



MENU

JOURNAL OF

FOOD & HOSPITALITY RESEARCH

FOOD, BEVERAGES, SERVICES

Through SOCIAL SCIENCE, COGNITIVE SCIENCE & ECONOMICS

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Aims and Scope

Menu, Journal of Food and Hospitality Research aims to publish articles about work in progress on food behaviors, in link with culinary arts, foodservice and hospitality. Its scientific ambition is both thematic and methodological. Firstly, it proposes to publish the work of PhD students, researchers interested in food, culinary arts and gastronomy, who place people –cooks, consumers... - at the Centre of their works. Secondly, from a methodological standpoint, the journal gives priority to ecological studies of these activities, promoting the development of *in situ* approaches. As multidisciplinary is at the heart of the journal, it aims to maintain the dialogue between social and behavioral sciences and humanities together with food sciences. As a scientific journal, it also aims to bring together the academic, public and private sectors, through the diffusion of applied research to a wide reading audience.

Menu publishes articles on the basis of the annual Institut Paul Bocuse Summer School as well as from exploratory works. Articles are subject to a double-blind review process mainly involving the participants to the Summer school.

The journal contains three types of publications:

- **Research articles** report accomplished or exploratory research works.
- **Book / Literature reviews** are short articles presenting a critical view on recently published books or papers on a given research question.
- **Fieldnotes** present ongoing research works.

Editors of this issue

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The Centre for Food and Hospitality Research of the Institut Paul Bocuse organizes annually a cross-disciplinary workshop. It is a unique opportunity for scientific exchanges between PhD students and senior researchers from various universities to increase their knowledge on the current hot-topics of food and hospitality research questions in social science, cognitive science, economics. The aims of this Workshop are twofold. Firstly, the workshop is a research workshop, combining presentations and discussions of research works on the topic of Food and Hospitality Research. For two days, participants are able to present their research and exchange on methodology as well as concepts and results. Secondly, the workshop provides modules in scientific writing of a manuscript for journal submission - useful training opportunity on the process of scientific publishing. Workshops are organized with tutorials on scientific article writing and peer-reviewing papers. Moreover, participants experience the complete publishing process with the publication of the proceedings in Menu, the Journal of Food and Hospitality Research. During this process, junior researchers endorse successively the roles of author and reviewer. The workshop also includes interventions from experienced researchers.

MENU, the on-line journal of the Research Centre, gathers some papers on communications presented during the summer school as well as short communications, field notes or literature reviews.

The present issue of MENU gathers works presented at the 2015 Summer School workshop, which took place on September, 21th – 22th, 2015, organized in partnership with Penn State University and the support of FoodSMART project (funded by the European Union's Horizon 2020 Programme under grant agreement n°643999)..



Three keynote speakers contributed:

- Martin Yeomans, Professor of Experimental Psychology, informed us about *“Exploring food from an Experimental Psychology perspectives: basic principles and hot topics”*.
- Séverine Gojard, Senior Researcher at INRA and works at ALISS (Alimentation et sciences sociales - Food and social sciences) presented us *“The evolution of eating along life course in France. Opportunities for change towards more sustainable food practices?”*.
- Armando Perez-Cueto, Associate Professor at the University of Copenhagen in the Department of Food Science helped new generation with these several advices as *“Tips and hints for writing a paper and survive in the publish or perish era”*.

This cross-disciplinary workshop had also this year the opportunity and the honor to welcome various PhD students and researchers from the Penn State University through a webinar. They are researchers and experts in hospitality management and finance. Pr. Larry Martinez gave a speech on *“Bias in customer service contexts: How employee demographic characteristics impact customer attitudes”*. Then Pr. Amit Sharma, in association with Pr. Hema Kesa (University of Johannesburg) gave us key information about *“School Foodservice Programs in South Africa and US: Challenges and Obstacles to Healthier Kids”*. To end the day Victor Motta (PhD student) in association with Pr. David Cranage presented their research related to *“Locally Grown Foods in Institutions: Perspectives from K-12 Schools and Penn State University”*.

Seven research articles from the 2015 Summer School workshop are presented in this issue of Menu. The first research article (Anastasia Eschevins) aims to investigate key elements involved in food and beverage pairing, paper describes methodologies. The second article presented by Camille Rioux is an experiment conducted in kindergarden, she developed a new way to measure food neophobia and pickiness in young children. Next research article (Carla Pires) explores connections from culinary practices. She used her knowledge of Brazilian practices to report different approach from the food blogs of Brazilian emigrants. The fourth article (Laura Guérin) describes the practices and interactions that take part in the daily organization of a shared meal in the context of a nursing home restaurant in a historical point of view. Then an article presents us (Sarah Price) criteria of importance influencing food choice in workplace canteens through an architecture choice way. Next research article (Sabine Rizzo-Ivanoff) explores through the chicken-egg question at the individual level the link and direction between perception and expectations. Last research article deals with the impact of allotment on the noncontractible quality of the supply chain for school canteen in French region.

The second part of this issue consists of two literature review. The aim of the first study presented during the workshop (Gaétan Talens) presents ways to measure different parameters describing human in hotel organization. The second study (Jean Baptiste Suquet & Charles Stoessel) is to examine service management through specificities of customer orientation.

Finally, a field note is also included. Martine Ferry describes a new field of research, important in many ways: the gastrodiploacy.

This issue of Menu wishes to illustrate again the multidisciplinary approach of the Center for Food and Hospitality Research, Institut Paul Bocuse, which is worked out during Summer schools as well as in research projects.

Gaétan Talens and Agnès Giboreau,

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Investigating key elements leading to food and beverage pairing: A methodological approach

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Abstract

During a meal, the dish is rarely consumed alone. It is generally served with a beverage. However, all dishes don't go well with all beverages. The choice of the proper products to pair is therefore necessary to be sure the meal experience be pleasant. Catering professionals and producers usually face this situation to satisfy their customers and to enhance their products' sales, but how do they to know which products can be matched together or not?

In order to better understand how the experts, do to pair food and beverage and give their recommendation, to bringing out the key elements which could lead to a good or bad pairing and to compare the results for two beverage's type such as wine and beer, individual semi directive interviews were realized with twenty Sommeliers and Beer experts. These interviews were composed of three parts. During the first part, different dishes were presented to each participant as a leaflet. On the basis of these documents, several questions about the association of these dishes with beverage were asked. The second part was almost the same than the first one except that the presented leaflet represented different beverages (wines and beers). The participants were questioned about these beverages' pairing with dishes. They were asked also to give us some details on their personal experience.

This study was the first part of a PhD project on the association between beers and meals from the perception to the consumers' judgement in real eating and drinking situation. The obtained results allowed therefore to emphasize some unclear points regarding the key elements leading to a good or a bad food and beverage pairing and to give some directions for future studies.

Keywords: Food, beverage, pairing, experts, wine, beer

1. Introduction

1.1. General introduction

In France, beverages as water, hot drinks, milk drinks, juices, soft drinks and alcoholic beverages are mainly consumed during meals (87%) (Hébel, 2011). However, all beverages don't go well with all foods (Cornwell & McAlister, 2013; Donadini, Fumi, & Lambri, 2012). It is therefore necessary to choose the proper products to pair to be sure the meal experience be pleasant. Catering professionals and producers usually face this situation to satisfy their customers and to enhance their products' sales, but how do they to know which products can be matched together or not?

There is a lack of knowledge in the scientific literature on this topic but a lot of information is available in the expert literature such as books, website or blogs to help people to choose some beverage and food to pair together in order to create a good match. These information are available for several beverage's types as wine, coffee, beer or tea. As the association between wine and dishes is part of the gastronomic French meal registered since 2010 on the Representative List of Masterpieces of the Oral and Intangible Heritage of Humanity (UNESCO, 2010) and because 87% of French people claim they buy wine to go with a meal (Ifop, 2014) and 11% consider the meal as a special opportunity to consume beer (Ifop, 2012), only the pairing between food and wine or beer will be investigated in this study.

1.2. Food/wine & food/beer association

The information about the pairing of food and wine or beer found in the vulgarized literature consists either of different specific recommendations or of some general rules based on the interaction between the product's sensory properties. The specific recommendations are presented as advice to consume one given beverage with a given dish (eg. a Milanese risotto with a Meursault white wine or a Blond Leffe with Sushi). However, these advices provide no specific information on the reasons why these products can be consumed together. Some other recommendations suggested by the experts offer first explanations.

Indeed, according to Elisabeth Pierre (2014), a French beer expert, one way to select the proper beer to consume with food is to look at the dominant flavor of the dish and to choose a beer which share a close flavor as, for example pasta with hazelnuts and an amber Ale. A lot of other

advices given by experts in different website, books or blogs could be also illustrate this rule (eg. a grilled fish drizzled with lemon and seasoned with herbs and a Sauvignon wine with its lemon and herbs flavors). This rule is based on the notion of "Similarity" between the products' sensory properties and seems to be particularly applied for products' aromas. One other way to select food and beverage to consume together is to work on the complementarity between products' flavors which consists in marrying some analogous flavors in order to bring something more (eg. a fruity beer and a dish with chocolate) (ABInBev, 2015; Pierre, 2014). Nevertheless, there is no consensus in the definition of this notion of complementarity. Indeed, Harrington (2008) mentioned that "a complementary example may be the echo of raspberry in a young Pinot Noir matched with a raspberry reduction sauce" which seems to be more related to the notion of similarity. Added to these two rules, another one emerges from the literature and consists in putting a property against another one to create a contrast (eg. a dry wine with an oily meal or a bitter beer with a fatty dish). Harrington (2008) mentioned also that "a classic contrasting example include Sauternes wine and Foie Gras or California Cabernet wine and bittersweet chocolate". A contrast pairing should therefore be applied for sweet wine and savory foods. This notion seems to be particularly applied for tastes and textures.

In addition to these three notions which concern the sensory dimension of products, the notion of "Terroir" is often cited as rule to pair two products. This notion states that two products which come from a same place (region, country, etc...) could be consumed together (eg. to pair a Comté cheese with a Jura wine or a sauerkraut with an Alsatian Pils).

To summarize, several rules of pairing arise from the expert literature:

- **Similarity:** to pair two products sharing similar flavors in order to enhance the general flavor of the match.
- **Complementarity:** to marry flavors to bring something more.
- **Contrast:** To put a property against another one to create a contrast.
- **"Terroir":** to match two products from the same region or country.

These notions bring some indications to better understand why a food and a beverage go well together or not. However these notions are not precisely defined and some explanations remain unclear.

2. Aims

The main objective of this study was to better understand why a food and a beverage go well or don't go well together. To answer this question, some points were investigated to bringing out (i) the key elements on which the experts are based in selecting good or bad food-beverage pairing (ii) the rules implemented to match a given beverage with a dish and also to match a given dish with a beverage. The way on which the experts do to select the rule to use to pair two products was also be evaluated.

3. Methodology

3.1. Participants

Twenty experts (50% Sommeliers, 50% beer experts) were interviewed.

3.2. Material

Four recipes (Poulet Basquaise, Filet de merlu au beurre blanc, ratatouille and lasagne bolognaise)

have been selected from a previous study to be representative of different typical recipes prepared by French people. They were presented to the experts as leaflets with only the name of the dish, the ingredients, the quantities and the culinary techniques available.

Two international beers (Hoegaarden and Blond Leffe) regularly consumed by French consumers have been selected with the help of the staff of AB Inbev Company. Two classical French wines often proposed to the consumers during a meal (Muscadet Sèvre et Maine, 2014, Domaine de la Louvetrie, Cuvée Amphibolite Nature and St Joseph, 2013, Domaine du Monteillet, Cuvée du Papy) have been selected with the help of a Sommelier of the Institut Paul Bocuse. The different beverages were presented as leaflets to the experts. For each beer, the alcohol level and the sensory properties were available. For each wine, its appellation, its year, its producer and domain and its vintage were available as well as its region of origin, its alcohol level, and its sensory properties (see table 1)

<p style="text-align: center;">Muscadet Sèvre et Maine 2014 Producer: Joseph Landron, Wineyard area: Louvetrie Natural Amphibolite Cuvée</p> <hr/> <p style="text-align: center;">Dry white wine Product at the top of the Nantes vineyards, on the slopes of the Sèvre Alcohol content: 12%</p> <p style="text-align: center;">Intense aroma of ripe citrus lemon flavor Grapefruit flavor Rich and complex palate, underpinned by mineral acidity. Superb balance with a crystalline mineral density. Persistence of salinity remains pure with high precision of the fruit.</p>	<p style="text-align: center;">St Joseph 2013 Producer: Stéphane Montez Wineyard area: Monteillet Papy's Cuvée</p> <hr/> <p style="text-align: center;">Red wine produced on the right bank of the Rhone, in the department of the Loire Alcohol content: 12.5%</p> <p style="text-align: center;">red fruit aromas (blackcurrant) violet aroma Spice (nutmeg, pepper) licorice aroma vanilla aroma The palate is elegant and long with a solid tannic structure with soft tannins.</p>
<p style="text-align: center;">Hoegaarden</p> <hr/> <p style="text-align: center;">Belgian white beer sold internationally Alcohol content: 4.9%</p> <p style="text-align: center;">Lemon aroma sweet acid smooth Clove aroma Coriander aroma creamy bitter Banana aroma</p>	<p style="text-align: center;">Leffe blonde</p> <hr/> <p style="text-align: center;">Belgian blond beer sold internationally Alcohol content: 6.6%</p> <p style="text-align: center;">fruity delicately spiced clove aroma vanilla aroma smoky aroma phenolic aroma caramel aroma butterscotch aroma grilled aroma sulphide in aftertaste sweet bitter dense alcohol aroma</p>

Table 1: Beverage leaflets

3.3. Procedure

Individual semi directive interviews were realized to investigate the experts' practices on the field of the food and beverage pairing. The semi directive interview is a method allowing new ideas to be brought up during the interview as a result of what the interviewee says. A recording device was used to record each participant's speech.

This interview was composed of three parts. The first one consisted in the presentation of the different dishes to each participant in a random order. The second one consisted in the presentation of the different beverages to each expert in a random order. For each dish and beverage, several themes were approached in order to provide answers to the questions evoked in part 2. These two first parts were also randomized. The third part consisted in investigating the personal experience of each expert.

3.4. Analysis

The speech of each expert was transcribed and a thematic analysis was performed.

4. Results

Study is in progress

5. Conclusion

This study was a first part of a PhD project which aims at investigating the association between beers and meals, from the perception to consumers' judgement in real eating and drinking situation. The investigation of Sommeliers' and Beer experts' practices with concrete examples of products thanks to semi directive interview will allow to emphasize some unclear points regarding the key elements leading to a good or a bad food

and beverage pairing and to give some directions for future studies.

Acknowledgments

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References:

- ABInBev. (2015). L'ABC du mariage bière & mets. In. chrexpert.fr.
- Cornwell, T. B., & McAlister, A. R. (2013). Contingent choice. Exploring the relationship between sweetened beverages and vegetable consumption. *Appetite*, 62(0), 203-208.
- Donadini, G., Fumi, M. D., & Lambri, M. (2012). The hedonic response to chocolate and beverage pairing: A preliminary study. *Food Research International*, 48(2), 703-711.
- Harrington, R. J. (2008). *Food & wine pairing. A sensory experience*: John Wiley & Sons, inc.
- Hébel, P. (2011). Consommation de boissons en France : préférences culturelles et contributions à l'équilibre nutritionnel. *Cahiers de Nutrition et de Diététique*, 46(1, Supplement 1), H13-H19.
- Ifop. (2012). Les français et la bière. In. www.ifop.com.
- Ifop. (2014). Baromètre de l'image du vin - Vague 5. In. www.ifop.com.
- Pierre, E. (2014). *Le guide hachette des bières*: Hachette.
- UNESCO. (2010). Le repas gastronomique des Français. In. www.unesco.org.

Food neophobia and pickiness in young children. How to measure it?

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Abstract

Background. The two strongest barriers to increasing children's dietary variety and consumption of fruit and vegetables are food neophobia and pickiness, assumed to be the main kinds of food rejection in children. Accordingly, psychometric tools that provide a clear assessment of food neophobia and pickiness are greatly needed.

Objective. We developed and validated a new scale for the assessment of food neophobia and pickiness, thus filling a major gap in the psychometric assessment of food rejection by French children. We concentrated on French children aged 2-7 years, as no such scale exists for this young population, and on the two known dimensions of food rejection, namely food neophobia and pickiness, as the nature of the relationship between them is still unclear.

Design. The questionnaire was administered online to two samples ($N_1=168$; $N_2=256$) of caregivers who responded for their children aged between 2 and 7 years. Additionally, a food choice task was administered to 17 children to check the scale's predictive validity.

Main outcome measures/Statistical analysis performed. A factor analysis was performed to investigate the underlying structure of the scale. Internal consistency, test-retest reliability, and convergent discriminant and predictive validity were also assessed.

Results. The resulting scale, called the Child Food Rejection Scale (CFRS), included six items relating to food neophobia and five items relating to pickiness. The factor analysis confirmed the two-dimensional structure of the scale. Internal consistency, test-retest reliability, and convergent and discriminant validity were all satisfactory. Moreover, results from the food choice task showed that scores on the CFRS accurately predicted children's attitudes toward new and familiar foods.

Conclusions. Taken together, these findings suggest that the CFRS, a short and easy-to-administer scale, represents a valuable tool for studying food rejection tendencies in French children.

Key-words: Questionnaire development, Children, Food neophobia, Food pickiness, Reliability, Validity

1. Introduction

The prevalence of childhood obesity has increased fairly steadily to worrisome levels these past few years. In France, 18% of children aged 3-17 years old are overweight and 3.5 % are obese (INPES, 2012). One of the reasons advanced for this high prevalence is the degradation of dietary habits, including the increased consumption of foods rich in saturated fatty acids at the expense of the consumption of foods rich vitamins and minerals, such as fruits and vegetables (Jacobi, Agras, Bryson, & Hammer, 2003). The strongest barriers to the increase of children dietary variety and consumption of fruits and vegetables are *food neophobia* and *pickiness*, presented as the main kinds of food rejections in children (Dovey, Staples, Gibson, & Halford, 2008).

Food neophobia is defined as the reluctance to eat novel food and is present among omnivore's species (Pliner & Hobden, 1992). Food neophobia appears as the child become mobile, but there is a contention in the literature as to whether food neophobia increases steadily (Cashdan, 1994) or remains stable during early childhood (Adessi, Galloway, Visalberghi and Birch, 2005). Pliner and Hobden (1992) were the first to design a questionnaire to assess food neophobia: The Food Neophobia Scale (FNS), followed by Frank and van der Klaauw (1994) who developed the Food Attitude Scale (FAS). These two questionnaires asked participants to indicate the extent to which they agree or not with statements relative to food choice and consumption. Both theses neophobia scales have been since widely adapted and successfully translated into several languages.

Food pickiness is defined as the rejection of a substantial amount of foods that are familiar (as well as unfamiliar) to the children (Smith, Roux, Naidoo, & Venter, 2005). Pickiness also includes the consumption of an inadequate amount of food (Rydell, Dahl, & Sundelin, 1995), or may relate to the rejection of certain food textures (Smith *et al.*, 2005) and is sometimes considered to include food neophobia (since food neophobia is defined roughly as the rejection of novel food whereas pickiness is the rejection of a large proportion of familiar as well as unfamiliar foods). In their review, Dovey *et al.* (2008) assumed that the two phenomena are behaviorally distinct because different factors predict the severity and expression of the two constructs. However, other authors argue that these two constructs are clearly related (Wardle & Cooke, 2008) and to date there is no decisive empirical evidence in favor of a robust sharp distinction between food neophobia and pickiness. An additional contention exists

regarding pickiness developmental path. Finally, compared to food neophobia, not much attention has been yet dedicated to picky eating measurement. To date, this construct has usually been assessed through general questionnaires on food habits, which included scales about problematic eating, fussiness, food neophobia, or low enjoyment when eating....

