money.

Questions that guide the processes of the target audience dialogue in the EXPLORATION/ REFINEMENT stage

How does this print ad make you feel?

What is the message?

How do you feel about this brand/ product now?

What are the values you connect to this advertisement?

What could you learn about this product/ brand?

By letting potential viewers answer these questions, an understanding of the effectiveness and comprehensiveness of the advertisements Kansei can be formed. In a second step, deviant results can lead to necessary adjustments of the concept that will have an immediate effect on the preciseness of the target Kansei.

The second method of reflection links the stage 4 of Exploration/Refinement to the constraints manifested in the stage

Identification. The idea of reflection, in regards of making a more Kansei oriented design concept, is to revisit these constraints and ensure that all of them have been met. By revisiting those Kansei constraints, a misstep or oversight can be easily detected and corrected. The idea is to not lose sight of the essence of the project and to reevaluate if constraints, and in particular Kansei constraints, have been sufficiently paid attention to.

Questions that guide the processes in the EXPLORATION/ REFINEMENT stage
How have my Kansei constraints influenced the concept?
Which elements reflect decisions I have made based on a Kansei constraint?
How am I communicating the desired message?
Which tools am I utilizing in order to convey the Kansei?
Does every element of my concept fulfill the purpose of the targeted Kansei?

By questioning the current design concept and the decision making process that has lead to it, a designer can reevaluate individual decisions and their effect on the overall design concept and its message to the viewer.

3.3 - STAGE 6: DEFINITION/ MODELING

This stage mainly focuses around the design needs of a design concept and the objectification of a concept into a real 'thing'. Particularly for the example of this thesis of creating a link between the ideology of Kansei and the design process at large, this stage poses an elementary function in this process.

As established in the earlier chapter, there is a clear connection between the functionality of a design concept and the Maslow Hierarchy of Needs as the main aim of print media advertisement evolves around the idea of creating a consumption urge. By creating an urge through the media of print, a designer evokes a lot more then just the buying urge. He induces the viewer with certain initial emotional responses, so a certain Kansei, that leads to the urge of consumption in a second step. Kansei therefore enables the designer to create a instant reaction of emotions that full fill the criteria of the first design need. As the Maslow Hierarchy of Needs is link to motivations that are infused in the human nature, the correct utilization of Kansei can tap into those human motivations, due to the correct stimulation of instant emotional responses. So, as it becomes more evident, the strategic usage of Kansei can lead to a more effective outcome of the functionality feature of a print design concept.

Questions that guide the processes in the DEFINITION/ MODELING stage

Which needs of the Maslow hierarchy is my design concept addressing?

What emotions express the targeted Maslow need the best?

In what way am I addressing the target Maslow motivations in my design concept?

Does my product or service exceed the basic functionality and addresses higher level motivations then those?

Which physical elects of my design express the motivation?

The second technique for inducing the general design process with the ideology of Kansei in this stage of the process is the review of the anatomy of the founding idea of the design concept. The process of this

technique includes the general analysis of the different elements of the design firstly from a physical stand point, which can include considerations like material, form and production, but also secondly from a more mythological, psychological and emotional point of view. The idea is to reconsider different elements of the design and evaluate them based on their emotional and mythological meaning on its own as well as an element of the entire body of work. It is essential to understand the connections between different elements of the design work and physical parts of the design and their impact or evoking emotional response for the audience. This very much responds with the essence of KE. Rather than a consumer experiment in the production stage of the design process, like KE suggests, this review method of the Anatomy of the Deign allows a self driven pre-KE test. The anatomy of the idea concept is about analyzing the body of design work based on different aspects and evaluating these and their emotional value or respond. This way designers can develop a more emotion sensitive design technique that saves time and money throughout the design process throughout different disciplines.

Questions that guide the processes for the anatomy of the idea method in the DEFINITION/ MODELING stage

What are my physical elements?

Why did I choose these elements and what purpose are they fulfilling?

What emotional as well as mythological reason do these elements have?

Do they serve the purpose of my proposed Kansei expectation?

Is there any other element or a different variation of this element that would serve the purpose of the proposed Kansei in a better way?

Material, color, type, shape, form, proportion etc…

3.4 - STAGE 6: COMMUNICATION

Communication of a finished design concept is an elementary part of the process. A product or design can be as good as it gets, but if people are not communicated with properly it is all not worth it. So, this stage is very much about understanding how and in what way a design has to be communicated to its target group. Serving to the needs of a target group is very much connected to the idea of Kansei. Thinking about it in this way that the feeling of satisfaction is a strong one, serving to the needs of the client becomes certainly a matter of Kansei. As explored in chapter one UX is not only link to the user friendliness, but also the connecting emotions with a design as they contribute to the entire experience of a user in a big way. So, when thinking about the communication of these addressed needs and ideas that are fundamental in the design have to be communicated in a way that speaks to the target audience.

Questions that guide the processes in the COMMUNICATION stage

What are the needs that my design is fulfilling or speaking to?

What emotions are connected to these form of needs?

In what way are these emotions connected with the pursued Kansei of my project?

How can these emotions be addressed in my communication of the design?

What is the core message/slogan of the design work and how does that message correspond with the targeted Kansei?

3.4 - CONCLUSION OF THE EMOTIONAL RESPONSE SENSITIVE DESIGN PROCESS

Creating print designs that firstly appeal to the target group and secondly may lead to a sustainable customer relationship, is the goal and should be the major driver of any champaign related project. Kansei can function as a useful tool in many different forms of methodologies throughout the design process, and create a more successful outcome of the design project. This is simply because the base of Kansei is to deeply understand the emotional instincts and relations of the customer, and if this is correctly rooted into the design process, a more targeted and tailor-made solution for the specific target group can be created. Throughout this chapter important linking points (Figure 8) have been turned into useful methods and tools that help a

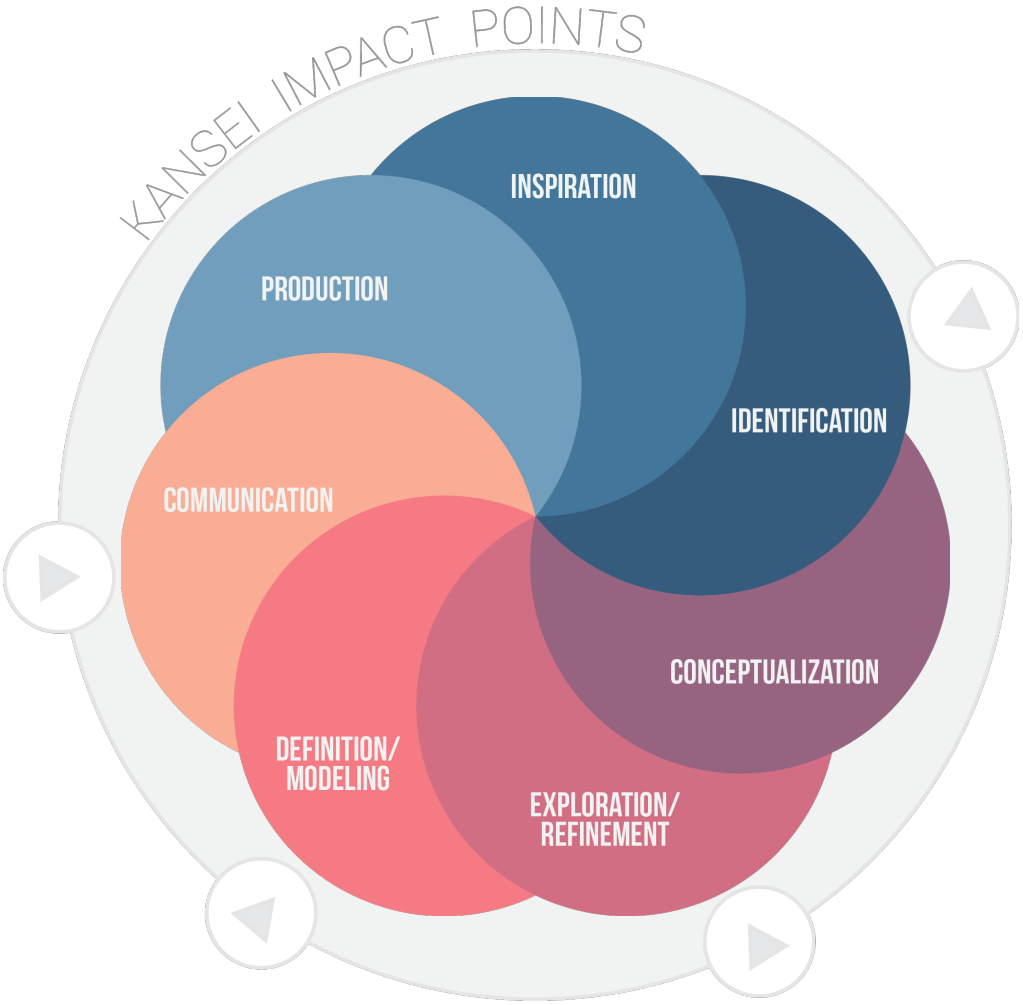


Figure 8 - "Emotional Response Sensitive Design Process" illustration, displaying the created linking points of Kansei and the Design Process by Aspelund

designer to focus his design process approach more on the emotional communication of his design work and make the Kansei of his end-user an inherent part of his process.

