How Do Signals Shape Wine Shoppers Value Perception?

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Abstract (250 words):

This research examines the resiliency of the impact of objective wine ratings on consumer value perceptions in light of influences from the regional origins of the wine and the business orientation of the winery. The research examines authenticity as a facilitating construct linking signal cues such as ratings and their interactions with region of origin and business orientation with value in the form of both get (hedonic value) and give (what you pay). The results support higher value with higher ratings. However, this is qualified by an interaction such that wines from a country highly associated with wine production (France) are affected more by low ratings than a new wine producing country and by the impact of authenticity as a mediator of rating's effect on hedonic value.

Purpose

Examine the effect of ratings across varying conditions.

Design/methodology/approach

Standard between subject experimental design.

Findings

Main effects of ratings on both value aspects, give and get, and rating X country of origin interactions on authenticity and hedonic value. In addition, a rating X business orientation interaction is observed on willingness to pay. Authenticity displays significant relationships consistent with a mediating role between various signals and perceived value.

Practical implications (if applicable)

Ratings seem to influence all wines in terms of perceptions of authenticity and hedonic value. French wines seem to be most affected by low ratings because low ratings lower authenticity. Consumers expect a certain level of quality from French wines and when a cue signals that quality is not there, a contrast effect lowers consumer perceptions significantly. Countries who shun the heritage of a terroir may also be perceived well if the wines produce very high ratings.

Key words: Authenticity, country of origin, rating, willingness to pay, hedonic value

1. INTRODUCTION

Wine is epitomizes experiential consumption. Although wine must be experienced to extract value, consumers of all knowledge levels use various cues to try to ascertain the value resulting from a given wine's consumption during the search process. Prior to purchasing any good or service, consumers engage in an evaluation process characterized by the assessment of a variety of different attributes associated with desirable factors, such as quality, taste, and feel. While some products are more easily appraised, other products have shown to be more challenging with regard to pre- and even post-consumption evaluation (Nelson, 1970).

In the absence of sufficient knowledge, customers therefore rely on other means to assess the quality and determining attributes of a product as part of the decision making process. As defined by Spence (1973), signal theory provides one explanation of consumers' evaluative behavior by examining signals of a product or a service within their consideration set. These signals represent credible information about unobservable quality characteristics that can be appraised via different strategies such as firm reputation, premium price, or brand. One of the most common signals provided by sellers is the price of a product or service (Dutta et al., 2007). However, prior studies have shown that the relation between quality and price is relatively weak leading to the conclusion that higher prices tend to be a poor signal of higher quality (Gerstner, 1985). As a result, consumers need additional quality indicators to distinguish between potential alternatives. Research has identified third-party evaluation as effective signal for consumers to infer quality of a product (Dean and Lang, 2008).

Here, the lack of personal experience or product knowledge is complemented by product quality information provided by a third party (De Maeyer and Estelami, 2011). According to Akdeniz et al. (2013), the perceived quality of a product is judged as higher when supported by a third-party rating rather than by the individual alone. A frequently applied signal of a high quality rating issued by a third party is an award, ranging from J.D. Power and Associated Award to Malcom Baldridge Quality Award. The award is offered by a supposedly independent organization to the winner of a competition (Dean and Lang, 2008). This competition can have follow several different formats, such as a product ranking against competing products in its class or a "seal" of approval within a certain category (Dean and Biswas, 2001). Within the wine industry, the most commonly referenced wine rating system is the Parker grading system published by American wine critic Robert Parker (Wine Advocate) and ratings published in the Wine Spectator (Hadj Ali and Nauges, 2007). As stated by Hadj Ali et al. (2008), the Parker grading system is based on a 50-100 point scale, which differentiates between single scores for mature wines and grade intervals for *en primeur* wines. The quantitative rating component is complimented by a verbal tasting note that contains an overall description of the wine. Prior research studies have validated the relationship between Parker rating scores and price sensitivity, namely that a higher rating results in a higher willingness to pay (Hadj Ali et al., 2008). This research looks at how these "objective wine ratings" serve as cues along with regional information to shape consumers' expectations of value associated with the wine's consumption.