To summarize, clearly, there is still some confusion on the very concept of pickiness (Taylor, Wernimont, Northstone & Emmett, 2015), arguably partly explaining the lack of consensus regarding the relationship between food neophobia and pickiness. This uncertainty is reinforced by the lack of previous (or known) project aimed to design and validate a common scale including pickiness and food neophobia as two possible dimensions of food rejections by children. As pointed out by several authors (e.g., Hollar, Paxton-Aiken, & Fleming, 2013; Laureati, Bergamaschi & Pagliarini, 2015), the availability of assessment scales regarding food neophobia is crucial to the study of childhood eating behaviors and the effectiveness of food education programs or other interventions targeting fruits and vegetables consumption. So far, and as we have reviewed it above, food neophobia has been the target of several assessment scales, which is not true for pickiness. Specifically, no tool has yet been designed to evaluate both food neophobia and pickiness in young children. This is an important gap in the field of childhood eating behavior assessment, which would be worth filling in.

In the present study, we decided to develop and validate a new scale that enables the assessment of food neophobia and pickiness, both assumed dimensions of food rejections, in young French children. We concentrated on French children aged 2- to 7-years old, as no such scale exists for this young population. Moreover, we took special care measuring of all the expected properties of a psychometric instrument, that is to say, internal consistency, but also factorial structure, discriminant and convergent validity, and test-retest reliability (see e.g., Hinkin, 1995). Finally, we believe that designing and testing the validity of a scale, including items relative to food neophobia and items relative to pickiness, would provide insight into the relationships that these two constructs entertain, as well as the nature of their developmental paths.

2. Methods

Questionnaire design. To generate items, we priority reviewed the literature to precisely define the two constructs in consideration and evaluate previous measures (Lafraire, Rioux, Giboreau & Picard, *in*

preparation). We then (i) adapted 16 items from existing scales that proved to accurately capture the two phenomena and (ii) created 19 additional items based on their definition. In total 35 items were compiled, so that dismissing some items due to their potential inaccuracy or indistinctness allowed the retention of a sufficient number of items to assure a robust tool (Gehlbach & Brinkworth, 2011).

Participants. The 35-item questionnaire was administered online to 168 parents who responded for their child aged between 2 and 7 years old (83 girls and 85 boys). Caregivers rated each item regarding their child behavior on a 5-point Likert-type scale ('strongly disagree', 'disagree', 'neither agree nor disagree', 'agree', 'strongly agree').

Convergent and discriminant validity. In order to assess the convergent validity of the scale, each participant also filled online for their child the FAS (see introduction, Frank & van der Klaauw, 1994).

3. Results

Exploratory and confirmatory factor analysis. For each child a food rejections score ranging from 35 to 175 was calculated based on caregiver's answers, where high scores indicated higher food neophobia and pickiness. The factorial structure of the scale was then investigated with an iterative exploratory factor analysis (EFA) using principal component analysis with varimax rotation, to evaluate the factor structure underlying the set of items and aid in item selection for inclusion on the final scale. The optimum number of factors was determined using a combination of the Kaiser criterion (factors with eigenvalues greater than one should be retained for interpretation; Kaiser,

We chose to administer the FAS to assess convergent validity because this questionnaire has been widely used as measure of attitude towards familiar and new foods. To assess the discriminant validity of the scale, each participant also filled online for their child the French version of the Revised Children's Manifest Anxiety Scale (Turgeon & Chartrand, 2003). The RCMAS asked participants to answer with "yes" or "no" 36 statements related to anxiety and low esteem issue. We chose to administer this scale to assess the discriminant validity because it measure anxiety and not food rejections, but food rejections are sometimes associated with high anxiety toward food items (Galloway, Lee & Birch, 2003).

Test-retest reliability. To evaluate the reliability of the scale, 44% (N=74) of the original sample underwent a retest procedure. These parents twice completed the 35-item version of the scale with a four-week delay.

1960) and the Cattell's scree plot criterion (scree plot for eigenvalues is used to determine the point at which the last significant drop takes place; Cattell, 1966). This iterative exploratory analysis yielded to an 11-item scale with a 2-dimension solution model with factor loadings rather strong on the expected latent factors. A confirmatory analysis using the maximum likelihood method, was then conducted to test the two-factor model's fit to the 11-items scale, in which items N1, N2, N4, N6, N7, N10 loaded on the first latent factor named *food neophobia* and items S3, S4, S5, S6, S10 loaded on the second latent factor named *food pickiness*. Figure 1 displays the path diagram yielded by the CFA for the two-factor solution.

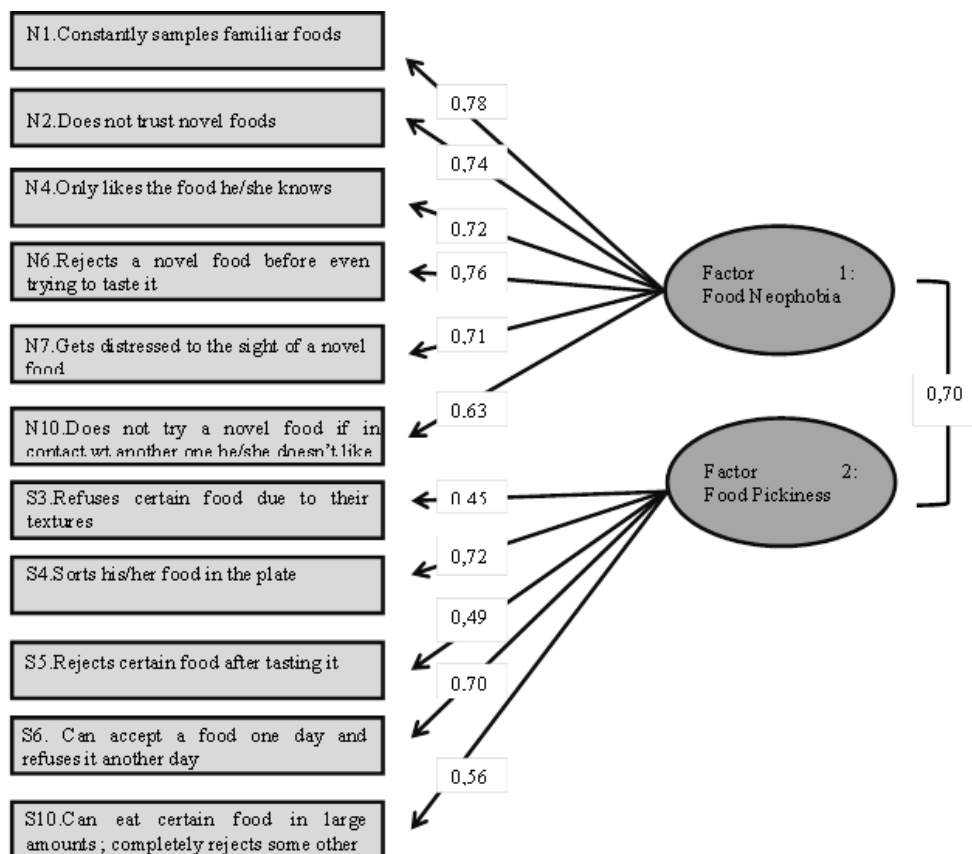


Figure 1. Path diagram yielded by the confirmatory factorial analysis

Figure 1 shows satisfactory factor loadings for each latent factor (range: 0.49-0.78), and a strong correlation between the two latent factors ($r=0.70$). The CFA yielded acceptable goodness-of-fit indices: $GFI=0.932$, $CFI=0.954$, $RMSEA=0.0639$ and $\chi^2/df=1.67$ as recommended by Jackson, Gillaspay & Purc-Stephenson (2009). Thus, the two-factor model was fully relevant. We then conducted a series of psychometric analyses on the retained set of items (11).

Convergent and discriminant validity. Results from Pearson's coefficient indicated that Food rejections scores were significantly highly correlated with FAS scores ($r=0.70$, p -Value<0.001). Additionally, as with FAS score, Food rejections scores were significantly and positively correlated with RCMAS scores as indicated by Spearman's coefficient ($r=0.27$, p -Value<0.001). These correlations attested the convergent and discriminant validities.

Test-retest reliability. Statistical analyses indicated that scores obtained at the test session were highly correlated to score obtained at the retest session (all Pearson's coefficients $r >0.5$). This finding indicated that the food rejections scale had satisfactory test-retest reliability.

Variations in food rejections scores according to children age and gender. Finally, results from mean comparison using a t -test showed that boys and

girls did not differ significantly on food rejections scores ($t=0.71$, p -value=0.94, ns). Additionally, Pearson's coefficient indicated that food rejections scores were no significantly correlated with age ($r=-0.05$, $p=0.50$, ns).

4. Discussion

First, our findings indicated that the 11-item food rejection scale, named the French Children Rejections Scale (FCRS), displayed good psychometric properties. Reliability, measured through internal consistency and test-retest reliability was satisfactory, with coefficients comparable to those found in previous research on children food neophobia or pickiness. Additionally the construct validity of the FCRS was adequate as attested to by measures of convergent and discriminant validities.

Second, factor analyses supported the two-dimension structure of the scale, hence the distinction between food neophobia and pickiness in young children. There was however a strong positive correlation between these two kinds of food rejections, implicating that they are noticeably related. In this view a child with high neophobia (respectively pickiness) level is likely to displays a high pickiness (respectively neophobia) level as well. These finding are in line with the claims of Wardle & Cooke (2008).

Third, we found no evidence that food rejections varied across age or gender. The absence of children's gender difference in food rejections scores is consistent with previous results in young children food rejections (see Xue *et al.*, 2015). This finding is noticeable since by the teenage years there are generally clear gender differences in terms of attitudes towards foods and rejections. It would be hence interesting to track the developmental path of gender differences across the years. Concerning the correlation between food rejections and age, the pattern found here is consistent with the view proposed by Adessi *et al.* (2005), that food rejections rise rapidly around the age of two, when the child is susceptible to ingest toxic compounds because of his/her growing mobility, and remain quite stable until 6-7 years old. It is also consistent with the developmental evolution of temperamental inhibition (i.e. tendency to experience distress and to withdraw from unfamiliar situations, people, or environments; Fox, Henderson, Marshall, Nichols, & Ghera, 2005) in early childhood (Rigal, Chabanet, Issanchou & Monnery-Patris, 2012).

Food neophobia and pickiness are major public health issues and we believe to have successfully developed an efficient tool to evaluate them in young French children through their caregivers. However the fairly low responses rate to the online-questionnaire resulted in a small sample size and led us to presume that it was mainly filled by families with a greater interest in issues of eating and nutrition, hence not representative of the national population. Additionally, it would seem that the subscale for neophobia is more robust than that for pickiness. Pickiness is a construct which is still not well defined and further studies are much needed to better grasp this construct. Nevertheless, the French Children Rejections Scale (FCRS) represents a valuable tool to study childhood food habits and the effectiveness of interventions aiming to increase their consumption of fruits and vegetables.

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References

Adessi, E., Galloway, A. T., Visalberghi, E., & Birch, L. L. (2005). Specific social influences on the

acceptance of novel foods in 2–5-year-old children. *Appetite*, *45*(3), 264–271.

Cashdan, E. (1994). A sensitive period for learning. *Human Nature*, *5*(3), 279–291.

Cattell, R. B. (1966). The scree test for the number of factors. *Multivariate Behavioral Research*, *1*, 245-276.

Dovey, T. M., Staples, P. A., Gibson, E. L., & Halford, J. C. G. (2008). Food neophobia and 'picky/fussy' eating in children: A review. *Appetite*, *50*(2-3), 181-193.

Fox, N. A., Henderson, H. A., Marshall, P. J., Nichols, K. E., & Ghera, M. M. (2005). Behavioral inhibition: linking biology and behavior within a developmental framework. *Annual Review of Psychology*, *56*, 235-62.

Frank, R. A., & van der Klaauw, N. J. (1994). The contribution of chemosensory factors to individual differences in reported food preferences. *Appetite*, *22*, 101-123.

Galloway, A. T., Lee, Y., & Birch, L. L. (2003). Predictors and consequences of food neophobia and pickiness in young girls. *Journal of the American Dietetic Association*, *103*(6), 692-698.

Gehlbach, H., & Brinkworth, M. E. (2011). Measure twice, cut down error: A process for enhancing the validity of survey scales. *Review of General Psychology*, *15*(4), 380-387.

Hinkin, T. R. (1995). A review of scale development practices in the study of organizations. *Journal of Management*, *21*(5), 967–988.

Hollar, D., Paxton-Aiken, A., & Fleming, P. (2013). Exploratory validation of the Fruit and Vegetable Neophobia Instrument among third- to fifth-grade students. *Appetite*, *60*, 226-230.

INPES (2012). Parce qu'à ses débuts, l'obésité infantile ne se voit pas, il faut la dépister le plus tôt possible.

Jackson, D. L., Gillaspay, J. A., & Purc-Stephenson, R. (2009). Reporting practices in confirmatory factor analysis: An overview and some recommendations. *Psychological Methods*, *14*, 6–23.

Jacobi, C., Agras, W. S., Bryson, S., & Hammer, L. D. (2003). Behavioral validation, precursors, and concomitants of picky eating in childhood. *Journal of the American Academy of Child and Adolescent Psychiatry*, *42*(1), 76-84.

Kaiser, H. F. (1960). The application of electronic computers to factor analysis. *Educational and Psychological Measurement*, *20*, 141-151.

Lafraire, J., Rioux, C., Roque, J., Giboreau, A., & Picard, D. (in preparation). Food rejections in

children: Cognitive and social/environmental factors involved in food neophobia and picky/fussy eating behavior.

Laureati, M., Bergamaschi, V., & Pagliarini, E. (2015). Assessing childhood food neophobia: Validation of a scale in Italian primary school children. *Food Quality and Preference*, *40*, 8-15.

Pliner, P., & Hobden, K. (1992). Development of a scale to measure the trait of food neophobia in humans. *Appetite*, *19*(2), 105-120.

Rigal, N., Chabanet, C., Issanchou, S., & Monnery-Patris, S. (2012). Links between maternal feeding practices and children's eating difficulties. Validation of French tools. *Appetite*, *58*(2), 629-637.

Rydell, A.-M., Dahl, M. & Sundelin, C. (1995). Characteristics of school children who are choosy eaters. *The Journal of Genetic Psychology: Research and Theory on Human Development*, *156*(2), 217-299.

Smith, A. M., Roux, S., Naidoo, N. T., & Venter, D. J. L. (2005). Food choices of tactile defensive children. *Nutrition*, *21*(1), 14-19.

Taylor, C. M., Wernimont, S. M., Northstone, K., & Emmet, P. M. (2015) Picky/fussy eating in children: review of definitions, assessment, prevalence and dietary intakes. *Appetite*, *in Press*

Turgeon, L., & Chartrand, E. (2003). Reliability and validity of the revised children's manifest anxiety scale in a French-Canadian sample. *Psychological Assessment*, *15*(3), 378-383.

Wardle, J., & Cooke, L. (2008). Genetic and environmental determinants of children's food preferences. *The British Journal of Nutrition*, *99 Suppl 1*(February 2008), S15-21.

Xue, Y., Lee, E., Ning, K., Zheng, Y., Ma, D., Gao, H., ... Zhang, Y. (2015). Prevalence of picky eating behaviour in Chinese school-age children and associations with anthropometric parameters and intelligence quotient. A cross-sectional study. *Appetite*, *91*, 248-255.

Transnational connections from culinary practices: an approach from the food blogs of Brazilian emigrants

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Abstract

This paper explores food blogs of Brazilian emigrants and examines the role of these sites in establishing and maintaining transnational connections of social and communicative nature. From a socio-cultural and interdisciplinary perspective, where aspects related to globalization exert a decisive role, this text is based on the relationship between food, - represented here by the culinary knowledge -, communication and migration. The central question is: to what extent and in what way communication around food from the food blogs of Brazilian emigrants contributes to the maintenance of transnational connections and what does this say about the relationship between food and migrations in the current context?

Key-words :

Food; Migration; Communication; Culinary Practices.

1. Introduction

Today, food is gaining more visibility in different kinds of media and in an unprecedented way. Social media such as blogs are an example in this direction and to examine these sites may contribute to understand how the relationship with food and around food have been outlined by new hues, reflecting various dimensions of human experience, which include the migratory experience. In this context, among different meanings, we highlight the role in establishing and maintaining transnational connections of social and communicative nature. By moving, people carry with them habits, imaginary and food-related practices that may continue or not in the destination country. Similarly, as they carry some social bonds linked to the country of origin, other bonds are formed from the new country of residence. Nowadays, technologies are facilitating the maintenance of these connections. From a broader perspective, the processes of globalization exert significant influence in this panorama, causing the intensification of different flows (people, pictures, technology, capital, information, goods, etc.). With regard to food, not only products gain wider circulation, but also pictures, text, information and communication related to food.

Migrations are not limited to geographical change. Regardless of the reasons that lead to the displacement to another country, it is certain the need for reworking of several elements that contribute to giving meaning to everyday life. In such process, food has an extremely important role: located at the interface between the experience in the new destination and that related to the country of origin, in addition to others factors, it can become a means through which knowledge and practices that go beyond geographic boundaries, become a connecting link between the new country of destination, the country of origin, as well as other locations.

Taking this into account, the aim of this paper is to put in relief the role of food in establishing and maintaining transnational connections of social and communicative order, expressed from the food blogs of Brazilian emigrants. Exploring prospects concerning food that go well beyond their nutritional character, the focus in these pages also aims to provoke a reflection on the landscape in which come unfolding contemporary international migration.

From a socio-cultural and interdisciplinary perspective, where aspects related to globalization exert a decisive role, this text is based on the relationship between food, - represented here by

the culinary knowledge -, communication and migration. The central question is: to what extent and in what way communication around food from the food blogs of Brazilian emigrants contributes to the maintenance of transnational connections and what does this say about the relationship between food and migrations in the current context?

The methodological resources used to analyze these sites are based on "Screen ethnography". Derived from anthropology (visual), this ethnography mode includes procedures such as observation and field notes¹. In addition, research also included interviews². The following blogs were considered as references (in parentheses, the respective areas where live the immigrants, according to the reference given on the website): *Magia na cozinha* (EUA)³, *My Delishville* (Londres)⁴, *Trem Bom* (Reino Unido)⁵, *Hat & Apron* (Lisboa)⁶, *Vai comer o-que* (EUA)⁷, *Na cocina* (Argentina)⁸, *Com uma pitada de açúcar* (Canadá)⁹ and *Cuchiaio Pieno* (Itália)¹⁰. The criteria for the selection of the blogs were the time period since the page was created (over two years), its configuration - especially with respect the specificity of the reports and comments - and also the regularity of the posts.

2. Overview of the Brazilian migration

From a historical perspective, since its initial configuration, Brazil has its image associated mainly to immigration flows. However, from the last two decades of the twentieth century, this frame has undergone significant changes. Uncertainties related to the Brazilian economic situation as well as the increase in transport and communication technologies have driven new displacements and the country has been marked by the predominance of emigration. In recent years, this view has undergone changes, gradually incorporating new immigration movements. Even so, in the current period, the country has more emigrants than immigrants (LESSER, 2013).

1 According to Rial (2004, p.25), the "screen ethnography" can be assumed "[...] as a practice of fieldwork, based on a practical collection and extensive and long data analysis, which allows researchers to achieve a high degree of understanding of the social group or of the studied text, maintaining a reflexivity".

2 The observation work took place between May and August 2015 and the interviews were conducted by email.

3 <http://clima65.blogspot.nl/>, accessed July 2015.

4 <http://mydelishville.com.br/>, accessed July 2015.

5 <http://trembom.com/>, accessed July 2015.

6 <https://hatandapron.wordpress.com/>, accessed July 2015.

7 <http://www.vaicomeroque.net/>, accessed July 2015.

8 <http://nacocina.blogspot.nl/> accessed July, 2015.

9 <http://comumapitadadeacucar.blogspot.nl/>, accessed July 2015.

10 <http://www.cuchiaiopieno.com/>, accessed July 2015.