CHAPTER 4 - SURVEY CONCEPT AND EXECUTION

After establishing a model of how Kansei could influence the design decision making process positively, it is important to evaluate the current status in reality of design process application in order to gain an understanding of how designers are working and utilizing the design process in regards to anticipated emotional response. In a second step, it will be important to evaluate to what extent designers are considering these anticipated emotional responses of their target groups and to which degree it is influencing their decision making process up to date. This will allow us to then evaluate the potential of the created design process model of this thesis and how much it could impact the current working ethic in regards to creating a more targeted emotional response of print design. The survey was conducted available under a publicly accessible link and was online from the 15th of February until the 30th of May. The link was shared in Designer Communities like Bechance, International Council of Design Community, as well as shared with Bilgi University's Design students.

For a copy of the full online survey please see the appendix 1.

4.1 - SURVEY CONCEPTUALIZATION AND IMPLEMENTATION

The idea was to create a survey set-up that would firstly allow an evaluation of how much expected emotional responses are already considered during the design process, and then secondly when within the design process they are considered. This part of the survey was dedicated to gain a further understanding of how impactful the ideology of Kansei could be for the design process, and how and in what way the aspects of Kansei are new for the design working procedure of today. The second part of the survey was created in order to gain insight into which tools designers gravitate to in order to communicate these emotional messages. The idea was to analyze if certain print design tools are evaluated as stronger emotional messengers than others, and therefore to see in what ways anticipated emotional responses are altering the design decision making process of a designer. The focus was to gain a deeper insight into what tool/parameters of print design are chosen to advocate emotional messages, and therefore how different anticipated emotional responses would impact the final design output.

All in all, this two-part survey was designed to gain perspective on the decision making process of designers today concerning how much and in what way anticipated emotional responses are already influencing their decision making process. The goal is to firstly understand to what extent and when in the design process designers are influencing their decisions on anticipated emotional responses, and then secondly to gain deeper insight into the process by analyzing which print design tools are utilized to communicate these emotional messages that are directed to evoke the anticipate emotional respond of the target group.

4.2 - SURVEY QUESTION STRUCTURE

Within this chapter, the concept set-up of the online survey and the individual questions will be explained in detail:

How many years of experience do you have as a Designer?

0 - 5 years

6 - 10 years

11 - 15 years

16 - 20 years

21 years and more

The first question of the survey is concerned with the level of experience of the designer answering the survey. The idea is that later on there might be the possibility to distinguish differences of answers from designers with different experience levels. In this way, it will be possible to separate the data collected and determine if there is a variation and if this variation might be meaningful for the research of this thesis.

To what extent do you consider the emotional response of the viewer when making design decisions for print media advertisements?

10 - "My decision making is solely based on the expected emotions of the viewer"; 0 - "I do not consider the emotions of the viewer at all"

This introduction question summarizes the entire intent of the survey. It firstly introduces the designer to the topic of the survey and secondly asks for a precise answer to a very direct question. The designer is presented with a 10-scale rating system which is supposed to help him defining the extent to which he feels he is considering the emotional responses of the viewers. The main aim of this thesis is the ideology that consideration of anticipated emotional responses of the viewer lead to a more successful UX as well as a stronger sense of design output. This question is aimed at understanding to what extent designers are already considering these emotions, and then in conclusion how much the ideology of Kansei could improve this procedure. The zero to ten scale was chosen, as this is a highly complex question

and there needed to be enough space for finer differentiation (that is why a zero to five scale was perceived as to limiting) and the clear structure of numbers could assist and clarify the answering process of the designers.

In which stage of the design process do you consider users emotional response the most? (choosing multiple stages is possible)
Inspiration
Identification
Conceptualization
Exploration/ Refinement
Communication
Production

As the model of this thesis is based on the design process and specific considerations during different stages of the process, it was important to compare the current status of considerations and the point of when they are considered in the design process with the created model of this thesis. Therefore, this question is directed towards clarifying when within the design process designers are considering the anticipated emotions of their target group. As there are multiple points of the process that are relevant for the Kansei ideology within the design process, it was important to offer the answering designers the same opportunity to choose multiple stages of the design process.

The next six questions are directed towards the idea of analyzing which tools/ parameters, of print media designers gravitate to in order to convey these emotional messages. In order to determine these tools/ parameters it was elementary to focus on the area of print media design as it limits the options of tools or parameters to static options. For determining these parameters, a focus group of five print designers was formed for analyzing the print media design process and confirming a preselection of parameters provided. The focus group was held in a form of group discussion. The designers shared experiences and opinion about what they felt were elementary part of the print design decision making process. The provided parameters where based on the elements of graphic design in general. These are Line, Color, Texture, Shape, Size, Value and Space. These basic seven elements of

graphic design were reviewed and put into connection with the specific design work in print media design. So, these seven elements of graphic design were consolidated with different aspects of the print media design work and six parameters of print media design were created. These six parameters are Font, Image, Copywriting/Slogan, Color, Proportions and Form/Shapes. In the next part, the concert thought process that lead to the arrival of these six parameters will be described for the individual parameter at hand.

Font - When confronted with the research provided all five designers of the focus group felt that one of the strongest factor of the print design process is the choosing of a suitable font. Font itself falls into different elements of graphic design as it can be evaluated as a graphical work of art on its own. So therefore, all seven elements of design are reflected in the parameter of font.

Image - In Print Design there is always some form of image/background that sets the framework of the design. Therefore, the focus group selected it as an individual parameter of print design as it sets the tone or foundation of a print design work. Again, the parameter of image consist of all seven elements of graphic design as the image itself once again can be viewed as a graphic design work on its own.

Copywriting/ Slogan - The focus group felt like it was necessary to not only name visual parameters, but also parameters that are more connected with the message of the print media design work. Therefore, the parameter copywriting/slogan was chosen, representative of all the text that is displayed within the print media design. As it is a parameter that is more concerned with the overall message rather than the visual packaging of that message this parameter does not really designate with any of the graphic design elements, as it is solely based on what the copywriting of the design is and not the way it is visually presented with in the design work.

Color - As an element of graphic design, this is just as well relevant on its own for the decision making process in print

media. The choice of color for the different elements of the design work and how these color correlate with one another makes a huge visual impact and difference for the outcome of the print design. Therefore, the focus group felt that color itself should be rated as one of the six parameters of print design.

Proportions - The parameter of Proportion is directly linked to the elements of size and space. It refers to the decision process of how big or small the different elements of the print design are in comparison to each other, as well as the distance/ space in between these different elements of the design. All in all, the proportions of the work of print media design are collectively summarized within this parameter.

Forms/Shapes - This parameter is directly linked to the elements of shapes in graphic design. It refers to the overall elements with in the print design of how they are shaped and placed/ structured together as individual part of design and as design in total.

Question 4-15 of the survey were structured in the same matter, for the six different parameters of Print Media Design.

How would you rate the emotional impact of the element FONT to influence the design of Print Media Advertisement in your experience?

10 - "The emotional message is solely conveyed through this element"; 0 - "The emotional message is not impacted at all through this element"

Participants then had the option to rank their option on a ten-point scale. As for the same reason of the second question, the ten-point scale was chosen for this line of questioning again. The six parameters of print design were all presented in the same style of questioning. The idea was to understand which of these parameters the designers value most when transmitting emotional messages to their viewers and which of those they rank as most impactful. After asking the participating designers to rank the value of the impact of the specific parameter, they were asked to give a brief explanation of their value decision. These

answers are relevant in the way that they can later on add another level to the numerical results and may shed some light onto unanswered questions of the burly numerical results.

