

The influence of Wine Label Visual Cues On Perceived Quality

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ABSTRACT

Wine is an experience good whose quality can't be directly assessed prior to consumption. Consumers therefore rely on extrinsic cues to form quality judgments. In mass retail environments characterized by a dense and visually standardized offer, wine labels play a central role in shaping sensory expectations and perceived quality. Rather than reflecting objective quality, perceived quality emerges as a cognitive construction based on the interpretation of accessible visual signals.

This study investigates the influence of categorical visual codes on wine quality perception and explores the existence of consumer segments receptive to visual innovation, even within traditionally conservative appellations. Focusing on the Burgundy appellation Nuits-Saint-Georges, the research follows a multi-stage methodological approach. First, a brand awareness study identifies Nuits-Saint-Georges as the most recognized Burgundy appellation. Second, a semiotic analysis of the corpus of 120 labels reveals the dominant visual codes structuring this category. Third, a choice-based conjoint (CBC) analysis conducted with 206 consumers assesses the relative impact of these visual attributes on perceived quality in a moderate-risk consumption context.

Results indicate that visual attributes do not contribute equally to perceived quality. Illustration and label color emerge as the most influential determinants, followed by label shape, whereas typography and typographic color play a secondary role. Consumer segmentation further reveals a distinct segment—approximately one quarter of the sample—that is receptive to visual innovation. This finding is particularly noteworthy given the traditionally conservative image of the appellation.

Overall, the study highlights the strategic importance of aligning label design with wine positioning, perceived consumption risk, and target audience diversity. Beyond the case of Nuits-Saint-Georges, the findings contribute to a broader understanding of visual perception mechanisms in wine markets and offer insights applicable to other contexts facing challenges of visual standardization and differentiation, while acknowledging the role of consumer culture in shaping categorical visual codes.

Keywords: Perceived Wine Quality, Categorical Visual Cues, Wine Label Design, Label Semiotics

Introduction

A substantial body of research, including the studies conducted by Viot and Aurier and Ngobo, has examined the criteria underlying wine choice as well as the influence of the written information displayed on wine labels on consumers' purchase intentions [1,2]. The attributes investigated include the geographical origin of the grapes, appellation, vintage, grape variety, bottling location, and ageing method. However, a FranceAgriMer study

(2015) revealed that consumers generally have only a limited understanding of the meaning of these terms. Since wine is an experience good and cannot be tasted before purchase, while 78% of wine purchases are made in supermarkets and hypermarkets (Sowine, 2021), consumers rely on various quality cues, such as the appellation, the production area, and awards, to infer product quality.

Consumers also experience considerable difficulty in understanding the organization of wine shelves and in locating products within the assortment [3]. Consequently, selecting

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a bottle of wine is perceived as a difficult decision [4,3]. This complexity is likely to increase both the duration and the cognitive effort involved in the purchase decision. Indeed, shoppers spend an average of 2.42 minutes in the wine aisle, compared with only 1.03 minutes for most other fast-moving consumer goods [5,6].

Pinto et al. showed that consumers primarily select wine according to its colour (red, white, or rosé), a decision that is generally made before entering the store [7]. The second criterion is the region of origin, largely because wines are organised geographically on retail shelves, followed by price. However, the increasing number of wine references available in supermarkets, together with the multiplication of appellations and product denominations, has made the offer increasingly difficult to decipher. Under such circumstances, the wine label should enable consumers both to identify the product and to assess its expected quality.

Choosing a traditional-looking bottle therefore appears to constitute a strategy for reducing the perceived risk associated with wine purchasing [8]. Consequently, most wine labels continue to rely on traditional visual codes in order to reassure consumers. Even today, the dominant discourse surrounding wine remains strongly associated with tradition and terroir. In renowned wine-producing regions such as Bordeaux and Burgundy, wineries tend to use highly similar visual codes for their packaging, resulting in a certain degree of visual uniformity on retail shelves [9].

Furthermore, French consumers remain strongly attached to traditional representations of wine and generally show limited acceptance of innovations surrounding this product. Wine consumption appears to be embedded within a national culture shaped by traditions transmitted across generations, imposing highly ritualised consumption practices, well-established packaging conventions, and socially shared representations of wine from which producers find it difficult to deviate [3,10,11]. Because wine is typically consumed in social settings, it also contributes to the social image projected by the purchaser and may be interpreted as an expression of the esteem shown towards one's guests [10]. Consequently, consumers seek reassuring visual cues in wine packaging regardless of their age, level of expertise, or wine knowledge.

As a result, wine producers face considerable difficulty in departing from the visual conventions associated with their appellation. Nevertheless, given consumers' confusion when confronted with increasingly complex wine assortments in supermarkets, it appears legitimate to question the role of product differentiation and, more specifically, the potential contribution of innovation in wine label design.

