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The impact of meal experiences and packaging on wine choices

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Abstract:

Purpose: We examine the moderating effect of the packaging on wine choices in the context of restaurant meal experiences. The meal experience is analysed using the Five Aspects Meal Model. We document correlative patterns between wine packaging, consumers' wine choice criteria and their meal experience.

Design/methodology/approach: We collect field data from four major French cities: Lille, Rennes, Paris and Lyon. Respondents may face 5 types of wine packaging (bottle, glass, carafe, can and PET bottle). We use multi-group analysis to measure the effect of packaging on wine choice, given the meal experience.

Findings: A more convivial meal experience is positively correlated with wine choices that are aligned with the host's recommendation. Other types of meal experiences lead to wine choices that give less consideration to the wine's origin. The moderating effect of packaging is validated but mostly depends on non-traditional packaging (PET and can).

Practical implications: Fast-food consumers seem to accept more easily non-traditional packaging like the PET bottle and can. For the producer side, the PET could be used in convivial context without any risk to dislike the others guest and it could use to discover a simple wine in an informal context. For the can packaging, the wine will be basic in regular occasions or occasions without pressure (simplicity and informal occasion).

Keywords: meal experience, wine choice, packaging, multi-group analysis

Restaurant customers often seek the proper way to associate wine with a particular dish. Since ancient times, wine has been recognized as an enhancer of food's taste and it does play a fundamental role in the enjoyment of the restaurant dining experience (Davis and Charters 2006). The goal of this research is to analyze, as part of the overall meal experience, the moderating effect of wine packaging on wine choices, in the context of restaurant meals.

Meal Experience and Wine Choice

The meal experience depends on its uniqueness. Unique meals are often associated with special events such as weddings, vacations, exotic settings, etc... In that context, consumers are motivated by a curiosity to discover new cooking, a sense of escape, the pleasure or memory of an extraordinary past meal experience. On the other hand, it is more often the case that people have an expedient meal experience and in that case, they focus more on convenience and quickness rather than pleasurable sensations (Hanefors and Mossberg 2003). A meal experience in which wine consumption takes place has an impact on the "emphasis that the consumer will give the various consumption practices" (Groves et al.2000). On the other hand, when the meal setting changes consumers' preferences for wine may change as well (Hersleth et al. 2003, Jaeger et al. 2009).

A meal setting stimulates the guest aesthetically, and this is the reason why many restaurant owners take this into account when they have understood that their restaurant is broadly speaking an "experience arena" (Westwood 2006). A meal setting naturally includes what the consumer does during the meal, like handling the bottle, the glass or any other sensory activity or rituals. Of course, it also includes interactions with other people and the general marketing environment. Hence, the meal experience includes not only the consumption of products (wines or beverages and dishes) but also the interaction between guests, waiters and the room where the experience takes place. The interaction of product, meeting people and the room create the atmosphere of the setting.

These various interactions have been codified and synthesized in the Five Aspects Meal Model (Gustafsson et al. 2004). When you are in restaurant, the meal experience is defined by an interaction of three aspects: the Design or others physical aspects of the place, the interactivity with other guests or the waitress (the meeting) and all the Products served. The meal takes place in a room, this interaction encompasses in an Atmosphere of the restaurant and the meal but also depends on rules, management resources that make possible the experience (Management Control System).

These interactions may help explain the error-avoidance behavior that many consumers exhibit when ordering a wine. Because of a tension between gathering information and self-representation (Ariely and Levay, 2000), a balance must be achieved between not making an adventurous choice that may turn out to be the wrong choice, and the need to showcase one's own knowledge of wine. Which behavior tends to dominate depends on whether it is business or private setting (Hansen et al.2005). During a business meal, the experience depends not only of the environment, the staff or the food but also on whether the business objectives are being achieved throughout the meal. Thus, business diners appear to require "wine selections that reflect security while an intimate dining experience is focused on creating a warm relationship with others" (Davis and Charters 2006).

Generally speaking, the experience varies depending on what is at stake during the event (Hall et al. 2001). The authors argue that the experience of dinner with friends reveals two values ("fun and enjoyment in life" and "being well respected") though the experience of dinner with family leads to a "warm relationship with others". The differences between these two settings reveal more or less the importance of wine attributes (Hall et al. 2001). The intrinsic attribute (taste) is most important for an intimate dinner, whereas the type of wine (red/white) is most important for a business event. A limitation of Hall et al.'s (2001) analysis is that they do not take into account restaurant attributes (i.e. sommelier and wine list) as criteria to analyze meal experience.

