



POLITECNICO
DI TORINO

Honors thesis

Master of Science in Sustainable Architecture

Abstract

**Representation, colour and theories of visual perception.
Perceptual and sensorial communication for an exhibition
in a former Turin industrial building.**

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by
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February 2021

The starting point of this thesis is the desire to deepen ideas and topics addressed during the Making Studio, a design studio that I attended during my Erasmus experience at the School of Architecture of the KTH in Stockholm and from those resulting from my project "Perceptions", which consists in the abstract representation of a space, realized through the interpretation of feelings and perceptions aroused by the presence of the body within the space and by the relationships that are established with it.

The themes of perceptions and sensory involvement are, therefore, key topics of this final work, intended as tools through which it is possible to experience and understand the reality that surrounds us, which is full of perceptual stimuli, by relating our body to the substance, the observer to the environment.

The analysis of the different senses and the involvement of the same in the architectural discipline have made it possible to detect how the integration of the different senses allows the designer to create interesting and involving spaces, capable of arousing in the user different and complex sensations and perceptions. For this purpose, the designer has at his disposal several tools capable of arousing multiple perceptive interpretations with great evocative and emotional power, such as colours, materials, noises, smells, signs, shapes, etc..

Therefore, in this work were analysed the main theories of perceptions, which can be distinguished because they identify different agents responsible for the mechanism of processing the different stimuli perceived from the outside, which takes place through a process of selection of sensory information received from the environment.

The individual selective process carried out in the act of perceptions can be seen as the same of the one performed during the act of representing or drawing, through which, with the use of different graphic languages, it is possible to understand the personal vision of reality and of what each one sees, hears, perceives or thinks.

The expressiveness of the drawing and of the elements that constitute it, such as point, line, surface (V. Kandinskij), geometric shapes etc., is also linked to the theme of colour. Each colour, real, fictional, or represented, has, in fact, a strong communicative and emotional power within it, capable also through the combination with the previously mentioned elements, of communicating certain messages, sensations, perceptions.

All these elements linked to the sensorial perception are fundamental in the architectural discipline and in the sensorial design. Signs, geometric shapes, colours strongly influence the architectural connotation, by communicating different emotions and sensations, as well as being able to give life to optical and perceptual illusions that allow to "manipulate" the perception of environments and space.

The analysis of these complex theories ends with their application in an experimental project of an exhibition inside a building belonging to the disused industrial heritage of the city of Turin: the "*Officine Grandi Motori*" as it is a space that is well suited to evoke memories of a past life. As a matter of fact, the proposed set up of the exhibition aims to evoke the complex memory of the Turin plant (learned through the study of the history of the building and its workers, in relation to the city context) during the years of activity.

The aim behind this exhibition is to involve the user in an emotional and cognitive experience linked to a factory that is a symbol of the history and the industrial heritage of Turin, through the involvement of the senses, the use of colours, shapes, textures and light effects.

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