# What does your wine label mean to consumers? A semiotic approach

**Franck Celhay**
*Montpellier Business School, MRM - Montpellier Recherche Management, France*
f.celhay@montpellier-bs.com


**Hervé Remaud**
*KEDGE Business School, France;*
*Ehrenberg-Bass Institute for Marketing Science, Australia*
herve.remaud@kedgebs.com

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*Abstract:*

*Purpose*: A large body of research has shown that the packaging's graphic design influences consumers' perception of a product. Many marketing scholars and researchers acknowledged that a package graphic design is a critical tool for managers to communicate about the brands they manage. In the meantime, very little is known about how the visual component of a packaging does produce the desired meanings among consumers. Using a semiotic approach, this study aims to investigate this link using wine labels as a field of investigation.

*Design/methodology/approach*: In this study, a content and semiotic analysis of Bordeaux wines visual codes is conducted. Four labels, representative of the Bordeaux wine category, are tested on a sample of 932 French respondents using a free word association task. A correspondences factorial analysis is also conducted to identify the themes' association with the different labels.

*Findings*: We confirm that using a semiotic perspective can anticipate most of the ideas' associations that a package graphic design is likely to produce in consumers' mind. More importantly, semiotics allow to understand which visual attribute is likely to produce which idea association and why.

*Practical implications*: Conducting a semiotic study seems to be a reliable tool for managers to help them to design their packaging according to the positioning and brand's meanings they seek to communicate to their clients.

Keywords: Packaging, design, semiotics, communication, wine label

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# 1. INTRODUCTION

Many authors have shown that the visual aspect of a product (especially food products) contributes to its perception (Ares et al., 2011; Hagtvedt, 2011; Henderson et al., 2004; Orth & Malkewitz, 2008; Pantin Sohier, 2009; Mizutani et al., 2012; Raz et al., 2008; Rebollar et al., 2012; Sester et al., 2013; Velasco et al., 2014; Westerman et al., 2013). Consequently, any modification of the package design would affect the brand's personality and quality perception, and ultimately, consumers' willingness to buy the brand (Mueller & Szolnoki, 2010; Orth & Malkewitz, 2008; Pantin Sohier, 2009; Westerman et al., 2013). Based on this background, marketers use the package design to communicate about their brands (Underwood, 2003). Several researchers have explored the theoretical bases of such a phenomenon (Ares et al., 2011; Henderson et al., 2004; Orth & Malkewitz, 2008), but very little is known about the relationship between the characteristics of the visual design and consumers' understanding and perception of these wine labels' design. In this study, we aim to respond to the following question: what do wine labels mean to consumers? In other words, we investigate and show that a semiotic approach is a relevant and effective approach to understand how the visual component of a packaging does produce the desired meanings among consumers. Three major methodological approaches have been used so far to understand this link. If two of these approaches are interesting to overview, we will focus in this paper on the semiotic approach to explain how wine labels are perceived.

# 2. LITERATURE OVERVIEW

## 2.1. From experimental to holistic design

Manipulating some visual attributes of the packaging (colors, typeface, etc) was often used to measure their impact on perceived quality or intent of purchase (Velasco et al., 2014; Mueller and Remaud, 2013). However, such experiments are unable to reflect the multiple interactions that determinate the global visual aspect of a packaging. Yet, as highlighted by Orth and Malkewitz (2008), consumers look at a packaging as a whole, and on the basis of this holistic perception, they establish specific beliefs with regard to a product.

Other researchers argue that there is no theory in the marketing field that provides concrete guidelines for defining a package (or logo) visual aspect according to the messages a manager wants to communicate about his/her brand (Henderson et al., 2004; Orth & Malkewitz, 2008). These researchers have proposed a two-step empirical approach to identify holistic designs (e.g., massive, contrasting, natural, delicate, etc.) and then test them with consumers. The advantage of this approach is its realism as it allows researchers and marketers to test the perception of real stimuli (real packages or logos). However, this approach also possesses a few limits: no theory supporting the empirical findings; difficulty to fully explain them; lack of stability in the observed relationships between holistic designs types and the dimensions of the brand personality. These limits suggest that the same visual attributes could generate different meanings across different product categories.

