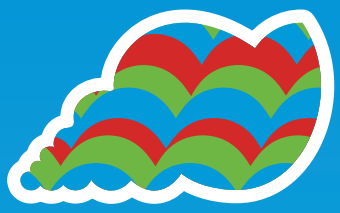

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COLOR AND FOOD: From the Farm to the Table

Interim Meeting of the International Color Association

12-15 October 2010

PROCEEDINGS

José Luis Caivano and Mabel Amanda López
editors

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Color strategies for food packaging: Systematic compilation and analysis of chromatic palettes of olive oil's package

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ABSTRACT

The present work represents the initial stage of an exploratory research project on the field of packaging design for food. This project aim to analyze chromatic strategies used on different packed products segments, understanding as segment each one of the groups –milky, canned, oils, etc.– in which the diverse food products are gathered and sold on retail.

Our work is based on the hypothesis that for the different food products exist certain chromatic conventions and codes, born from consumption traditions and habits. Our research will try to make visible the strategies of adhesion or transgression to these codes, implemented by the companies in their attempt to establish a position on consumer's mindset.

In this occasion, we will present the methodology developed to compile the information and some initial results of the analysis of olive oil segment.

1. THEORETICAL FRAMEWORK

Considering the aim of the project, a theoretical framework is built on the crossroad of three fields: human vision –as the mechanism which allows the subject to have a perception of products–; morphology –as the taxonomic dimension of different formal aspects of product–; and semiotics –as the combination of perception with socio-cultural values. The main approaches are summarized in Table 1.

Table 1. Theoretical approaches that build this project's framework.

Field	Approach	
Human vision	Color is a psychophysical phenomenon, trigged by the light that stimulates color receptors in retina –whether if it comes from a direct source or remitted by the interaction with an object.	
Morphology (Categories taken from Jannello, 1984)	Form	It is defined by the registration of the alternatives on four parameters: spout, neck, body and label (Vila Ortiz 1992)
	Color	It is defined according to NCS system, using its notation code and variables: blackness(s), chromaticness (c) and hue (φ)
	Cesia	It is defined by determining the levels of darkness (absorption), permeability and diffusivity of each element of package (Caivano 1991, 1996)
	Texture	It is defined by three variables: direction, size and density (Jannello 1961)
Semiotics	As defined by Morris (1938) our project works on the field of semantic: the study of signs according to its ability to represent and transmit information of an object, which is beyond the sign itself (see also Caivano 1998).	

2. METHODOLOGY

Our analysis is carried out through a methodology that combines different levels of information: on the one hand, the systematic collection of colors and color-combinations present on packages which are distributed in local market; and on the other hand, a semantic analysis of package's elements, both structural (bottles, caps, cans, etc.) and graphics (typography, miscellaneous, illustrations, etc.).

To compile the necessary information for this analysis, a photographic register of package's fronts is made, in order to reproduce as far as we can, the average visual conditions –lightning, scale, position, etc., in which the product meets the consumer on retail.

The data collection of each case is made through a form, with the aim to compile all information of samples at a same level of depth and detail. The data sheet (Figure 1) includes:

a) *General information*: brand, product, contents and origin.
b) *Form* (both structural and graphics): components, materials, finish and % of surface.
c) *Color*: color map, NCS notation, location on NCS solid, and % of each color over total surface.
d) *Cesia*: levels of darkness (absorption), permeability and diffusivity of each element of package.
e) *Texture*: direction, size and density.

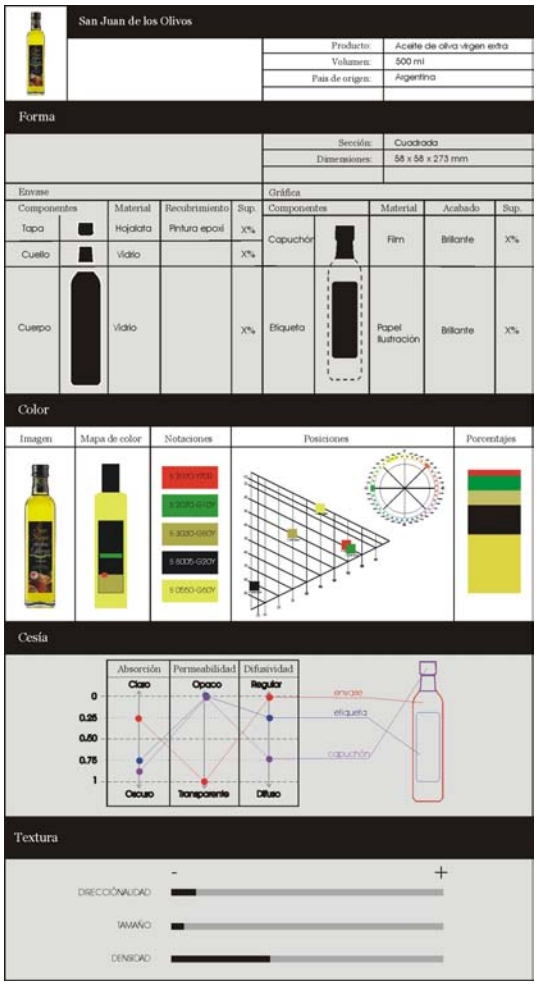

Figure 1. Sketch of data sheet for collection and systematization (in Spanish).

On this stage of the research, the operative process of image treatment is being defined throughout different explorations. Once this step is completed, we will be facing the data collecting and systematization stage, in which we will make a thorough gathering of the information related to selected sample –olive oil package. Fourth and final stage will be work on the classification and comparing of these data to undergo the final semantic analysis.

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