



6th AWBR International Conference
9 – 10 June 2011
Bordeaux Management School – BEM – France

Telepresence and Terroir: The Interplay among Regional Information Elements on Consumer Evaluations

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Abstract

◦ **Purpose**: *The research examines variations made by the presentation of terroir information on consumer reactions to wines.*

◦ **Design/methodology/approach**: *An experimental design manipulates the presentation of information across two information styles (detailed versus casual), two levels of telepresence (explicit versus nonexplicit) and two places of origin (France versus Oregon).*

◦ **Findings**: *The results suggest multiple interactions between terroir descriptions, telepresence and wine origin. Detailed information benefits wines from Oregon more than wines from France. Similarly, explicit statements of telepresence also aid wines from Oregon more than wines from France. These results are qualified by a main effect indicating preference for French wines overall and a significant covariate effect in the form of wine knowledge.*

◦ **Practical implications**: *The research assists in designing wine labels that present the terroir in a manner that conveys relevant and valuable information to consumers. By contrasting new and old-world wine regions, the results are applicable internationally.*

Key words: Terroir, Telepresence, Origin Effects

1. LITERATURE REVIEW

Perhaps no product beyond tourism itself is more defined by place than wine. Even the earliest product brands identified the origins of wine, from Thasos in early Hellenistic Greece (Nevett and Nevett, 1994). Regional designations have played a key role in the branding of many wines throughout history and to this day (Viot and Passebois-Ducros, 2010). Additionally, the wine tourism industry tends to capitalize on the regional meanings of wine and the desire by consumers to transport themselves to the actual place of origin of the wines they consume and value most (Cohen and Livnat, 2009; Kunc, 2009).

Wine is among the products that have the potential for consumers to transport themselves to another place. For example, a rosé from Provence on a warm spring day can take the consumer right to a balcony overlooking the Mediterranean. Telepresence is the degree to which an environment or communication medium allows one the benefits of experiencing an environment without physically being in that environment (Mollen and Wilson, 2010). The telepresence effect occurs due to heightened involvement which manifests itself in the extreme in a state of flow (Mollen and Wilson, 2010), which is a hedonic state. In a wine context, a label can propose telepresence as a potential benefit by giving cues that strongly identify a region or by explicitly stating that consumption “takes one” to the region of origin.

Traditionally, old-world wine business strategy places a particular emphasis on a wine’s terroir (Hervé and Couderc, 2006). Applied primarily to food and wine products, terroir is a French term used in the definition of Appellation d’Origine Contrôlée (AOC) classifications. This AOC designation serves to identify products as having territorial origin and conforming to specific production rules that render them distinctive in character (Barham, 2003). Terroir refers to “various ethnological, sociological, and cultural meanings of a geographical place of origin, which collectively refer to identity and memory. Terroir has both mythical and cultural features [...]” (Vaudour, 2002, p. 120). How consumers use the meaning of the word terroir to qualify products has been shown to depend on their level of involvement. Santos, Blanco, Fernandez (2006) show that as level of wine involvement increases, consumers perceive more enjoyment and even a sense of escapism when wines contain terroir attributes and descriptors.

Marketing research in general offers results contrasting the presentation styles of food product information on labels and demonstrates that consumers learn different beliefs and have differing evaluations and behavior when objective product information is presented in complex as opposed to colloquial terms (Levy, Fein and Schucker 1996). Therefore detailed descriptions of terroir can transport consumers as well as help consumers decipher wine labels.

Thus, this research contributes by examining how limited versus elaborate descriptions of a wine’s terroir influence consumer evaluations across new and old world wine regions. Theoretically, the research adds to existing research regarding the ways consumers process label information and how they react to wine origins. It also introduces the concept of telepresence as a potential variable that can shape consumers’ evaluations and value perceptions of wine consumption.

2. RESEARCH QUESTIONS

Label content influences consumers’ value expectations and choice behavior (Kozup, Burton, Creyer, 2001). However, the style of presentation may be just as important as the actual content of the information. This may be particularly true for products with high degrees of

experience properties or for products for which actual information is considered difficult to obtain (Perrouy, d'Hauteville, Lockshin, 2006). For example for food, extracting label information to enhance the utility of a choice can prove difficult and ambiguous. Simpler labels and descriptors such as “low-fat” on food products convey information about the actual fat content of a food product effectively. However, that same term causes consumers to distort the appropriate portion size and can cause overweight consumers to make worse food choices thus decrease the utilitarian value from the consumption experience (Wansink and Chandon, 2006).