CHAPTER 5 - SURVEY RESULTS AND ANALYSIS

The number of participants of the survey was 39 designers from a total of 18 different countries from all around the world. The survey was run from the 15th February until the 24th of May.

In this chapter, the results of the online survey will be concluded. Firstly, the quantitive findings of the survey will be elaborated on and the distribution as well as ratings of the participants discussed. The aim will be to get a first oversight of the generated data and the most meaningful data. The second and more important part of this chapter will deal with making sense of the generated data and formulating concrete findings of the survey. We will try to find answers to some of the decisions and ratings of the designers within the qualitative survey part, where they were able to explain their choices of rating.

The author statements will serve as guides to get a deeper insight and make more precise statements. This way the quantitive findings can be verified through the statements of the participants and alteration can be made if necessary. Through this method, a holistic and qualitative finding can be ensured.

5.1 - THE CONSIDERATION OF EMOTIONAL VIEWER RESPONSES IN THE DESIGN PROCESS

The first important question that needs to be answered is to what extent do designers even think about the emotional response of their target audience throughout their design process. This is the elementary bases for ensuring an interest for the topic of creating a more emotional response sensitive design process methodology. The question was answered on a 10 point rating scale. (Just as a short reminder: 10 - "My decision making is solely based on the expected emotions of the viewer"; 0 - "I do not consider the emotions of the viewer at all") The average answer rate amounts to a total of 8.03 points (see Figure 9). This high rating clearly showcases that there is a high sensitivity of designers concerning the anticipated emotional responses of their target groups. One interesting detail was

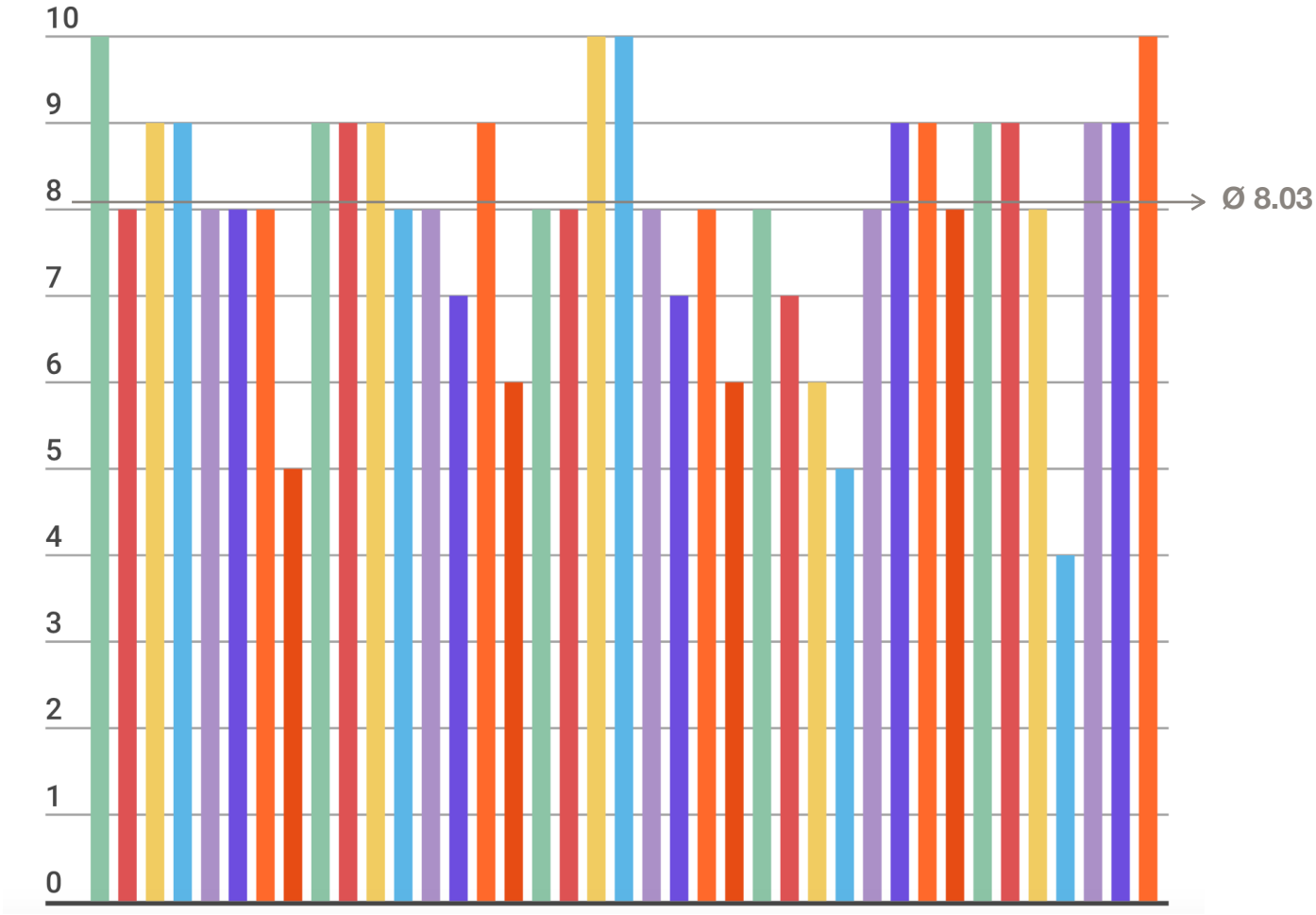


Figure 9 - Participants evaluation of extend of consideration of the emotional audience response throughout their design process

that amongst designers (with 0-5 years of experience) the rated average was higher than the total average. It was set at 8.25 points, which could be explained through the fact that the idea of UX as well as emotional marketing have increasingly gained attention and are also an essential part of the design education today. Overall, these rates display that designers are obviously considering the emotional reaction of the target audience, and that further development of new methods concerning focusing techniques of the anticipated emotional viewer response.

5.2 - DESIGN PROCESS STAGES AND THE CREATIVE CONSIDERATION OF THE EMOTIONAL AUDIENCE RESPONSE

Within the next section, the current status of when designers are considering the emotional audience response, will be explored (Figure 10). This serves as a groundwork in order to understand if the developed Emotional Response Sensitive Design Process can provide a benefit for the already existing and in reality practiced design process. As we have detected the influence points of the Kansei ideology on the Western concept of design development, it will be essential to see if the survey data reflects the Kansei impact points, or if there are variations. These variations would then display the stages and techniques developed, based on the Kansei ideology, and the base of the Western design process by Aspelund, that would have the greatest potential of changing the approach and work flow of the current design process flow of designers, and could successfully direct the working process towards more targeted emotional response of the target audience.

41% of the participants stated that they are considering the user's emotional response in the inspiration phase of the design process. As inspiration may come from users it is slightly surprising that apparently the emotional response of a non existing design work can also lead to some sort of inspiration for some designers. For the ideology of Kansei, this has no real impact as Kansei is concerned what emotional responses different concept models trigger and how the audience reacts towards the work. The phase of inspiration is not a crucial part for understanding the audiences Kansei. Nevertheless 41% of the participating designers did. Here a redirection of attention and time could be helpful if the target is really about creating a visual language that triggers a specific emotional response.

In the phase of Identification, 31% of the designers claim to consider the emotional response of their target audience. This is the third lowest stage rate for the design process. Considering Kansei, the Identification stage is elementary for

understanding the end-user constraints and making them an inherent part of the design concept, and therefore the design work itself. A redirection of attention and time from the first stage Inspiration to the second stage of identification could be a beneficial change in approach.

A total of 69% and therefore the most chosen stage of importance for emotional response consideration is the stage of Conceptualization. According to Aspelund's Design Process, the Conceptualization phase is for formulating a holistic concept. Within this research, the phase of Conceptualization is not considered as an impactful stage specifically for the creation of meeting expected emotional responses of the target audience. The framework is set through the considerations of the previous stage and the implementation of the end-user concerns in the fundament of the concept outline. So, they obviously have to be further considered and explored within this stage, but not reworked or altered as they should be considered as inherent constraint. The high amount of designers choosing the stage of conceptualization as a considering stage for the purpose could be related to the fact that within this stage the concept has to be built around the end-user constraints. But for our considerations, we do not see this building process as a consideration of the anticipated emotional response, because the constraints are already set and implemented in the Identification stage. Within the Conceptualization stage, designers are creating a concept that meets these inherent needs, but they do not reconsider them, and therefore the stage of conceptualization is about exploring solutions that meet the needs but not creating new needs. Again, as in the first stage the recommendation of distributing this time and effort to the previous stage where these actual needs are formulated and manifested.

