

EDITED AESTHETICS OF TASTE

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ABSTRACT

Edited Aesthetics of Taste (E.A.T.) is a research project questioning the knife and fork in relation to Western eating habits, using parameters of senses, materiality and time to develop and propose an alternative set of eating utensils. The basis of the approach borrows from views found in the writing of Juhani Pallasmaa, which inspired an interest in designing and making by hand while considering the full range of human senses. Further sensory influence and notions of playfulness were found in *Gastrophysics* and contemporary *Michelin Star* Restaurants. A mapping tool named the *Act of Eating* (AoE) was developed as a means by which to generate ideas and function as a starting-point for artistic research. Emotional design theory was used as a potential key to positive user experience and memories, leading to a focus on wood inspired by thoughts pertaining to materiality and behaviour found in the work of Bruno Munari and Alvar Aalto. The utensils were developed through an extensive period of practical exploration with Norwegian birch- reflecting the attitude towards materials and sustainability often found in leading restaurants- and placed the designer in direct haptic contact with the objects as part of a craft approach. A slow-eating kit was tested as a series of open-ended objects that may be developed for different scenarios. E.A.T. aims to suggest that design can positively influence and ultimately change everyday eating habits, while highlighting the potential benefits of focusing on senses and, when possible, making by hand in the design of physical objects.

Keywords: Food Design, Haptic, Emotional Design, Gastrophysics, Materiality

1 INTRODUCTION

The need for eating habits to receive attention through design is evident in the growing research and discussion relating to the damaging effects of food systems mainly in Europe and North America [1]. Whether this conversation regards pollution concerns, land degradation or chemical use, it ultimately leads to individual food choices. It is therefore possible to think of cutlery as often the final tools in the journey of produce, and as an opportunity for reflection through experience within such moments. Interrupting the way in which food can be mindlessly consumed due to the familiarity and ubiquity of the knife and fork in Western eating becomes an opportunity to create a greater awareness, appreciation and potentially enjoyment of the food. Eating also serves as a fruitful platform in which to study materiality in the frame of James Gibson's sensory taste, smell, haptic, basic orienting, auditory and visual systems [2].

The combination of food and design has gained traction in recent years, leading to its emergence as an expanding field in its own right. This is seen within design schools such as Design Academy Eindhoven (DAE), which offers an MA study programme on the subject of Food Design, and as an attempt to develop methodologies through education which can contribute to sustainable environmental, cultural, social and economic development both now and in the future. Many of the resulting projects can be found online and debated as potential future realities, serving as examples of the growing overlap between food and design in an educational context. Whether these proposals take a constructive, critical, conceptual or commercial position, they all serve to highlight the need for discussion on the subject of food as perhaps the ultimate natural resource to be protected and maintained. According to Marije Vogelzang, head of the MA course at DAE, 'food is the most important material in the world' [3]. Eating, therefore, is a relevant area in which to work as a designer, and as future food challenges increase to generate concern, design could lead through products, systems and experiences in helping to establish new and improved Western eating habits. The research question for this study was: How can the interplay of senses, materiality and time be

explored within design for eating?

1.1 Emotional Design

Eating is an experience in which emotional reactions including pleasure, satisfaction and, occasionally, disgust are present. Leading chefs generally aim to create positive emotions and use an increasingly sophisticated range of ingredients including sound and smell to achieve this. However, this modulating of sensory input may not be simply the pursuit of novelty, but rather a strategy that has been theorised in the design world. Therefore, it is not only possible to find examples of senses being manipulated in order to create changed aesthetics experiences, but to refer to them as examples of emotional design [6], used as a method within gastronomy. As such, it suggests a meeting point between the work of *Michelin Star* chefs, and that of product designers using a framework of visceral, behavioural and reflective factors. The science of understanding and manipulating the dichotomy of sensorial factors at play within a perfect meal has blended into the contemporary restaurant industry and manifested in collaborative examples between chefs, researchers and designers. One such example can be found in the 2010 dish *The Sounds of the Sea*; the combined effort of Charles Spence, a leading figure in *The New Science of Eating* [4], and Heston Blumenthal, head chef and owner of the *Fat Duck*, a three Michelin Star restaurant in Bray, England [5]. It has become the restaurant's signature dish, and possibly an early, contemporary example of emotional food design. *The Sounds of the Sea*, pairing seafood with an oceanic soundscape, offers a cross-modal experience that has been said to illicit such emotional reactions from guests as to cause tears to be shed.

2 METHODS

2.1 Artistic Research

It has been suggested that while it is certainly true that gustatory and olfactory information have a central role in determining our everyday experience of food, it is important to note that they do not constitute the whole picture [7], justifying innovation through materials in the form of utensils. Although studies have been conducted that investigate the effect of different metals within cutlery design [8, 9], birch became the material of focus for reasons discussed later in this article and afforded a hands-on, craft approach as well using an unexpected materiality in the context of Western eating. The concept of craft can be found in many vocations [10], but within the artistic research phase of this project, was driven by an interest in the haptic sense of designing as an active part of the iterative process. Craft has been related to emotions through 'the emotional reward craftsmanship holds out for attaining skill: people are anchored in tangible reality' [11], mirroring views presented by Pallasmaa, and juxtaposing more contemporary techniques such as computer-aided design (CAD). The question of handcraft 'vs.' software reflects the E&PDE 2018 conference theme of 'Diversity or Conformity?' due to the role of the designer having shifted in recent years, increasingly towards digital user experiences and fields such as service design and UX design and not necessarily leading to the result of physical objects. This raises the question of cultural practice in design and design education.