In highly saturated markets, label design may provide producers with an effective means of differentiation through distinctive visual elements such as original illustrations, specific typography, and unique colour schemes. Such visual differentiation is likely to attract consumers' attention and improve product memorability in highly competitive retail environments. Wine labels therefore represent the meeting point between marketing creativity and product authenticity, serving both quality communication and brand recognition.

Moving away from the traditional visual conventions associated with a given appellation should therefore increase product visibility at the point of sale, thereby improving category readability and simplifying consumers' decision-making process. Previous studies, particularly Barber and Almanza, have demonstrated that the overall appearance of both the label and the packaging is perceived by consumers as an indicator of product quality [12,13].

This raises the following research question : How do consumers evaluate the quality of a bottle of wine when facing a retail shelf ? Which visual elements displayed on the label contribute to this quality judgement?

This article first presents a theoretical framework devoted to perceived quality and visual cues. It then introduces the empirical study and discusses its findings before outlining the limitations of the research and concluding with managerial implications.

Theoretical Framework

Perceived Quality

Perceived quality is one of the fundamental concepts in marketing and consumer behavior, particularly for food products whose characteristics cannot be fully evaluated prior to consumption. Although the concept has been extensively investigated since the 1970s, the definition proposed by Zeithaml remains the most widely adopted in the literature. She defines perceived quality as “the consumer's overall judgment about the excellence or superiority of a product [14].”

This definition highlights several essential characteristics. First, perceived quality is inherently subjective. It does not depend solely on the technical or intrinsic characteristics of a product but rather on how these characteristics are interpreted by consumers. Consequently, two individuals evaluating the same product may arrive at different judgments because of differences in their knowledge, prior experience, and cognitive processing.

Second, Zeithaml emphasizes the distinction between objective quality and perceived quality. Objective quality refers to the measurable properties of a product, such as its composition, technical performance, or production process. In contrast, perceived quality corresponds to the consumer's mental representation of that quality. Although this representation may accurately reflect the product's actual quality, it may also diverge from reality when consumers possess limited information or are influenced by various communication cues, such as the product label.

Perceived quality also represents a global evaluation. Rather than reflecting consumers' assessment of a single product attribute, it constitutes an overall judgment resulting from the integration of multiple pieces of information available at the time of the purchase decision. Finally, perceived quality is constructed from the cues consumers use to infer a product's actual quality. Zeithaml distinguishes between intrinsic cues, which are directly related to the product's physical characteristics (e.g., taste, colour, texture, or composition), and extrinsic cues, which are associated with the product without altering its physical properties (e.g., price, brand, packaging, producer reputation, or label design). When consumers are unable to evaluate intrinsic

characteristics directly—as is the case prior to purchasing wine—extrinsic cues become particularly influential in shaping perceived quality.

This distinction is especially relevant in the wine industry. Because wine is widely regarded as an experience good, consumers are generally unable to assess its objective quality before tasting it. Consequently, they rely on the information available on the bottle to form quality expectations [15]. The label, appellation of origin, winery, price, awards, and the producer's history all function as signals that may influence consumers' judgments. Perceived quality therefore emerges as the outcome of an inferential process based on these various cues rather than on the wine's actual sensory characteristics.

Among extrinsic cues, the label occupies a distinctive position. It simultaneously performs informative, aesthetic, distinctive, and symbolic functions. It enables consumers to identify the product, conveys regulatory and commercial information, and communicates the positioning intended by the producer.

The label often intervenes at a very early stage of the decision-making process. It can attract consumers' attention, facilitate product identification, and create a first impression even before the written information has been read in detail. In retail environments offering a large number of references, label design therefore constitutes an immediate means of product differentiation.

Research on label design has shown that graphic elements generate meanings that shape consumers' perceptions of both the brand and the product. The semiotic analysis conducted by Celhay and Remaud on Bordeaux wine labels demonstrates that packaging graphic codes contribute to communicating meanings related to the wine's identity, authenticity, and market positioning [16].

Consumers' perceptions of labels also vary across markets and cultural contexts. The literature identifies several approaches to measuring perceived quality, depending on the research objectives and the context under investigation. Three principal approaches can be distinguished.

A first approach consists of directly measuring an overall judgment, such as 'This wine appears to be of high quality.' This measure is consistent with Zeithaml's conceptualization and is particularly appropriate for studies seeking to explain the influence of an extrinsic cue on consumers' overall evaluation of a product's perceived quality [14].

A second approach consists of measuring different dimensions of quality. Verdú Jover, Lloréns Montes, and Fuentes Fuentes demonstrate that perceived wine quality has a multidimensional structure [17]. This approach is appropriate when the objective is to gain a detailed understanding of the components underlying quality judgments, which is not the purpose of the present research.