## 2.2. The semiotic approach

More recently, a few researchers started to use the conceptual and theoretical frameworks of the semiotic field to better understand how the visual aspect of a logo, brand, or packaging generates meanings for consumers (Ares et al., 2011; Piqueras-Fizman et al., 2011). Semiotic can be defined as "the theory which describes and analyses the mechanism by means of which a sign system produces meaning" (Ares et al., 2011; Kehret-Ward, 1988; Piqueras-Fiszman et al. 2011). Having this theoretical background in mind, Ares et al. (2011) and Piqueras-Fizman et al. (2011) have developed a three-step approach:

1. Run a content analysis of packages available on the market to identify the visual codes of a specific product category.
2. Decode the meanings usually associated with these codes through a semiotic study.
3. Test the visual codes previously identified with consumers using a free word association task.

Semiotic studies appear to be a relevant tool for marketers to guide them in the design of their package and logo. This approach presents several advantages, including taking into consideration the package visual attributes separately (i.e. colors, typography, forms, illustrations, materials…) and the overall aspect of the package (i.e. overall level of complexity or novelty of the visual, level of congruency among the different visual attributes, equilibrium of the composition, hierarchy among the different elements etc…). However, this approach suffers a lack of replication. The two articles of Ares et al. (2011) and Piqueras Fiszman et al (2011) use the same experiment materials and analyze the visual codes of the same category (yogurt packages). On the top of it, one of the visual codes used in the experiment come from a well-known brand (Activia of Danone), potentially impacting and conditioning the respondent pre-existing awareness and knowledge of that specific brand positioning.

This study aims to contribute to this body of knowledge by extending the external validity of the results of Ares et al. (2011) and Piqueras-Fizman et al. (2011) as well as to add to the existing body of knowledge new results in relation to this new product category: wine.

## 3. RESEARCH PROTOCOL

### 3.1. Identification of the Bordeaux wines visual codes

To facilitate the research protocol and narrow down the research field, we focused on wine labels of the Bordeaux region. The first step of the study was about identifying the visual codes used on these wine labels. A selection of 117 Bordeaux wine labels have been analyzed using a content analysis method. Two coders independently coded the labels using a grid of observation (composition and layout, color, typography, illustrations themes, styles, etc…). The inter-judge reliability was measured by calculating the inter-judge rate of agreement and Cohen's kappa coefficient. The inter-judge agreement was 91% and Cohen's kappa was 0.87, which indicates great concordance among the judges.

### 3.2. Semiotic analysis of the Bordeaux wines visual codes

Following the codification of the labels, a semiotic study was conducted to interpret what these labels refer to. We used the binary model of signs of Ferdinand de Saussure (1917). According to Saussure, signs can be divided into two facets: the signifier and the signified (Crow, 2010; Celhay et al. 2015). The "signifier" (or the expression plane) is the physical manifestation of the sign. It can be a sound (for a verbal sign) or an image (for a visual sign). The "signified" (or the content plane) is the meaning that is attached to the signifier. From a semiotic perspective, a package design is a combination of several signifiers that communicate specific signifieds (i.e. meanings) to the consumer.

### 3.3. Designing the wine labels to be tested

Based on the content analysis results, a graphic designer created four typical Bordeaux wine labels. All labels include the same informational content but each presents some individual characteristics regarding its visual attributes (see Figure 1).

