NORDES 2021 COLOUR SAMPLES AND MOOD-SCALES



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SUMMERY OF PHD PROJECT: EXPLORING AN EXPERIMENTAL AND MATERIAL-BASED COLOUR DESIGN PRACTICE

With this project, I investigate how elements from classical colour theory and aesthetic theory of atmosphere can form both the basis for the development of an experimental and material-based colour design practice and the basis of a contemporary colour terminology using harmony and atmosphere as perspectives to analyse and discus designed colour combinations.

Existing colour theories present the concept of colour harmony as a dogmatic approach to colour combination for example Itten (1977) and Munsell (1905). The argumentation for the harmonious colour combinations is built on the organisation of colours in each theory's specific system. This is aligned with the earliest conceptions of beauty as a common ideal where beauty is embedded in the object and can be achieved by arranging elements in a certain way (Aristotle & Barnes 1984). The colour theories are being criticised by colour and design researchers for not including the diversity of material and form and for not being aligned with the contemporary practice of colour design that has a more intuitive and experimental nature (Arnkil 2013, McLachlan 2013, Weber & Kanthak 2018).

The concept of chromatic atmosphere is recently suggested as an alternative to the concept of colour harmony within architecture (Arnkil & Pyyrko 2018). Chromatic atmosphere is based on the understanding of atmosphere as a physical perception of a space through emotional sensibility and recognise materials as an important element in the creation of emotional response (Böhme 2018, Gumbrecht 2012). Opposite the concept of colour harmony, chromatic atmosphere acknowledges the material's influence on the perception of the colour, but refrain from suggesting specific design methods.

The project applies the methodology 'Practice-based design research' (Koskinen et al. 2011, Vaughan 2017) and is built as an empirical study with a reciprocal

action between practice-based design experiments concerning the creation of colour combination and theoretical reflection.

In the PhD project I have identified two issues concerning the matter of scale.

ISSUE 1: SCALING COLOUR SAMPLES IN MATERIALITY, FORM AND EXTENT

The first issue relates to the theme of prototyping and revolves around the colour sample as a tool in a colour design process and problems relating to this. In a colour design process, the colour sample is a common tool for both experimenting with various colour combinations as well as presenting a final colour design solution. The colour sample is often a small piece of painted paper. I have some concerns about the use of the colour sample as primary method.

In the final design, the extent of the colour is much larger as for example the colour of a garment or a car. This constitute a problem as the perception of the colour is highly sensitive to the surrounding colours (Albers 2013, Arnkil 2013). The smaller the colour sample is, the more sensitive it will be to other colours, resulting in the perceived colour changing radically due to size.

Another concern regarding the traditional colour sample is the lack of materiality and form. The colour on a garment or a car is closely linked to both the surface of the material as well as the form. A traditional colour sample without materiality or form does not take into account how the colour will change under the influence of different lighting effects. Scaling a colour in both extent and materiality will affect the colour perception (Mikkelsen 2019a).

In order types of representations in a design process such as drawings and models, we are aware that the representation itself does not equal reality, but requires a cipher or professional culture to translate and imagine the final design solution. With colour samples it is easy to understand to colour through a direct perception instead of understanding it as a representation and reduction.



Figure 1: Three-dimensional colour samples showing the light's influence on colour perception (Mikkelsen 2019a)

ISSUE 2: MOOD-SCALES

The second issue relates to the theme of measurement and revolves around the concept of chromatic atmosphere and how we can identify and evaluate different colour expressions with the purpose of designing for atmosphere. In this context a scale is understood as a continuum of two opposites.

Classical colour theory offers specific means to classify harmony in colour combinations, such as complementary colour pairs, warm and cold, analogous colours, triads etc (Itten 1977). These variations of harmony provide the designer with a system and a terminology that makes it easy to describe a colour combination. However, the harmonious colour combination might not be an adequate aim for the contemporary designer, who not only strives to design for a broader range of expressions, but also often questions a common ideal of beauty (Mikkelsen 2019b). The introduction of chromatic atmosphere as an alternative to the concept of harmony allows the designer to work with a limitless range of expressions, but causes a new problem concerning measurement and terminology. The experience of atmosphere is a subjective, physical perception, and as such it rejects the common ideal of beauty. My concern is how we describe and evaluate colour combinations from the perspective of atmosphere instead of harmony? When is one colour combination more dramatic than another? Or more intimidating? Or uncomfortable? Is it possible within practise-based design research to work with scales of moods or atmospheres? What is the relation between colour as fixed universal language and personal preferences? If we are designing colours for atmospheres what influence is then the context? And what if the designer's attunement to the colour combinations do not mirror that of the user?

These are question I wish to address in my research as described in the paragraph below.

LIST OF PLANS AND NEEDS FOR FURTHER RESEARCH

I am in the first semester of the PhD project leaving many experiments and questions unexplored. My project revolves around three central themes:

I. Experimental colour design processes II. Colour embedded in material and form III. Chromatic atmosphere

In regards to the two issues outlined above I plan the following research in 2021:

1. Conduct experiments with personal colour palettes in the research studio as well as in colour classes for design students in order to explore different colour expressions, characters and descriptions. Includes students' production of colour samples and students' reflections on the concepts of harmony and atmosphere. This work is concluded in the spring semester.

2. Conduct experiments with colour narration in order to explore different combinations of colours and corresponding moods. Includes own production of artefacts: colour and material samples as well as still life compositions. Some issues here are how the colour combination is perceived as an 'open work' of art (Eco 1984) leaving feelings and interpretations open to the user.

3. Analyse experiments: a discussion of the produced artefacts from both experiments using the two perspectives; 'the ideal harmony' and 'the experienced atmosphere'. Testing 'mood-scales' as a means to analyse atmospheres in the produced artefacts.

4. Write conference paper about challenges within contemporary colour design, specifically the perspectives 'the ideal harmony' versus 'the experienced atmosphere'.

My goal in attending The Nordes Doctoral Consortium is to share and learn from peers, especially concerning the execution and evaluation of a practised-based design experiment as well as to discus to theory of atmosphere.



Figure 2: Student's work with chromatic atmosphere

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