A third approach distinguishes between expected quality and experienced quality. This measurement is particularly relevant

in research protocols involving an initial evaluation based solely on the label, followed by a tasting session.

The choice of measurement approach depends directly on the research question. In the present study, which examines the influence of wine label visual codes on perceived quality, the first approach appears particularly appropriate. Our objective is to assess consumers' overall quality judgment based exclusively on the visual information displayed on the label.

From this perspective, perceived quality acts as a mediating variable between design characteristics and behavioural responses such as product choice, purchase intention, and willingness to pay.

The scientific contribution of this research lies in identifying how the visual codes embedded in wine labels are transformed into meanings and subsequently used by consumers to infer the quality level of the wine.

Visual Codes

Celhay and Trinquécote demonstrated that the more a wine label is perceived as exhibiting a design typical of its region, the more consumers appreciate its aesthetic appeal [11]. Typicality judgment refers to a consumer's assessment of an element's ability to represent the category to which it belongs [18]. The relationship between typicality and aesthetic appreciation is moderated by product-category involvement, product knowledge, consumers' propensity to innovate, perceived risk, age, and educational level. Furthermore, this relationship is stronger among men than among women. By contrast, sign value and the importance consumers attach to visual appearance have no significant influence [11].

All product categories are characterized by specific visual codes [19]. Category-specific visual codes correspond to the visual and iconic characteristics shared by brands within the same product category [20]. Divard and Urien highlighted the existence of colour codes associated with different product categories, such as blue and white for dairy products and black and red for coffee [9]. Other studies have examined visual codes from a semiotic perspective in order to decode the meanings associated with them [16]. For example, red wines are generally presented using rather dark shades to convey elegance, or against a white background combined with intense colours such as blue, red, or gold.

White wines are typically associated with light colours, often enhanced by blue or green accents, in order to evoke freshness and lightness. Rosé wines frequently feature a more festive colour palette, including shades of pink, gold, or rose gold, highlighting their convivial and celebratory character. The colour palette is therefore not merely an aesthetic choice but a strategic lever that shapes consumers' perceptions of wine quality.

However, the visual codes of a product category are not limited to colour schemes. Labels provide important extrinsic cues that consumers rely on when evaluating quality [17,21]. Indeed, the combination of colour and texture enhances the visual salience of wine labels [22]. Labels are also evaluated according to their shape and size [23].

Celhay and Folcher analysed 117 Bordeaux wine labels in order to decode the meanings associated with their visual codes [20]. Whereas Pelet argues that label complexity results from the interaction between colour, graphic elements, and typography, Celhay and Remaud introduced a fourth component defining the visual appearance of a label: its shape and layout [24,16].

These studies, based on a semiotic approach, have made it possible, first, to identify the meanings that consumers attach to the visual attributes displayed on wine labels and, second, to distinguish four categories of elements defining the appearance of a wine label:

- **Overall shape and layout:** 90% of wine labels are rectangular and 96% are centrally aligned [25,20]. These characteristics are perceived as traditional and convey the meanings associated with classicism [16].
- **Background, text, and illustration colours:** Half of the labels feature a pristine white background, conveying a premium image, whereas the other half use an off-white background associated with rusticity [12]. In addition, black, burgundy, and gold are widely used for textual elements.
- **Typographic choices:** Two major typeface families are generally distinguished in typography: serif fonts and sans-serif fonts. Serif typefaces reinforce a sense of classicism, while the use of capital letters conveys prestige and grandeur. Script fonts such as Edwardian Script communicate elegance and refinement associated with taste, whereas Gothic lettering evokes an old-fashioned and authentic image [25,16].
- **Illustration themes and styles:** Castles, coats of arms, and crowns symbolize nobility and history, whereas estates and vineyards express terroir while conveying tradition and authenticity [16,24]. Regarding illustration style, visuals perceived as traditional and handcrafted are generally preferred to those perceived as modern. Consequently, drawings, engravings, and watercolours are favoured over photographs and digitally generated images. In the study by Bonescu et al., a heraldic shield accompanied by armorial symbols was perceived as an iconic element reinforcing authenticity [25]. Images and illustrations therefore influence both product perception and the level of perceived quality.

Consequently, label design evokes emotions and aspirations among consumers, thereby enhancing product desirability. Pelet, Durrieu, and Lick refer to this process as sensory enhancement [24].

Celhay and Trinquescoste argue that label design constitutes an inferential cue from which consumers derive assumptions regarding the intrinsic qualities of a product. It therefore influences perceived wine quality [26]. An elaborate and refined label may suggest a premium wine, whereas a simpler label may evoke a more casual product. As previously highlighted, wine is an experience good; consequently, consumers frequently rely on visual cues to assess product quality, which in turn influences their purchase intentions.