**Figure 1: Typical Bordeaux wine labels used for the free word association task**



| Bottle 1 | Bottle 2 | Bottle 3 | Bottle 4 |

### 3.4. Semiotic analysis of the wine labels to be tested; test of the labels

A semiotic analysis of each bottle was conducted in order to anticipate how the perception of each label was likely to differ according to its individual specificities.
Respondents were recruited using the client list of a Bordeaux wine merchant. Request to participate was sent by e-mail, inviting participants to forward the invitation to people they know (snowball effect). To encourage participation and participants to complete the full survey, a competition in which a few bottles of wine would be offered to randomly selected participants has been organized. People stating that they don't consume wine were excluded

of the study. Finally, 932 people fully completed the survey. The average respondent is 43 years old, and 59% of the participants are male.

The survey was conducted online using Qualtrics software. The four bottles of wine were tested based on a within-subject experiment design. First, the four bottles were presented all together to the respondents with the following sentence: "Here are four bottles of wine from Bordeaux in which the brand (chateau) name has been removed for the purpose of the study. Look at them carefully before continuing the survey." We wanted each respondent to clearly see and compare these bottles before answering the questions. Such a comparison also occurs in a real environment when consumers face many more labels and bottles to choose from. Then, each bottle was presented individually to the interviewees in a random order and respondents were asked to evaluate each of these four bottles using a free-word-association technique: "what does this bottle of wine evoke to you? Please write down all words, idea associations, emotions, or images that come to your mind when looking at these bottles" (Ares et al., 2011).

### 3.5. Data analysis

In order to analyze all idea associations generated by each label, a lexical content analysis was conducted following Celhay et al. (2015) approach. Because of the number of responses to analyze (4 * 932 = 3,728), Sphinx Quali lexical analysis software was used. Two researchers independently conducted this categorization and then compared their theme dictionary to obtain a consensus. Finally, when the main themes were identified, the software recoded the responses obtained from the free word association into close-ended variables in relation to the first 50 themes of the corpus. It enabled to calculate the frequency of occurrence of each theme for each label and for all the respondents (see Table 1) and then to conduct a correspondences factorial analysis indicating what themes were most associated with the different labels (see Figure 2).

### 4. RESULTS: Perception of the labels using the free word association task

Table 1 presents the results of the free word association task for each label. The lexical content analysis allows identifying the ten (restricted here to the 5 most important ones) themes which have been most frequently associated by the respondents to the different labels.

**Table 1. First 5 lexical themes associated to each label**

| Stimuli | Themes | # | Freq. | Stimuli | Themes | # | Freq. |
|---|---|---|---|---|---|---|---|
| Bottle 1 | Ancient | 296 | 31.8 | Bottle 3 | Simple | 163 | 17.5 |
| | Outdated | 183 | 19.6 | | Small château | 141 | 15.1 |
| | Heavy | 179 | 19.2 | | Classic | 140 | 15.0 |
| | Tradition | 120 | 12.9 | | Sober | 116 | 12.4 |
| | Wine of quality | 103 | 11.1 | | Wine of quality | 82 | 8.8 |
| Bottle 2 | Modern | 222 | 23.8 | Bottle 4 | Classic | 174 | 18.7 |
| | Elegant | 164 | 17.6 | | Tradition | 128 | 13.7 |
| | Sober | 152 | 16.3 | | Ancient | 115 | 12.3 |
| | Simple | 151 | 16.2 | | Terroir | 106 | 11.4 |
| | Wine of quality | 84 | 9.0 | | Wine of quality | 100 | 10.7 |

Label 1 evokes themes such as ancient, outdated, tradition and classicism. This was expected according to the ochre background, enlightened frames, centred layout, etching style of illustrations and gothic typeface. The "heavy" association was also expected according to the overall complex and fully "loaded" aspect of the label.

Label 2 evokes themes such as modern, elegant, sober, and simple. This was expected according to the overall simple aspect of the label: pristine white background with black text and subtle touches of gold and the use of a thin type.

Label 3 evokes themes such as simple, sober. This was expected according to the pristine white background with black text and the use of a thin formal script typeface for the brand name. The "small château" association was also expected according to the use of lower-case letter for the brand and region name and the absence of gold. The "classic" association was expected according to the layout and composition of the label as well as the use of etching as style of illustration.