According to data released by the the Ministério das Relações Exteriores (2012), the largest contingent of Brazilian emigrants would be concentrated in the United States (1.066.559), followed by Japan (210.032), Paraguay (201.527), Portugal (140.426), Spain (128.238) and UK (118.000)¹¹. Although it does not represent a such significant amount compared to the United States, in recent years there has been an increase in the number of Brazilians who elected other countries as migratory route, especially those situated on the European continent. This change in flow is closely related to the rigid restrictions of USA immigration policy, subsequent to the attacks of September 11, 2001, in New York, whose consequences changed the range of options that put the country as a major destination for immigrants from Brazil. With regard to the presence of Brazilians in Europe, as noted Lesser (2013), many of these people are children or grandchildren of European immigrants in Brazil. For this reason, they can get European citizenship and take up residence on this continent of legalized way.

The Brazilian flow abroad is part of a broader prism, marked by the acceleration of globalization and the consequent emergence of transnational processes. Although some of these processes date back to much earlier periods, at present, we experience some peculiarities in this regard. As some authors point (BASCH et al. 1994; VERTOVEC, 2009), the construction and maintenance of cross-border interconnections have been favored by a different order than kept by past migrations.

Today, it stands out above all the increase in density and multiplicity of such interconnections, resulting from the aforementioned changes in transportation and communication technologies (jet planes, phones, faxes, internet), which have progressively eased nearest and immediate links with distant locations. The same situation also reflects a resize in the ways in which time and space - essential coordinates of modern social life - are experienced and represented since these do not longer consist of fixed or insurmountable barriers to many forms of social interaction and organization (APPADURAI, 1990 ; GIDDENS, 1999; KEARNEY, 1991).

In this same perspective, as it grows the number of Brazilians abroad, several other flow gain impetus (images, capital, technology, people, goods, etc.). Among these flows are included those

related to food. As part of this process, to find Brazilian goods stores, restaurants of "Brazilian food" or delivery food services, especially in cities where the largest number of these immigrants is are situations less and less unusual. In the same context, in addition to the conditions of production, distribution and food consumption are undergoing profound transformations, representations and meanings associated with food are gaining greater expressiveness, reflecting the migratory experience and also putting in evidence the relationship between food and communication.

3. Food and communication through the acceleration of flows

Migrants play a crucial role in transnational circulation of foods, recipes and also of meanings associated with certain dishes or food. But, if they carry with them many habits related to food, in reverse, inevitably they incorporate new foods and practices in this field, as it includes the communication around food. Although this situation is not restricted to the migration context, it poses new horizons to think about the role of food and culinary practices as a means to establish and even maintain multiple connections between migrants and distinct locations.

At the current stage of globalization, both the behavior as different practices associated to food and, similarly, the food landscape, especially in developed countries are undergoing an increasing reconfiguration. Such circumstances include fundamental changes in how and why food is produced (or not produced), the ways in which they are distributed (or not distributed) and variously prepared, consumed, shared, thought, imagined, discussed and disputed (INGLIS and GIMLIM, 2009). These modifications imply consequences in the migratory context.

The spread of recipes, ideas and images related to food not only fosters different imaginary about food; this diffusion can also reveal the various meanings attributed to certain foods and how these can also differ depending on the context in which they are located. In addition, from the perspective of migration, the food can act as a mediating element between the universe of origin and other contexts. Eating certain dishes is a way to refer the country of origin, even if is in an imaginary way. On the other hand, to try new tastes and to adopt unusual flavors can establish confidence and even contribute to adaptation to a new environment. But as well as food involves aspects that go beyond nutrition, experiences related to food also encompass other factors.

¹¹ <http://www.brasileirosnomundo.itamaraty.gov.br/a-comunidade/estimativas-populacionais-das-comunidades/APENDICE%20Diplomacia%20Consular%20- accessed September 2014.>

Food is an important way to communicate values, ideas, beliefs, etc.. According to Barthes (2008), the food is a communication system, an image body, a protocol of uses, situations and behavior. As note the same author, the data for understanding this system can be collected wherever they are found, including indirect observation of the mental life of a given society. At the same point of view, food still influences the way we perceive and represent ourselves as individuals and members of social groups.

Sharing daily culinary experiences, the dissemination of recipes from any specific media or accounts of what is eaten in distant lands are not exactly a novelty. Today, however, with the expansion of information technologies, the internet has become a breeding ground for the proliferation of such practices. Related to the current mass tourism and gastronomy and its growing visibility in conventional media (television, radio, newspaper), themes developed around food, recipes and various information are becoming more widespread in social media. In Brazil, it is easy to see especially the rise of television programs and the number of pages related to food in different newspapers as well as the launch of various books and magazines specialized in the subject. Similarly to what happens in conventional media, grows the number of sites and web pages dedicated to the topic. In this sphere, also gain expression the personal publications. Among these publications, we highlight the food blogs.

4. Brazilian Migration and transnational connections through the food blogs

With regard to migration, the term transnationalism is commonly associated with a number of practices and institutions that connect migrants, people or organizations in their home land, elsewhere and their destination country. In this conception, different authors (Appadurai, 1996 Urry, 1999 Basch et al, 1994 Vertovec, 2009, Levitt and Glick-Schiller et al., 1995) emphasize the emergence of social processes that cross geographic, political and cultural borders of countries of origin and destination, from the simultaneous involvement of migrants ("transmigrants"¹²) in these two societies.

¹² Immigrants are understood to be transmigrates when they develop and maintain multiple relations – familial, economic, social, organizational, religious, and political – that span borders. [...] Transmigrates take actions, make decisions and feel concerns within a field of social relations that links together their country of origin and their country or countries of settlement (Glick-Schiller et al, 1991: ix)".

Transnationality is linked to the Globalization. As well as the intensification of different flows (ideas, images, people, goods, capital) has been setting the current period of globalization (Appadurai, 1990, 1996, Hannerz, 2014, 2015), the improvement of transnational connections between social groups has also represented a key manifestation of the same process (Vertovec, 2009). These connections can be maintained through various forms: remittance of money and goods, business activities, political participation, investment, travel and also through the exchange of ideas and communications.

The food blogs can be briefly defined as Web sites dedicated to the kitchen theme, by sharing recipes, stories and information. In general, experiences related to culinary practice are presented step-by-step through text, images or videos. These experiences vary and may result from creations of the author of the blog, reproductions of family recipes, magazines or so books including those of some renowned chefs. Repetition and adaptation of recipes presented in other blogs of the same nature also serve as a reference for building posts.

In addition to the recipes, it is common texts that include explanations of how and why choose certain ingredients and spices , such as replacing items or unusual utensils to find or how to resort to alternatives considered healthier to prepare certain dishes. From a brief analysis of some of these pages, one can see that the authorship of the recipe is not necessarily a fact of utmost importance. What seems more important is the ability to demystify, translate, interpret and mainly simplify culinary operations, in order to make viable its reproduction by anyone interested in the subject. But not only that. In this design, the cooking can also be viewed as a means to establish and maintain connections of this people with Brazil and other locations. Within these pages, the domestic kitchen, known to be restricted to a private universe, gets wide visibility: anchored in the informational and communicational technologies, the culinary practices assume a public nature and recipes with their respective images are shared with people that go far apart from relatives, neighbors and friends, gaining a much wider social dimension. It is interesting to note that some of these sites still earn corresponding ramifications on social networks like Facebook, Instagram, Pinterest, Google+ or You tube.

However, as part of blogging, it is not celebrated chefs or characters promoted by the mainstream media, but individuals who use their

culinary knowledge to establish any exchange level with people who share interest in the same subject¹³. But, it is worth noting that; in these pages, knowledge and practices related to food also appear as a key point in the creation of lifestyles, also expressing a certain cultural capital¹⁴ and even a culinary capital. This is visible through the observation of the resources used in making the site and images (such as in the graphic design and in the improvement of photographic technique), and by the remission to other cultural sources as references, which includes renowned restaurants, travel, etc..

Food blogs also result from culinary practices of Brazilians living outside the country. The central idea of these pages is summed up in the words of one interviewee: "[...] the idea was always direct the blog who wants to make good food without much complication and extravagant ingredients." Taking into account the case of some of these sites, as well as the specificity in its setting and the theme mentioned above, there are even issues relating to the use of local ingredients in the preparation of dishes associated with Brazilian cuisine or else where to find Brazilian ingredients in this country, how to identify products from their labels - since barrier with the new language appears as a recurring problem for many people in immigration status - or else how to adapt a recipe from the new country of residence using ingredients available in Brazil, when making the dish alludes to those who live on its land origin. Furthermore, there are frequent mentions of many cultural habits related to the country where is living the immigrant and particularly various aspects related to food in this new context.

Following the model of most food blogs on the Web, as already mentioned, the pages analyzed were not born from the hands of gastronomy professionals, but from people who share an interest in cooking as well as turn it into a means of expression and communication. However, as with the world of blogs, some of these pages can eventually take over a professional character becoming the main craft in their lives.

According to the interviews, share recipes with friends were the initial impetus for the creation of most of these pages. But, as shown by some interviewees, this act of sharing also involves the establishment and maintenance of certain connections with these readers: "At first, the idea was directed to my friends. But the blog has

increased and today many other people access. I have even made friends through it. " Another respondent noted: "My focus remained people who like to share recipes, talk about food and develop a friendly relationship [...] writing blog is a way of keeping in touch, even with a small group of people".

From the daily practice involving ingredient research and creation and reproduction of recipes, some of these blogs are guided by the initial logic of these sites, whose shape was similar to a diary (one of the blogs analyzed is even presented as a "gastronomic diary"¹⁵). In this way, the recipes are accompanied by stories of everyday life, including aspects related to the migratory experience, in a stronger exercise of subjectivity and representation of themselves. As a result, the connection with others not only establishes by the culinary exercise, but also by identifying with the life stories. It is interesting to mention that the initial idea can still start from another perspectives, such as pointing one of the interviewees: "Initially, what led me to create the blog was the desire to have my recipes documented, easily accessible. The blog has emerged as a recipe book, but in digital format".

Aside from the data already mentioned, reports and comments contained in these websites give some clues to understand the meanings that food takes on immigration status, especially in an environment shaped by intensifying transnational processes in a global level. Similarly, the setting of the blogs in question highlights other elements that contribute to think about the way in which the relationship between food and migration has gained new shades through current communication technologies, particularly with regard to the maintenance of transnationals connections.

In this perspective, the transnational character that emerges from these pages is not limited to the interaction between the migrant and people in Brazil - which already can be seen in blogs produced in more than one language. As other sites, these blogs also include spaces for comments, questions or suggestions. From the observation, it can be seen that expressed connections there involve the strengthening of family relationship and friendship, but also new connections involving other bloggers or so people who identify with the subject and consult these pages in order to increase their culinary practices. In this universe are included Brazilian emigrants living in another countries. Transnationality from

¹³ Although the purpose of this article is not to focus on gender aspects, it is interesting point that the majority of blogs are written by women, but some comments on these blogs are made by men.

¹⁴ See Bourdieu, 2003.

¹⁵ <http://comumapitadadeacucar.blogspot.nl>

these blogs is expressed in the form of networking, involving people in different contexts.

Since this configuration reproduces the very specificity of virtual universe¹⁶, it also reinforces the image of social interactions in force under the impact of social media and its role in international migration. Some authors (Massey et. Al 1993; Truzzi, 2008) in addressing the recent international migration, call attention to the importance of social networks, especially for making possible the circulation of information and experiences sharing, connecting places of origin and destination, but also for making possible to rebuild social spaces in the destination countries.

In the case of social networks that are established and are maintained through the Internet, and more specifically, those that are expressed through the food blogs, social space is formed through the relationship between food and communication. In this context, the culinary practices act as starter for communication and also to maintain social interactions, highlighting both the communicative and the social dimension of food.

5. Concluding remarks

Food travels in suitcases, containers and also through recipes, information and images. Nowadays, communication around food represents new possibilities related to culinary and the dissemination of such knowledge. With regard to food in migratory context, the recipes sharing from the Brazilian emigrants' food blogs reveal the perception and imaginary of the societies of origin and destination of such persons, emphasizing the symbolic dimension of food, in the same way that highlights the transnational conditions which are expressed in current displacement.

The food blogs of Brazilian emigrants initially point to sharing recipes and experiences related to cuisine. However, the observation of these sites shows that in parallel to share recipes is nourished and maintained transnational connections of social nature involving different locations. In this context, the culinary practices not only resize the relationship

16 The communication established by the Internet occurs from the network connection. As noted Santaella (2005), the network idea should be understood in a special sense, especially because this is not built second hierarchical principles, but as a great web without edges or centers. In addition, the internet allows forms of interaction consistent with another dynamic, in real-time - where distance does not count - and in a multidimensional space, dependent on user action. Thus, social networks, and mobilization of people with similar interests, allowing greater participation and collaboration, as well as new forms of socialization and aggregation (virtual communities).

between food and migration, but also exalt the social and communicative dimensions of food.

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References

- APPADURAI, Arjun. Disjuncture and Difference in the Global Cultural Economy. In: WILLIAMS, Patrick, CHRISMAN, Laura. Colonial Discourse and Post-Colonial Theory. N.Y.: Columbia University Press, 1990. p. 324- 339.
- APPADURAI, Arjun. Modernity at large: cultural dimensions of globalization. Minneapolis, Minn.: University of Minnesota Press, 1996.
- BARTHES, Roland. "Toward a Psychosociology of Contemporary Food Consumption". In: Counihan, C. & Van Esterik, P. eds. Food and culture: A reader. 2 ed. New York: Routledge, 2008.
- BASCH, Linda, SCHILLER, Nina Glick, Szanton-Blanc, Cristina. Nations unbound: transnational projects and the deterritorialized nations-state. New York: Gordon and Breach, 1994.
- BOURDIEU, Pierre. A Economia das Trocas Simbólicas. São Paulo: Editora Perspectiva, 2003.
- FISCHLER, Claude. El (h)omnívoro: el gusto, la cocina y el cuerpo. Barcelona: Anagrama, 1995.
- GIDDENS, Anthony. A trajetória do eu. In: Modernidade e Identidade. Rio de Janeiro: Jorge Zahar Ed., 2002. p.70-104.
- GLICK & SCHILLER, Nina, BASH, Linda, BLANC, Cristina. From Immigrant to Transmigrant: Theorizing Transnational Migration. Anthropological Quarterly, vol. 68, Nº1. (Jan., 1995). pp. 48-63.
- HANNERZ, Ulf. Transnational Connections. Culture, People and Places. Londres: SAGE, 1990. p. 237-251. Disponível em: <http://tcs.sagepub.com> Acesso em Fev/2014.
- HANNERZ, Ulf. Fluxos, fronteiras, híbridos: palavras-chave da antropologia transnacional. Mana, Rio de Janeiro, v. 3, n. 1, Apr. 1997. Available from <http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0104-93131997000100001&lng=en&nrm=iso>. access

on 15 Jan. 2015. <http://dx.doi.org/10.1590/S0104-93131997000100001>.

IGLIS, David, GIMLIN, Inglis. The globalization of food. New York: Berg, 2010.

KEARNEY, Michael. The Local and the Global: The Anthropology of Globalization and Transnationalism. *Annual Review of Anthropology*, Vol. 24 (1995), pp. 547-565.

LESSER, Jeffrey. Immigration, ethnicity, and national identity in Brazil, 1808 to the present. New York: Cambridge University Press, 2013.

MASSEY, D. ARANGO, J.; HUGO, G. KOUAOUCI, A.; PELLEGRINO, A.; TAYLOR, J. E. Theories of International Migration: A review and Appraisal. *Population and Development Review*, v. 19, n. 3, p. 431-466, 1993.

NUTZENADEL, Alexander, TRENTMANN, Frank. Food and globalization: Consumption, Markets and the politics of the modern world. Oxford: Berg, 2008.

RIAL, Carmen. Antropologia e mídia: breve panorama das teorias de comunicação. In: *Revista Antropologia em primeira mão*. Florianópolis: Programa de Pós Graduação em Antropologia Social - UFSC, 2004.

SANTAELLA, L. (2005) "Os espaços líquidos da cibermídia". *Revista Nacional dos Programas de Pós-Graduação em Comunicação/ COMPÓS*. Disponível em: www.compos.org.br/seer/index.php/e-compos/article/viewFile/26/27

TRUZZI, O. M. S. Redes em processos migratórios. *Tempo Social – Revista de Sociologia da USP*, v.20, p. 199-218, 2008.

URRY, John. *Global complexity*. Cambridge: Polity, 2003.

The medicalization of the elderly's food habits in France from the beginning of the twentieth century until today

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«The pains and complaints are human being conditions. Pains and complaints are part of the human existence, however, the diseases are creations; they result of a definition of conditions and situations»
(Hughes, 1996: 130).

Abstract

Based on a socio-historical approach, this article describes the process of medicalization of food habits in the elderly, in France, from the beginning of the 20th century until the present time. Nowadays, public policies describe undernutrition as one of the main medical problems in older populations, but at the beginning of the 20th century this issue didn't exist in such terms. We analyze this historical turning point from a food consumption defined as charitable act to food consumption defined as a particular care for the elderly.

Key-words :

Hospices, Nursing homes, undernutrition of the elderly, food consumption, meal

1. Introduction

The medicalization of food habits is the process when a daily life habit – in this case eating – is defined and thought in medical terms (Dubois & Burnier, 2013: 831). In other words, non-medical daily habits are turned into medical problems. Sexuality and alcohol consumption are two examples of this process (Conrad & Schneider, 1992). This explains that more and more behaviours have been medically diagnosed and treated with drug therapies. Medicalization is the need we have to define a social reality as a medical problem. (Conrad & Schneider, 1992: 6).

Nowadays, many diseases and medical treatments are related to food. The body size is seen as a symptom of our health condition. We tend to look at good and bad eating habits to assess a healthy lifestyle. Medically speaking, the treatment of obesity, for example, implies to control food consumption. The disease rests in the excess of fat. In public health history, going on a special diet is one of the daily forms of control imposed on the body (Berlivet, 2004: 38). Food as always been seen as a poison as well as a cure. The Greek physician Hippocrates made a distinction between healthy and unhealthy food. But if the idea of good nutrition as a prerequisite to good health is quite old and established, food viewed as a medical issue is quite new.

In this article, we analyze the process of medicalization of food habits in the elderly, in France, from the beginning of the 20th century until the present time. Nowadays, public policies describe undernutrition as one of the main medical problems in older populations, but at the beginning of the 20th century this issue didn't exist in such terms. The term « undernutrition » was only used for animals.

2. Methodology

Let us put aside the global history of medicalization of eating habits (Poulain, 2001; Corbeau, 2002; Fischler, 2011), and describe more precisely some reasons that explain the medicalization of the elderly's food habits in France during the twentieth century. Trying to write a history of the medicalization of food habits in the elderly requires to describe and analyze the emergence of a new medical category associated to aging: what we call undernutrition. Nowadays,

undernutrition is defined as a medical condition more and more frequent in elderly people, but this condition didn't exist in the medical vocabulary at the beginning of the twentieth century: back then, we talked of malnutrition and underweight, but not of undernutrition.

How can we explain then, that food has become a medical problem and public health issue when we talk about the elderly? The research is based on an analysis of the medical literature written between the end of the 19th century and the beginning of the 21st century. The aim is to try to understand how unhealthy food habits in the elderly have become a medical issue named undernutrition. We describe the scientific construct of a social reality. In less than a century, what was only a private issue gradually aroused public interest and required public action.

There are no books dedicated to this specific question but several sources proved to be useful in this socio-historical study.

- First, the archives of Paris public hospitals (Assistance Publique des Hôpitaux de Paris – APHP), enabled me to analyze the vocabulary used in such institutions to address the issue of nutrition of the elderly at the beginning of the 20th century. Looking at the guidelines and rules of the general administration of Paris hospitals (recueil des arrêtés et des circulaires de l'Administration centrale des Hôpitaux de Paris), helped to better understand how feeding the elderly was mainly a charitable act.