Consumption occasions also influence consumers' wine choices because they differ in terms of perceived risk. Pinto et al. identified three wine consumption occasions: everyday meals, meals shared with friends or family, and special occasions [7].

The latter two were evaluated by respondents as situations involving higher perceived risk [10]. Consequently, consumers tend to choose the label they perceive as the most typical, even when it is not the one they find most aesthetically appealing.

Given the existence of these visual codes, Celhay and Trinquescoste suggest that two packaging design strategies are possible [11]. The first consists of conforming to category-specific visual codes in order to reassure consumers. The second, by contrast, involves departing from these codes to surprise consumers, attract their attention, and achieve visual differentiation from competing products.

In both Burgundy and Bordeaux, producers appear to encounter genuine difficulties in moving away from the visual codes traditionally associated with their respective regions. Perhaps the optimal strategy would be to strike a balance between conformity, which reassures consumers, and originality, which creates an element of surprise and enables a product to stand out. Some industry professionals also suggest that such an approach may help attract specific consumer segments, particularly young adults and women.

The objective of the present research is therefore to investigate how consumers respond to traditional wine labels compared with more original label designs.

Our literature review led us to formulate the following two hypotheses:

H1: Label shape, colour, illustration type, typography, and typography colour exert the same influence on consumers' perceptions of wine quality.

H2: Even for a highly traditional appellation such as Nuits-Saint-Georges, there exists a consumer segment receptive to labels that do not conform to category-specific visual codes.

Methodology

To design the wine labels used in this study, we first conducted two preliminary investigations. The first aimed to identify the best-known Burgundy appellation, while the second sought to identify its category-specific visual codes. We then employed conjoint analysis to test our hypotheses.

Spontaneous and Aided Awareness Study of Burgundy Wine Appellations

A convenience sample of 428 individuals was surveyed in the city centre of Dijon. Nuits-Saint-Georges was the appellation most frequently cited as the top-of-mind response (11.1%), followed by Pommard (10.4%) and Gevrey-Chambertin (9.2%). Under aided awareness conditions, the same appellations ranked highest, with awareness levels of 85.0%, 79.5%, and 73.6%, respectively. These findings are consistent with the Burgundy wine awareness survey commissioned by the Bureau Interprofessionnel des Vins de Bourgogne in July 2012. Nuits-Saint-Georges therefore emerged as the best-known Burgundy appellation. Consequently, our empirical study focused on this appellation.

Analysis of the Category-Specific Visual Codes of Nuits-Saint-Georges Wine Labels

The elements identified across the 120 Nuits-Saint-Georges wine labels are presented in Table 1. Additional items also appeared,

although less frequently. The expression 'Grand Vin de Bourgogne' was present on 52% of the labels and was positioned at the top in 65% of cases. The vintage appeared on the main label in only 32% of the sample, most often at the top (45%). However, in 68% of cases it was displayed on a separate neck label. As the vintage constitutes a cue of authenticity and wine ageing, it was retained in our study [19,27]. The statement 'Appellation Nuits-Saint-Georges Contrôlée' appeared on 62% of the labels, generally in the centre (88%), whereas the expression 'Mis en bouteille au domaine' appeared on 43% of the labels, usually at the bottom (72%).

Table 1 : Visual Codes of the Nuits-Saint-Georges Appellation

Attribute	Category	%	Category	%	Typography
Label shape	Vertical rectangle	50			
	Horizontal rectangle	41			
	Other	9			
Label colour	White	47			
	Cream	41			
	Other	12			
Position of the winery name	Top	32.5			
	Bottom	64			
	Centre	3.5			
Winery name typeface	Script	24	Serif	39	Uppercase: 53
	Gothic	4			
	Standard	72	Sans-serif	61	Uppercase: 34
Winery name colour	Black	48.5			
	Red	15.5			
	Gold	8			
	Other	28			
Position of the appellation name	Centre	72.2			
	Top	15.8			
	Bottom	6			
Appellation name typeface	Script	15	Sans-serif	42	Uppercase: 16
	Gothic	7.5			
	Standard	77.5	Serif	58	Uppercase: 54
Appellation name colour	Black	64			
	Red	13			
	Other	23			
Illustration	Coat of arms and crown	56			
	Estate building	12.5			
	Producer's logo	32			
	Vineyard	5			
	None	13.5			
Position of the illustration	Top	80			
	Bottom	10			
	Centre	10			
Illustration colour	Black	32			
	Red	17			
	Gold	12			
	Grey	10			
	Other	29			
Largest text element	Appellation name	79			
	Winery name	21			

Note: Uppercase = all letters in uppercase.