Label 4 evokes themes such as classic, tradition, ancient. This was expected according to the use of a yellowing background, to the layout and composition of the label as well as the use of etching as style of illustration. Label 4 also evokes themes such as terroir, based on the use of brown colors, the irregular outline label style and the illustration theme which highlight more the vineyards than the château.

Thus, it appears that some ideas associations (classic, wine of quality) are generated by the four labels while other are more specific. This appears as a logical result as the four labels have common visual codes (layout and composition). This can also be explained with the overall reputation a wine region already generates in people's mind. This general reputation (here wine of quality) acts as a general 'landscape' for the wine being offered to the

consumers. However, whatever the way a region is generally perceived, the label of each bottle still convey a distinctive message and meaning to the consumers that the region will not overshadow.

The correspondence analysis factorial map (Figure 2) allows us to better outline what the associations of ideas are with the perception of the four labels.

The first axis explains 62% of the total delivered information and represents two polarities: modern versus ancient. Thus, it appears that the labels (labels 1 and 4) on the right side of the map could be differentiated as being perceived as more ancient and traditional and the labels on the left side (labels 2 and 3) as being perceived as more modern. The second axis, explaining 28% of the total delivered information, represents two sides of the perceived price and prestige of the wine: small, modest and affordable châteaux on one side; prestigious, high-end and expensive châteaux on the other side. Thus it appears that the labels on the bottom of the map (labels 3 and 4) are perceived as being more affordable and the labels on the top of the map are perceived as being more expensive (labels 1 and 2). This however doesn't imply that the label 3 and 4 are perceived as being low quality wines as the theme "wine of quality" is associated to all the labels and appears at the centre of the map.

## 5. CONCLUSIONS

In line with previous researches, our study confirms the idea that different packaging (including signifiers and signified) convey different messages and specific positioning for wine products. Our study also supports the relevance of using a semiotic approach to better understand consumers' perception of signifiers and signified in the case of wine product.
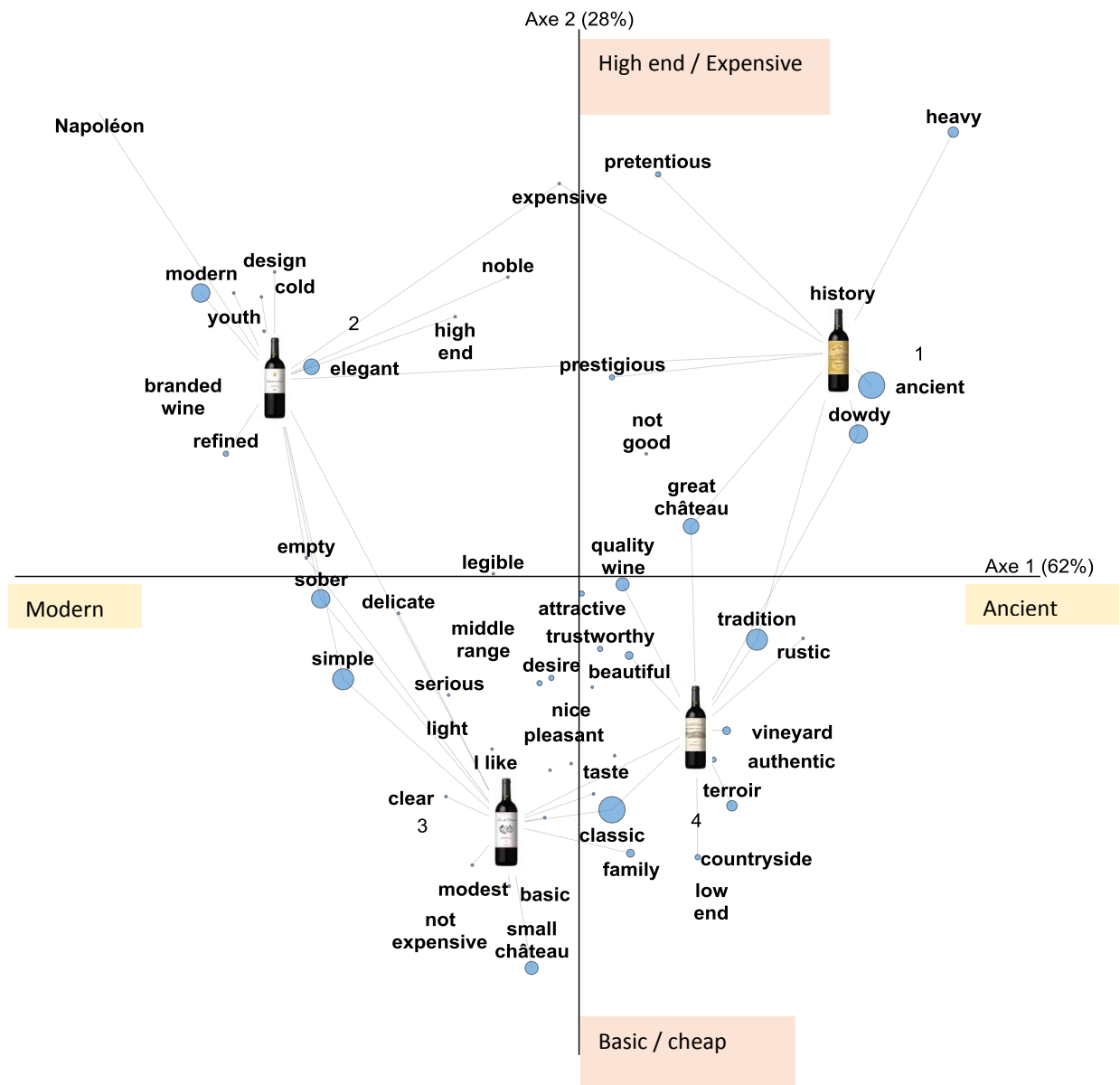
From a managerial perspective, our findings give relevant insights to wine producers wanting to position their wine labels in a way that delivers value to the consumers:

