

Color: cognitiv aspects, perception and presentation

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CHAPTER 1

Color is the only experience about an object that we have at the same time of his shape: extremely easy knowledge decrees his importance in the world of communication. Essentially color is light: everything we see is the product of the light's action that reduces our awareness of the continuous color changes during daylight. This one is an electromagnetic radiation, so it has a wavelength, an intensity and a precise direction: different wavelengths agree with different colours. Hue doesn't depend only on spectrum composition of the radiation, but a color agrees complex relations between different radiations.

Today it's practically possible to reproduce all the colours with the help of chemistry.

Since remote ages we can see continuous attempts to still nature colours by men; till a few years ago, pigments for paintings were extracted from natural ingredients by hand. Modern chemistry can obtain by synthesis an incredible number of colours, more sparkling and resistant than any hue we could dreamt since two centuries ago.

Color history mirrors the spirit of the age it was born and it's strictly linked by social changes and technological and chemical improvements.

Perception subject is very complex and extremely wide, and it covers disciplines like Psychology, Optics, Psychophysics, etc...

Eye's *retina* is the mediator between external world and perception, that is the process with which we construct a representation of the reality in our mind.

Strictly closed to perception's problems there is Psychophysics, a branch of Psychology created by Gustav Theodor Fechner, trying to solve the philosophical problem of the relation between mind and body.

Asking "What colour is..." (something), we put colour like something object. Eye's stimulus is practically the electromagnetic radiation, that in a second time we put it into lights, shadows, colours.

CHAPTER 2

In the past philosophers and scientists elaborated a series of colour models for explaining color nature and its relation with various tones; they are an indispensable instrument for intellectual elaboration, critical verification end for design.

Greeks first developed models and colour theories and from them we have Empedocles and Democritus' models, and the Plato's one; this one are considered almost "subjective". The first model a little bit different from the four-

colour process of the Pre-Socratics and Plato was Aristotelis' one. We can remember also this important series of models:

- Leonardo da Vinci
- Athanasius Kircher
- Isaac Newton
- Moses Harris
- Johann Wolfgang Goethe
- Philipp Otto Runge
- Michel-Eugène Chevreul
- James Clerk Maxwell
- Ogden Nicolas Rood
- Albert H. Munsell
- Wilhelm Ostwald
- Il sistema C.I.E

Probably the most famous color model in the world is the Munsell's one. In relation with my stage experience, each colour was "codified" by Munsell's values and it was valid in Italy as in the U.S.A. or in France.

Munsell's colour connotation system, is a way for defining exactly nature and his relation with other colours through three parameters: hue, value, brightness. Hue, value, brightness can be changed in a precise scale, so all the colours can be codified by this three parameters. All the colours are placed in a sort of "space" called colour solid.

CHAPTER 3

Presentation is a basic aspect of each project, and it's this component which make the first impact between project and client; so a good aesthetic impact improves comprehension and quality of memory.

Semiotics

It's a dynamic reconstruction of the way we realize the meaning of a proposition, passing by a gradual journey, starting from the analysis of simple sign till complex ones. At the basis of Semiotics we find an element that we can use to easily analyze every conversational structure, like a photograph, a text or a presentation, in other words the *semiotic square*.

Analyzing communication process we understand that it's always possible to influence it, using elements like the attention and categorizing (the relation between what we know everyday and what we remember). Patterns are organized structures made by central concepts (nodes) in association with accumulated knowledge. It's clear in the receiver the creation of new patterns makes easier comprehension process. Understanding a subject means to "penetrate" it with our mind, and in this process memory is very important.

So became very important to know what are the mental models: one of the most complete and recent is Vannoni's "Imaginary world's model" (1996), which supposes that the client creates imaginary worlds inherent to advertising texts; this situation is important to create a sort of attitude for everything we have around us. Communication is the transmission of thoughts by men: also for this aspect we have a lot of "communication models", but, for explaining something, is more important the way we explain something. So it's necessary to analyze deeply the actors of the communication process: sender, text, images, receiver and means of communication.

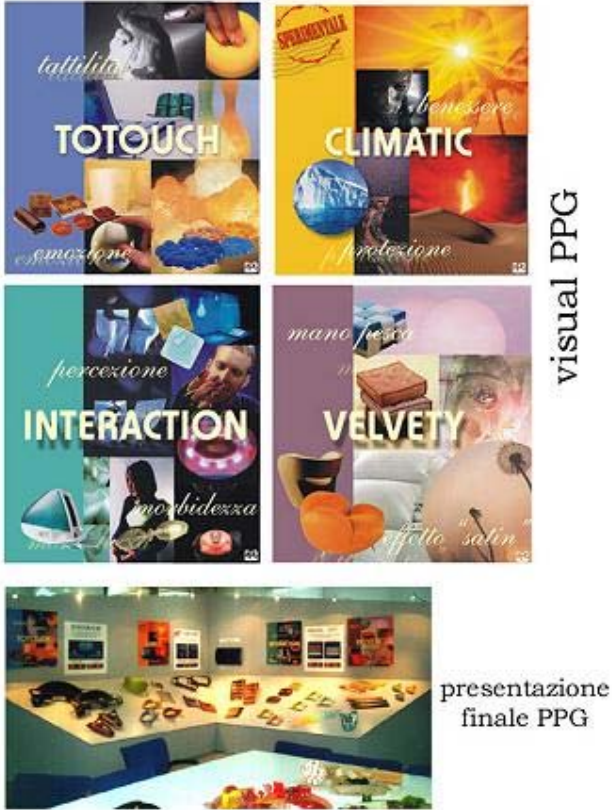
CHAPTER 4

PPG Industries is a worldwide producer of coatings, glass fibres, chemical products and it's the first producer of laminated glass of United States. PPG is the great producer of industrial and motor coatings, glass for cars, glass fibres in production line, chloralkali and special chemical products as of architectural coatings.

In Quattordio's "Style & Color Center", some people decide ranges of colours for each Italian car, and also there, they suggest new colours and hues. Paint is made by three elements: resin, solvent and pigments.

During my stage at PPG Industries, I worked together some people for 4 new kind of paints' presentation, created by PPG research laboratory and characterized by a particular surface. For each one of these products is made a photo collage, containing something that could remind the idea of "touching". (Pict. 1)

Figura 1



Presentation were been during only a week for various clients and lasted about two hours: clients were received in PPG showroom where they could look at the new exposition, then we explain them the concept of surface-paint, and the way to use those new paints on dashboards.

Figura 2



Even if new presentation was good, a lot of mistakes (by a comunicational point of view) were made, and also many particulars were neglected. So I have developed a little new project which realize this presentation only on the point of view of communication, analyzing tipical phases of a dialogue for the public, some visuals for presentation and a new stand for the products. The final project send me to different conclusions like the importance of simplifying concepts and avoiding plenty of informations. Color exposition and perception's theme open the door to many cues for design for comunication.

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