These analyses enabled us to design labels containing identical written information positioned in the same locations (Figure 1). Overall, 91% of the Nuits-Saint-Georges labels were rectangular, a format perceived as traditional and classic [16]. Label colours were predominantly white (47%) or cream (41%), in line with previous research.

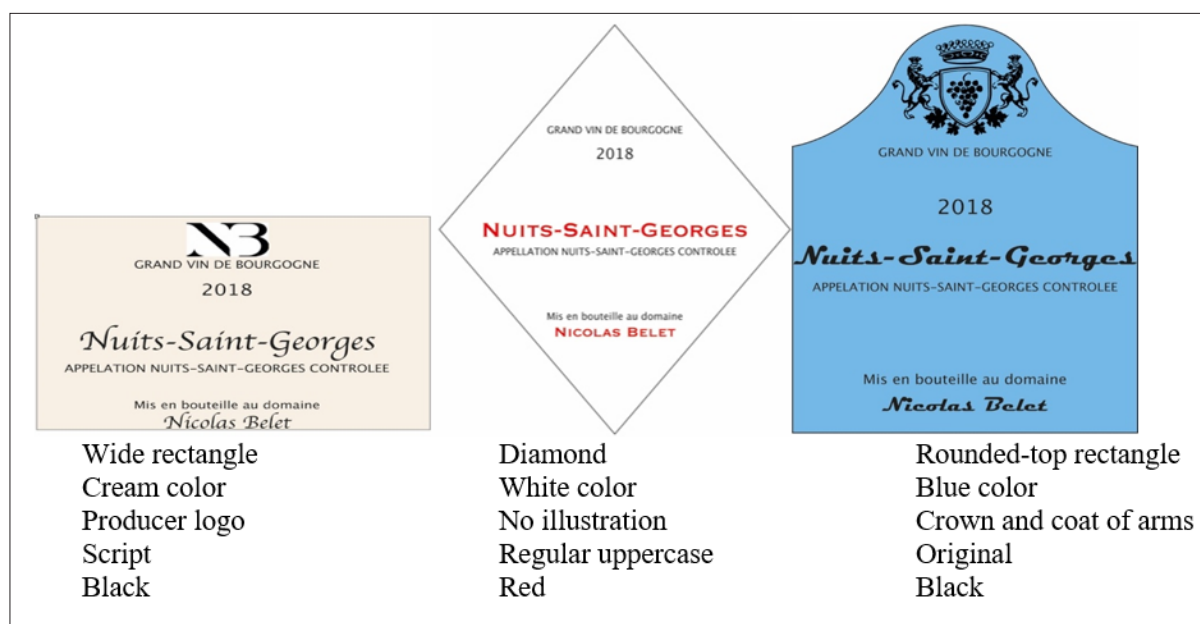


Figure 1: Examples of labels

Regarding typography, the most common typeface for both the appellation name and the estate name was a traditional uppercase font, with serifs used for the appellation to reinforce its classic character and a sans-serif typeface used for the estate name. The predominant typography colours were black and red, with red appearing more frequently for the estate name. This suggests that producers seek to preserve tradition through the appellation while conveying greater modernity through the estate name. Furthermore, the appellation was given greater visual prominence, being printed in a larger font in 79% of the labels and centred in 72.2% of cases, whereas the estate name was generally positioned at the bottom of the label.

With regard to illustrations, coats of arms and crowns predominated (56%), conveying meanings of history and nobility (Celhay & Remaud, 2015), followed by logos (32%) and buildings or estates (12.5%). These illustrations were mainly positioned at the top of the label (80%) and predominantly used black and red colours. Interestingly, 13.5% of the labels contained no illustration at all. Compared with the study by Celhay and Folcher (2012), which analysed 117 Bordeaux wine labels, similar findings were obtained concerning label shape, colour, and the use of uppercase letters and serif fonts. The major difference concerned the illustrations: Bordeaux wine labels predominantly featured châteaux, whereas Burgundy labels mainly displayed coats of arms and crowns, reflecting the widespread use of the term 'château' to designate Bordeaux wine estates.

Conjoint Analysis Using the CBC Method and Sawtooth Software

The objective of this method is to indirectly measure consumer preferences, based on the trade-offs they make in a choice situation, and to assess their influence on the perceived quality of wine. Drawing on both the literature and our analysis of category-specific visual codes, we selected five attributes (Table

2), resulting in a full factorial design comprising 162 label profiles. This design was reduced to 60 combinations, which were presented to respondents in 20 choice sets, each containing three wine labels (see Figure 1 for an example). This number was considered sufficient to preserve the information required for robust estimation while minimizing respondent fatigue.