- Label 1 style and positioning is old fashioned, trying to encapsulate the historical aspect of the wine, but fail to be attractive (pretentious, heavy, bad, square) for most consumers.
- Label 2 style and positioning generates greater beliefs and perceptions: it's modern (elegant, design, young) and at the same time, perceived as ultra premium (referring to the 1855 classification, expensive). If the objective of many producers is about a premiumisation of their production, they would certainly consider this style of label.
- Label 3 is the archetype of the entry level wine: simple, modest, basic, light, cheap.
- In addition to label two, label 4 is the other label generating positive beliefs and perceptions to the consumers: authentic, terroir, classic, tradition, like, etc.

More than designing their labels based on their own style and taste, wine producers and wine marketers would gain to understand the meaning that specific font, color, shape, etc, generate in people's mind. Such an understanding of the signifiers and signified would help these producers and marketers to design wine labels in line with the positioning they want to achieve in line with consumers' expectations with these wines.

In a very competitive environment such as the one facing wine producers today, a better understanding of the signifiers and signified valued by consumers, would allow the producers to deliver greater value to their clients, assuming these producers understand and acknowledge what meanings their labels convey to the consumers.

**Figure 2. Correspondence analysis factorial map**



Axe 2 (28%)

High end / Expensive

heavy

Napoléon

pretentious

expensive

design
cold
modern
youth

noble

history

branded
wine

high
end

2

elegant

prestigious

1
ancient

dowdy

refined

not
good

great
château

empty

quality
wine

legible

Axe 1 (62%)

Modern

sober

attractive

trustworthy

tradition

Ancient

delicate

middle
range

rustic

simple

desire

beautiful

serious

nice

vineyard

light

pleasant

authentic

I like

taste

terroir

clear

4

3

classic

countryside

family

low
end

modest

basic

not
expensive

small
château

Basic / cheap

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