Generally, researchers consider the attributes of food products included on labels as central cues, thus helping consumers make appropriate choices (Rimal, 2005). However, if one presents the information too technically, many consumers may not be able to integrate the information accurately into a meaningful decision calculus (Lambert, 1977). Consumer research indicates that complex and overly technical information can backfire. For instance, detailed numerical information about product contents reduces consumers' abilities to use that information effectively (Levy, Fein and Schucker, 1996). Modern product labels often employ terms such as “smart,” “sensible,” and “healthy” rather than providing detailed breakdowns beyond the nutritional label (Berming, Chouinard and McChinskey, 2008). While detailed information can offer more substance than style, some consumers cannot process the detailed information because of lack of knowledge. Thus consumers may be impressed by technical descriptions and use such information as a peripheral cue to persuasion (Sparks and Areni, 2008).

Wines can be associated with certain personality traits, often related to the cultural origin of the wine. For example, consumers see French wines as sophisticated and prestigious, thus offering value for novice and expert consumers alike (Overby, Gardial and Woodruff, 2004). In contrast, wines from the new world (i.e. USA, Chile, New Zealand) have yet to earn these qualities (Guidry, et al. 2009). However, all consumers, novices and experts, rely heavily on region information when making wine selections (Johnson and Bruwer, 2007). Thus, what differences can be expected between the uses of technical versus summary (or colloquial) information? Given that few consumers can actually process detailed information about a terroir (soil content, elevation, etc.), a more detailed description should help in making a wine seem more sophisticated or complex, particularly for relatively unknown wines.

RQ1: How does the use of detailed technical versus casual summary descriptions of terroir influence consumer value expectations and willingness to pay among new and old world wines?

In a wine context, choice often involves matching a wine to an occasion such as matching the right wine with the right food. Alternatively, consumers also base wine selection on the pure enjoyment that consumption will bring. In this way, consumers have both utilitarian and hedonic value expectations of the wines they buy. While detailed information should enhance the utilitarian value expectations by allowing a more accurate choice, hedonic value expectations for the wine may be created using telepresence. In addition, consumers' overall impression of the wine can be measured by their willingness to pay (WTP) (Chao, 1993).

RQ2: How does the use of telepresence work in conjunction with terroir information to influence consumer value expectations and willingness to pay among new and old world wines?

3. METHODOLOGY

A 2 X 2 X 2 between subjects experimental design was implemented. The first experimental variable manipulates the terroir description across two levels: technical and detailed versus casual and summary style. The technical condition includes the precise elevation, soil composition, average temperatures during the growing season, precise longitude and latitude. The casual style describes the same terroir by using the color of the soil and simple adjectives describing the terroir such as sunny, cool, high altitude, and so on. The second experimental variable is the wine region. Two regions were selected based on places growing the same grape at approximately the same latitude (Willamette Valley in Oregon and the Côte de Nuits in France). Finally, the third experimental variable operationalizes telepresence. In the high telepresence condition, subjects were exposed to a label that included a description of the wine as “No other wine transports the drinker to _____ like this one.” We took the wording from an actual bottle of French wine. In the low telepresence condition, substitution wording was used that indicated that the wine was just typical of the region.

The experiment was distributed to a convenience sample of consumers from the community of a Southern US university via an online survey tool. In all, 118 consumers responded ranging in age from 20 to 71; 112 of these subjects passed the screening and timing tests and are included in the final data set. The screening questions made sure the subject paid at least a rudimentary amount of attention to the description. For example, if a subject named Spain as the source of the wine, they were deleted. Also, if a subject took less than 15 seconds to view the description, they were deleted. Thirty-four percent of subjects are male and 62 percent are either MBA or undergraduate business students. Three items assessed subjects' self-reported knowledge about wine and cuisine (coefficient $\alpha = .81$). The results indicate a mean score of 53.5/100 ranging from a low of 42.3 to a high 64.5 suggesting a sample with modest category knowledge.

The measures include multiple item scales for utilitarian value expectation and hedonic value expectation and a single item indicating WTP (how much would you be willing to pay for a bottle of this wine?). The utilitarian value and hedonic value items used were adjective descriptors taken from the personal shopping value scale (Babin, Darden and Griffin 1994). Subjects rated how well the following terms describe the wine: reliable, successful, useful and versatile for utilitarian value expectation (coefficient $\alpha = .79$) and exciting, fun, engrossing, adventurous and unique (coefficient $\alpha = .90$) for the hedonic value. Subjects rated the wines on a 0 to 100 sliding scale indicating how well each adjective described the particular wine, thus reporting a score for utilitarian value and hedonic value expectation, respectively. A composite for each value expectation dimension was created by summing subject responses for each set of adjectives. Subjective wine knowledge was assessed using a single item in which subjects indicated how much they believed they knew about wine relative to their peers using a 0 (not very much) to 100 (much more than most) point scale. In addition, manipulation checks included a single 5 point scale in which subjects indicated how technical they believed the information to be, a single item in which they identified the wine as from Oregon, France or Spain (included to make match more difficult), and a final item asking whether or not the label stated that the wine transported the drinker to the place of origin.