Another factor impacting the experience is a restaurant's reputation. "Famous" restaurants usually have complex wine lists. They call upon a sommelier's expertise for choosing wines or have trained

staff to guide consumers towards familiar wine or wine region (Richie, 2007). When the staff has little knowledge regarding the wines contained in the restaurant's list and the restaurant does not have a sommelier, guests typically choose more classic or house wines by analyzing price–quality relationships, confirm restaurant choice and make informed decisions for the other guests (Richie 2007).

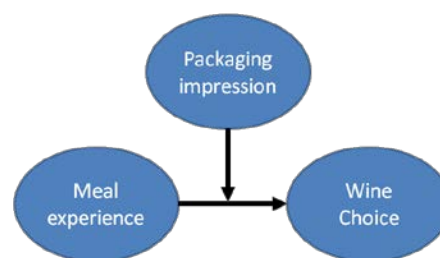
The wine list could help the guest to make the right choice (Lacey et al. 2009) because of the number of references, comments, (Berenguer et al. 2009). There are differences concerning the dimensions of the wine list but if you consider illustration and format size, there are very little differences between restaurants (Berenguer et al. 2009). Hence, packaging has got the same importance whatever the restaurant may be.

Package design is an "extremely influential medium when the purchase decision is made" but not in restaurant context (Orth 2008, Mueller et al. 2010). Hall et al. (2001) consider the packaging and label have minor impact across all the occasion.

In general, packaging generates impressions in the mind of consumers, which influence brand and/or product perception. If the packaging is not consistent with the wine's recognizable attributes and presumed quality, the wine's brand image could suffer as a result. For instance, it would be difficult for most customers to disassociate iconic Bordeaux wines from the classical Bordeaux bottle, because the packaging reflects the stylistic consistency of the wine and remains a true expression of place and identity (Beverland 2005).

Bag in Box packaging is often associated with a perceived wine freshness even if it has been opened for a while. But, consumers do not associate this type of packaging with a high quality product. Drinking wine from a bottle as opposed to a wine glass leads to different feelings and experiences (Spence and Gallace, 2011). When celebrating a special event at the restaurant, it appears natural to choose a packaging consistent with the event. Hall et al. (2001) argue that packaging and labels are most important for ritualized events such as an intimate dinner or a party. Hence, the packaging can moderate the meal and wine experiences. Indeed, when a guest judges that the packaging has low value, the meal experience will be perceived as average and the wine basic. In this article, we consider the moderating effect of packaging on wine choice criteria, given the meal experience. The expected logical interactions are shown in the following diagram (Figure 1).

Figure 1: The effect of packaging on wine choice criteria during a meal



Data Collection and Sample

We collect field data from four major French cities: Lille, Rennes, Paris and Lyon. Each data point is an onsite questionnaire filled by an individual respondent in any of these cities. The sample size is 400 with the following break-down per city (Lille: 102; Rennes: 100; Paris: 104 and Lyon: 94).

Our sample has the following demographic characteristics: men (57.5%), unmarried (45.3%), young (55,8% have less than 35 years), with an elevated level of education (54% have at least 3-year post-high school degree). They live in these cities or nearby cities of more than 100,000 inhabitants (68.4%) with an income of less than 30,000 euros for 51% of them. 39.1% of the sample consume

have begun consuming wine less than 3 years ago, and 34.7% between 3 years and 10 years ago. 45% order more than 10 times wine per year. They define themselves as amateurs (55.8%). They consume a fair amount of wine (58.6% consume wine often and rather often) and mainly red wine (69.5%). They mainly consume French wines: (58.5%) of Bordeaux, then Côtes of the Rhone (33.8%) and finally Burgundy (32.3%). 35.3% consume wines priced below 15 euros a bottle and 39.3% pay a price ranging between 15 and 20 euros.

The respondents were presented 5 packaging types (bottle, glass, carafe, can and PET bottle). The questionnaire includes a measure of packaging impressions with four possible values – (1) pleasing, (2) engaging, (3) reassuring and (4) prominent (Henderson et al., 2004). For the packaging impressions, we implement a factor analysis, and use the factorial scores for each packaging to define a binary variable that takes the values Low vs. High in terms of consumer impression. The questionnaire also included a measure of wine choice criteria applied in the context of restaurants (Cohen et al., 2009). The possible values were: (1) pleasure, (2) recommended by the waitress, (3) good adequacy with the meal, (4) tasted before, (5) suggestion on the menu, (6) suggestion by other guests, (7) availability by glass, (8) exploration, (9) wine grape, (10) appellation, (11) promotion on table, (12) availability by half bottle, (13) knowledgeable but not tasted, (14) special event, (15) pleasure for others, (16) price, (17) local wine, (18) color and (19) the season.