2.2 Mapping

Gastrophysics research can provide findings from studies of eating, which in particular focus on the sensory factors at play. While what we touch with our non-eating hand shouldn't influence our rating of food, apparently it does [12]. Based on this, a mapping tool named the *Act of Eating* (AoE) was developed in order to create a set of rules by which to make design decisions regarding materiality. When moving through all parameters in an iterative progression, AoE can be used to generate ideas. 'Senses' (taste, smell, visual, haptic, basic orienting, auditory), provides a jumping-off point where new scientific (*Gastrophysics*) insights might be found, which could then be fed into the process and inform a design approach. The words container, surface and tools were used in the 'object' category in order to avoid more generic words that might limit the imagination or have preconceived notions of form (for example bowl/plate/spoon). In the 'context' category, conceptual, critical, commercial, constructive parameters were set in order for ideas to elicit more open-ended and intuitive results. The AoE map served as a reminder throughout this project that sensory attributes can and perhaps should be central from an early stage of a design process, used as an active part of a concept, and need to be considered as consequences of material choices. With some changes in parameters, it could therefore be applied to other product categories in order to gather information and generate ideas. The method

of mapping relates to the research question because it affords a degree of order out of large, complex and overlapping research and sets those within an approach including senses and materiality.



Figure 1. Image of *Lento* utensils

3 FINDINGS

Weight has been studied within *Gastrophysics*, and in the context of cutlery, can be found to surprisingly change perceptions of food. Participants in one case were seen to like the taste of yoghurt, and consider it to be of an overall higher quality when eating with a heavier spoon, than with a lighter one [13]. Although these findings by no means suggest a universal rule, instead depending on the 'need for touch' which varies from person to person [13], it does suggest some general ideas of how some of us associate the weight of objects with quality. It is this 'sensation transference', in the case of cutlery and tableware that we might be likely to move over to the food itself [13]. This is important as it shows a theoretical link between senses, materiality and experience in the context of food. However, it is not only the weight of an object that transmits a sense of quality, but also the general feel of the material- 'that is, it's quality' [13].

Alvar Aalto's use of bent, birch plywood in the 1930's came at a time when tubular steel furniture was achievable on production levels, perhaps most notably in designs born out of the Bauhaus in Germany, with now classic examples by Marcel Breuer and Mies van der Rohe. But while respecting the rationality of steel, Aalto was aware of the emotional benefits of using wood. When reflecting upon steel's excessive glare, excessive ability to conduct heat, or acoustic unsuitability for a room, he is referring to human senses and how they combine to build an aesthetic sensation for the user [14]. This way of thinking was used as a comparative example between traditional, metal cutlery and the proposal of using birch hardwood instead. The final set of five utensils are named *Lento*, and were the result of several months of prototyping and testing in various contexts with various users.

The kit of five utensils (Fig 1) developed during this project are made from Norwegian birch, which is intended to evoke a sense of quality through finish, smoothness and form, and are the result of a systematic process of iteration. Each utensil leads to a thinner section which alludes to fragility, and is intended to instil careful and deliberate movements of the hand. A decision for the handle to be uniform on each utensil is intended to place them in a comfortable haptic language, putting sharper focus on the unfamiliar function-end, and its interaction with the food. The varying lengths are related to the purpose of each tool, where more or less accuracy may be required. This variation is also intended to disrupt the standard distance, as defined by archetypal cutlery, and to cause an unfamiliar spatial relationship to the plate when collecting food, and to the mouth when eating. The materiality of the utensils has also been considered in other sensorial terms. For example, birch will conduct temperatures of both hot and cold food in a different way than stainless steel. Their relative lightness is not thought to contradict the weight-equals-quality notion, due to a belief that the beauty of the natural wood itself represents a sense of quality that is inferred- particularly in a Nordic context. Finally, in terms of sound, there is a marked difference when wood comes into contact with ceramic, when compared to the sharp noises often heard with stainless steel.

4 DISCUSSION

There is a psychological basis to emotional design, pertaining to three levels of the human brain which come into play as we navigate and process our experiences. Visceral; the automatic, pre-wired layer,

Behavioural; processing everyday activity, Reflective; the contemplative part of the brain [6]. According to Norman, at the visceral level, physical features - look, feel and sound - dominate. Thus, a master chef concentrates on presentation, arranging food artfully on a plate [6]. Given the high focus on visual aesthetics in the context of *Michelin Star* restaurants, and the use of amplified, auditory components in *The Sounds of the Sea*, its appeal is partly explained. But how does it fit across other levels of experience in an Emotional Design frame?