Table 2: Attributes and their Levels. See the Representation in Figure 1.

Attributes	Levels
Label shape	Wide rectangle
	Rounded-top rectangle
	Diamond
Label color	White
	Cream
	Blue
Illustration	Crown and coat of arms
	Estate logo
	None
Typography	Script (Apple Chancery)
	Regular Uppercase (Copperplate)
	Original (Magnet Bold)
Typography color	Black
	Red

For each choice set, respondents were asked to select the label that, in their opinion, corresponded to the highest-quality wine for purchase in a supermarket, with the intention of serving it at an enhanced meal with friends or family. This consumption scenario was chosen because it is perceived as relatively risky: a bottle of Nuits-Saint-Georges appellation wine costs at least €30 and is therefore seldom purchased for everyday consumption.

The questionnaire was administered by email and through social media. To encourage participation, respondents were entered into a prize draw to win a bottle of wine.

Because the order in which stimuli are presented may influence evaluations, this potential bias was reduced by randomizing the order of conjoint stimuli across respondents. Following the work of Celhay and Remaud (2015), we also examined the influence of several explanatory variables, including product-category involvement, wine expertise, consumption frequency, gender, age, and socio-professional category. However, for the sake of conciseness, these results are not reported here.

A total of 206 valid responses were collected. Conjoint analysis makes it possible to identify the trade-offs consumers make when forming their preferences, an important advantage given that individuals are generally unable to explicitly articulate these decision mechanisms [28]. More specifically, the probability that a respondent selects a given label is modelled using a multinomial logistic function, in which the utility of each profile is calculated as the sum of the part-worth utilities associated with its attributes. The resulting parameters reveal the intrinsic attractiveness of each attribute level independently of the others.

Results

Table 3 presents the mean part-worth utilities associated with each level of the different attributes. These values, centred on zero, were calculated across the 206 respondents, whose characteristics are reported in Table 4. For each attribute, the sum of utilities equals zero. Consequently, a positive utility indicates that respondents preferred this level over the alternative levels of the same attribute, whereas a negative utility indicates a comparatively lower level of preference.

Table 3: Mean Utility of Each Level of Each Attribute Across the Entire Sample

Attributes	Levels	Mean utility	Standard deviation
Label shape	Wide rectangle	20.66	52.07
	Rounded-top rectangle	-13.09	55.24
	Diamond	-7.57	45.25
Label color	White	51.72	36.9
	Cream	23.34	32.14
	Blue	-75.06	51.07
Illustration	Estate logo	-40.66	57.62
	Crown and coat of arms	63.08	58.87
	None	-22.42	39.5
Typography	Script	11.11	30.86
	Regular Uppercase	12.96	23.99
	Original	-24.07	30.04
Typography color	Black	14.01	21.53
	Red	-14.01	21.53

Table 4: Sample Profile

Gender	%	Age	%	Occupation	%
Women	55	18–25 years	8	Farmer	2
Men	45	25–34 years	21	Shopkeeper / Artisan	7
		35–44 years	23	Executive, higher intellectual profession, liberal profession	44
		45–54 years	25	Intermediate profession	6
		55–64 years	18	Employee	23
		Over 65 years	5	Manual worker	1
				Retired / Unemployed / Student	9 / 3 / 3

The relative importance of each attribute was calculated from the range of estimated part-worth utilities across its different levels. For each respondent, this range corresponds to the difference between the highest and the lowest utility associated with the attribute. Relative importance was then obtained by dividing this range by the sum of the ranges for all attributes and expressing the result as a percentage. The importance scores (Table 5), which total 100%, therefore reflect the relative contribution of each attribute to perceived quality. This ranking highlights the design elements that should be prioritized to maximize perceived quality.

Table 5: Mean Importance of Each Attribute

Attributes	Mean importance	Standard deviation
Label shape	21.71	12.11
Label color	28.47	13.57
Illustration	29.36	13.72
Typography	12.82	8.78
Typography color	7.64	6.86

Utilities are additive across attributes; consequently, the total utility of an alternative product corresponds to the sum of the utilities associated with one level of each attribute.

The label shape generating the highest perceived quality is the horizontally oriented rectangle, followed by the rounded-top rectangle, with the diamond shape ranking last. White labels are preferred to cream and blue ones. Regarding illustrations, the crown and coat of arms generate the highest utilities, and consumers perceive labels without any illustration as being of higher quality than those displaying the producer's logo. Only minor differences are observed between script and standard uppercase typography, whereas black typography generates higher utility than red typography.

Given the substantial standard deviations, considerable heterogeneity can be expected across the sample. Consequently, segmentation based on these individual utilities is required.

Examination of the mean importance scores (Table 5) shows that illustration and label colour are the two most influential determinants of perceived quality, followed by label shape. Typography and typographic colour play a more limited role.