- Then, we used medical thesis and dissertations written on the nutrition of the elderly. They are useful to determine when food habits and aging are starting to be thought of together in medical terms. This kind of medical research is developed during the 30s and 40s and multiplies from the 60s onwards.

- The French public recommendations regarding the nutrition guidelines of elderly people enable us to realize that undernutrition is a major medical and social concern from the noughties onwards. These different sources enabled us to describe and analyse the scientific and social construct of this new public health issues.

3. The fight against the over-nutrition in the elderly

In the beginning of the 20th century, in hospices and hospitals, the State gives daily food charity to a wide range of people in need, not only to the elderly but also to the disabled, the orphans, the

terminally ill. The elderly are part of the 55 399 people fed everyday in hospitals and hospices (Cros-Mayrevieille, 1912: 365). Up until the 40s, feeding the elderly belongs both to the private and public spheres, it is part of a system of solidarity that set the minimum of food intake the elderly should get. Society in those days disapprove of the « lazy » elderly. In the first years of the 20th century, overnutrition is morally condemned in people who are thought to have fewer needs (Landouzy, 1907: 9). Inactive people should get less food. Food charity exists to help poor people who cannot provide for themselves and need help for society. The quantity of food allowed daily is basic. The menus take into account religious prescriptions, days with meat and days without with fish and broth instead. The elderly do not get special extra care. According to the « High Council of public health », the food intake of elderly people must be smaller than the food intake of other patients.

For obvious reasons, the elderly in hospices should be given smaller portions of food. Overnutrition and indigestible food consumption is to be avoided. The food will have to be mashed and easy to chew. This diet, with very little meat, will be rather untoxic, with a small quantity of wine and a pudding for supper. Sweets (chocolate, cocoa) or an extra dessert will compensate the smaller intake of meat (Séré, 1936: 23).

The goal of this specific diet is to treat patients, but also to limit waste and reduce public expenses. This is a prevalent idea that hospitals welcome lazy people (Borsa, 1985: 50). The elderly being an exaggerated epitome. As a consequence, the food served to them must not be too rich or too abundant.

« One should not change the habits of old people and should train the children to the life of deprivation that unfortunately awaits them outside of the care home. Under no circumstances should the food be better than the one available to poor households that, by a praiseworthy consideration one should encourage, are reluctant to come and ask for help from the hospices. It is the State's duty to extend its benevolence to as many people as possible rather than concentrate it on a few, and to keep it in morally acceptable proportions »-

According to the French Administration of parisien hospices, if an institution is too generous regarding food, all people will come and ask for charity. Because of financial difficulties the quantities of bread, wine, boiled beef, and milk to be served every day are carefully calculated. Gender and the

level of infirmity of patients are taken into account to establish different diets. Often, elderly people who live in the hospices criticize the quality and the quantity of food by anonymous complaints. They judge it too bad and too insufficient (Méheust, 2013). In Paris, in the middle of the nineteenth century, assisted people complained mainly about the food (Méheust, 2013).

The famous doctor Maxime Durand Fardel, in his *Traité clinique et pratique des maladies du veillard*, an essay on age-related diseases written in 1854, describes the ageing process. He analyses several diseases such as dementia and tuberculosis. One chapter is dedicated to stomach diseases. According to him little appetite is not systematically pathological in the case of elderly people

« Generally speaking, elderly people do not have a big appetite. Most of those who eat a lot do it mainly because no other interesting stimulation is offered to their senses. But one can assume that none of them needs to eat large quantities of food. (...) But one can witness that a lot of elderly people lose their appetite without suffering from general or local morbid conditions. It is a kind of essential anorexia» (Durand Fardel, 1854: 724).

Dr Fardel identifies two different sorts of anorexia. The most frequent is what he calls a natural anorexia and the second sort is pathological and requires medical treatment (Durand Fardel, 1854). The lack of appetite is often considered natural.

When, rarely, the food consumption of the elderly is thought of in medical terms, the nutritional needs are determined by the level of physical activity, the idea being that those who do not work anymore do not need as much food as they used to eat when they worked. Doctor Landouzy's article offers a good example on the subject. Concerning public charity towards people in need, he is in favour of a rationalisation of food consumption in the elderly. His goal is to reduce the monthly installments paid by city councils.

« How many people in their seventies, if they could afford it, would certainly eat copiously, thinking they still needed to eat rich food as they used to in their fifties? Retired old people do not need to get as much energy from food for their muscles as working people do. The only energy they need goes towards basic body functions on the one hand (breathing, blood

circulation and secretions) and activities like daily walks or home activities on the other hand » (Landouzy, 1907 : 10).

The criterium of labor work is central to determine energy needs: elderly people have to eat less than working people.

4. The social construct of a new pathological characteristic : undernutrition

During the 20s, the classification of all the diseases and disabilities that justify for a person to be committed to an Alsatian hospice does not take into account undernutrition. Alcoholism is the only medical condition related to food consumption that one can find in this classification. Between 1919 and 1924, « cancer », « dementia », « paralysis », « disability » are several conditions that justify for a person to be committed to a nursing home (Gemmerle, 1987: 94).

Up until the 60s, eating habits among the elderly is never considered a medical issue. Doctors speak in terms of bad eating behaviour more than in terms of a serious disease. This explains why undernutrition is not always mentioned in medical encyclopedias. And when it is mentioned, for example in the *Guideline of practical alimentation* of the scientific society of food hygiene, the babies are the population at risk but not the elderly. In 1939, Doctor Arthur Bibring regrets that no systematic research was made on food and aging.

« It seems that this subject is of real physiological and clinical interest, given the fact that the diets among the elderly are almost always not appropriate to their specific needs » (Bibring, 1939: 12).

According to Doctor Bibring, excessive eating habits - such as over-eating, bulimia and undernutrition - are frequent among the elderly. It was thought at the time that elderly people needed a social control of their appetite because their natural behavior regarding food was one of exaggeration. Poverty and avarice were thought to explain a large part of the problem of eating disorders. It was morally believed that elderly people should live modestly. Food excesses and restrictions would break social norms. In the

social construct of ageing, dietetics plays an important part of controlling all forms of excessive behaviours among elderly.

« From some age, it is wise to live modestly, reducing one's activities and costs to save one's energy and age well, living to a happy old age. One's diet will have to be comparable to a child's diet, as light as possible » (Lassablière, 1941: 574).

Considering that a lot of older people eat « too much », « not enough », or « badly » marks certainly the first step in the medicalization of elderly's eating habits. In a social context where life expectancy is more and more linked to food consumption, the elderly's eating disorders appear largely unacceptable. To be socially integrated, an ageing man must eat less than working men and not more than children. Indeed the representation of aging is related to childhood and youth.

From the 1960s onward, the medical literature recommends several food diets to the elderly. Numerous studies talk about « thinness of aging », « disease of privation », « nutritional disorders », « unsuitable nutrition ». « Undernutrition » is not the only one terme used to talk about older's food disorders, certainly because the wrong king of nutrition is considered as the main origine of the problem. The doctor's role is central to diagnose this problem and teach elderly people how eat right.

« It is very important to make elderly people understand that a good health depends on a healthy and balanced diet throughout the day » (Robin, 1975: 16).

Doctors also have to be teachers. A doctor must their patient presenting eating disorders with advice on good eating habits and nutrition. Indeed, this kind of education, to end food ignorance among elderly, is part of a global health education started during the same period (Berlivet, 2004). During the 20th century, medical and public authorities want to make people aware that a good health care starts in the individual. Food and aging are part of this self-control process (Vigarello, 1999: 298).

In the mid-1980's, at the same time as Alzheimer's became an independent pathological category,

undernutrition became the main medical issue related to food, but diabetes and obesity are two other diseases affecting the elderly. If at first it was believed that they had fewer nutritional needs than adults did, now the reverse is true. Their needs are equal to those of an adult if not greater.

« The energy need of elderly people is similar to those young's adults. Protein requirements are slightly superior of those of young adults » »(Jean & Bloch, 2005: 26).

During the twenty-first century undernutrition is recognized as the most severe nutritional problem of elderly people (CNA, avis 53: 5).

« The number of case studies is still insufficient, but the negative impact of undernutrition in terms of mortality and morbidity is certain (bed sores, falls, fractures, nosocomial infections) » (IGAS, 2013 : 4).

Giving an epidemiological definition to undernutrition is an important step in the medical recognition of the elderly's specific needs. The dominant approach of this topic is indeed the epidemiological one : « It consists in investigating the prevalence and the repartition of undernutrition in the population, in defining its pathological aspect, and in inquiring into its causes » (Pouyet, 2015 : 36). In this medical construct of eating disorders, the energy needs of an ageing metabolism are not enough guaranteed. Food consumption involves a medical control each time the quantity of food eaten is reduced.

A large number of factors can lead to the elderly's undernutrition and as a consequence, many aspects of their daily life are under scrutiny by professionals assessing the risks of undernutrition. This medical investigation starts with the body: doctors look at the state of the dentition, the eschars, the fractures, the patient capacity of attention. Neurological disorders, psychiatric disorders, drug therapies, infectious diseases are also taken into account. Social isolation, financial difficulties, grief, dependence can also play a part in the process of undernutrition. The public and the media now acknowledge undernutrition as a frequent medical issue in the elderly. The French consumer organisation UFC – Que choisir (2015) even refers to the medical paradigm of undernutrition when they review and criticize the catering service offered in nursing homes.

« Even in our society of plenty, undernutrition can be a public health issue. It is particularly the case for elderly people. For those of them living in a nursing home, the prevalence of undernutrition is over a third » (UFC- Que choisir ?, 2015 : 46).

From a legal point of view, tackling the issue of undernutrition brought the French MPs to vote an amendment to the law. In April 2015 the French National Assembly voted that an article regarding the food offered to the elderly in nursing homes should be added to the code of public health. « Art. L. 3232-10. - The public health policy contributes to preventing, treating and fighting undernutrition. It will pay particular attention to nutrition in nursing homes ». This article legitimates at a national level the social construct of undernutrition as a disease.

5. Conclusion

The aim in this article was to underline the considerable gap between representations and the actual eating habits of elderly people in France from the 20th century until now. Three successive points emerged.

At the beginning of the 20th century, the eating habits of the elderly were mainly a private matter, not a medical issue. In hospices, food was part of a more global process of State charity. The criterium used to determine food portions to be served to the elderly was mainly financial. In those days, there was a strong social control over underprivileged people. The elderly's eating habits became a medical issue in the 40's.

The terms « overweight » and « underweight » are used to talk about eating disorders. Until the 70's, this kind of problem was not due to biological factors but more to misinformation of the elderly regarding healthy food. Initially limited to animals, the term undernutrition assumes a new meaning in the 60's to refer to the disease of a person suffering from a lack of proteins and energy. Undernutrition, just as dependency, becomes a new sign of ageing. This condition is a form of dependency affecting the elderly's food habits. At this period, eating issues and ageing started to be described and understood in medical terms. This socio-historical approach helps us to better understand the process at work in the medicalisation of food and eating habits among the elderly. This medicalisation process does not only apply to health professionals, it also triggers a cultural transformation. The changes operating in food norms where the elderly's are

concerned, illustrate a new perception of End-of-Life. Between the social norm of « eating less » and the social norm of « eating more », the paradigm shift is remarkable. The elderly, who were once considered as profiteers in hospices, are now the target of public health in Ehpad

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References

Claire, Barillé & Pierre-Louis, Laget. 2013. « L'architecture des hospices prise entre les contraintes de la fonctionnalité et la tentation hygiéniste », in Yannick, Marec & Daniel, Régulier (dir.). *De l'hospice au domicile collectif. La vieillesse et ses prises en charge de la fin du XVIII siècle à nos jours*, Presses Universitaires de Rouen et du Havre, Rouen, pp. 303-333 (566p.).

Serge, Borsa & Claude-René michel. 1985. *La vie quotidienne des hôpitaux en France au XIXe siècle*, Hachette, Paris, 246p.

Luc, Berlivet. 2004. « Une biologie de l'éducation pour la santé. La fabrique des campagnes de prévention » in Dominique, Memmi & Didier, Fassin (dir.), 2004, *Le gouvernement des corps*, Editions de l'Ecole des Hautes Etudes en Sciences Sociales, Paris, pp.38-75.

Arthur, Bribing. 1939. *Sur l'alimentation du vieillard*. Thèse pour le doctorat en Médecine. Faculté de médecine de Paris, 43p.

Peter, Conrad. 2007. *The medicalization of society: on the transformation of human conditions into treatable disorders*, The Johns Hopkins university press, Baltimore, 204p.

Peter, Conrad & Joseph W, Schneider. 1992. *Deviance and medicalization: from badness to sickness*, Temple university press, Philadelphia, 327p.

Conseil National de l'alimentation, *Avis sur les besoins alimentaires des personnes âgées et leurs contraintes spécifiques*, Avis n° 53, agriculture.gouv.fr

Jean-Pierre, Corbeau. 2002. *Penser l'alimentation : ente imaginaire et rationalité*, Privat, Toulouse, 20p

Françoise, Cribier & Elise, Feller, 2013, « Parcours de fin de vie et recours aux hébergements. Evolution des trajectoires, dispositifs et attitudes au cours du XXe siècle » in Yannick, Marec & Daniel, Reguer (dir.). 2013. *De l'hospice au domicile collectif. La vieillesse et ses prises en charges de la fin du XVIII siècle à nos jours*, Mont-Saint-Aignan, Presses universitaires de Rouen, coll. « Histoire et Patrimoines », 568p.

Anatole, Chauffard, 1901. « De la réforme régime alimentaire des hôpitaux », Premier rapport à la société médicale des hôpitaux, *Annales d'hygiène publique de médecine légale*, série 3, pp. 200-211

Gabriel, Cros-Mayrevieille. 1912. *Traité de l'assistance hospitalière*. Tome 1. Editeurs Berger- Levrault, Paris, 613p.

Alain, Drouard, 2007, « L'alimentation à l'hôpital », pp. 327-338 in Francis, Démier & Claire, Bastillé (dir.), 2007, *Les maux & les soins. Médecins et malades dans les hôpitaux parisiens au XIXe siècle*, Editions Action artistique de la ville de Paris, Paris, 397p.

Lise, Dubois & Daniel, Burnier. 2012. « La médicalisation de l'alimentation », in Jean-Pierre, Poulain (dir.), 2012. *Dictionnaire des cultures alimentaires*, Presses Universitaires de France, Paris, pp. 831-837.

Maxime, Durand Fardel. 1854. *Traité clinique et pratique des maladies des vieillards*. Editions Germer Baissière, 876p.

Criteria of Importance influencing food choice in workplace canteens

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Abstract

Workplace canteens are an example of a public sector foodservice setting where meals are taken on a consistent basis, contributing to people's daily calorie intake. Despite growing demand, little information is available and time pressure when making food choices alongside problems of understanding information provided not only act as barriers for healthy choices but also decrease confidence in the food system. Consumers are aware of their inactive role in the food system and are looking for information in order to choose food that meets their needs. This study used focus groups to explore criteria of importance that motivate people's food choices in a worksite canteen. Thematic analysis was applied to categorise data according to frequently occurring responses. Data was collected from four focus groups in Germany and the UK with a total of 23 participants. Although there is little expectation in the quality of food served in workplace canteens, food is purchased in order to socialise with other work colleagues. Criteria of importance influencing food choices made at work are: Value for Money, Variety, Naturalness, Nutrition, Portion Size, Taste & Visual Appearance, Origin, Animal Welfare, Environmental Impact, Fair Trade and Organic. Gaining insight into these criteria can enable operators to meet the needs and expectations of their customers in order to increase confidence in food provision.

Keywords: Food choice, information, consumer, foodservice, workplace canteens

1. Introduction

The workplace is a setting where food is consumed on a regular basis, can form an important part of the overall diet and as people spend an extensive time of their waking hours at work what they consume is of importance.¹ With this expanding trend of eating out, there is also more consumer interest to know the provenance of ingredients.² These needs and expectations have also arisen through past food scares and malpractices in food production which has affected the way consumers view their food and trust in the food they eat.³ Trust is an important component of health and wellbeing through its impact on food choice and confidence in expert advice.³ Moreover, in times where the consumer takes a less active role in food production and preparation, trust in the food we eat and in food providers is important as the consumer himself has no control over the production.⁴ Consumers have experienced a number of problems in the food chain, affecting the safety of food or misleading them about the true ingredients and their origin. Consequently, this has led to a greater awareness amongst consumers who have an increased interest in more information about provenance, production methods and nutritional profile of the food that they eat. Consumers' food purchasing habits have changed in a retail setting and when eating out commercially leading to pressure on public sector foodservice to keep up with changed consumer demands and expectations.⁵

Current trends in the foodservice industry show that consumers put a high emphasis on local and traditional food, whilst also having a high curiosity for ethnic foods.⁶ Additionally large consumer segments are becoming more socially responsible with high interests in eco-friendly and ethical business practices, sustainability, fair treatment of animals and carbon footprint.⁷ However, these trends are not always reflected in workplace canteens and there is currently very little information provided despite growing consumer interest and demand for more transparency.⁸ Although labelling of nutrients and provenance is provided to the consumer on products in a retail setting, there is a lack of information provision in an out of home setting making it harder for the consumer to make choices.

Moreover, food systems have evolved to be more complex and information is vast and difficult to interpret. More consumers would like greater transparency and have the right to be provided with such information.⁹ The current interest is topical in regards to the introduction of the EU regulation 1169/2011 under which information on allergens will have to be available to the consumer

for non-pre-packed foods through either labelling on the menu or availability on request.⁸

Understanding key drivers of food choice can allow food operators to align their service with consumer preferences across different market segments. Information provision can increase trust in the products and the food producer and can strengthen the relationship between industry and consumer.¹⁰ Although some research studies have focused on the importance of nutrition information to consumers, the focus has been on the retail sector and knowledge about information needs workplace canteens is lacking.¹¹ Furthermore, consumer interests go beyond the search for nutritional information with curiosity for information on other quality attributes and origin of food.¹² Consumers have different expectations in food associated with health or ethical concerns relating to food production.¹³ When these expectations are not met, there is not only an absence of confidence but also expressed distrust demonstrating consumer dissatisfaction with food production. In order to maximise utility, food on offer is evaluated and those products reflecting preferences most chosen.¹² Consumers have different priorities of food criteria and have the right to have a choice of foods that meets their needs. Therefore, this study is exploring criteria of importance that motivate peoples' food choices in a worksite canteen as an example of a public sector foodservice setting.

2. Methods

Focus groups were selected as the methodology for this study due to their ability to elicit discussion of participants' perceptions that can provide a rich description of viewpoints and experiences from many angles. The focus groups in the current study were used as formative research for the development of a questionnaire rolled out to a large consumer sample in Germany and the UK.

Structured focus groups (n=4) were conducted with employees who regularly use the canteen at their place of work. Participants were recruited through university contacts who distributed an invitation email via their work intranets. In order to ensure continuity across the four focus groups, specific questions were designed rather than relying on a topic guide. This decision was also made to improve the analysis of data. The questions used for the discussions were influenced by the literature and focussed on factors affecting meal choices when eating at work. These questions were also discussed with key industry stakeholders. Draper and Swift¹⁴ advise to design questions for structured focus groups based on the concepts of the research question: What influences food choice in workplace canteens? The

questions asked were related to eating habits and food choices made in workplace canteens and factors such as information influencing food choice. A thematic analysis approach was used to analyse the transcript data which is a widely used technique seeking to identify, analyse and report themes within and across data. Accordingly, the data was analysed in order to find common themes, differences and relationship. Themes were iteratively reviewed so that coding categories were adapted according to the data to achieve rigour.