All of the manipulation checks were successful. An independent samples t-test suggests a significant difference ($t = 5.94, p < .001$) in how technical the information seemed to be with subjects in the detailed condition reporting a mean of 4.52 on the five point scale and subjects in the casual condition reporting a mean of 3.07. A cross-classification of

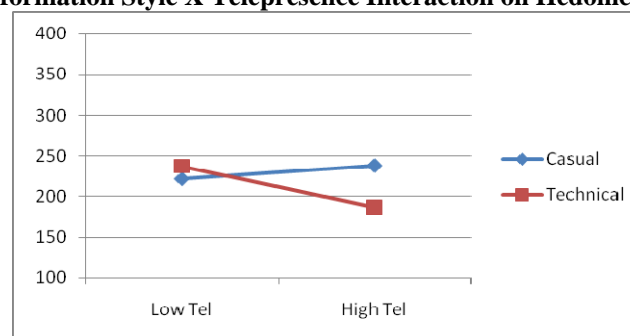
subjects on the wine origin shows that subjects were able to correctly identify the wine's origin ($\chi_{(2)}^2 = 88.8$, $p < .001$). Three subjects identifying Spain as the wine's origin were deleted from the analysis. Similarly, the cross-classification of the telepresence item suggests that subjects in the high telepresence condition were more likely to state that the wine included an explicit message of telepresence than were other subjects ($\chi_{(1)}^2 = 4.29$, $p < .05$). Although this supports the manipulation, the effect is not as strong as it might otherwise be because just over half of the subjects in the low telepresence condition also expressed a belief of telepresence.

4. RESULTS

The experimental data were analyzed using the General Linear Models procedure (GLM). A multivariate analysis of variance model predicting both hedonic and utilitarian value expectation was employed given the high degree of correlation between the two dimensions. The multivariate results suggest significant effects on both dependent variables. Thus, follow-up univariate analyses were made to interpret these effects in detail.

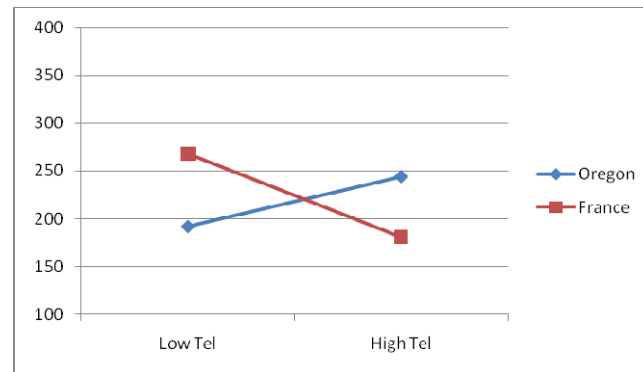
The univariate model results for hedonic value expectations yields a significant overall model $F_{(8,96)}$ of 2.96 ($p < .01$). Subjective wine expertise, included as a control variable, produced a significant effect ($b = .93$, $F = 5.36$, $p < .05$) suggesting that greater expertise is associated with higher hedonic value expectations. No significant main effects are found. In contrast, the model exhibits two significant two-way interactions. The telepresence by information style yields a significant effect ($F = 11.76$; $p < .001$). Figure 1 displays the effect graphically to aid in interpretation. A casual label description is associated with relatively high hedonic value expectations when an explicit message of telepresence is included (in the high telepresence condition hedonic value is 238.0 for casual versus 187.1 for technical). However, the effect is reversed when the information includes no explicit mention of telepresence. In the low telepresence condition, a casual description yields lower hedonic value expectation (222.0) than does technical information (237.5). The combination of technical information with telepresence produces significantly lower hedonic value expectations than all other conditions.

Figure 1. The Information Style X Telepresence Interaction on Hedonic Value Expectation



The origin by telepresence interaction is significant at the .1 level ($F = 2.68$). Including telepresence on the label is associated with relatively high hedonic value expectations for the wine when the label describes a wine from Oregon (244.0 versus 191.6 in the no telepresence condition). In contrast, the explicit mention of telepresence lowers hedonic value expectations in the French wine condition (181.1 versus 267.9 in the high and low telepresence conditions, respectively). Figure 2 displays the effect graphically.

Figure 2. The Telepresence by Wine Origin Interaction on Hedonic Value Expectation



The wine region by telepresence interaction significantly affects utilitarian value expectations ($F = 5.99$, $p < .05$). In a pattern similar to that shown for hedonic value expectation, for the wine from Oregon, low telepresence condition produces relatively low utilitarian value expectations (176.0) compared to the high telepresence condition (209.9). Conversely, subjects in the French wine condition report higher utilitarian value expectations in the low telepresence condition (220.2) as opposed to the high telepresence condition (181.6).