Therefore, the different label attributes do not exert the same influence on perceived wine quality, leading to the rejection of Hypothesis 1.

The label conveying the highest level of perceived quality (Figure 3) combines a crown and a coat of arms, a white background, a horizontally oriented rectangular shape, and standard black typography. This profile incorporates the symbolic meanings traditionally associated with nobility, classicism, and prestige, while simultaneously reflecting the dominant category-specific visual codes of the Nuits-Saint-Georges appellation.

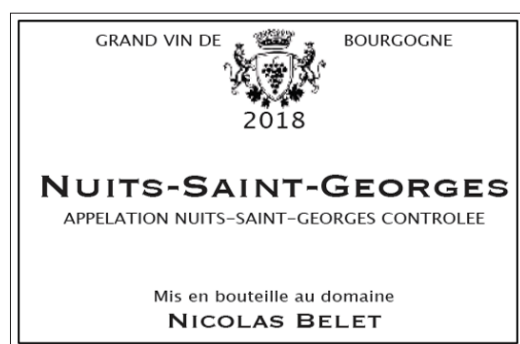


Figure 3 : Label Corresponding to the Wine Perceived As Being of the Highest Quality By the Overall Sample and by Group 2

We estimated latent class Multinomial Logit (MNL) models for up to eight segments. Based on several model fit criteria, including the Akaike Information Criterion (AIC), the Bayesian Information Criterion (BIC), the Consistent Akaike Information Criterion (CAIC), the percentage certainty, the chi-square statistic, and segment size, a three-segment solution was retained. This solution provides a satisfactory fit to the data, as the average respondent was assigned to a segment with a posterior probability of 0.95.

Table 7: Attribute Importance and Sensitivity

	Group 1		Group 2		Group 3	
	Sensitivity	Attribute importance	Sensitivity	Attribute importance	Sensitivity	Attribute importance
Shape	0.845	33.18	1.897	34.42	0.563	11.54
Colour	0.344	13.49	2.106	38.21	1.537	31.48
Illustration	0.207	8.14	0.697	12.64	1.994	40.85
Typography	0.855	33.57	0.651	11.82	0.434	8.90
Typography colour	0.296	11.63	0.160	2.91	0.354	7.24

The ideal label for this segment (Table 7 and Figure 4) would therefore feature standard black uppercase typography conveying classicism and prestige, a white diamond-shaped format, and the producer's logo. This structured composition communicates a sense of security and stability and, by extension, connotes seriousness and credibility (Celhay & Remaud, 2015). Consumers in this segment appreciate a modern and distinctive label shape—the diamond—while preferring a conventional typographic style.

For Segment 2 (22.5% of the sample), label shape, and especially label colour, are the most influential attributes, followed by illustration and typography, whereas typography colour has only a negligible impact. None of the attributes constitutes a threshold

For each segment, Table 6 reports the mean part-worth utilities associated with each level of every attribute, while Table 7 presents the mean relative importance of the attributes.

Table 6: Recalculated Utilities (Zero-Centered Differences) for Each Group

		Group 1	Group 2	Group 3
	Group size	24.5%	22.5%	53.0%
Shape	Horizontal rectangle	26.98088	96.56550	-11.58460
	Rounded-top rectangle	-96.43235	-75.55628	34.63159
	Diamond	69.45147	-21.00922	-23.04699
Colour	White	30.05641	91.83727	56.44413
	Cream	7.33253	7.36811	44.50516
	Blue	-37.38894	-99.20538	-100.94928
Illustration	Producer logo	15.26665	-22.13093	-86.77526
		10.14410	41.07417	117.46054
	No logo	-25.41076	-18.94324	-30.68528
Typography	Standard uppercase	77.01063	28.26757	-16.58671
	Script	13.81890	2.56215	27.89553
	Original	-90.82953	-30.82971	-11.30881
Typography colour	Black	29.07663	7.26659	18.10498
	Red	-29.07663	-7.26659	-18.10498

For Segment 1 (24.5% of the sample), typography and label shape are the most influential determinants of purchase intention (Table 6), followed by label colour and typography colour, whereas illustration plays only a minor role. Although typography is the most important attribute, it does not constitute a threshold attribute. Indeed, the loss of 0.855 utility units resulting from changing the typography from the preferred 'standard uppercase' style to the 'original' style can be offset by combining a white diamond-shaped label with black typography and the producer's logo.

attribute, as the utility loss associated with a blue label can be compensated for by favourable combinations of the remaining attributes.