The stage of Exploration/Refinement was chosen by 36% of the participating designers. As this stage is defined by Aspelund as a form of ensuring that the created concept in the stage of Conceptualization is meeting the requirements and needs. This can be accomplished through different testing methods. 36% of the designers are stating to consider the emotional response once

again in the 4th stage, which is conform with the methodology introduced based on the Kansei ideology. This stage can be considered as a reinsurance phase where emotional responses can be tested on a focus group.

Only 23% of the participants choose the stage Definition/ Modeling as a stage of consideration. This is the second to last ranking rate. As this stage is all about objectification of the created concept into a

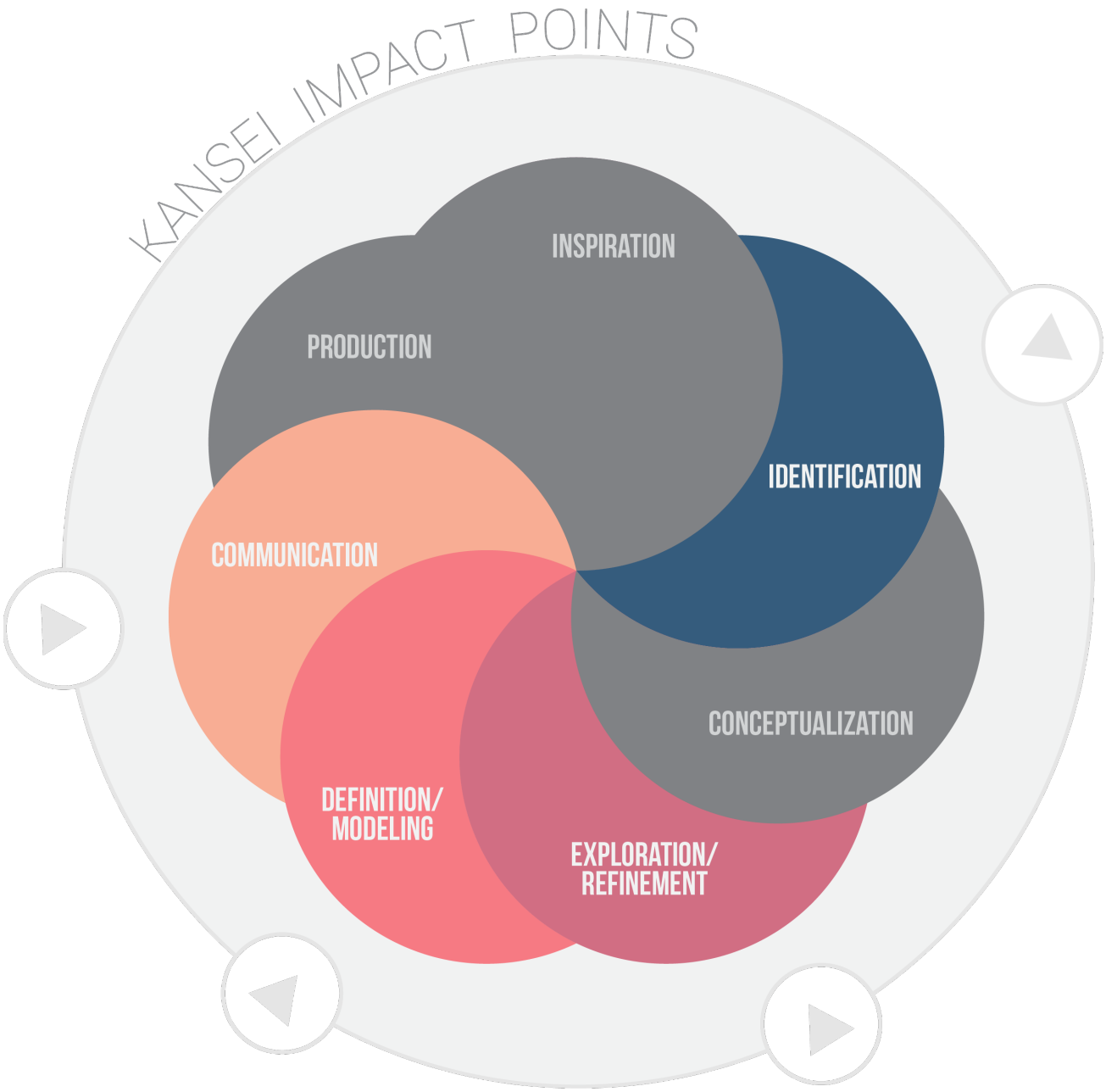


Figure 10 - Stages of importance for the consideration of emotional audience response according to the Emotional Response Sensitive Design Process

real “thing”, according to our Emotional Response Sensitive Design Process this stage is elementary. As designers are creating concrete elements of the design work, they have to monitor those, their meaning, their implications and the composition of these elements. This thesis introduces two methods that can support this working process. The big difference and the little amount of designers choosing this stage as a considering stage, clearly show cases that fine tuning of the emotional response concerned working process can be meaningful and lead to some new realizations.

With 67%, the stage of Communication was top runner up of the considering stages for anticipated emotional responses. The stage of Communication is about finding the right way and method in order to get the message across to your target group. Just like most designers are already practicing it in reality, this is a major take for the Emotional Response Sensitive Design Process. It is clear that these ideas that Kansei might be introducing for this stage are already more present in the Western design process techniques and are not as impactful regarding a potential change in the work flow of designers.

The stage of Production was rated at the lowest rate at 21%. This comes as no surprise as this stage is solely about the actual production of the finished design concept and the communication with the producer. As well as for the designers in reality and for the introduced Emotional Response Sensitive Design Process, this stage is not one where anticipated emotional reactions of the target group should be no longer of any interest.

All in all, it can be summarized that there are two clear front runners in the rating of the designers. These are the stages Conceptualization and Communication. The other stages are by around 30% or more behind. The average of designers have chosen 2.82 stages when answering the question of when they are considering the users emotional respond the most. When comparing this outcome with the newly developed Emotional Response Sensitive Design Process, there are some clear

discrepancies. The major differences are listed below:

I. *The stage Conceptualization was rated at 69% and therefore strongest stage of consideration of the working process in designers reality. The new Emotional Response Sensitive Design Process proposes that this stage has no hug relevance in the creation of an anticipated emotional reaction of the targeted audience. So this might be the biggest discrepancy of the current workflow and the newly proposed concept of the design process (see Figure 11 and 12).*