In addition to the effects on value expectations, an additional GLM analysis of variance model examined how the experimental variables and the knowledge control variable shaped price perceptions in the form of WTP. The overall model is significant as indicated by the model $F_{(8,96)}$ of 2.49 ($p < .05$). Three individual effects are statistically significant. First, the subjective knowledge control variable is significant and negative ($b = -0.09$; $p < .10$) suggesting that the more knowledgeable wine consumers were willing to pay less than less knowledgeable wine consumers. Second, the wine origin experimental variable explained a significant main effect ($F_{(1,96)} = 8.02$; $p < .001$) with subjects in the French wine condition willing to pay more (30.83) than subjects in the Oregon condition (23.50). Third, the description style by origin interaction is significant ($F_{(1,96)} = 4.92$; $p < .05$). In the French wine condition, subjects in the technical description condition report lower WTP (27.10) than in the casual description condition (34.55). Conversely, for Oregon wines, the use of technical description leads to greater WTP (25.64) than does the use of casual description (21.34). Thus, a technical description is associated with more favorable evaluations (as captured by WTP) only in the Oregon condition.

5. DISCUSSION

The results provide insight into the style of labeling and in particular into different ways of conveying the terroir or regional origins of wines in general. The results also incorporate the notion of telepresence in shaping consumer perceptions. The model results suggest that each of the experimental variables displays significant effects on consumer value expectations and/or WTP while controlling for subjective wine expertise statistically. In particular, several two-way interactions suggest interesting effects. Description style interacted with the statement of telepresence in a manner that suggests that the use of technical information may conflict with an explicit statement of telepresence. Perhaps these two labeling tactics represent conflicting approaches to selling wine. Detailed technical information represents a far more calculative manner with which to frame a value proposition for a wine and combining it with the more emotive notion of telepresence serves to lower hedonic value expectations. In contrast, casual information is more consistent with a statement of telepresence.

Similarly, wine origin interacted with telepresence to affect both value expectation dimensions. An explicit statement of telepresence improves both hedonic and utilitarian value expectations only in the Oregon condition. At first, this effect seems counter-intuitive with the notion of traveling to France versus Oregon (all participants were from the USA). However, the French wine may already come across as sophisticated and the statement of telepresence may not reinforce the technical quality perceptions of the wine. Also, perhaps some interplay with risk may be an issue given the higher price perceptions associated with the French wine. Another possibility points to a weakness in the telepresence manipulation. While the explicit statement of telepresence did create greater perceptions of telepresence, the counter condition may have contained information that reinforced the typical nature of the wine and this may have benefited the French wines, in particular given the stereotypical notion that French wines are worthier than other wines.

Finally, the use of detailed technical information appears to increase consumers' WTP only among wines from Oregon. Given the strong cultural meaning that are typically associated to French wines by American consumers, the use of detailed information may come across as consistent with French wine marketing tactics, but may not do anything to improve the overall WTP. In contrast, wines from less familiar new world wine regions like Oregon, may have more to gain by including detailed information even if consumers cannot process this information in detail, as it may give the wine more credibility and sophistication. In this manner, the technical information may serve as a peripheral cue which improves its worth. In other words, the potential upside from using technical information is greater for wines from Oregon than for wines from France.

6. MANAGERIAL IMPLICATIONS AND FUTURE RESEARCH

For now, the practical implications point toward the use of telepresence and detailed terroir information among new world wines as opposed to old world wines. The more technical a wine label is for a new world wine, the more consumers are likely to appreciate the wine and have augmented value perceptions of it. Technical descriptions may add credibility to new world wines.

Additionally, telepresence adds additional value to new world wines – perhaps the idea of discovering new wine territory appeals to consumers. Old world wines and specifically French wines have always been a reference and thus highly publicized in the media. The idea of telepresence may not be as impactful on consumers because they have pre-established perceptions and images of French wines. French Chateaux and iconic domains are prevalent in media. Furthermore, the complexity of French geography as well as the number and scope of French wine regions may naturally lead consumers to seek more information about the product so as to understand it better. New world regions are perhaps perceived as easier to situate and thus to imagine their geography. For example, consumers may have problems situating the Clos Saint-Jacques in Gevrey-Chambertin in the Côte de Nuits but find it easier to place a McMinnville Pinot Noir in McMinnville in Oregon. As such, wine marketers may want to carefully consider the image and publicity surrounding the wine region before using telepresence as a wine label attribute.

Overall the results are suggestive of avenues for further research that involve a more detailed examination of how these effects actually take place and which processes are at play. Furthermore, a more thorough examination of telepresence and the ways it can be manipulated is in order.

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