2. BACKGROUND

2.1 Product Cue – Country of Origin

Certain products are difficult to evaluate through advertising and label information leading consumers to rely on product cues that infer quality of the product's actual attributes (Olsen, 1973). Wine is one of these products that lack easily comparable attributes (Schiefer and Fischer, 2008), which motivates consumers to seek out supplementary cues, such as country or region the wine was produced in or overall wine rating. While country of origin relates to extrinsic cues or image variables, aroma or taste of the wine are recognized as intrinsic cues or actual attributes. The lack of ability to evaluate a product based on intrinsic cues prompts consumers to rely on extrinsic cues to form quality perceptions about a product (Olsen, 1973). Thus, inexperienced consumers will rely more heavily on cues such as country of origin and wine ratings when assessing overall wine quality.

The importance of country-of-origin, on in wine markets regional, effects is based on the consumers' perceptions of the country or region's image. As defined by Roth and Romeo (1992), country image is influenced by prior perceptions of the market strength or weaknesses and production capabilities displayed by the country. These a priori perceptions in turn determine the overall consumer perception of the product in question. With regard to conceptualization of the construct, country image is represented by a set of general beliefs about representative products of the country and other country characteristics including economic environment, political maturity, and level of industrialization (Bannister and Saunders, 1978). Considering that a product associated with a country that has a favorable image not only results in higher perceived quality, but also lower perceived risk leading to increased purchase intention, the inclusion of country-of-origin can be a valuable attribute for consumers that have lack knowledge or experience with a certain wine.

The classification of a product based on the described attributes can be linked to categorization theory, which suggests the existence of a category structure that prompts individuals to group together objects and events to improve information processing (Cohen and Basu, 1987). These categories contain details of various events or objects that are summarized by exemplars that serve as the single best representative of a category. Considering wine as a product category, the specific country, French wines serve as the exemplar based on country-of-origin. Wine also is the product most associated with France. Other countries also may be prototypical of wine producing areas, such as Italy. When people think of the United States, wine is not one of the first products that comes to mind.

Old-world countries such as France, Italy, and Germany are perceived as traditional wine producing regions (Spielmann and Babin, 2011). In turn, wine is also one of the most prominent products from each of these countries. Not only is Italy a country most associated with wine, but wine is one of the best known products from the country. The appropriate location and climate necessary to produce good fruit in addition to manufacturing know-how contribute to the strong association between these old-world countries and quality wine.

In contrast, new-world countries with regard to wine lack this strong association making them less likely to be the exemplar of wine-producing countries. This new-world country category includes examples such as Australia, New Zealand, and South Africa, which are not perceived as being known for producing wine as an exemplar product. As such, consumers are more likely to attribute a higher quality and a more positively overall evaluation to wines produced by oldworld countries rather than new-world countries. This effect has been validated in previous research studies. Guidry et al. (2009) observed a higher perceived quality rating for French (oldworld country) wine than for Texas (new-world country) wine, even though both tasted wines were actually identical. In addition, the consumer willingness to pay was higher for the assumed French wine than for the Texas wine. Arias-Bolzmann et al. (2003) confirm the positive effect of perceived quality and traditional wine producing countries on the consumers' willingness to pay. The findings of their study concluded that differences in country of origin and quality is not only recognized by the market, but also significantly influences wine prices with a price premium being awarded to French wines. The previous discussion leads to the following research question:

RQ1: How do region of origin and third-party ratings together influence value perceptions?

2.2 Authenticity

The notion of authenticity has been a widely discussed phenomenon within the wine literature (Beverland and Luxton, 2005; Speilmann and Babin, 2011). While there has been a differentiation between iconic and indexical authenticity (Grayson and Martinec, 2004), the current paper focuses on the overall effect of authenticity on consumer perception. Specifically, prior research has validated the increase the perception of the wine's authenticity if the wine is related to a specific place. Consistent with categorization theory, objects that align with one's exemplar or standard of a category will be perceived as authentic. Based on the previous discussion about country-of-origin effect and the notion of being an exemplar for wine producing countries, old-world regions belong to a consumer's preexisting template for wines. In contrast, new-world regions are not likely used as a template for wine. New-world regions lacking the heritage necessary for high authenticity, old-world countries will be associated with a higher level of perceived authenticity because such wines correspond to the consumer's template for "true" wine.