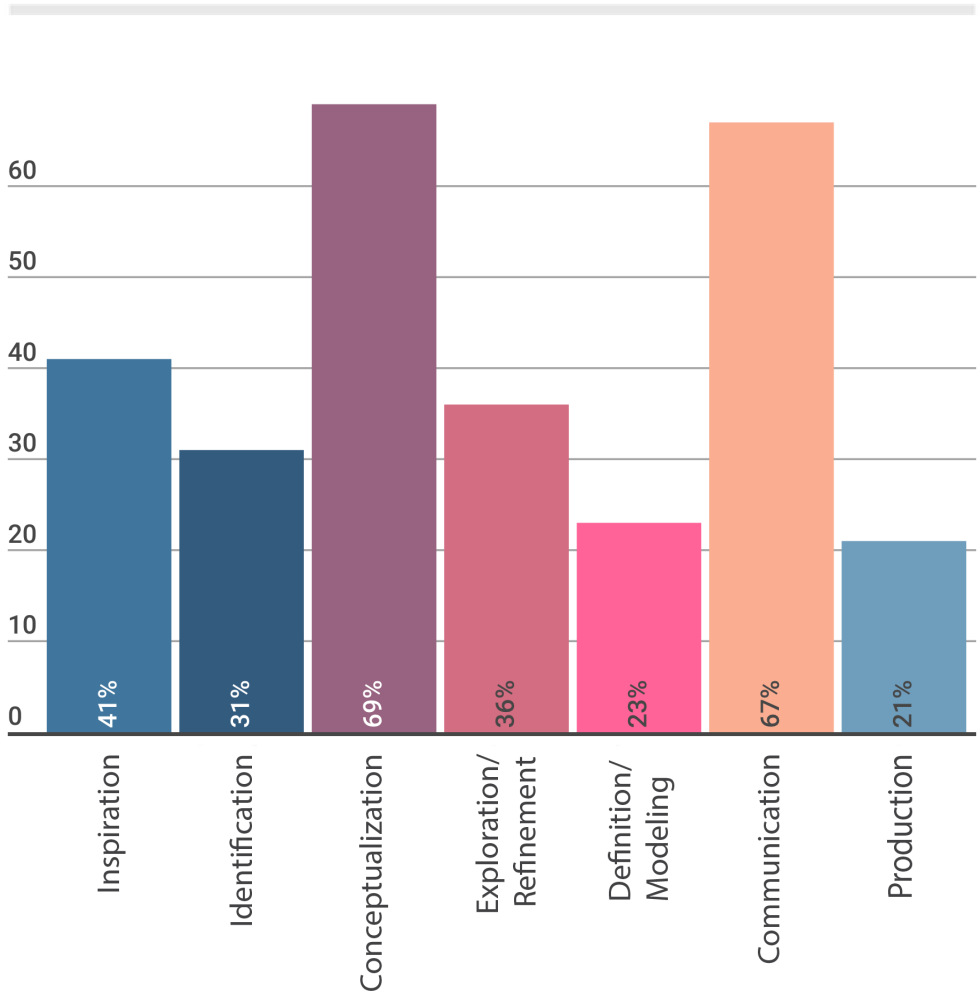


Figure 11 - Percental distribution of chosen design stages for the consideration of emotional audience response

II. *Only 23% choose the stage of Definition and Modeling as one of their considering stages. As this stage deals with creation of the actual elements of the design work and more concrete with the implications of those elements and their composition as a whole, this new Emotional Response Sensitive Design Process considered this stage as an elementary part of the creation process of the anticipated emotional reaction (see Figure 10 and 11).*

III. *The average of designers choose 2.82 stages where they are actively considering the anticipated emotional responses of their audience in their working process of creation (see Figure 12).*

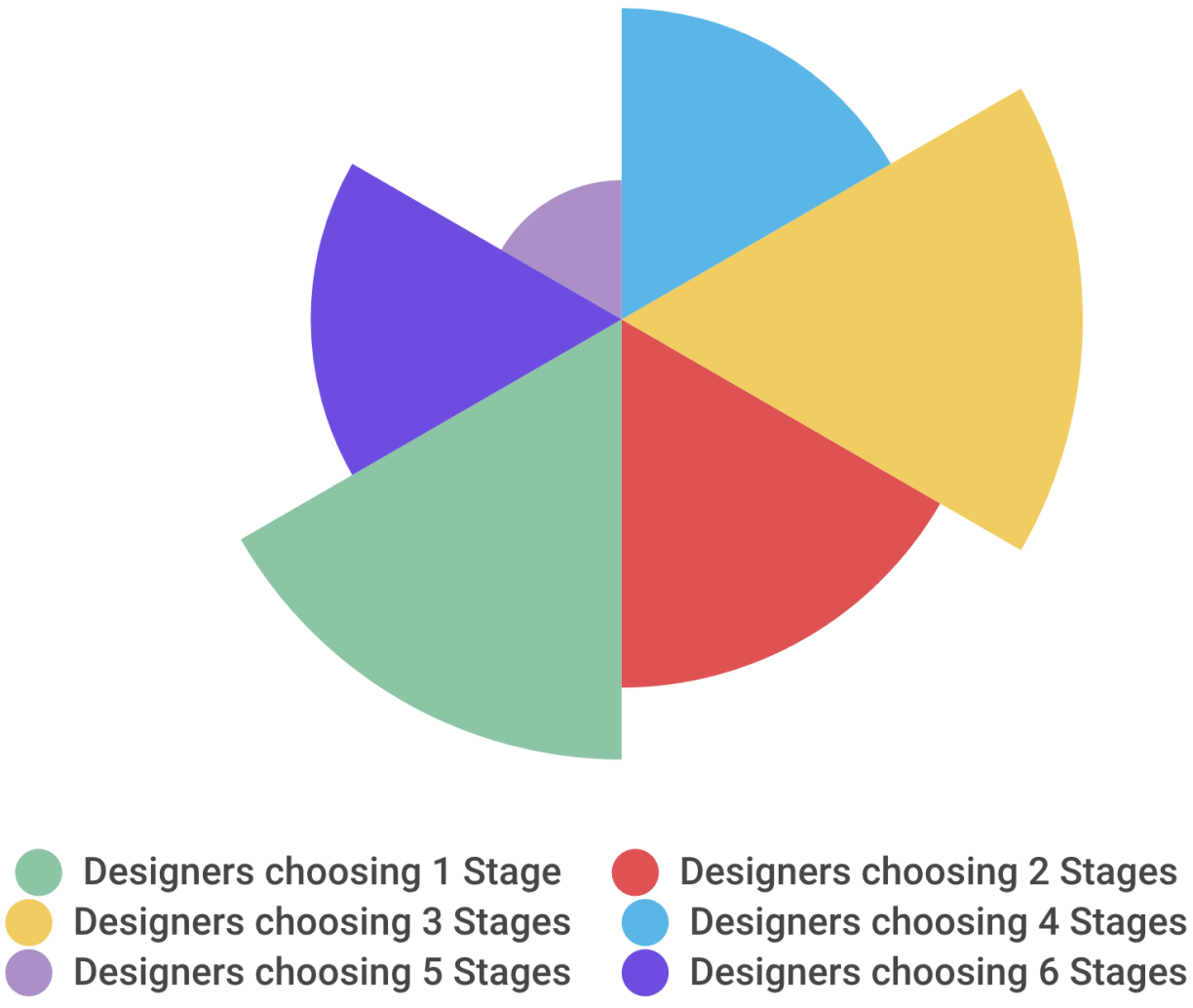


Figure 12 - Scale of quantitive amount of designers chosen stages for emotional audience response considerations

The major similarity is listed below:

IV. *The second to top stage Communication with 67% is also considered as a major driver for creating the anticipated emotional response by the Emotional Response Sensitive Design Process (see Figure 10 and 11).*

For further numerical data please find the full data report in the Appendix 2.

5.3 - ELEMENTS OF DESIGN AND THEIR RATED EMOTIONAL FORCE

As discussed above, the stage of Definition and Modeling is considered to be an important stage for creating a successful interpretation of the anticipated emotional response. Therefore, we wanted to further explore these elements of specifically print design. In order to understand how designers are using these elements and if they feel that there are elements that convey emotional messages with more force than others.

Seven elements of Print Design have been selected (see Chapter 4) and rated on a 10-point scale from the participants. In the next segment, we will quickly touch upon all the different elements and their rates to then conclude to an overall conclusion on which elements may are considered as more forceful tools in creating emotional messages.

The elements Font has been rated at an average of 7.03 with a standard deviation of almost two (1.94). That makes almost 20% deviation both below and above the average rate. This shows that Font is considered an important tool to convey emotional messages, but ratings are varying to a high degree, which show-cases that there is no clear allocation of the rating throughout the group of participating Designers.

The element Image was rated at an average of 8.28 points. With this rating, it has the highest points within the group of print design elements. The standard deviation is as well the lowest within the group at 1.39, which can be interpreted as a more pinpointed allocation of ratings throughout the group of designers.

Copywriting and Slogan has been rated at 6.33 points and therefore one of the lowest rates throughout the group of elements. But, even though it might be the lowest rate 6.33 points can still be considered as a moderate rating on a 10-point scale. Another fact that is arguing that participants could not reach a very concise rating is the very high standard deviation of 2.60.

At 7.92 points the element of Color was rated. With this rating it is second runner up after the element of image. The standard deviation amounted to 1.88, which again displays a big amount of variance in the answers of the designers.

Proportion was rated at an average of 6.54 points. The Standard deviation amounts to 1.88.

The element Shapes and Forms was rated at the lowest at 6.31 points. Again even though it might be the lowest of the ratings but overall still a moderate rating. The standard deviation amounts to 2.26, which displays a variance of almost 23%.