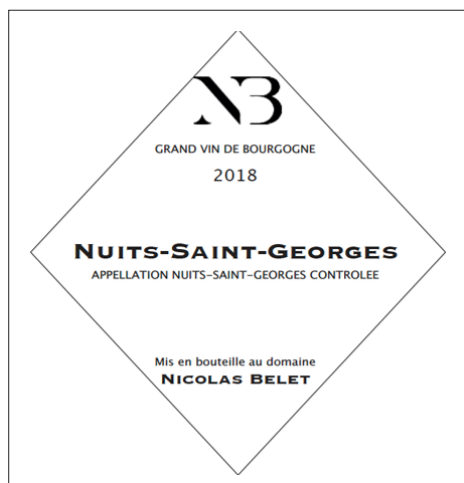


Figure 4 : Label Corresponding to the Wine Perceived as Being of the Highest Quality by the Overall Sample and by Group 1

The label generating the highest purchase intention for this segment (Figure 3) would have a white horizontally oriented rectangular format, display both a crown and a coat of arms, and use standard black uppercase typography. These design elements correspond to the category-specific visual codes of the Nuits-Saint-Georges appellation, thereby corroborating the findings of Celhay and Passebois. Moreover, this profile is also the one most preferred by the overall sample, although the relative importance of the attributes differs across segments.

For Segment 3 (53% of the sample, representing more than half of all respondents), the most influential attribute is illustration, followed by label colour and, to a lesser extent, label shape, typography, and typography colour. Nevertheless, despite its importance, illustration is not a threshold attribute.

The ideal label for this segment (Figure 5) would display a crown and a coat of arms on a white label with a rounded-top rectangular shape. The textual information would appear in black script typography. The crown and coat of arms convey symbolic associations with nobility and tradition, while the script typeface reinforces perceptions of refinement and elegance [16].

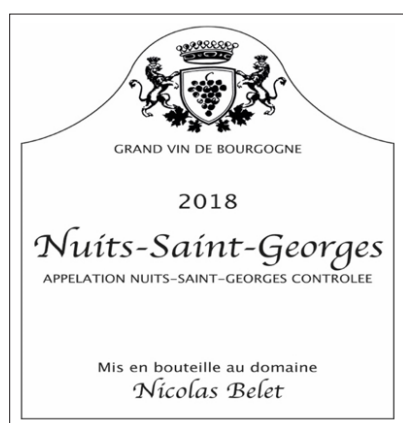


Figure 5 : Label Corresponding to the Wine Perceived as Being of the Highest Quality by the Overall Sample and by Group 3

Hypothesis 2 is therefore supported. These findings demonstrate that a distinct consumer segment exists for labels that do not incorporate the full set of category-specific visual codes, even within a highly traditional appellation such as Nuits-Saint-Georges.

Limitations, Conclusion and Managerial Implications

The main limitation of this research lies in the use of a single consumption occasion: an enhanced meal shared with friends or family. It might have been worthwhile to test a less risky consumption context, although Celhay and Passebois (2011) point out that the most typical labels are also predominantly selected for the least risky consumption occasions. Furthermore, a larger sample that was more representative of the French population would have enabled findings with greater external validity.

This research identified three groups of consumers that differ in the importance they attach to the visual codes displayed on a wine label. These findings reject Hypothesis H1 and support Hypothesis H2, since they demonstrate that producers from a traditional appellation such as Nuits-Saint-Georges can differentiate themselves by innovating in the shape of the label and thus moving beyond established category-specific visual codes. Indeed, whether through a diamond-shaped label (preferred by 24% of the sample) or a vertically oriented rectangle with a rounded top (preferred by 53% of the sample), an original shape may serve as a significant cue of quality. Moreover, it is noteworthy that participants in Group 1 were not influenced by the implicit regional anchoring conveyed by the illustration.

This finding suggests that consumers do not necessarily seek conformity with specific regional codes but instead favour visual effectiveness based on clarity, readability, and graphic consistency. It confirms that the graphic attributes of a label can transcend local traditions and play a decisive role in perceived quality by activating powerful cognitive mechanisms.

The visual attributes of a wine label therefore constitute strategic levers that directly influence product perception. These visual codes, whose effectiveness has been widely demonstrated in the literature [16,29], are rooted in reassuring traditions while simultaneously allowing room for carefully managed modernity [30].

An effective wine label is therefore one that successfully combines tradition and modernity, clarity and aesthetic appeal, while mobilising the appropriate visual cues to activate the desired cognitive and emotional responses. Consequently, the label should be regarded as a fully-fledged communication tool capable of capturing consumers' attention and conveying a promise of quality. In a highly competitive marketplace, mastering these visual elements is an essential prerequisite for differentiation and commercial success.

In a subsequent article, we will investigate the influence of variables such as consumer involvement and expertise in order to explain the observed differences in wine quality perceptions derived from label design.

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