In order to draw up an operational scale for the meal experience, it is necessary to identify the main defining characteristics of a meal experience. Therefore, we also carried out open-ended interviews with three experts in the wine industry. These interviews enabled us to isolate fourteen categories of main reasons, which drive the type of experience sought out: (1) celebrate an event, (2) business meal, (3) meal with colleague, (4) with friends, (5) for the quality of the cooking, (6) for a moment of relaxation, (7) to save time, (8) to please the other, (9) for the aesthetics of the place, (10) in family, (11) with your spouse and without the children, (12) because you do not like to cook, (13) to escape and (14) to spend a convivial moment.

Methodology

First, in order to define the uni-dimensional character of the different constructs used in this article we performed an Exploratory Factor Analysis with a promax rotation. To measure the reliability of the constructs, we then used the more powerful Rho test (Jöreskog, 1971) with small sample and scale and limited number of items. Fornell and Larcker's (1981) procedure was used to verify the psychometric qualities of the scales used. Secondly, the impact of meal experience on wine choice criteria was tested using the EQS model (Bentler and Wu, 2002). With the aim of avoiding problems with multivariate normality, we applied a robust corrected method (Bentler and Wu, 2002) that corrects fit index and the corrected coefficients of the model. Thirdly, in order to test the moderating effect of packaging evaluation (bottle, glass, carafe, can and PET) on the model we carried out a multi-group analysis. To test measurement invariance (Steenkamp and Baumgartner, 1998), we analyze the configural invariance, metric variance, structural invariance, variance factor invariance and error variance invariance. We use Chi-square differences between the model with equal parameters in each group and the model with unequal parameters in each group.

Results

We present the factorial structure of meal experience in Table 1 and wine choice criteria in Table 2.

Table 1a: Rotated Matrix structure – meal experiences

You go to the restaurant for one moment of relaxation	.81		
You go to the restaurant to escape	.78		
You go to the restaurant to spend one convivial moment	.77		
You go to the restaurant with colleagues		.87	
You go to the restaurant for a business meal		.85	
You go to the restaurant with your family			.82
You go to the restaurant with your spouse and without the children			.78

Table 1b: convergent and discriminate validity

	ρ of joreskog	pvc	business	family
Conviviality	0.82	0.61		
Business	0.85	0.74	0.06	
Family	0.78	0.64	0.10	0.02

Three experiences are identified representing 67.5% of the variance. The first dimension describes *conviviality*, the second one *business meal*, and the third one *stepwise family meal*. The convergent and discriminate validities and reliability are verified.

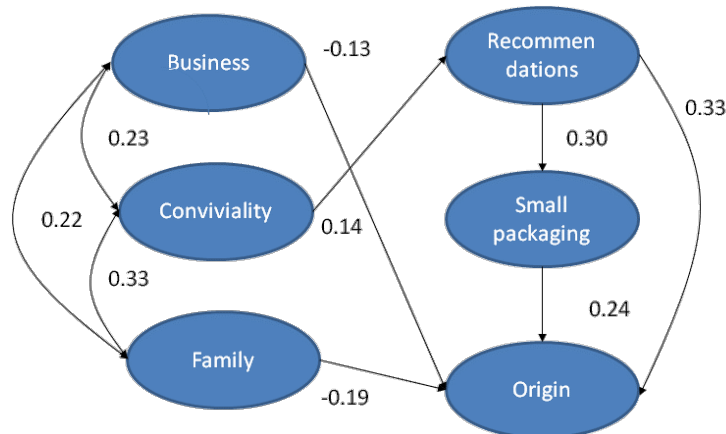
Table 2a: Rotated Matrix structure – wine choice criteria

It is recommended by the waiter	.87		
It is a suggestion on the menu	.85		
It is available to glass		.85	
It is available in half-bottle		.84	
I choose the wine according to the type of vine			.84
I choose the wine according to the appellation			.84

Table 2b: convergent and discriminate validity

	ρ of joreskog	pvc	Small packaging	Origin
recommandation	0.85	0.74		
Small packagings	0.83	0.71	0.03	
origin	0.83	0.70	0.05	0.04