Overall, the results have to be concluded that there is no clear front runner of the elements. The average of the overall rates for all of the elements lays at 7.07 points. Which is clearly very high as an overall rating and showcases that most designers choose above the mean value (5) ratings for all of the elements and could not express a clear favorite element for communicating emotional messages. Another point that makes that very evident, is that the standard deviation of the average points of the individual elements is as low as 0.85. That makes it evident that all of the averages are qualitative very close in rating points, and there are no big differences in the overall rating of the individual elements. So, basically no element has been singled out in a significant way, that it could be considered as a more effective tool in communicating emotional messages. Therefore, the overall conclusion that has to be drawn is that there is no one element that is much more effective in transmitting emotional messages to the target audience.

In order to solidify this major finding the qualitative data was draw into consideration. Words like ‘depend’ (29 times), ‘element(s)’ (53 times), ‘part’ (15 times), ‘composition’ (11 times) or ‘whole’ (9 times) have been used by multiple participants when answering the quantitive questions. As they were always asked to please explain the chosen rating of the individual print design elements, these words of reference to an entirety of a design and that individual elements are just part in it and not caring the

main weight of the emotional transmission, showcases that the assumptions based on the qualitative facts were correct. Designers do not see specific elements as stronger emotional transmitter tools, rather than the elements as part of the composition that transmits the emotional message as a whole.

V. There is no individual element of print design that can be named as the most favorable tool for transmitting emotional messages, as the variations in rating are to insignificant (see Figure 13).

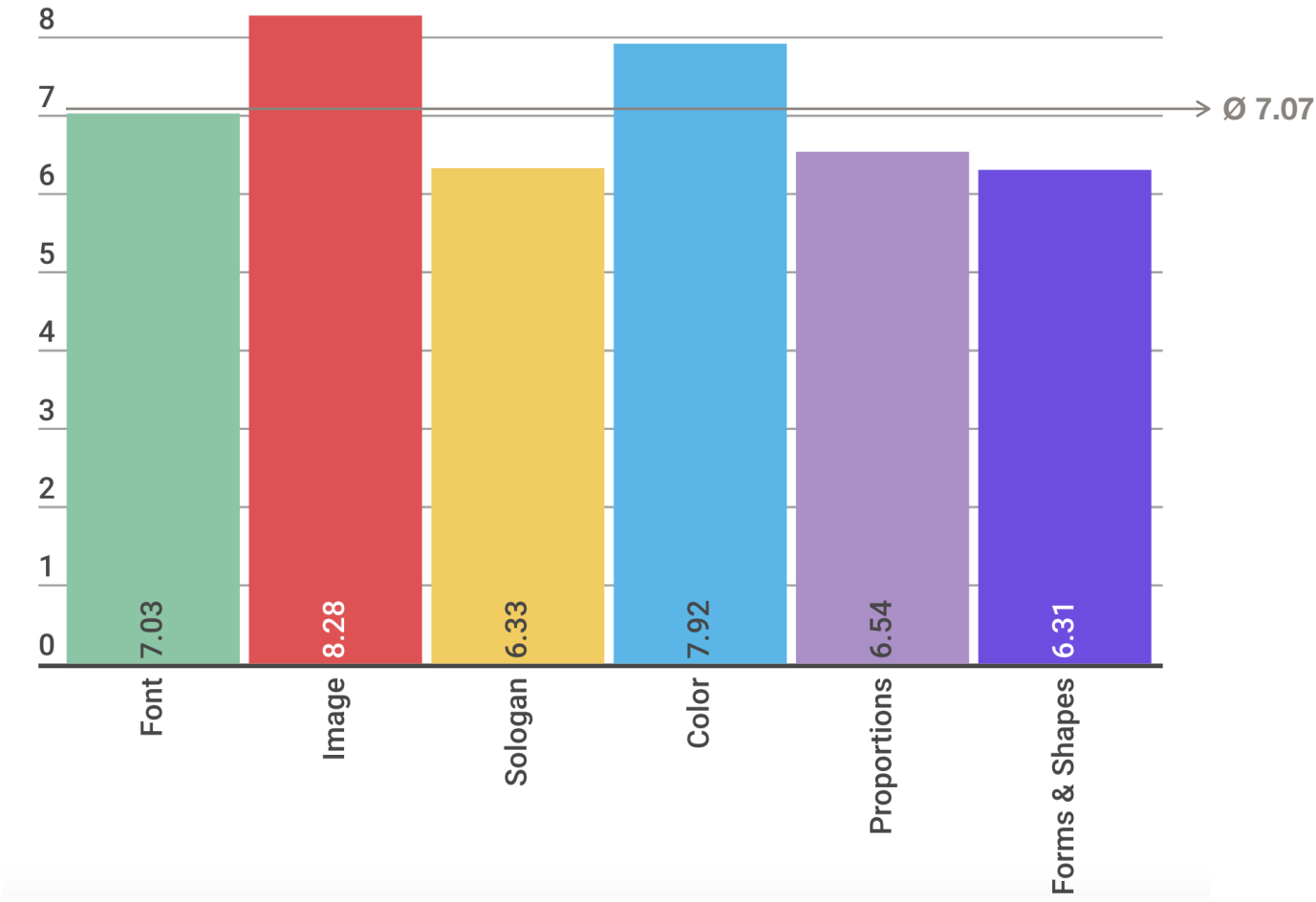


Figure 13 - Average distributions of the individual elements of print design on a 0 - 10 point rating scale

This Finding goes hand in hand with the practices and ideology of Kansei and the Emotional Response Sensitive Design Process. As KE believes that every element has an impact and therefore a high importance, as the individual high averages show, on the emotional response as well as the composition as a whole, as the small standard deviation of the overall element average shows. Specifically, in the Definition and Modeling stage it is all about understanding these differences and nuances of the individual and the composition, which in the end lead to the exact target of the anticipated emotional reaction. The methodologies introduced by the Emotional Response Sensitive Design Process clearly reflect this importance as they are asking designer to categorize and evaluate the individual elements and the design as a whole. What has not become evident is, if the designers see all of the elements similarly important, because they are paying the same amount of attention to them when they are creating the designs, or if they rated them all so similar as they see them as a part of the entire design, which overall then has a very similar rating. Some of the qualitative answers provide some sort of insight, that points towards the idea of elements being a part of a whole, but further research would be necessary to come to a clear conclusion. As far as the collected data of this thesis research goes, some tendencies can be concluded and new research questions formulated.

5.4 - KNOWLEDGE ABOUT KANSEI IN THE DESIGN COMMUNITY

The survey ended with the question about if Kansei was a known term or not. A total of 90% does not know what Kansei or KE is. As UX is gaining more influence on the design process in all fields of design, this should come as a surprise as Kansei delivers a long standing philosophy and delivers years and years of actual experience in the translation of customer needs and expectations into finished design. Surely, these techniques have been predominantly been used in the area of product development and industrial design, this thesis clearly shows how the ideology of Kansei can be implemented into the general design process and, in particular, into the print design process.

5.5 - CONCLUSION OF THE SURVEY RESULTS

Firstly, it has to be stated once again that this thesis is not proposing a generally 'better' design process. This Emotional Response Sensitive Design Process is about focusing the design processes, if the goal is to create a more predictable emotional response of the target audience. So, the main question to be answered through this survey was on the one hand if there is an interest in a design process model, that can lead to a more predictable emotional response of the viewers? As participating designers stated that on an average of 8.03 points they are considering the emotional responses of their users and determining their creative process based on these, it clearly shows that there is a major interest in the field of predicting emotional responses of target audiences. As a result of that, we can assume that techniques and models created for specific success in the field of predicting emotional responses, is of interest and has a high chance to alter the reality of a designers workflow.

The second part was to see if these created alterations of the Emotional Response Sensitive Design Process are maybe intrinsically already existing in the everyday working process of designers, we wanted to figure out when they are considering these emotional responses according to the design process model of Aspelund. This analysis showcases that there is an existing potential to benefit from time and attention relocation throughout the design process. Especially evident, is the front runner stage Conceptualization with 69%, which is according to the developed Emotional Response Sensitive Design Process not considered as a driving stage of consideration regarding participation of emotional responses. An example for the other extreme is the stage of Definition/ Modeling, which is considered as an influential stage for alterations and adjustments for exploring the emotional responses of the target audience. This stage was only rated at an amount of 23%.

On an Average designers have chosen 2.87 stages where they are considering these emotional responses. With the newly developed design process in mind, a general

expansion of time and effort would be a reasonable adjustment, if the predicability of my users emotional response should be increased.