3. Results

There were 23 participants, out of which 13 were female and 10 male with an age range of 22 – 52 years. Participants of the study shared their experience from different styles of canteens and have seemingly less expectations in the food sold at work than in food consumed at home or when eating out; especially in regards to taste and quality of ingredients. Additionally, preceding factors influence the decision to eat in a worksite canteen, which are reasons acting as facilitators or barriers to making use of the canteen. These factors are socialising, convenience and media coverage of food scandals. Employees use

canteens as an area to take a break and as a place to socialise. Furthermore, it offers many aspects of convenience including not having to cook at home or having to prepare any food in advance which was especially valued by single participants. Time constraints also mean that the canteen offers an advantage over alternative food outlets. The 2013 Meat Adulteration Scandal¹⁵, where food labelled ‘containing beef’ was found to contain horsemeat, was referred to by participants, as provision of this adulterated food reached into canteens. Once the decision to eat in a workplace canteen has been made, there are several aspects that influence food choice. However, these differ from factors influencing food choice in a retail setting which are influenced by the perception of inferior quality of mass produced food in workplace canteens. Additionally, when eating out, consumers are presented with a whole meal, therefore, not thinking about individual ingredients in the way they do when eating at home. Value for Money, Variety, Naturalness, Nutrition, Portion Size, Taste & Visual Appearance, Origin, Animal Welfare, Environmental Impact, Fair Trade and Organic are criteria that directly influence food choices made in workplace canteens as outlined in Table 1 below.

Table 1. Participants` Definition of Criteria affecting Food Choice

Criteria	Participants` Definition of the Criteria
Value for Money	Affordability, Criticism of healthy food at high cost Different views on paying premium for higher quality
Variety	Variety of options suitable for different physical needs Flexibility to change condiments Frequent Menu Rotation
Naturalness	Fresh ingredients, Less heavily processed foods Limited use of additives and preservatives
Nutrition	Range of healthy foods, Lighter Options Preparation of food that preserves nutrients
Portion Size	Sufficient portion size reflecting value for money Criticism of healthy options being a smaller size
Taste & Visual Appearance	Heavy reliance on experience Visual Appearance does often not reflect dish description
Origin	Support for local community, Provenance of food
Animal Welfare	Animal welfare standards, Production method of meat and eggs
Environmental Impact	Carbon footprint, Short supply chains
Fair Trade	Preference of fairly produced products
Organic	Organic ingredients regarded as healthy and of higher quality Seen as consumer right to obtain information about food
Information	Can help decision making Mixed views on making use of provided information Information interests in : Allergens, Calorie Content, Ingredients, Provenance

Similarities and Differences between the UK and Germany

There are similarities and differences between factors of importance when making food choices as shown in Table 2 outlining the different profiles for the UK and Germany. For the preceding factors affecting food choice, using the canteen to have a rest and socialise alongside the convenience it offers was equally important to participants from both countries. However, German participants also

stated the lack of alternatives and not having to cook a hot meal at home as reasons for using their worksite canteen. Furthermore, they not only mentioned food scandals concerned with fraudulent food but also food safety issues. The price of a meal, its taste and visual appearance are important factors in choosing a dish for UK and German participants as well as a high emphasis on healthy food and fresh ingredients. German consumers were concerned about food additives whilst UK consumers criticised the use of

processed foods in canteens. In terms of variety, German participants welcome menu rotations whilst UK participants have an interest in ethnic foods. There is a request for more in depth and understandable food information in both countries. Support for the local community, high

standards of animal welfare and organic food production were mentioned in both countries with views on organic produce being mixed. Furthermore, one UK participant found fair trade and the carbon footprint of food important.

Table 2. Overview of Country Differences

Criteria of Importance	UK	Germany
Convenience		Not having to cook at home, no alternatives
Variety	Ethnic Foods, Flexibility	Frequent menu rotation
Naturalness	Demand for less processed food	Less additives and preservatives
Nutrition	Adequate cooking method	
Environmental Impact	Carbon Footprint, short supply chain	
Fair Trade	Fair Trade	
Food information	Provenance	

4. Discussion

Food choice is a complex phenomenon, influenced by food properties, characteristics of the consumer and the context in which the choice is made.¹⁶ Results of this study show that food choice in a workplace canteen is not only influenced by underlying criteria of importance and characteristics of the food itself but also context dependent. Participants expect less quality of food offered in workplace canteens but accept this due to time constraints and the convenience of a worksite canteen and compromise on other attributes such as taste. Depending on the context, salient criteria such as taste, convenience and nutritional content are compared and negotiated. An American study analysing factors influencing lunchtime food choices amongst working Americans, found that convenience was the most important factor followed by taste, cost and health.¹⁷ The current study has also found that convenience, taste, price and nutritional value of food were important factors influencing food choices in worksite canteens. Especially taste and cost of the meal were important factors as food was believed to be of an inferior quality and as worksite canteens are visited regularly, meals offered must be affordable. Furthermore, participants indicated the struggle of identifying certain food characteristics such as origin, nutritional profile and production method. Food choices in workplace canteens relate to a meal rather than to individual ingredients, which differs from food choices made in a retail setting. Therefore, there is a stronger reliance on experience and visual appearance of the food compared to choices made in a retail environment. This study has also given an insight into consumer satisfaction in regards to worksite canteens as both

nutrition and naturalness are important for participants when making food choices, with a common demand for fresh ingredients and healthy food. However, it was criticised that these demands are rarely catered for although the benefits of a healthy workplace food environment for both employee health and organisation profitability are widely recognised.¹⁸ Increasing individual awareness of healthy eating is important, but improved dietary behaviours at the population level require commitment of foodservice operators to meet the requirements of their consumers.

Food scandals can have an effect on food choices made in canteens; the horsemeat scandal and outbreaks of bacterial contamination of food are on consumers' minds for the duration of media coverage. The effect of food scandals on food choice may change importance over time, especially as there was the consent that once the media attention withdraws, the relevancy for the consumer also changes. This short-lived influence of food scares was documented in the Eurobarometer 354¹⁹, which showed that the most common reaction is a temporary cessation of certain products. For those participants who do alter their consumption habits, their expectations of inferior quality ingredients being used in canteens resulted in an avoidance of dishes especially containing processed meats. Results from the trust in food survey conducted in six countries across the EU has also shown that consumers have little trust in the quality of processed foods, meat and unhealthy food items.⁴ Greater information provision was welcomed and even if this information is not being utilised it provides the reassurance that the information is there. Although in Germany, more information on additives and allergens is provided, it was criticised

as being too difficult to interpret. Information on ingredients, especially provenance is welcomed but views about nutrition information, particularly calorie information were mixed with some consumers welcoming help towards a healthier lifestyle whilst other participants perceiving it as an overload of information impairing their enjoyment of food. From a public health perspective, providing nutritional information at the point of purchase can provide the framework for measured food choice decisions.

5. Conclusion

Information provision in the food industry makes people believe that they are being given important evidence and there is a consumer demand for information in workplace canteens. Although consumers may not make use of all information provided, they are reassured by its presence. Therefore, consumers not only demand to be supplied with information on their food, it is also a way for foodservice operators to demonstrate transparency and strengthen the relationship with their customers.

References

- ¹ Department of Health. Choosing a better diet: a food and health action plan. London: Department of Health 2005.
- ² Banterle A, Cavaliere A, Ricci EC. Food labelled information: an empirical analysis of consumer preferences. *International Journal on Food System Dynamics*. 2012;3(2):156-70.
- ³ Coveney J. Food and trust in Australia: building a picture. *Public Health Nutrition*. 2008;11(3):237-45.
- ⁴ Kjaernes U. Trust and Distrust: Cognitive Decisions or Social Relations? *Journal of Risk Research*. 2006;9(8):911-32.
- ⁵ Edwards JSA. The foodservice industry: eating out is more than just a meal. *Food Quality and Preference*. 2013;27(2):223-9.
- ⁶ Bugge AB, Lavik R. Eating out a multifaceted activity in contemporary Norway. *Food, Culture and Society*. 2010;13(2):215-40.
- ⁷ Fleming CA, Miller RK, Washington K. Chapter 8: Quick-Service & Fast-Casual Chains. Richard K. Miller & Associates; 2008. p. 69-72.

- ⁸ Watson R. Managing allergens from a food retailer perspective including an update on allergen labelling regulation. *Nutrition Bulletin*. 2013;38(4):405-9.
- ⁹ Mazurkiewicz-Pizo A, Pachuca-Smulska B. Access to information as a determinant of the consumer behavior at the food market. *Acta Scientiarum Polonorum - Oeconomia*. 2012;11(4):35-46.
- ¹⁰ Davide M, Rafia H-D, Cristina M, Georges G. Motives towards traceable food choice: A comparison between French and Italian consumers. *Food Control*. 2013: 49: 40-48.
- ¹¹ Carbone ET, Zoellner JM. Nutrition and Health Literacy: A Systematic Review to Inform Nutrition Research and Practice. *Journal of the Academy of Nutrition & Dietetics*. 2012;112(2):254-65.
- ¹² Lusk JL, Briggeman BC. Food Values. *American Journal of Agricultural Economics*. 2009;91(1):184-96.
- ¹³ Meyer SB, Mamerow L, Henderson J, Taylor AW, Coveney J, Ward PR. The importance of food issues in society: Results from a national survey in Australia. *Nutrition & Dietetics*. 2014;71(2):108-16.
- ¹⁴ Draper A, Swift JA. Qualitative research in nutrition and dietetics: data collection issues. *Journal of Human Nutrition & Dietetics*. 2011;24(1):3-12.
- ¹⁵ Premanandh J. Horse meat scandal - a wake-up call for regulatory authorities. *Food Control*. 2013;34(2):568.
- ¹⁶ Machín L, Giménez A, Vidal L, Ares G. Influence of context on motives underlying food choice. *Journal of Sensory Studies*. 2014;29(5):313-24.
- ¹⁷ Blanck HM, Yaroch AL, Atienza AA, Yi SL, Jian Z, Mâsse LC. Factors Influencing Lunchtime Food Choices Among Working Americans. *Health Education & Behavior*. 2009;36(2):289-301.
- ¹⁸ Thorndike AN, Sonnenberg L, Riis J, Barraclough S, Levy DE. A 2-Phase Labeling and Choice Architecture Intervention to Improve Healthy Food and Beverage Choices. *American Journal of Public Health*. 2012;102(3):527-33.
- ¹⁹ European Food Safety Authority. Eurobarometer 354 Food-related risks.Brussels: European Food Safety Authority. Available at: www.efsa.europa.eu/en/factsheet/docs/reporten.pdf (accessed 15 December 2014)

From perception to expectations: the chicken-egg question at the individual level

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Abstract

Food perception is partly based on top-down processes, meaning that the same product can be perceived in different ways by different consumers. Expectations are among the factors influencing consumer perception.

The aim of the research is to study how the link between expectations and perception vary according to subjects characteristics.

Expectations related to a food product are built from external information such as brand, product name, packaging, but also from internal information and previous experiences stored in subjects' memory. Memory is structured into categories, meaning grouping together objects sharing similar criteria. Categories can be structured based on sensory properties, beliefs, affective responses, implication. As previously shown in different studies, categories evolve as a function of contexts and subjects. Therefore, considering expectations are based on categories, we are interested in studying how expectations evolve as a function of individuals.

The test procedure is based on a common psychological methodology, a free sorting task. It is used to spontaneously reveal generated categories in a subject's memory and unveil consumer expectations.

This approach was tested with 214 Polish consumers testing a new type of drink. First, a free sorting task with 11 different products was conducted. Then, a free verbalization of the characteristics of each category was completed and finally, an association of each category with one board of expectations was asked (board being previously obtained through a qualitative study). Boards of expectations reflected context of consumption, beliefs and emotional responses.

Results allowed clustering consumers on their product categorization and showing different associations between expectations and perceived products. . Four relevant clusters of consumers were found, each with different perceptions of the product range as well as specific associations with expectations. Therefore, we were able to show different link between product perception and consumers' expectations linked to each category in terms of sensory properties, context uses, and benefits

Key words: Expectation, perception, categorization, sorting, food

1. Introduction

1.1. Expectations and perception are interrelated processes

Perception is a process inherent in each subject

Perception is partly based on top-down processes. These individual processes induce a personal interpretation of sensory information driven by concepts (Balçetis and Dunning, 2006). Sensory characteristics induce a recall of specific memories stored by the subject (Versace et al., 2014). For a food perception, sensory characteristics of the recipe of a product are interpreted into sensations by the subject. Integration of this information coming from subject's memory leads to different percepts for the same stimulus, meaning defined product's characteristics. Percept is defined by an "accessible, subjective, reportable experience that takes the form of an activation of a certain category in mind" (Brosch et al., 2010). Individual factors integrated during the perceptive process are linked to previous experiences stored in memory. Recollections of the subject are stored with a defined context

Categorization is a top-down process integrated to perception

Memory is integrated to perception. In order to gain in efficiency and time during the process of identification of the stimulus, memory is organized into categories. Activation of categorization are regulated by two fundamental principles : the minimal cognitive effort that "provide maximum information with the least cognitive effort" and the relevance of associations defining by the fact that "combinations of what we perceive as the attributes of real objects do not occur uniformly" (Margolis and Laurence, 1999). Therefore, integration of categorization in the process of perception ensures a faster and better identification of the stimulus by the subject. A category is defined by a group of objects that are at the same time similar on specific criteria and discriminated from other categories among these criteria (Bruner, 1956). These specific criteria can be:

Structural or sensorial (Reed, 1972). For example, the category of cars is a group of objects sharing this specific structure: four wheels and an engine. In the case of food perception, categories can be defined by sensory properties of the products. For example, category of "flavored drinks" is defined by a liquid texture associated to an aromatization. Categories induced by these criteria are defined as taxonomic.

Believes associated to semantic knowledge (Murphy and Medin, 1985). These criteria are conceptual and can't always be ensured just after consumption. The category of "healthy yoghurts" is based on associations between information given on the product and previous experiences of the subject with the products of the category. These associations are partly cultural.

Contextual or goal-related (Barsalou, 1983). In this case, the ad-hoc category is based on criteria that helps achieving a specific goal in a define situation. These categories are not based on structural characteristics shared by the objects but more on concepts induce by the subjects. They are defined as "script" categories. In food consumption, these categories are driven by the context of consumption meaning environment of consumption but also by the motivation for the subject to consume the product.

Affective (Niedenthal et al., 1999). Previous experiences are well stored in memory when associated to a high affective arousal. Categorization of the stimulus is inducing by the comparison between affective reactions of previous experiences and on the moment. Niedenthal et al give as example all the situations categorize in the same way under fear-based reactions: "sound of an air attack", "a snake on the road" and "admonition from a manager".

Then, activation of one specific category by the perceived characteristics of the stimulus induces an association of all the criteria of the category to the object (Bruner, 1956; Reed, 1972). In food perception, criteria defining the category are: sensory properties, believes associated to the brand, the information on the packaging as labels, a context of consumption and an affective reaction to the consumption.

Therefore, the percept is an individual construct integrating memory into the process of identification.

1.2. Expectations are integrated to memory and perception

Expectations are defined as a cognitive process but differently among fields of study and without real consensus. Here, expectations will be defined as Olson and Dover did : "pretrial beliefs about the product [...] the subjective probability of association between two concepts such as a product and an attribute" (Olson and Dover, 1979). This probability of association is related to memory activation process. Indeed, expectations are built on information stored in the subject's memory, therefore activated category, and external information such as packaging, brand or communication around the product (Cardello and

Sawyer, 1992). Two different types of expectations are shaped by the subject : conceptual, meaning defined by believes, and sensorial (Deliza et al., 2003; Lange et al., 1998). Most of the studies on expectations are focused on the effect of context on expectations variability toward a product. The link between memory and expectations is not enough studied and more specifically the link between activated category in mind and expectations.

1.3. Categories vary among subjects

Categories in mind are not stable but dynamic. It evolves function of many parameters that structure the product experience: consumer, product and context. Categories evolve among subjects. For example, the motivation to consume the product is an individual parameter. It is define as the believe to reach a goal determined consciously or not by the subject (Balctetis and Dunning, 2006). Social and biologic characteristics are also influencing perception at an individual level as familiarity like level of knowledge. Therefore, the way of categorizing is individual and categories are not stable.

2. Research question and hypothesis

Expectations are shaped by the subject's memory, meaning the way his knowledge is organized and re-emerged during the process of identification of a specific stimulus. This structure allows a reactivation of knowledge faster with a less cognitive effort. These categories evolve among subject. Therefore, the aim of the research is to study expectations variability among subjects, The research hypothesis is the following: a variability of categorization among subjects leads to a variability of expectations among subjects for the same product.

3. Material and method

The methodology was planned in two steps with unfamiliar consumers of the product in the proposed context of consumption (figure 1). The first step is a qualitative study based on interviews to explicit expectations activated in mind of

consumers by this category of product. The second step is a quantitative study based on sorting task in order to understand subjects' perception of the product range. The whole test was realized with polish consumers.

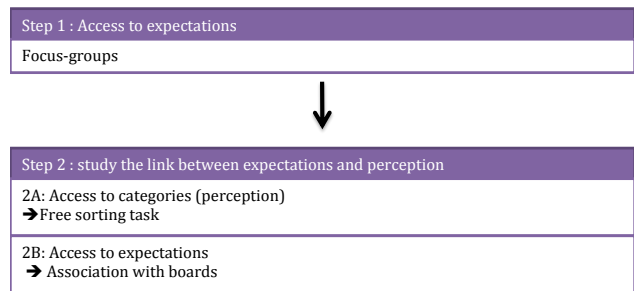


Figure 1. Methodology followed to study the link between perception and expectations

3.1. Qualitative study : explicit expectations of subjects

Grouped interviews have been done. Four groups of five polish subjects have participated, clustered among age and the type of drinks they used to consume. One interview lasted for three hours and was done in two phases.

First phase was based on activations in memory related to the primed category of products. Subjects have expressed expectations related to believes, context of consumption, sensations for this specific category of products. Six profiles of consumption have been evoked linking for each, one context of consumption with one motivation to drink the product.

Second phase was based on the tasting of samples, meaning real stimuli. Ten products have been proposed and have been selected based on sensory description made by experts. The range of product was heterogeneous in order to give to subjects various sensory stimuli (figure 2). Different sensory modalities were explored: visual (color), taste (aroma and basic taste), odor, somesthetic (texture). For each tasted product, subjects had to assess the fit with the evoked category and the link with the sensory modalities. This step allowed selecting 11 products to propose for the sorting task.