Hedonic Value

The consumer's perception of value attributed to a product has been shown to significantly influence a variety of outcome measures, such as willingness to pay and repurchase intention. Specifically hedonic value has been suggested to positively contributed to the overall shopping experience (Babin et al. 1994). Here, hedonic value is associated with be a more subjective and personal component of value and reflects an emotional worth attached to the purchase experience. Most importantly, perceived enjoyment is a hedonic benefit often linked to the consumption of products. Especially wine has been identified as being one of the most hedonic consumer experiences.

Value, a function of benefits and sacrifices, is captured in two ways in this study (Babin and Harris 2013). The get component is represented by the perceived hedonic value associated with consumption of the wine. Subjects rated hedonic value using a five-item adjective description scale derived from the personal shopping value hedonic items (Babin, Darden and Griffin, 1994). Authenticity (alpha = 0.80). Perceived authenticity was assessed with three 10-point items asking subjects to use the adjectives, authentic, worthy of the name and connected to place (alpha = 0.78). The give component is captured by the consumer's willingness to pay; price representing the sacrifice aspect of value.

3. RESEARCH METHODS

Following previous experimental studies (i.e., Spielmann and Babin, 2011), a 2 X 2 X 2 between subjects experimental design provides data for the study. The two experimental variables of most interest here are country of origin (France and Australia) and the wine ratings from Wine Advocate and Wine Spectator (average 95 in high condition and 80 in low condition). In addition, the research explored the orientation of the winery by manipulating it across two levels (market oriented – the winery changes with today's trends in the market place and product oriented – the wine has a history of producing traditional wines that do not change with time). All subjects were first exposed to a warm-up wine (Italian wine with 91 point average ratings) and asked to rate it for willingness to pay and the expected hedonic value from drinking the wine. Following the warm-up, subjects were exposed to the target wine. All information was presented as label information (front and rear). Both objective and subjective wine knowledge also was assessed. No name for the wine was provided but all information other than that comprising the manipulations was held constant.

A total of 71 subjects from a U.S. consumer panel provided data for the experiment. Multi-item scales were included to measure perceived authenticity and hedonic value expected from consumption. Willingness to pay (WTP) was measured with a single slider scale ranging from \$0 US to \$100 US per bottle. The WTP dependent variable was computed by subtracting the price for the warm-up wine from the target wine as a way of controlling for individual price expectation variation from consumer to consumer.



Figure I: Conceptual Model

3. RESULTS

3.1 Authenticity Results

Multiple full-factorial ANOVAs Authenticity Results. The first examines the effects of the experimental variables on Authenticity as a dependent measure. All analyses were conducted using wine knowledge as a covariate. Surprisingly, wine knowledge had little effect on any dependent measure nor did it interact with experimental variables. Thus, the results reported below do not include effects due to wine knowledge (objective or subjective).

The overall model F = 2.96 (p = .007) is significant. Looking more closely, neither country (p = 0.13) nor orientation (p = 0.90) exhibit significant main effects, but wine ratings does affect perceived authenticity significantly (p = 0.005). Moreover, the only significant interaction is the country X rating interaction (p = 0.003). Table 1 displays the means by country and rating conditions. Figure 2 displays the results graphically. The results show the significant main effect with higher rated wines displaying higher perceived authenticity scores (19.0) as opposed to lower rated wines (14.5). In addition, the interaction suggests a much greater difference for the ratings in the French wine condition (French-high 20.2, French-low 11.0 versus Australia-high 17.8 versus Australia-low 18.0). The results suggest that wine ratings do influence

Rating	Country		Total
	Australia	France	
High	17.8	20.2	19.0
Low	18.0	11.0	14.5
Total	17.9	15.6	16.8

authenticity ratings and seem to create a greater difference for French wines than Australian wines.