When considering the importance of the Definition and Modeling stage of the process, it was elementary to derive data, which allowed us to understand which elements of print design are considered to transmit these emotional messages in the most effective way. The overall conclusion could be made, that is nothing like a most effective tool for transmitting emotional messages, as the data derived from the survey only showed insignificant differences and the overall standard deviation of the elements average rating only amounted to 0.85. Unclear remains if this is the case, because designers consider all elements as equally important or effective, when coding emotional messages or, if they were rated similarly because they are all seen as a part of a larger concept, and therefor equal, and not as individual element, that can lead to a change in perception.

Overall, it can be stated that the Emotional Response Sensitive Design Process can lead to an improvement of the design process work flow in regards to a higher success in predicting the emotional responses of the target group. As there are a multitude of variances of the work flow considerations of the participating designers and the new model, it can be expected that the newly introduced methods and ideas would lead to a higher predictability of the reactions. As 90% of the design community did not know what Kansei is, we could expect that if Kansei would be introduced into the design communities in connection to its high relevance to UX Design, it could generate high interest and actual changes in the work flow of the design practice.

Conclusion of the survey data analysis

***Conceptualization** was rated at **69%**. The new Emotional Response Sensitive Design Process proposes that **this stage has no hug relevance** in the creation of an anticipated emotional reaction of the targeted audience. So this might be the **biggest discrepancy** of the current workflow and the newly proposed concept of the design process.*

*Only **23%** choose the stage of **Definition and Modeling** as one of their considering stages. As this stage deals with creation of the actual elements of the design work and more concrete with the implications of those elements and their composition as a whole, this new Emotional Response Sensitive Design Process considered this stage as an **elementary part of the creation process** of the anticipated emotional reaction.*

*The average of **designers choose 2.82 stages** where they are actively considering the anticipated emotional responses of their audience in their working process of creation.*

*The second to top stage **Communication** with **67%** is also considered as a **major driver** for creating the anticipated emotional response by the Emotional Response Sensitive Design Process.*

*There is **no individual element of print design** that can be named as the most favorable tool for **transmitting emotional messages**, as the variations in rating are to insignificant.*

CONCLUSION

This thesis concluded its first theoretical research part of the possibility of fusing the Japanese philosophy of Kansei with the Western idea of the design process in a expanded Design Process model. This model was built based on the ideology and the experience reports of Kansei and KE, which have been widely used in the fields of product development and industrial design. The idea is to make the benefits of Kansei available to all fields of design through implementing different methods and techniques into the design process. The main aim remains to increase the predictability of the emotional viewer response. Therefore, the model was named Emotional Response Sensitive Design Process.

The techniques implemented into the design process are introduced at different stages. The Identification stage of the Emotional Response Sensitive Design Process introduces a compensatory-inherent-user-constraints technique, that makes the intended emotional response of the audience an inevitable part of the design concept framework. Further along in the Exploration/Refinement stage the need of understanding the reactions towards the design concept in depth, through tools like a focus groups, are emphasized. In the Definition/Modeling stage, where the concept is brought into physical life, the model reveals different methods in order to understand the meaning and implications of the design elements as individuals as well as an ensemble. As final additions to the classical design process by Aspelund, tools that allow designers to pinpoint the form and way of communicating the message successfully and creating the anticipated emotional reaction among the audience, in the stage of Communication.

The second part of the thesis was directed towards the goal of understanding, if there is any interest and need for such an expanded Emotional Response Sensitive Design Process within the design community, or if the proposed techniques may already be an unconscious part of the

designers working process. Due to the conduction of a design survey, data was collected that allowed an analysis of the designers workflow through the design process. Through a comparison of the analysis and the suggested work flow of the Emotional Response Sensitive Design Process, correlations and ambiguities could be detected and potential areas of benefit identified.

These main areas of benefit from the Emotional Response Sensitive Design Process, that have been identified, are firstly the enormous rate of designers processing predictability of emotional viewer responses within the stage of Conceptualization. According to the Emotional Response Sensitive Design Process model, these consideration should be part of the identification stage where constraints are set and making particularly user constraints an inherent element of the concept framework. The stage of conceptualization should not be directly concerned with these sort of questions, as this stage serves the purpose of developing a holist design concept within the parameters of the concept frameworks and its constraints, which makes them an indirect influence on the decision making process, but not an active consideration part of this stage. Another main benefit area is the stage of Definition and Refinement. It only collected a low rating within the survey, even though the Emotional Response Sensitive Design Process model considers it an elementary part, as the concert shape and forms of the physical appearance of the design work are shaped. As mentioned before, this stage is considered crucial as decisions are made about how constraints and the concept are translated into physicality. More attention and focus on this part of the design process could lead to a better anticipation of the emotional responses.

All in all it can be concluded, that the Emotional Response Sensitive Design Process can support the goal of attaining a more successful prediction of emotional viewer responses! This extended design process does create some new perspectives on the traditional work flow process. As the survey data has clearly show that their is an extensive interest of designers in the emotional viewer response, but the data has also shown that, even though the emotional

response was rated with great importance for the design process, it does not translate into the actual working process of designers. The Emotional Response Sensitive Design Process provides alterations and methods, that can make designers better understand their emotional initial reaction psychology of their target audience, which ultimately will allow them to create design works, that will lead to a more satisfied UX. The Kansei philosophy and its implications for the creation process and its influence on the human instant evaluation system, is a area of high interest. If utilized to full potential, it bears great opportunities for understanding the visual language on a deep emotional preceptive level. The Emotional Response Sensitive Design Process is the first step in utilizing this powerful philosophy for the filed of conceptual design.

APPENDIX

Page 1

1* How many years of expirence do you have as a Designer?

- [ ] 0 - 5 years
- [ ] 6 - 10 years
- [ ] 11 - 15 years
- [ ] 16 - 20 years
- [ ] 21 years and more

2* To what extent do you consider the emotional response of the viewer when making design decisions for print media advertisements?
(10 - "My decision making is solely based on the expected emotions of the viewer"; 0 - "I do not consider the emotions of the viewer at all")

	10	9	8	7	6	5	4	3	2	1	0
Strength of consideration	○	○	○	○	○	○	○	○	○	○	○

3* In which stage of the design process do you consider users emotional response the most? (choosing multiple stages is possible)

- [ ] Inspiration
- [ ] Identification
- [ ] Conceptualization
- [ ] Exploration/ Refinement
- [ ] Definition/ Modeling
- [ ] Communication
- [ ] Production

4* How would you rate the emotional impact of the element FONT to influence the design of Print Media Advertisement in your experience?
(10 - "The emotional message is solely conveyed through this element"; 0 - "The emotional message is not impacted at all through this element")

	10	9	8	7	6	5	4	3	2	1	0
Strength of Impact	○	○	○	○	○	○	○	○	○	○	○

5* Please explain your rating choice briefly

6* How would you rate the emotional impact of the element IMAGE to influence the design of Print Media Advertisement in your experience?
(10 - "The emotional message is solely conveyed through this element"; 0 - "The emotional message is not impacted at all through this element")

	10	9	8	7	6	5	4	3	2	1	0
Strength of Impact	○	○	○	○	○	○	○	○	○	○	○

7* Please explain your rating choice briefly

8* How would you rate the emotional impact of the element COPYWRITING/SLOGAN to influence the design of Print Media Advertisement in your experience?
(10 - "The emotional message is solely conveyed through this element"; 0 - "The emotional message is not impacted at all through this element")

	10	9	8	7	6	5	4	3	2	1	0
Strength of Impact	○	○	○	○	○	○	○	○	○	○	○

9* Please explain your rating choice briefly

10* How would you rate the emotional impact of the element COLOR to influence the design of Print Media Advertisement in your experience?
(10 - "The emotional message is solely conveyed through this element"; 0 - "The emotional message is not impacted at all through this element")

	10	9	8	7	6	5	4	3	2	1	0
Strength of Impact	○	○	○	○	○	○	○	○	○	○	○

11* Please explain your rating choice briefly

12* How would you rate the emotional impact of the element PROPORTION to influence the design of Print Media Advertisement in your experience?
(10 - "The emotional message is solely conveyed through this element"; 0 - "The emotional message is not impacted at all through this element")

	10	9	8	7	6	5	4	3	2	1	0
Strength of Impact	○	○	○	○	○	○	○	○	○	○	○

13* Please explain your rating choice briefly

14* How would you rate the emotional impact of the element FORMS AND SHAPES to influence the design of Print Media Advertisement in your experience?
(10 - "The emotional message is solely conveyed through this element"; 0 - "The emotional message is not impacted at all through this element")

	10	9	8	7	6	5	4	3	2	1	0
Strength of Impact	○	○	○	○	○	○	○	○	○	○	○

15* Please explain your rating choice briefly

16* Do you know Kansei or Kansei Engineering?