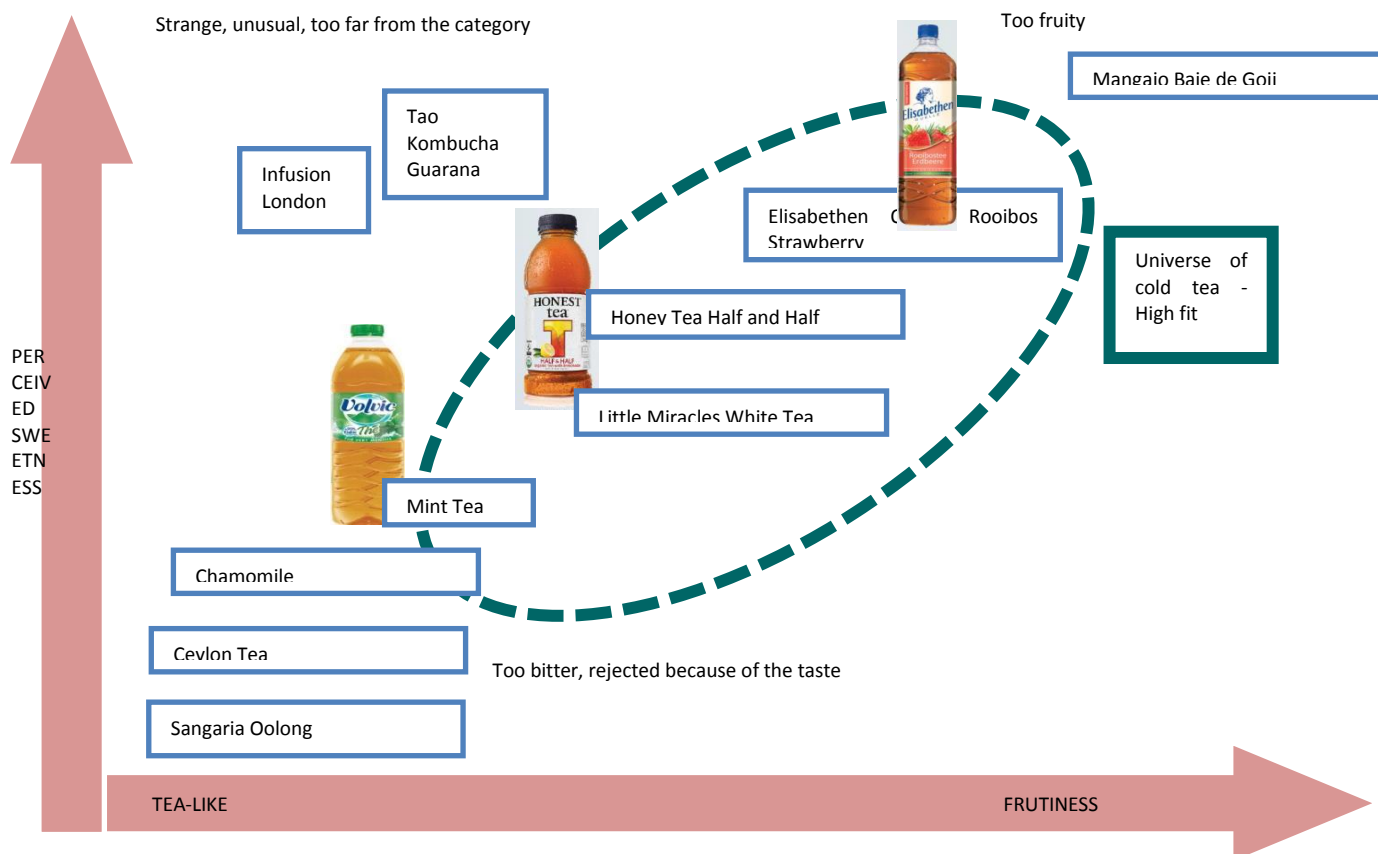


Fig 2: Product space tasted by subjects during focus-groups

3.2. Quantitative study : studying the link between perception and expectations

214 consumers have been recruited on the same criteria than for the qualitative step. 50% of the consumers were women and a repartition of 50% between 20-35 y.o and 36-56 y.o has been kept. All the subjects are consumers of a specific brand of drinks and used for the priming. They were non familiar of the category of products studied and were non rejectors of the different aromas selected for the sorting as well for the global category primed for the study.

Eleven products have been presented to the consumers on the basis of the results obtained through the qualitative study. The product range was composed of products of the same semantic category. They were industrial products coming from different worldwide markets. These eleven products were the following:

Two products were known by the subjects but not relevant for the specific category primed with the chosen brand.

Four products were prototypes, specifically formulated for the study with different aromas not well known by the consumers

Five products were coming from other countries, so unfamiliar for Polish people.

The product range was differentiated on the tea aroma (green, black, rooibos, and white) and the fruit aromatization (pear, lemon, white grape, and strawberry). They were heterogeneous on the main sensory criteria highlighted by the consumers in the qualitative study as most important to define the category. Then, sensory expectations explicated by consumers allowed restricting the product range and selecting stimuli for the sorting task. This goal was achieved by linking the sensory expectations highlighted during the first step based on subjects' memory and the sensory perception of the stimuli during the second step based on tasting. Results showed that this category of drinks is structured through three main sensory modalities: sweetness, fruit intensity and tea intensity (figure 3).

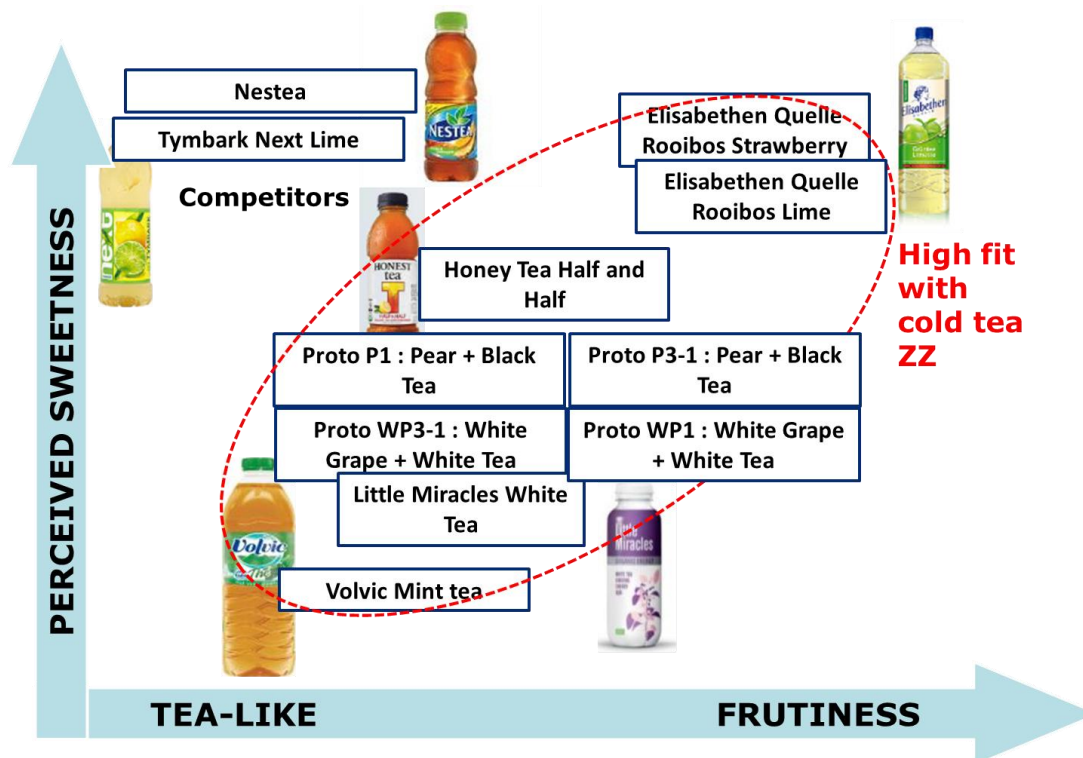


Fig 3: Product space tasted by subjects during the sorting task

Results highlighted a reject of non-sweet products and a taste of fruit more intense than tea. Products too intense in fruit taste were also rejected by subjects as not congruent with the semantic category induced.

Distinction between sensory expectations and perception is key. Indeed, if consumers have mentioned in the first part a low sweet intensity then during the tasting, the most sweetened products were assessed as congruent with the category. This distinction between remembered sensations, meaning expectations and perceived stimuli was also observed on:

Visual criteria: a clear color was expected because of the influence of the brand but some cloudiness is tolerated because of the expected naturalness of the product linked to the addition of fruit juice. However, during the tasting, cloudiness was rejected by consumers as non-fitting with the category. In the same way, sparkling drinks were pulled out.

Basic tastes as bitterness that must be perceived in the product because of the tea but not too much when dealing with real stimuli.

Aromatization: fruit aroma must be traditional because of the brand and the tea highlighted in the product that emphasis the traditional side of the sample. Expectations about herbal tea were also much more defined by the tasting phase because it reactivates memories linked to medical care so not congruent to the category.

This product range has been described by a sensory expert panel in two ways. The first one is a static description meaning a quotation of each sensory modality for each product. The second one is a dynamic description, meaning at each time of the consumption an assessment of the most salient sensory modalities. These two methodologies were assessed on sweetness intensity, fruit aroma intensity and tea aroma intensity, bitterness, balance between tea and fruit, and color. The aim was to ensure a differentiation between the products selected for the sorting task.

3.3. Modality of presentation

All the samples were served in plastic and transparent glasses of 12mL, under the same known brand used for the screening of consumers. Therefore, differences perceived by the consumers are induced by the sensory differences. All the products were presented in a comparative way, meaning all at the same time, to the consumers but in a random order on the table. It ensure that consumers could taste all the samples but not in the same order while they sort them on the table.

Methodology

Each subject made the same sequence of tasks (figure 4):

1st task: contextualization on the semantic category of products and on the brand. This phase was a two-steps task. First, they were asked to describe their expectations related to the category

speaking about context of consumption, motivation to consume it, sensations. This first step was made to ensure activation in memory of consumers of specific knowledge related to the products and activated all the criteria of the category. Then, in a second time, they were asked to give the fifth words coming to their mind while they were looking at the logo of the brand. This second step ensures activation of knowledge related to the brand. At the end of this first task, consumers were put into the context of consumption of this category of samples under the defined brand.

2nd task: sorting task on the product range. Subjects were asked to group products among perceived similarities and dissimilarities. The following instruction was given : “Observe the all product range in front of you. All these products are made by the brand X. Smell them, taste them. Then, group them among the aspects that are common and at the same time different from another group of products. You can make at least two groups and no more than ten? You can taste as much as you want the samples”. At the end of this task, consumers have made in front them several groups of products.

3rd task: free description of the product range. Consumers have to describe each group of products and give the criteria that specifically differentiate this group from another. This third step wasn't explained before in order to ensure that subjects do not think too much about the reasons why they made the groups. Indeed, this step can had a bias in the spontaneity of the sorting task.

4th task: association to expectations. At this step, six boards of expectations were presented to consumers. These boards had been obtained through collages made by the consumers during the qualitative study. Each board was a mix of different pictures evoking one specific situation of consumption. We avoid presenting citations to consumers in order to avoid a step in the interpretation that consumers can make and also to facilitate the task. These boards will be described later. For each group of products, they had to associate if they want the board fitting the best. This step allowed us to study the link between perception (sorting task) and expectations.

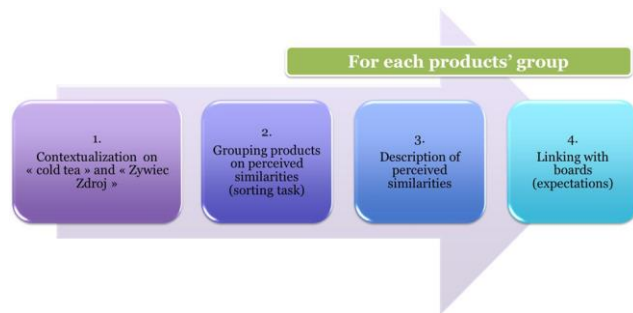


Fig 4: Procedure followed by subjects during the quantitative step

Boards of expectations

The qualitative study allowed to explicit two different kinds of expectations: conceptual expectations and sensory expectations. Conceptual expectations are, here, presented through different boards of pictures. These pictures have been selected by consumers during the focus-groups. Six different boards were obtained characterizing six different situations of consumption linking one specific benefit with one context of consumption.

Six profiles are defined (figure 5):

A situation link to physical activities where the expected benefit is to rehydrate, refill the body in electrolytes and minerals. The context is just before, during or after sports (a).

A spontaneous situation of consumption. Main motivation to drink is to refresh and have pleasure during the summer, or hot days in a nomad way of consumption (b).

An exotic situation of consumption. The context is mainly holidays, or traveling. It induces the pleasure of taste and the need to taste something new, exotic. Main benefit is related to pleasure and relaxation (c).

A social situation of consumption. Context is mainly defined by the social aspect as going out with friend. This category of products is expected to be stimulated and energizing. The choice of the drink became a way to express a personal image (d).

A situation of consumption related to family. The main benefits associated by the subjects are the natural and traditional sides and healthiness of the product. And these main benefits are related to the fact that it is consumed by the whole family including children during meal time (e).

A situation centered on the subject. The aim of consumption is to relax and give to itself pleasure at home, after work and alone (f).

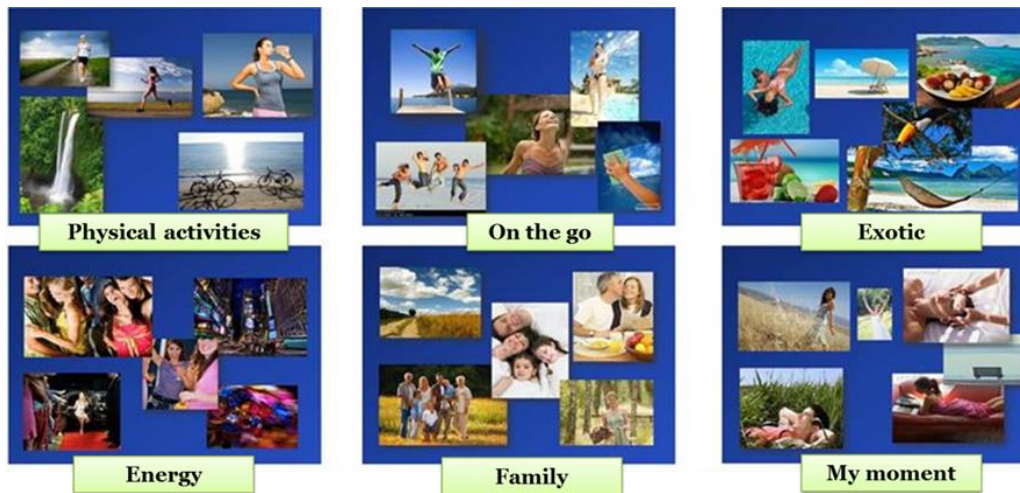


Fig 5: Boards of expectations built on subjects' collages during the qualitative step

Activation in subjects' memory is very specific because the results highlight specific association between sensory expectations and conceptual expectations as presented with the boards. Therefore, activation of defined categories allowed referring to goal-related, affective or contextual criteria.

Statistical analysis

Data from sorting were organized in individual matrix of dissimilarities. The matrix for each subject is a product x product matrix; with 0 when the two products are in the same group and 1 when not. All the individual matrices are summed to give an aggregated matrix. A MultiDimensional Scaling (MDS) has been performed with XLStat 2014 on the global matrix. Dimensions for the best configuration of products are selected for a Kruskal stress inferior to 0.05 (Faye et al., 2004).

Adjusted Rand Index (ARI) has been calculated between subjects to assess the proximity between the two partitions (Faye et al., 2004; Hubert and Arabie, 1985). The index evolved from -1 to 1. For values inferior to 0, partitions are completely different. When the two partitions are exactly the same, the index is equal to 1. A global matrix subject*subject has been made with at each cell the correspondent IRA between the two subjects.

Then, a Hierarchical Ascendant Classification (HAC) has been done on the global matrix in order to cluster consumers among their perception of the product range. For each cluster, the same analysis (matrix of similarity and MDS) has been performed.

To analyze data provided by the description and the association to the boards, matrix of products*descriptors and products*boards were done. For each subject, a correlation coefficient was calculated between the coordinates of each sample on the mapping and the descriptors or boards associated. A projection on the mapping of the verbatim and the boards allowed us to

associated samples to specific descriptors and boards.

4. Results

4.1. Variability of perception of the same range of products among subjects

Two different criteria were analyzed to assess the variability of perception among subjects. A first criterion was the clusterisation on sorting task. Results provided by the clusterisation of consumers showed four different perceptions of the product range, meaning four ways of grouping the samples (figure 6).

See Figure 6 (end of the text)

Numbers of groups were not the same among clusters of consumers. For clusters 1 and 3, three groups of products were obtained; for the cluster 2, six groups and for the cluster 4, 5 groups.

Nature of association between samples is also different depending on the consumers. This result is highly correlated to the heterogeneity of the product range. As the samples were quite different, many ways of grouping can be done. As some samples were closer, as for example the prototypes WP3-1 and WP1 they were systematically grouped together.

These two indexes showed a difference of categorization among consumers.

Looking at the results on description task, we could hypothesize that only sensory descriptors will be used. Indeed, perception of the subjects is mainly based on sensory criteria because of the available level of information. From one side, products are not familiar for consumers and from the other side; the only information given on the product range is the brand meaning common information for all the products.

The number of sensory descriptors are higher after clustering the set of subjects, meaning a highest consensus between subjects, so a same way of differentiate the samples and define the categories in mind. Sensory descriptors mainly used among clusters are: sweetness intensity, fruity intensity, tea intensity and color. Nevertheless, associations between sensory descriptors and products are different depending on the clusters of subjects.

4.2. Variability of expectations on the same range of products among subjects

Comparison between the results obtained with the whole set of subjects and after clustering show a highest consensus in association between groups of products and the boards (figure 7).

See Figure 7 (end of the text)

For the global set of subjects, only two different boards of expectations are associated with the product range. Looking at the cluster 4 of subjects, for example, a highest number of boards are associated with the product range: all the boards were associated. Clustering on subjects' perception emphasizes the consensus between subjects, showing that clustering on perception allows obtaining similar expectations among subjects.

A variability of association between products and boards of expectations are also observed. For example, Volvic and Elisabethen Quelle Rooibos are associated with energy situation and family context for the cluster 4 while for the cluster 1 they are associated with physical activities. For some of the samples that are already familiar for the subjects, as Nestea, the same association is kept among cluster: exotic and holiday situation.

The results show a variability of expectations among subjects depending on their perception.

5. Discussion and perspectives

5.1. Expectations depend of categories activated in memory

Difference of associations between boards and products depending on the cluster of subjects allows showing that expectations are strongly correlated to the way subject categorize the product range. Indeed, depending on the group of products and therefore, criteria of categorization used by the subjects, expectations associated are not the same. Expectations are based on memory. Therefore, activation of a specific category in mind based on sensory criteria induces specific conceptual expectations in subject's mind for the product. Criteria of categorization are different

among subjects leading to different expectations for the same product among subjects. As the product range is unfamiliar, sensory criteria are even more structuring expectations of the subject, because these are the only information given to him. For a familiar product range, expectations are stronger meaning that conceptual information can also shape perception of the products.

5.2. Expectations depend of the context of activation

Activation in memory leads the process of identification of the stimulus. Before the product consumption, activation of one category in mind is based on available visual information grasped by the subject. These clues are integrated in the environment where the product is set. This hypothesis is here inferred by the presence of visual descriptors in the product categorization made by the consumers. This categorization will then induce expectations before product consumption. Depending of the level of available information in the product environment, meaning for example, the set up in the market store, the packaging, activation of a category in memory of subjects will be different and therefore induce different expectations. As the results highlight a variability of expectations among subjects, it is necessary to check this variability among context, meaning different levels of information on the product. This step is essential to understand the role of categorization in the process of expectations on a product. In the consumption cycle, at the buying step, one part of the expectations in an innovative case of product, meaning not familiar, is shaped on the information delivered by the environment and more precisely the range here the product is set up. This context of presentation induces the way the product is identified and therefore expectations toward this product are built.

5.3. Familiarity is influencing the link between perception and expectations

Familiarity is influencing perception. Results show four different clusters of subjects perceiving differently the same product range. One questionnaire has been delivered at the end of the test to the subjects assessing different levels of the familiarity: knowledge on tea, frequency of consumption of the brand, familiarity to the brand. This assessment shows four different levels of familiarity among consumers. Therefore, familiarity is correlated to the difference of perception and then to the difference of expectations. It could be interesting to cluster people among familiarity and then highlight a difference of perception and then

of expectations. Indeed, Faye has proven that the level of expertise, meaning the level of knowledge on the product can influence the way of categorizing the product range. Nature of category and precision can be different among different level of knowledge. In the same way, implication to the brand and conceptual associations to it are different among subjects and therefore can influence expectations toward a product. Therefore, a complementary study could show the effect of familiarity on expectations by recruiting subjects with a different level of familiarity (for the brand, the product, or the category) and following the same procedure.

5.4. A perspective to access expectations of consumers

A high percentage of new product launching on the market is removed because of inadequacy with consumers' expectations. This mismatch could be linked to a discrepancy between the information available for the consumer and the way they categorize the product. The methodology used in this study could be applied in business projects to access expectations of consumers toward an innovative product. In this way, sensory recommendations could be given to formulation team, but also information on consumer target and benefits to communicate for marketing team.

5.5. A perspective to characterize consumers

Consumer targets are defined by social and demographic criteria by marketing teams. These criteria are then used to recruit subjects for consumer test. This study showed a differentiation of consumers based on perception and a way to characterize them through the level of familiarity. This new criteria could be used then in recruitment step to be closer to reality of perception and differentiate people.