Figure 2: Impact of meal experience on wine choice

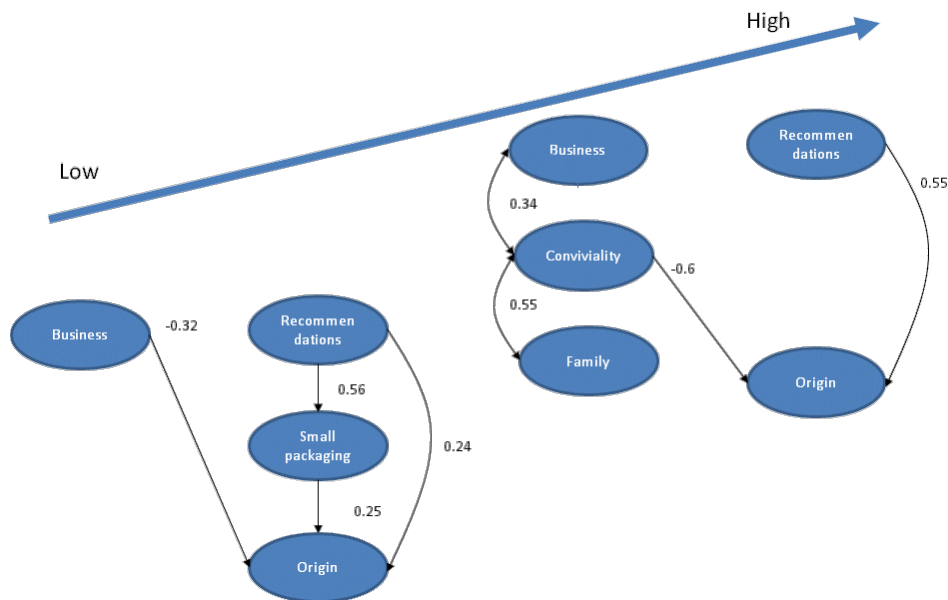


Concerning the impact of packaging on the link between meal experience wine choice criteria, we don't have any difference when the packaging is well evaluated or not for the bottle, the glass and the carafe. So we present only the result for the can and PET packagings that show an effect of the packaging on this link.

Table 3: Invariance validity – effect of can packaging on the link between meal experience and wine choice criteria

effect can	chi2	df	Δchi^2	Δdf	sign	RMSEA	CFI
	103.79	78				0.02	0.98
configural invariance	162.28	116	58.49	38	0.02	0.03	0.94
error measurement							
invariance	181.92	93	78.12	15	0.00	NA	NA
metric invariance	120.84	84	17.05	6	0.01	0.03	0.95
structural invariance	119.96	90	16.17	12	0.18	0.02	0.97
variance factor							
invariance	111.41	81	7.62	3	0.05	0.02	0.97
covariance							
invariance	107.09	81	3.29	3	0.35	0.02	0.98

Figure 3: effect of the can on the link between meal experience and wine choice criteria



Now, we verify the invariance of the effect of the can bottle in Table 3. The configural invariance is verified (0.02) and only the differences concerning structural link are significant. All the indicators respect partially their criteria of validity (chi^2 103.79, df 78, $p=0.03$, gfi 0.96, agfi 0.91, nfi 0.86, cfi 0.98 and rmsea 0.02). We present each structural coefficient between meal experience and wine choice for each level of packaging evaluation – see Figure 3. In low packaging evaluation as compared with high packaging evaluation, consumers need more recommendations concerning origin (Low 0.24 versus High 0.55). The impact of meal experience on wine choice criteria is *negative* but we don't have the same link between meal experience and wine choice. When a consumer has a low evaluation of the can packaging, business context has negative impact (-0.32) on origin of wine. In the case of a high evaluation, it is conviviality that have negative impact (-0.6) on origin. With can packaging, the origin is less important criteria when the context of meal experience is important. Perhaps, consumer wants to find basic wine or wine table with such packaging.