- ☐ yes
- ☐ no

Finish Survey

Appendix 1 - Screenshot of full online survey questionnaire run through the online service portal https://freeonlinesurveys.com from the 15th of February until the 30th of May

	Years of experience					consideration of emotional viewer response	Stage of viewers emotional response consideration							Amount	FONT	IMAGE	SLOGAN	COLOR	PROPORT	FORMS & SHAPES		Knowledge of Kansei?		Date	Time Taken	Country	Region	Completed
	0 - 5	6 - 10	11 - 15	16 - 20	21 and more		Inspiration	Identificati	Conceptua	Exploratior	Definition/	Communic	Production		Strength o	Strength o	Strength o	Strength o	Strength o	Strength of Impact		yes	no						
1				1		10		1	1	1	1	1	1	6	8	8	8	8	8	8			1	2016-02-15	372	TR		TRUE
2	1					8	1	1	1	1	1	1		6	9	9	5	9	9	9			1	2016-02-15	644	TR	31	TRUE
3			1			9		1	1			1		3	8	8	9	9	8	8			1	2016-02-15	290	TR	16	TRUE
4	1					9	1		1	1	1	1		5	8	8	9	9	8	6			1	2016-04-04	2114	CA	QC	TRUE
5				1		8	1					1		2	9	10	10	10	10	10			1	2016-04-04	802	FR	A8	TRUE
6		1				8			1		1	1		3	10	10	1	9	7	8			1	2016-04-05	3456	DE	5	TRUE
7	1					8		1	1			1		3	7	8	4	9	9	3			1	2016-04-05	578	DE		TRUE
8		1				5						1		1	10	8	8	9	7	2			1	2016-04-05	222	TR	34	TRUE
9		1				9							1	1	10	9	9	10	7	9			1	2016-04-05	486	US		TRUE
10		1				9		1				1		2	7	9	6	9	6	8			1	2016-04-11	2981			TRUE
11	1					9	1		1	1				3	8	8	8	5	5	5			1	2016-04-18	37153	CO	33	TRUE
12	1					8		1						1	7	10	7	8	7	5			1	2016-04-18	256	CO	33	TRUE
13	1					8	1		1			1		3	10	10	8	8	5	6			1	2016-04-18	367			TRUE
14	1					7	1	1		1		1		4	6	10	8	9	8	7			1	2016-04-21	468	US		TRUE
15	1					9	1	1	1	1		1	1	6	7	10	9	10	7	7			1	2016-04-26	497	NZ	E9	TRUE
16			1			6	1	1		1				3	9	4	3	9	5	4			1	2016-04-26	1095	FR		TRUE
17					1	8			1					1	6	8	3	5	7	2		1		2016-04-28	507	US	PA	TRUE
18		1				8	1		1			1	1	4	3	10	8	6	2	2			1	2016-04-28	600	AU	08	TRUE
19	1					10		1	1	1	1	1	1	6	8	6	3	8	8	3			1	2016-04-28	749	ES	29	TRUE
20				1		10	1	1	1	1	1	1		6	6	6	6	6	6	6		1		2016-04-28	351	US		TRUE
21	1					8	1		1					2	6	9	1	8	6	7			1	2016-04-29	625	BR		TRUE
22			1			7			1			1	1	3	5	8	9	8	7	8			1	2016-05-01	331			TRUE
23		1				8			1			1		2	8	8	3	9	7	7			1	2016-05-05	562	DE	07	TRUE
24					1	6	1		1			1		3	6	8	8	7	5	6			1	2016-05-08	1015	US	NJ	TRUE
25				1		8			1		1	1	1	4	7	8	8	8	8	8			1	2016-05-09	1140	TR		TRUE
26	1					7			1	1				2	4	10	7	5	7	5			1	2016-05-10	956	EU		TRUE
27	1					6						1		1	5	5	4	10	3	4			1	2016-05-10	212	DE	07	TRUE
28			1			5	1		1			1		3	4	8	6	6	5	6			1	2016-05-10	503	MY	14	TRUE
29	1					8				1				1	5	7	6	9	7	9			1	2016-05-10	1282	US	PA	TRUE
30			1			9			1			1		2	8	8	8	8	9	9			1	2016-05-11	1180	ID	04	TRUE
31	1					9							1	1	10	9	8	10	10	10			1	2016-05-11	870	IN	07	TRUE
32				1		8	1		1	1		1		4	8	8	3	8	5	5			1	2016-05-11	371	IE	11	TRUE
33		1				9		1	1	1				3	7	9	7	9	6	7			1	2016-05-11	1152	MY	16	TRUE
34	1					9	1				1	1		3	8	8	9	8	7	9			1	2016-05-11	1932	CO	33	TRUE
35				1		8			1					1	5	8	8	6	3	5			1	2016-05-12	1648			TRUE
36		1				4						1		1	3	8	4	2	5	4		1		2016-05-13	614	AE		TRUE
37		1				9			1	1				2	6	8	2	8	3	4			1	2016-05-17	665	ES		TRUE
38		1				9	1		1		1	1		4	5	7	4	7	7	7		1		2016-05-17	755			TRUE
39			1			10			1					1	8	10	10	8	6	8			1	2016-05-19	145	MX	19	TRUE
SUM	**15**	**10**	**6**	**6**	**2**		**16**	**12**	**27**	**14**	**9**	**26**	**8**	**112**								**4**	**35**					
%	**38%**	**26%**	**15%**	**15%**	**5%**		**41%**	**31%**	**69%**	**36%**	**23%**	**67%**	**21%**															
AVERAGE						**8.03**								**2.87**	**7.03**	**8.28**	**6.33**	**7.92**	**6.54**	**6.31**	**7.07**							
ST DEV																												
						1.42									**1.94**	**1.39**	**2.60**	**1.72**	**1.88**	**2.26**	**0.85**							

Appendix 2 - complete survey data results

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http://www.usabilitybok.org/glossary/19#letteru (defintion UX)

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HOBBIES

LANGUAGES

English

French

Itanlian

Turkish

ABILITIES

Illustrator

Photoshop

InDesign

MS Office

Presentations

TRAVELS

North-, Central- and South America,
Asia

EDUCATION

BILGI UNIVERSITY ISTANBUL // 2013 - 2016
Visual Communication Design MA Program; Average A-

UNIVERSITY OF MANNHEIM // 2010 - 2013
Business Administration B.Sc Program; Average 2.4
Exchange program with Koc University Istanbul, Turkey (2012-2013); Average A

GOETHE GYMNASIUM BENSHEIM // 2000 - 2009
Highschool diploma 1.4

WORKING EXPERIENCE

FREELANCE PROJECTS // since 2013
Brand Identity Projects for different companies (Jumpstarter, The Sushishop, Xeltis, Harrisons Parents, Decent Espresso, ect.); Business Development Projects for the Hilton Food Group Netherlands and Flora Holland; Marketing Strategy and concept developments as well as creation of on- and offline champagnes (Michigan University, Jumpstarter, Harrisons Parents, Eelko.com, ect.)

GEOFILTER PROJECT WITH SNAPCHAT // 2016
Concept development and creation of the Geofilter roll-out in Germany

WARNER BROTHERS MOVIE PROJECT // 2014 - 2015
Lead Designer for the movie "8 Sekunden - Ein Augenblick Unendlichkeit"; Location scouting, Concept development of the visual strategy, responsibility for a team, project monitoring, effective time management in a constantly changing working environment, as well as a qualitative turn around of all the graphical needs, Trailer: https://www.youtube.com/watch?v=IQSuWkcDRvw

FÜNFRAD FASHION GBR // 2014 - 2015
Branding, in-depth trend and market analysis, opportunity evaluation, project monitoring, development of the collection, production-comprehensive concept and brand developments, creation of a strong and consistent Brand Identity

C-COLLEGE INSITUT // 2011 - 2013
Tutor for students

TRISTAN STYLE COMPANY // 2009 - 2010
Fashion Advisor

HIGH Q MEDIA AG // 2009
Internship; Assistence during the foundation phase of a private cooperatation (Customer and Backoffice Management)