Bibliography

Balcetis, E., and Dunning, D. (2006). See what you want to see: motivational influences on visual perception. *J. Pers. Soc. Psychol.* *91*, 612–625.

Barsalou, L.W. (1983). Ad hoc categories. *Mem. Cognit.* *11*, 211–227.

Brosch, T. [b1] (analytic), Pourtois, G. [b2 b3] (analytic), and Sander, D. [b1] (analytic) (2010). The perception and categorisation of emotional stimuli: A review (English). *Cogn Emot Print* *24*, 377–400.

Bruner (1956). *A Study of Thinking*.

Cardello, A.V. [b1] (analytic), and Sawyer, F.M. (analytic) (1992). Effects of disconfirmed consumer

expectations on food acceptability (English). *J Sens Stud* *7*, 253–277.

Deliza, R., Macfie, H., and Hedderley, D. (2003). Use of Computer-Generated Images and Conjoint Analysis to Investigate Sensory Expectations. *J. Sens. Stud.* *18*, 465–486.

Faye, P., Brémaud, D., Durand Daubin, M., Courcoux, P., Giboreau, A., and Nicod, H. (2004). Perceptive free sorting and verbalization tasks with naive subjects: an alternative to descriptive mappings. *Food Qual. Prefer.* *15*, 781–791.

Hubert, L., and Arabie, P. (1985). Comparing partitions. *J. Classif.* *2*, 193–218.

Lange, C., Rousseau, F., and Issanchou, S. (1998). Expectation, liking and purchase behaviour under economical constraint. *Food Qual. Prefer.* *10*, 31–39.

Margolis, E., and Laurence, S. (1999). *Concepts: Core Readings* (MIT Press).

Murphy, G.L., and Medin, D.L. (1985). The role of theories in conceptual coherence. *Psychol. Rev.* *92*, 289–316.

Niedenthal, P.M., Halberstadt, J.B., and Innes-Ker, Å.H. (1999). Emotional response categorization. *Psychol. Rev.* *106*, 337–361.

Olson, J.C., and Dover, P.A. (1979). Disconfirmation of consumer expectations through product trial. *J. Appl. Psychol.* *64*, 179–189.

Reed, S.K. (1972). Pattern recognition and categorization. *Cognit. Psychol.* *3*, 382–407.

Versace, R. [b1] (analytic), Vallet, G.T. [b1] (analytic), Riou, B. [b1] (analytic), Lesourd, M. [b1] (analytic), Labeye, É. [b2] (analytic), and Brunel, L. [b3] (analytic) (2014). Act-In: An integrated view of memory mechanisms (English). *J. Cogn. Psychol. Print* *26*, 280–306.

Balcetis, E., and Dunning, D. (2006). See what you want to see: motivational influences on visual perception. *J. Pers. Soc. Psychol.* *91*, 612–625.

Barsalou, L.W. (1983). Ad hoc categories. *Mem. Cognit.* *11*, 211–227.

Brosch, T. [b1] (analytic), Pourtois, G. [b2 b3] (analytic), and Sander, D. [b1] (analytic) (2010). The perception and categorisation of emotional stimuli: A review (English). *Cogn Emot Print* *24*, 377–400.

Bruner (1956). *A Study of Thinking*.

Cardello, A.V. [b1] (analytic), and Sawyer, F.M. (analytic) (1992). Effects of disconfirmed consumer expectations on food acceptability (English). *J Sens Stud* *7*, 253–277.

Deliza, R., Macfie, H., and Hedderley, D. (2003). Use of Computer-Generated Images and Conjoint

Analysis to Investigate Sensory Expectations. *J. Sens. Stud.* *18*, 465–486.

Faye, P., Brémaud, D., Durand Daubin, M., Courcoux, P., Giboreau, A., and Nicod, H. (2004). Perceptive free sorting and verbalization tasks with naive subjects: an alternative to descriptive mappings. *Food Qual. Prefer.* *15*, 781–791.

Hubert, L., and Arabie, P. (1985). Comparing partitions. *J. Classif.* *2*, 193–218.

Lange, C., Rousseau, F., and Issanchou, S. (1998). Expectation, liking and purchase behaviour under economical constraint. *Food Qual. Prefer.* *10*, 31–39.

Margolis, E., and Laurence, S. (1999). *Concepts: Core Readings* (MIT Press).

Murphy, G.L., and Medin, D.L. (1985). The role of theories in conceptual coherence. *Psychol. Rev.* *92*, 289–316.

Niedenthal, P.M., Halberstadt, J.B., and Innes-Ker, Å.H. (1999). Emotional response categorization. *Psychol. Rev.* *106*, 337–361.

Olson, J.C., and Dover, P.A. (1979). Disconfirmation of consumer expectations through product trial. *J. Appl. Psychol.* *64*, 179–189.

Reed, S.K. (1972). Pattern recognition and categorization. *Cognit. Psychol.* *3*, 382–407.

Versace, R. [b1] (analytic), Vallet, G.T. [b1] (analytic), Riou, B. [b1] (analytic), Lesourd, M. [b1] (analytic), Labeye, É. [b2] (analytic), and Brunel, L. [b3] (analytic) (2014). Act-In: An integrated view of memory mechanisms (English). *J. Cogn. Psychol. Print* *26*, 280–306.

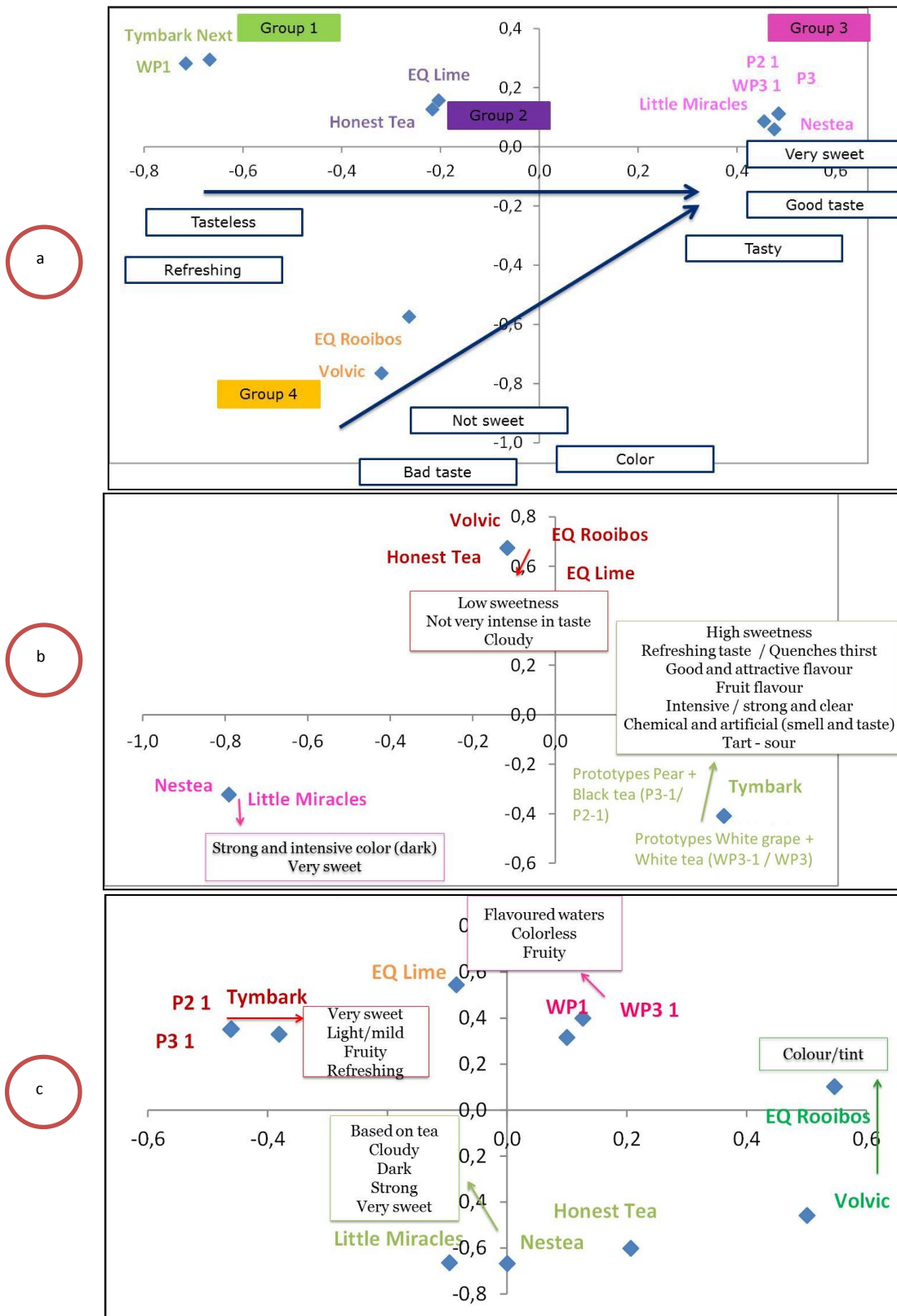


Fig 6 : Mapping obtained with MDS and projection of sensory descriptors for : a) whole set of subjects(N=214); b) Cluster 1 of consumers (N= 44) ; c) Cluster 4 of consumers (N=48)

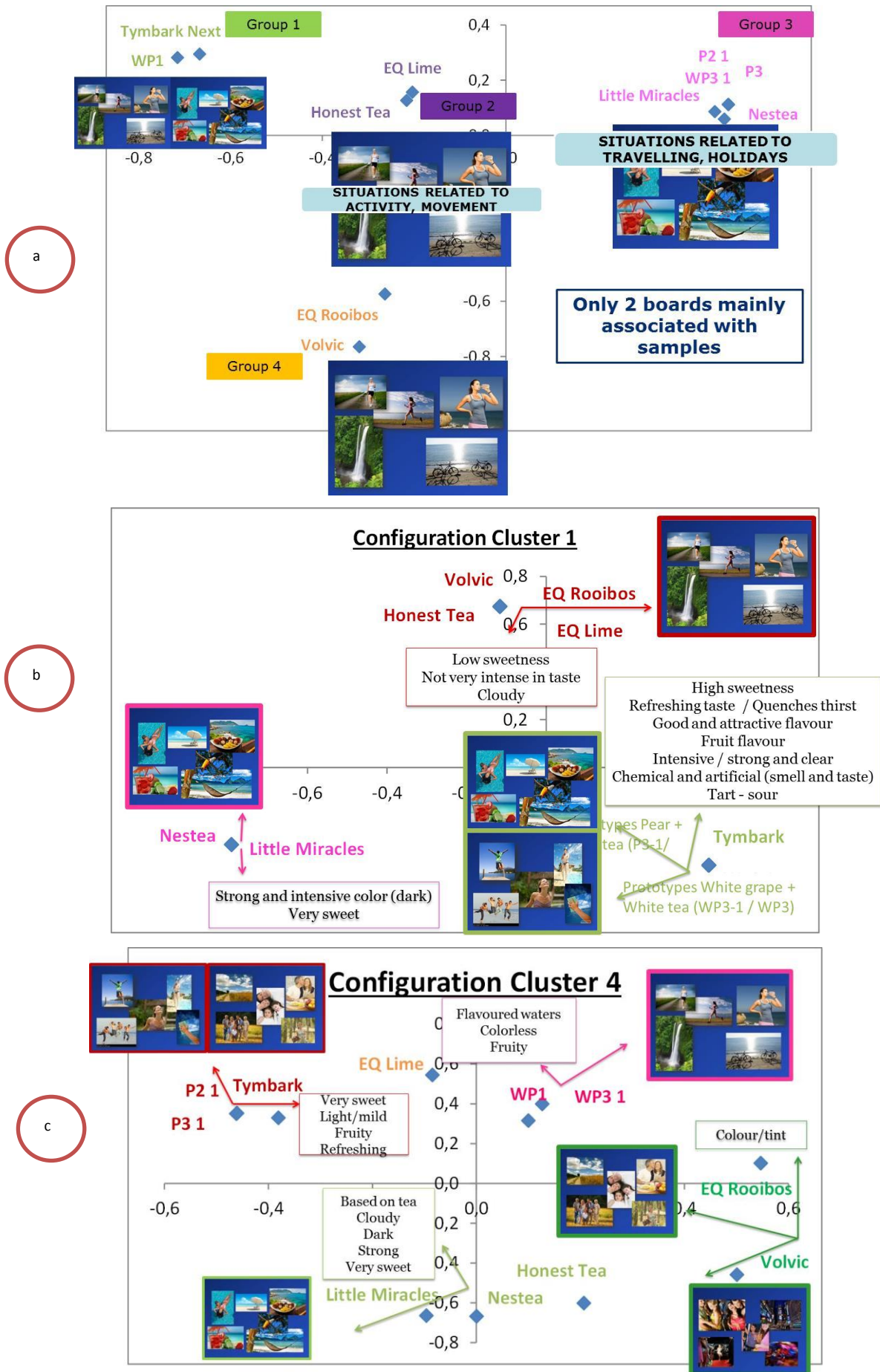


Fig 7 : Mapping obtained with MDS and projection of associated boards for :a) whole set of subjects(N=214) ; b) Cluster 1 of consumers (N=44) ; c) Cluster 4 of consumers (N=48)

To allot or not to allot? The impact of allotment on the noncontractible quality of the supply chain for school canteens in a major French region

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Abstract: The demand to improve the quality of the food supply in school canteens is increasing. One particular manifestation of it is the insistence on a necessary re-localization of the food production which is not perfectly contractible. That is why, in order to improve the quality with little additional costs, the French government advises to allot – to divide a public market into lots – the food markets for institutional catering. This recommendation is made in order to increase the competition and to be able to catch the local agricultural offer by making it easier for local producers to participate in the auctions. However, the economic literature does not give clear results on the matter. On the one hand, we can consider that allotment decreases the noncontractible efforts that the private partners are willing to do, because of the size of the market which is smaller (De Brux and Desrieux, 2014). On the other hand, if we consider that to allot is a way to internalize the supply process, then we reduce the choice to a make-or-buy's one. Consequently, the theoretical and empirical economic literature advises to "make" when there is noncontractible quality that can have a large negative impact on the service when it is reduced unilaterally by the private partner (Hart *et al.*, 1997). We argue that it is worth considering that both effects have an influence on the efficiency of the supply chain. This paper presents a statistical method to investigate both kinds of influence and attempt to determine their respective weight.

Keywords: Public-Private Partnership, Institutional economics, incomplete contract theory, school canteens, allotment

1. Introduction

Economists are interested in the efficiency of public tendering and the right scale for allotment. Should we allot a market? What are the consequences on price? On quality? Nevertheless, there is at our knowledge no empirical article addressing the question of allotment on the double dimension of cost and quality.

In this article we attempt to fill this gap by measuring the efficiency of allotment on price and quality through the study of food supply for in-house school canteens in the French region *Ile-de-France*. Indeed, to study the impact of allotment on contracts is to study the impact on both price and quality, and more particularly on noncontractible quality verifiable *ex post*. If not, the risk is to seize only one kind of effect, for instance a lower price but maybe at the cost of a lower quality. Besides, public authorities are interested in improving the quality of public services because it has a positive impact on economic growth (Barro, 1990). Yet, this quality depends on objectives to fulfill but also on adaptations and noncontractible innovations to apply during the contract (Daniels and Trebilcock, 2000; IPPR, 2001). As a consequence, public authorities are expecting private partners to innovate when they win a contract so that they would both improve quality and decrease the cost for the community (Aho's Report, European Commission, 2005).

Through the study of public institutional catering, and more precisely the municipal school canteens, we can study the impact of allotment on price and quality of the service: is allotment a tool to increase quality of the supply and decrease price of a public service, or on the contrary does it reduce the incentives to imply noncontractible innovations and diminishes the strength of relational contracting?

In order to answer this question, we build on Grossman and Hart (1986), Hart and Moore (1990) and Hart (1995), arguing that public authorities cannot specify all their qualitative will, whether because it is too costly and complex or because the law forbids doing so. More precisely, we follow the idea of Hart *et al.* (1997) that during the running contract private partners imply noncontractible *ex ante* investments, but verifiable *ex post* by the public authority in order to improve the quality of the service or to diminish its price. We also build on the economic literature on allotment.

2. School canteens – description

2.1. The unit of study

In France, school canteens for 5 to 11 years old pupils are managed at the municipal level. All the decisions concerning school meal system, and more particularly public food markets, are voted by the municipal council. It has to make a first choice, either to produce the service in-house or not. However, and this is the case we are interested in, an in-house school meal system does not exempt the municipality from organizing a competitive bid since it still has to buy the food to cook¹. Then several choices must be made to organize the auctions for the food supply to be the less expensive and of the best quality.

2.2. A multidimensional quality

As school canteens touch upon children's health, there are a lot of safety and nutritional criteria to fulfill. If those criteria of quality are important, they are not the one we focus on in this article. In this article, we want to study the quality of the food supply described as local, organic, seasonal, and from a short supply chain. First, the French law Grenelle 1² gave the objective of 20% of organic and seasonal food components³ to attain in 2012, with an intermediary objective of 15% in 2010⁴. The local and short food supply chain criteria appeared after the Grenelle as a consequence of the issues encountered by the mayors to get French organic food, and food scandals that weakened the confidence of citizens in food-processing industries, such as the horse lasagna or the worms in rice in a school canteen. By taking into account the origin of the product, the mayors want also to solve the apparent contradiction of the so-called "sustainable" organic food, but mainly imported from South-America or Germany⁵.

Those four qualitative criteria have their own characteristics, sometimes one is contradictory

¹ It is important to note that the municipality can also integrate the production of fruits and vegetables. However this case exists only in one municipality to our knowledge, Mouans-Sartoux.

²The Law Grenelle 1 is a French law voted in 2008 that gives a frame for a greener economy in several domains (institutional catering, advertising, etc.).

³A meal is composed of 4 or 5 components: a starter, a fish or some meat, a side dish, cheese, and a dessert.

⁴Memorandum of the 3rd of December, 2008, relative to exemplariness of the State.

⁵We precise « apparent » on purpose since the pollution from transportation depend on the distance but also on the transportation technology used. An old truck can be more polluting, per kilogram of food transported, with a distance of 100km than a freighter that transports food on 3000km with the last kilometers by electric car.

with the others, and necessitate to carefully create the auction in order to get the best quality at the lowest price, including to think about the allotment and its perimeter. If the French authorities recommend allotting a food market in order to increase the quality of the supply in institutional catering (A Pro Bio, 2012) by giving priority to small and precise lots (DRAAF Rhône-Alpes, p. 102), no study has ever evaluated the legitimacy of this assertion.

We consider those quality criteria as hardly contractible either because the verifications and the management are too costly (seasonal, short food supply chain), or because the suppliers can easily act opportunistically to get higher benefits (organic), or simply because the law forbids to do it (local). This implies different contracting and organizational strategies to get the best quality at the lowest price.

2.3. What is allotment

Allotment is the fact to divide a market for a same service into different lots that can be awarded to different partners. In that case, the private firms that desire to compete for the market can do it for one, two or every lots separately. In the case of school canteens and food supply, the lots are divided into several kinds of ingredients. For instance, a municipality can do a lot for meat, one for fruits and vegetables, and another for bread and groceries. That is only a very simple example. In the facts, in addition to divide the market into several kind of ingredients (vegetables, fruits, bread, fish, etc.) municipalities divide the market into more lots according to whether or not the products are organic or fulfill sustainable standards, whether the products are fresh or frozen, and according to their supply policy. The allotment can take as many forms as there are municipalities and supply policies. It depends on the shades the mayors want to give to their supply policy.