Table I: Authenticity Means by Condition



Figure II: Authenticity Means by Condition

3.2 Hedonic Value Results

The overall model predicting hedonic value, including perceived authenticity as a covariate, yields a model F = 4.11 (p = .001), which is statistically significant. Looking more closely, country (p = 0.05) and rating (p=0.01) both exhibit significant main effects, but winery orientation does not (p = 0.66). Moreover, the only significant interaction once again is the country X rating interaction (p = 0.001). Table 2 displays the means by country and rating conditions. Figure 2 displays the results graphically. The results show the significant main effect with higher rated wines displaying higher perceived hedonic value scores (40.7) as opposed to lower rated wines (30.0). In addition, the interaction suggests a much greater difference for the ratings in the French wine condition (French-high 43.1, French-low 21.6)

versus Australia-high 38.3 versus Australia-low 38.5). The results suggest that wine ratings do influence hedonic value expectations and seem to create a greater difference for French wines than Australian wines. Figure 3 displays the results graphically. Additionally, authenticity provided a significant and positive influence on hedonic value expectations (b = 1.79, t = 16.3, p < .001).

Rating	Country		Total
	Australia	France	
High	38.3	43.1	40.7
Low	38.5	21.6	30.0
Total	38.4	32.3	35





Figure III: HV Means by Condition

3.3 Price Difference Results

The full-factorial ANCOVA model including authenticity as a covariate significantly predicts WTP (F = 6.9, p < .001). The only significant main effect is wine ratings (p < .001). In this case, the only significant interaction is the two-way wine rating by orientation interaction (0.05). Table 3 and Figure 4 displays the means by condition. As expected, the higher ratings yield higher WTP (+7.9 in the high rating condition versus -7.7 in the low rating condition). The interaction suggests a greater difference in WTP in the market oriented condition (11.9 versus - 8.5) as opposed to the product oriented condition (3.9 versus -5.7). The country by rating interaction is not significant, nor is the covariate for authenticity (b = 0.20, t = 1.00, ns). The results suggest that ratings matter, particularly when a winery is market oriented.

Rating	Orientation		Total
	Market	Product (Terroir)	
High	11.9	3.9	8.3
Low	-8.5	-5.8	-7.1
Total	1.7	-0.9	0.7

Table III: Price Difference Means by Condition



Figure IV: Price Difference Means by Condition

4. DISCUSSION

The results speak to authenticity and the value consumers assign to a wine – at least from a monetary perspective. Although this simple study begins to explore the potentially different roles played by authenticity across different categories of wines, perhaps the key role of the research is in stimulating further discussion and research. Key findings from the study include:

• Further corroboration of the strength of the French wine stereotype among consumers – in this case new world wine consumers. One of the prices the exemplar plays is high

expectations. When those high expectations are not met (as in the case of low ratings for a French wine), the wine pays a price in perceived authenticity and in perceived hedonic value expectations.

- The important mediating role played by perceived authenticity in shaping value perceptions. Label presentation style affects perceived authenticity which in turn has a positive influence on perceived authenticity and hedonic value.
- Perceived authenticity does not influence WTP.
- For an avant-garde winery that is very market oriented, as we've seen in the case of many U.S. or Southern Hemisphere wines, the ratings matter a great deal. WTP is highest for a market oriented winery that follows trends and lowest for the market oriented winery that gets low ratings. The tradition oriented winery (true to the terroir) sees less variation with ratings.

5. CONCLUSION

One potential limitation the current study is the application of only two ratings for each wine. Also, the implemented measures included a scenario what prompted participants to imagine what the wine would taste like and thus did not include actual consumption of the product. Therefore, assessment of value was limited to imagining the wine attributes. Future studies should include actual sampling of the wine to make more conclusive inferences on perceived value.

The documented effect of ratings on overall product evaluation is proposed to be expandable to other product categories, such as whiskey or wine. The nature of the products predispose consumers to rely on additional quality indicators as part of the decision making process leading to the suggestion that the influence of ratings should be broaden to additional product categories.

These exploratory results require additional studies to extend the results beyond French and Australian wines and to perhaps better represent the orientation of the winery.