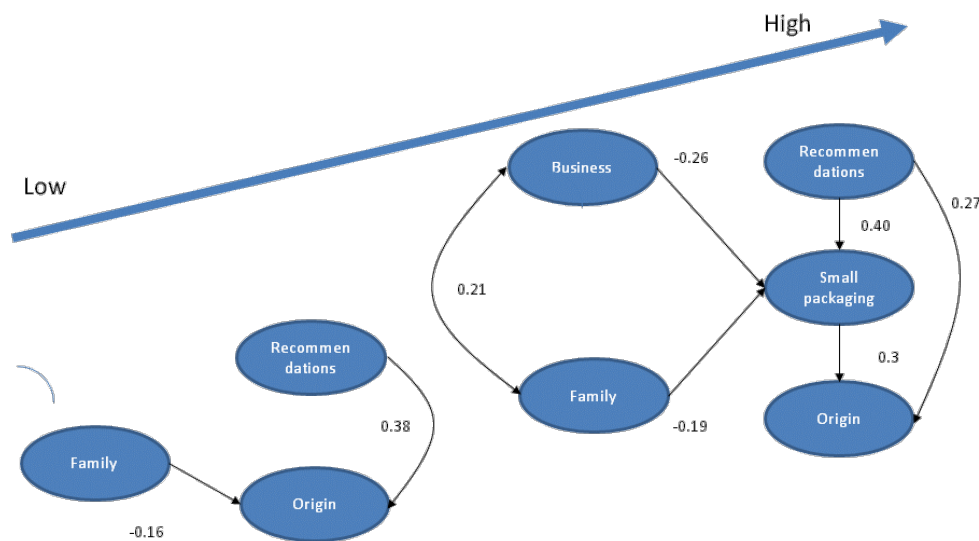
Finally, we verify the invariance of the effect of the pet bottle in Table 4. The configural invariance is verified (0.01) and only the differences concerning structural link are significant. All the indicators respect partially their criteria of validity (chi^2 105.061, df 78, $p=0.02$, gfi 0.96, agfi 0.91, nfi 0.85, cfi

0.98 and rmsea 0.02). We present each structural coefficient between meal experience and wine choice for each level of packaging evaluation – see Figure 4. In low packaging evaluation as compared with high packaging evaluation, consumers need less recommendations concerning origin (Low 0.38 versus High 0.27). With a context of low evaluation of the PET packaging, More the family context is important, less the origin of wine is important (-0.16). In the case of a high evaluation, it is business and family context that have negative impact (-0.26 for business and -0.19 for family) on small packaging. When the meal experience is family or business oriented, the PET is not perceived as classical bottle but as a small bottle because of their weight. The PET could be associated with more valuable wine.

Table 4: Invariance validity – effect of the PET Bottle on the link between meal experience and wine choice criteria

effect pet bottle	chi2	df	Δchi^2	Δdf	sign	RMSEA	CFI
	105.06	78				0.02	0.98
configural invariance	165.90	117	60.84	39	0.01	0.03	0.93
error measurement							
invariance	122.04	93	16.98	15	0.32	0.02	0.97
metric invariance	113.55	84	8.49	6	0.20	0.03	0.96
structural invariance	125.92	90	20.86	12	0.05	0.03	0.96
variance factor							
invariance	109.47	81	4.41	3	0.22	0.02	0.97
covariance invariance	107.87	81	2.80	3	0.42	0.02	0.98

Figure 4: effect of the PET Bottle on the link between meal experience and wine choice criteria



Discussion and Conclusion

This research shows that consumer packaging impressions have a moderating effect over the wine choice, in the context of the overall meal experience. This result implies that we should not analyze a wine without considering the congruency between the packaging and the associated event. First, the model shows that meal experience has a negative impact on wine choice if the atmosphere is not convivial and they need recommendations to reduce the risk to make the wrong choice in terms of the origin of wine and the use of packaging perceived as smallest shape. Secondly, for risky packaging (Can or PET), the impact on wine choice is different. The impact of the meal experience on wine

choice is more when the packaging is well evaluated. Also, the guests need recommendations and it concerns both small packaging and origin of the wine.

For can packaging, the recommendations are more salient with small packaging when it is valuable. When it is well evaluated, the recommendations concern more the origin of wine. The guests consider that the low quality wine is associated with the can packaging and to have a convivial experience, they need basic wine with this type of packaging. For the PET packaging, the recommendations concerning the wine origin is less important when the packaging is well considered than when it is not well evaluated. In specific context, guests don't grant drinking wine in such packaging because of the image reflected. But in unspecific context, they could drink more valuable wine with this packaging.

Regarding managerial implications on the type of restaurants, fast-food or restaurant chain should accept more easily the nontraditional packaging like the PET bottle and the can. For the producer side, it could be associate the packaging with the meal experience and the type of restaurant. The PET could be used in convivial context without any risk to dislike the others guest. So the PET packaging could use to discover a simple wine in an informal context. For the can packaging, the wine will be basic in regular occasions or occasions without pressure. Perhaps can is more associated with simplicity and informal occasion in funny meal experience. Future research will also look into the wine choice as it relates more closely to the regular or extraordinary character of the meal experience. In this research, you don't associate packaging with restaurant's style. "Brasseries" should be more easily able to serve wine in a bottle, glass or carafe. For the classical restaurants, the bottle seems to dominate. Hence, packaging is more or less congruent with the type of restaurant and it could be interesting in future research to analyze the moderating effect of the congruency (restaurant-packaging) on the wine choice.

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