Behavioural: pleasure and effectiveness of use: The inclusion of an *iPod* to transmit sound means that the auditory function of the dish is accessed by means of an easily understandable and usable, secondary product- the white earphones. Positioned as they are, adjacent to the other components of the plating, leading out from a shell, they illicit curiosity and invite to be picked up and used in a way which is very familiar since the boom of the characteristically white *Apple* products.

Reflective: self-image, personal satisfaction, memories: The sound of waves evoke nostalgia through memories, which can trigger the lasting, powerful emotions [6]. There is a certain prestige in eating a famous dish at a famous restaurant- an experience that can be shared with friends- creating layered memories and a preferable self-image due to the exclusivity of the situation.

Also on the reflective level effect is the concept of beauty, and here we begin to see a mergence with the notions of *Everyday Aesthetics* and moments found within otherwise mundane activities such as eating [15]. According to Norman, beauty looks below the surface and determines a persons overall impression of a product [6]. In this moment of reflection, there can arguably be a form of slow appreciation. Translating such methods into the design process of objects in everyday eating contexts uses the rationale that beautiful moments might help to create positive experiences and therefore, repeated use. In the case of this research, the factors of materiality, senses and time were used in an attempt to achieve slower, healthier eating habits and respect for the material of food itself, by replacing traditional cutlery with an alternative set of objects.

The idea of altered behaviour as a result of differences in materiality is discussed by Bruno Munari [16]. Many of his examples come in the context of architecture, and how the natural materials of Japanese homes contrast those of homes in Europe. This comparison of rational and emotional material choices is reminiscent of Alvar Aalto's focus on using birch instead of steel, as well as the tendency for Japanese eating to be conducted with one hand instead of the two usually used in Europe. Traditional cutlery is rational, but can bring out the same kind of carelessness behaviour Munari talks about when comparing the sliding doors of a traditional Japanese home- 'so light they can be moved with a fingertip'- to the heavy doors of Italy, 'which are shut with a bang that can be heard all over the house' [11]. In this analogy, the utensils developed during this research were found to elicit more considered movement of the hands, and can be discussed in terms of where they might be positioned in an emotional design frame. The concept may not be for everyone, and present too many behavioural drawbacks (not everyone is interested in maintenance or time-consuming interaction), but have been shown to provide pleasure through use [6]. Viscerally, the natural wood and simple forms have received positive feedback. Although this is a matter of taste, wood tends to create positive emotions and fits the Japanese aesthetic concept of wabi-sabi, in which material qualities have been listed as 'irregular, intimate, unpretentious, earthy and simple' [17]- qualities which also tend to be appreciated within Nordic countries. On a reflective level, if successful, the kit may become associated for the user with a build-up of positive eating experiences activated by beauty/ slowness, the fun and playfulness found in a social dinner scenario, or through memories created by caring for the utensils. If the kit does manage to inspire a deeper interest in food, then it could be a trigger to the personal satisfaction of mastering new recipes. In terms of self-image all of the materials used to produce the kit imitate some of the values represented by many leading restaurants in that they are locally and/ or responsibly sourced and sustainable. Ownership of the kit, and supporting products which take an ethical standpoint, communicates something about a users positioning. In a similar respect, and in a final point on materiality, this kind of abstract value is perhaps best or even only communicated effectively on the condition that the objects that complete the kit are made by hand.

5 CONCLUSIONS

A focus on materiality and senses throughout this research was born out of a belief in the importance of working through materials as an active part of developing physical products. In the context of food, it mimics and references the methods deployed by chefs as well as the idea that much of their knowledge pertaining to the material of food exists in the hands. The founding motivation for this

project was an interest in designing with and for a wider range of senses. The sense of touch physically connects us to the world and in a faster age in which so much of our communication, work and social interaction occurs virtually; design that celebrates haptic connections could potentially become more important. It could be suggested that this is also the case for the act of designing itself, at least in the case of physical objects.

Through the utensils described in this article, the aim is to create a slower pace, and after a period of testing prototypes which included varying levels of challenge, based on an idea that difficulties take time to overcome, it became apparent that such an approach might contradict possibly the greatest benefit of eating- that of joy. By offering a set of five utensils with which to eat, instead of the usual two (or perhaps three if you include a spoon), there are suddenly more options. Within this new table landscape, with unexpected materials and objects, curiosity becomes a consequence of choice and the small pockets of time that occur while considering the next mouthful and deciding whether or not to change utensil become doorways to a form of awareness in the moment. This design response is motivated by contemporary notions of convenience attached to eating, as seen in the existence of fast food, which arguably stands in the way of cooking and eating as something to be slowly enjoyed while supporting unhealthy lifestyles and unsustainable treatment of the earth.

Although the decision to focus on eating and slowness were personal choices to this research, it is suggested that the potential benefits of considering of senses, scientific input and artistic research during a design process can lead to exploratory, playful and novel results. The AoE mapping tool is the beginning of an open-ended method that, if adapted by students and designers, could form the basis of a motivating approach within the much-needed contribution of design to eating and cooking in pursuit of sustainable user behaviour.

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