References

- Akdeniz, B., Calantone, R. and Voorhees, C. (2013), "Effectiveness of marketing cues on consumer perceptions of quality: the moderating roles of brand reputation and third-party information," *Psychology & Marketing*, Vol. 30 No. 1, pp. 76-89.
- Arias-Bolzmann, L., Sak, O., Musalem, A., Lodish, L., Baez, R. and De Sousa, L. J. (2003), "Wine pricing: the influence of country of origin, variety, and wine magazine ratings," *International Journal of Wine Marketing*, Vol. 15 No. 2, pp. 47-57.
- Babin, B.J., Darden, W. and Griffin, M. (1994), "Work and/or fun: measuring hedonic and utilitarian shopping value," *Journal of Consumer Research*, Vol. 20 No. 4, pp. 644-656.
- Babin, B.J., Harris, E. (2013), CB: A Value Framework, Cengage, Mason, OH.
- Bannister, J. and Saunders, J. (1978), "UK Consumers' attitudes towards imports: the measurement of national stereotype image", *European Journal of Marketing*, Vol. 12 No. 8, pp. 562-571.
- Cohen, J. B. and Basu, K. (1987), "Alternative models of categorization: toward a contingent processing framework", *Journal of Consumer Research*, Vol. 13 No. 4, pp. 455-472.
- Cuellar, S. and Claps, M. (2013), "Differential effects of brand, ratings and region on willingness to pay: a hedonic price approach", *Journal of Wine Research*, Vol. 24 No. 2, pp. 138-155.
- Dean, D. and Biswas, A. (2001), "Third-party organization endorsement of products: an advertising cue affecting consumer prepurchase evaluation of goods and services", *Journal of Advertising*, Vol. 30 No. 4, pp. 41-57.
- Dean, D. H. and Lang J. M. (2008), "Comparing three signals of service quality", *Journal of Services Marketing*, Vol. 22 No. 1, pp. 48-58.
- De Maeyer, P. and Estelami, H. (2011), "Consumer perceptions of third party product quality ratings", *Journal of Business Research*, Vol. 64 No. 10, pp. 1067-1073.
- Dutta, S., Biswas, A. and Grewal, D. (2007), "Low price signal default: an empirical investigation of its consequences", *Journal of the Academy of Marketing Science*, Vol. 35 No. 1, pp. 76-88.
- Gerstner, E. (1985), "Do higher prices signal higher quality?", *Journal of Marketing Research*, Vol. 22 No. 2, pp. 209-215.
- Grayson, K. and Martinec, R. (2004), "Consumer perception of iconicity and indexicality and their influence on assessments of authentic market offerings", *Journal of Consumer Research*, Vol. 31, pp. 296-313.

- Hadj Ali, H., Lecocq, S. and Visser, M. (2008), "The impact of gurus: Parker grades and *en primeur* wine prices", *The Economic Journal*, Vo. 118, pp. F158-F173.
- Hadj Ali, H. and Nauges, C. (2007), "Reputation and quality effects in the pricing of experience goods: the case of *en primeur* wine", American Journal of Agriculture Economics, Vol. 89, pp. 91-103.
- Nelson, P. (1970), "Information and consumer behavior", Journal of Political Economy, Vol. 78 No. 2, pp. 311-329.
- Olsen, J. C. (1973), "Cue properties of price: literature review and theoretical considerations", paper presented at the meeting of the 83rd Annual Convention of the American Psychological Association, Montreal.
- Roth, M. S. and Romeo, J. B. (1992), "Matching product category and country image perceptions: a framework for managing country-of-origin effects", *Journal of International Business Studies*, Vol. 23 No. 3, pp. 477-497.
- Schiefer, J. and Fischer, C. (2008), "The gap between wine expert ratings and consumer preferences: Measures, determinants and marketing implications," International Journal of Wine Business Research, 20 (4), 335-351.
- Spence, M. (1973), "Job market signaling", *Quarterly Journal of Economics*, Vol 87 No. 3, pp. 355-374.
- Spielmann, N. and Babin, B. J. (2011), "Testing congruency effects between origin and producer", *International Journal of Wine Business Research*, Vol. 23, pp. 338-354.