Moreover, by allotting into small lots the municipality keeps the control on the supply policy. For instance, we take the case of Municipality 1 (M1) that has a lot "organic vegetables" (supplier OV1) and a lot "non organic vegetables" (supplier V1), and Municipality 2 (M2) that has only a unique lot for "organic and non-organic vegetables" (supplier OVV2). M1 can choose to buy to OV1 as long as the prices and the quantities correspond to what it expects, and the rest to OV2. The two suppliers are in competition for the same market, they are not complementary but substitutable. It is then in their best interest to propose the best price for the best quality, contractible or not. M2, however, depends only on OVV2 to supply the vegetables. There is no more competition to get

access to the market and it can benefit from its monopoly situation by increasing the price and/or diminishing the quality, even the contractible one with unilateral renegotiation. OVV2 can, for instance, exaggerate during the auction on its capacity to provide organic food and then not be able to satisfy the quantities demanded by M2.

In the case of school canteens supply, allotment can thus be compared with vertical integration. Indeed, by allotting a municipality keeps a hand on the supply policy and the list of suppliers, considered as a strategic asset. It can choose the suppliers, the ingredients, and the noncontractible quality more easily than if it gives the control of the supply chain to a wholesaler. Contrary to the usual choice to delegate or do in-house a service, when it comes to a food supply chain the make-or-buy choice is more graduated and depends on the number of lots a municipality choose to make. The more numerous the lots, the more the municipality integrates the supply chain process. This is not the case for a road tendering for instance. In that case the public authority can create different lots for different roads to build but it does not increase its control on the road building process. From that point, one has to wonder what is the right scale to allot a market and for which benefits.

2.4. Loss in economies of scale

One of the issues met with allotment is that it reduces the potential economies of scale. Once the lot awarded to a producer, she will have to deliver the carrots to the school canteens or to a delivery point. Delivery is not the core mission of producers, but even if we admit that they can do it as efficiently as a wholesaler, the gains are still smaller than those for a delivery of a lot of different ingredients only because of the amount of money the delivery represents. Indeed, there are fixed costs for a delivery (time, gas) that are better amortized with a full truck than a half empty one. If a producer delivers carrots for 100 meals, at a rate of 200g per portion, it is only 20kg. Not enough to be profitable, except if the producer is very close to the municipality, which is not the case for urban cities. There is then a costly loss in economies of scale that can either increase the cost of the service or prevent any vendor from participating in the auction thus diminishing the competition effect.

2.5. What allotment can do

Cambini and Filippini (2003) focused on how the markets for roads were allotted in Italy. They noticed that the optimal allotment is the one that allots the market for a work area and not for a road. To a certain extent, allotting allows to increase the competition for the market with

smaller lots that can attract more enterprises than larger lots. However, this positive competition effect on price is diminished by the lost in economies of scale due to smaller lots. Similarly, Lévêque (2007) shows with the French railway market that the optimal allotment is attained when the increasing gains in competitiveness meet the loss in economies of scale.

De Brux and Desrieux (2014) demonstrate, within the theoretical frame of incomplete contracts, how allotment can diminish the incitation to innovate from the private partner(s) for noncontractible efforts. Those efforts are not implemented due to the lack of incitation and return on investments. In that condition allotment does not allow to maximize the social surplus, but benefits to the public authority that can get a larger part of this surplus. That could be an explanation of why allotment is pushed forward by public authorities even know it is suboptimal. This article is the only one to our knowledge that focuses on the impacts of allotment on noncontractible quality. We differentiate our article from this one because we consider allotment for food supply chain also as a way to integrate the service “supply”.

2.6. To allot is to integrate the supply chain – the make or buy choice

The choice to allot a food market is thus a matter of contractual right in the sense of Grossman and Hart (1986). As they do, we define ownership as the power to exercise control on assets (the list of producers). In the case of school canteens and supply chain, the power is in the control of the relation with the producers since their characteristics define a sustainable supply chain (short supply, local, organic, seasonal). The efforts the agents (the municipality or the supplier) make are to try to organize the supply as sustainable as possible. When it is too costly for the municipality to specify the particular rights it desires – in our case the sustainable supply – it may be optimal for the municipality to integrate a part of the production (the supply chain), or to exercise a higher control on the supply chain through allotment.

Following Hart and Moore (1990), we consider that the crucial difference between our two municipalities M1 and M2 is that when M1 is not satisfied with a producer/supplier it can choose to stop dealing with it. Under non-integration, as for M2, the municipality has to stop dealing with a much bigger supplier that will leave with its producer's list. M2 has also to acquire some costly new skills to do the job itself. M2 has then less power on the list of producers than M1. At the difference of Hart and Moore (1990), we consider that there is a gradient in the integration according

to the number of lots. The more the number of lots, the more the supplying process is integrated.

Following Klein, Crawford, and Alchian (1978) we consider that as assets become more specific quasi-rents are created. Consequently, the gain for opportunistic behavior increase and the costs of contracting will generally increase more than those of vertical integration. In the case of school canteens, the asset is the relation with the producers, and it becomes more specific as the quality increases. Indeed, before the will to increase the sustainable quality, the food was undifferentiated. It had to meet sanitarian criteria but the supply quality did not matter. Now that sustainable food matters, the list of the producer and the traceability of the food does too. The relation with the producers has become a specific asset since their products are less replaceable. A local producer is less in competition than an international one. To create a short supply chain implies to build trust with the producer so that she does not end the relationship for the benefit of another buyer. Then it becomes more costly for a municipality to change a supplier (especially one that supplies numerous different products), or to re-integrate the supply chain, making opportunistic behavior more profitable for the supplier. Opportunistic behavior can come from both sides. A municipality can ask a supplier to invest in sustainable supply chain and then ask for the same price than a non-sustainable supply chain. The supplier would have invested with no higher return on investment than for the typical supply chain. Alternatively, and more realistically, because the municipality has to serve the meals every day the supplier can ask for a higher price or decrease the quality to increase its benefits especially when the controls are expensive and litigate as it is the case for food. This creates a shift in power toward the one who controls the supply chain and thus has consequences on the efficiency of the organization choices. Whether or not to integrate the supply chain, whether or not to allot, has become the crucial point for municipalities to increase quality at the better price.

Hart *et al.* (1997) add the capacity to contract for all aspects of the service in their economic predictions. As they demonstrate, the bigger the adverse consequences of noncontractible cost-cutting on noncontractible quality, the stronger is the case for in-house provision. In our case, as the noncontractible quality of the supply chain becomes more important, all other things equal the allotment must increase to increase the control of the municipality on the supply chain and its inherent quality. Indeed, if the supplier decides to decrease the costs due to a sustainable supply chain, it also decreases the quality of the supply

with no possibility for the municipality to prevent that or even to control it.

To conclude, allotment is a tool prescribed by public authorities to increase the quality of food supply in institutional catering, understood as organic/short supply chain/seasonal/local food, but without any empirical study on the potential gains and the over costs it can engendered.

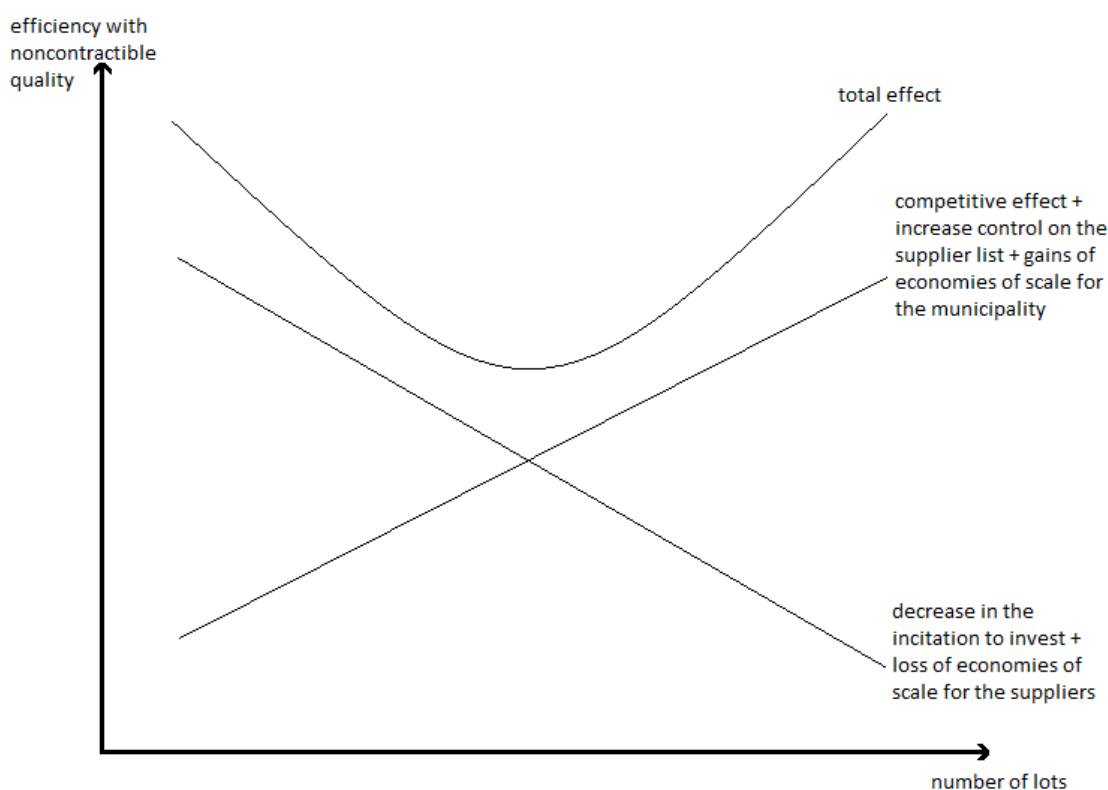
3. The model

The quality of the supply for school canteens is not perfectly contractible. According to the theories developed above, we should observe that allotment has an influence on the efficiency of the supply. We can verify two propositions:

Proposition 1: When the municipality chooses to decrease allotment – meaning that it delegates the supply chain – the allotment should decrease the efficiency of the supply for noncontractible quality as there would be fewer incentives to invest in noncontractible quality or cost-cutting.

Proposition 2: When the municipality chooses to increase allotment – meaning that it integrates the supply chain – the noncontractible quality should be higher and at a lower price as it goes along with allotment.

As a consequence, we should observe a U-curve of the effect of allotment on efficiency on noncontractible quality.



VERTOVEC, Steven. *Transnationalism*. New York: Routledge, 2009.

References

- A Pro Bio, (2012). *Recueil d'expérience et guide des bonnes pratiques : L'approvisionnement de la restauration collective en circuit de proximité*. Technical Report.
- Barro, R. J. (1990). Government spending in a simple model of endogenous growth. *Journal of Political Economy*, 98(5), S103–S126.
- Cambini, C., & Filippini, M. (2003). Competitive tendering and optimal size in the regional bus transportation industry: An example from Italy. *Annals of Public and Cooperative Economics*, 74(1), 163–182.
- Daniels, R. J., & Trebilcock, M. J. (2000). *An organizational analysis of the public-private partnership in the provision of public infrastructure*. Technical report.
- De Brux, J., Desrieux, C. (2014). To allot or not to allot public services? An incomplete contract approach. *European Journal of Law and Economics*.
- DRAAF Rhône-Alpes, (2011). *Guide pratique : Favoriser une Restauration Collective de Proximité et de Qualité*. Technical Report.
- European Commission. (2005). *The Aho report. Creating an Innovative Europe*. Technical report, European Commission.
- Grossman, S. J., & Hart, O. (1986). The cost and benefits of ownership: A theory of vertical and lateral integration. *Journal of Political Economy*, 94(4), 691–719.
- Hart, O. (1995). *Firms, contracts and financial structure*. Oxford: Oxford University Press.
- Hart, O. & Moore, J. (1990). Property rights and the nature of the firm. *The Journal of Political Economy*, 98(6), 119–1158.
- Hart, O., Shleifer, A., & Vishny, R. W. (1997). The proper scope of government: Theory and an application to prisons. *Quarterly Journal of Economics*, 112(4), 1127–1161.
- IPPR. (2001). *Building better partnerships*. Technical report, Institute for Public Policy Research.
- Klein, B., Crawford, R., & Alchian, A., (1978). Vertical Integration, Appropriable Rents, and the Competitive Contracting Process. *Journal of Law and Economics*, XXI, 297–326.
- Leveque, J. (2007). Allotissement et rendements d'échelle. Application aux réseaux de transports ferroviaires. *Economie et Prévision*, 178(4), 147–159.

Dynamic capabilities for hotel service innovation: a human asset perspective

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Abstract

Through operational observations from a research project, we explain that investing in human capital could impact on performance. In fact, in our connected society, services companies agree about importance of human capital to obtain competitive advantage from new entrants as Airbnb that don't provide human services. But on the field, performance indicators are always based on financial performance and not on a human perspective.

After analysis of three operational issues linked with human capital, we made a bibliographic review around concrete measures of human capital parameters. We use literature about intellectual capital. These parameters could be used in hotels to observe impact of human capital on financial performance.

Keywords : Hospitality, Intellectual capital, Human Capital, Performance

1. Context

In a competitive environment, current hospitality offers and services do not guarantee the attractiveness nor the profitability necessary to the long-term performance of this sector's economic model. Modeling a "new" hospitality is required to meet the clientele's expectations particularly related to technologies uses. Employee's expectations are also changing and a new generation is coming with a totally new vision of repartition between leisure and work. Well-being and working atmosphere are important. Hierarchy at work has been replaced by trust and autonomy. Therefore, we wonder how we can use service design to innovate in creating a new organization: this question is the central issue of an on-going research which will be developed throughout this paper. We need to challenge traditional, distinct roles of both the consumer and the company, and then examine the impact of a convergence of the roles of production and consumption (Prahalad & Ramaswamy, 2004)

Core activity of a services company is *a priori*, production of services. Servuction, concept named by Eiglier and Langeard in 1987 which generalizes production of service through physical support and employees in contact representing the services company and which makes interaction with customers to create services. The paramount difference is the role of the customer who is involved in the production process as a stakeholder: without him, service can't exist (Eiglier & Langeard, 1987). To coordinate these stakeholders, organization is crucial. To change behavior and observe it we realized that the concept of intellectual capital was widely used for performance measures related to the organization. We will use this literature since the concept of intellectual capital is transverse to the human resource publications, management, economics, management and marketing control.

2. Research project

During the first months of this research project, the main objective was to discover this particular sector. Organization issue is caused by the entry of new indirect competitors from the internet rising. **Competitor**, because their existence asks customer about pertinence of traditional hospitality offers. **Indirect**, because they do not provide the same services as an hotel. These changes show that hotels need quickly to change their hospitality vision if they want to stay in the market. First

changes have been made especially about the internet and technologies in general (booking by mobile, internet reviews, participation in social networks, ILO Home digital) but associated with these changes the organization must follow.

2.1. Motivation

When we look at hotels from the inside, we need initially to address a **motivation** issue. Firm's employees want to learn, be trained, and obtain experience. But in the same time, they are aware about the importance of their private life. Their professional and social success was immediately weighted by their work well-being. All the historical jobs as receptionists, waiters, cooks, maids must coexist with new jobs as Community manager, Revenue manager, Spa managers, customer relationship manager, and even mixologists. Work organization for a modern hotel industry has to become competitive in front of Airbnb that does not offer hotel services.

2.2. Selection

Then we have to deal with a problem of **selection**: the right people for the right jobs. This scarcity and attractiveness problem suddenly raises questions of the sector's reputation. These businesses have difficulties to recruit qualified staff. There are a lot of potential reasons:

- Deficit of attractiveness and image of the sector's businesses, resulting in a shortage of candidates
- Negative image with young people, their parents and guidance counselors
- Harsh working conditions (late hours, weekends, holidays, cut)
- Weakness in the average level of pay, and difficulties of permanent and temporary housing
- Strong seasonality of tourism activities
- Porosity / volatility of the sector, with both new entrants from other trades and other training, and staff leaving regularly to other professions

2.3. Interaction

Finally, we have a problem of **interaction**. Since 2010, society is all internet and all mobile, this, is changing habits. Main tasks whose deliver value to the hotel product doesn't exist anymore, customer do it himself (reservation, check-in, check-out ...). Hotelier must provide value to the customer that new competitor from Internet cannot do. In a competitive environment when environment changes, the added value of the company is its adaptability and its flexibility.

We can see here that these three issues for the midscale hotels are integrally connected to the human, which is obvious for a service industry. However, if the three major challenges of the future service in this hospitality is around human, main indicators are financial or about customer. In fact, financial indicators are universal and

3. Bibliographic review Methodology

We then find a set of indicators associated with methods of obtaining thereof. We will then determine those used in the field of hospitality and interesting ones to adapt. We will keep in mind our goal is to make better use of non-financial data (tangible or not tangible) to determine the true

standardized. Non-financial ones, involving human issues are not standardized and manager-dependent. How can we act on the organization to create a sustainable competitive advantage? What are the parameters used in the scientific literature? How can we evaluate and measure human capital?

performance of hotel establishments. Intellectual capital is increasingly important in a knowledge society (Bukh et al., 2001; Manzari et al., 2012). Based on the recent literature review of Kazemi et al. in 2012, one realizes that no single definition of intellectual capital has been accepted and hence uncertainty exists.

Intellectual Capital is "those intangible assets of an organization that are not recorded in financial statements but which may constitute 80% of the market value of the organization".	Torres, 2006
Intellectual capital is "the group of knowledge assets that are attributed to the value creation of an organization".	Chu et al., 2006
Intellectual capital is "the set of critical resources used by firms to facilitate productive activities and generate economic rents".	
Intellectual capital is the "sum of the hidden assets of the company not fully captured on the balance sheet and that it is the most important source for sustainable competitive advantages in companies".	Peng et al., 2007
Intellectual capital is "all non-monetary and non-physical resources that are fully or partly controlled by the organization and that contribute to the organization's value creation"	
Intellectual capital "refers to valuable, intangible and inimitable resources for value creation of a firm".	
Intellectual capital is "the possession of knowledge, applied experience, organizational technology, customer relationships and professional skills that provide the firm with a competitive edge in the market".	Rudez & Mihalic, 2007; Montequín et al., 2006; Kim, et al., 2010; Bontis, 2001;

Definitions of « intellectual capital » according to several authors

There is no scientific consensus on the components impacting the intellectual capital but it is accepted by many researchers that it is composed of human capital, structural capital and relational capital. (Beattie & Thomson, 2007; Wall, 2005; Kim et al, 2010; Rudez & Mihalic, 2007); Chu et al., 2006; Tai & Chen, 2009; Torres, 2006). Some articles offer other categories such as process capital, innovation, research, and labor, social or strategic. What interests us here is not to measure or evaluate this capital in hotels but associate some useful measures to the hotel with other measures linked to the organization to understand the impact of the organizational performance.

About human we use all notion and concepts around the intellectual capital; this one was widely used for performance measures related

to the organization. First of all, we made a research on Google Scholar (Science Direct, EbscoHost, Wiley) with several keywords:

Measures, Intellectual Capital, Human Capital, Structural Capital, Organization

We focus on papers after 2000 but if there were classical ones, we took them. And about fields of research, we did not put frontiers between economics, management, accounting, social sciences, Business and Human resources.

Then we built a table with the following columns: Authors/ Year / Journal / Used parameters / Research Methodology / Main results / Comment / Hospitality? (Y/N). If parameter was used in

hospitality literature, then table will go on with the same columns about hospitality paper.

4. Results

We identify several kind of parameters oriented around human capital. We have detailed below those seem important for the research project. However, several other indicators have not been studied in the literature hotel might be interesting. We do not have detailed here but they come from the general literature and might be interesting: the number training hours, number of meeting hours, the number of managers, the average duration of employment, background diversification, ...

4.1. Empowerment

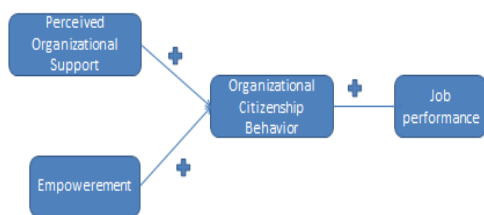
Definition

This concept is, according with professionals, a way change and innovation in order to improve organization.

Job satisfaction can be defined as the way an individual feels with his employment. It is often related to job performance, service quality and therefore hotel performance.

Results

These concepts have been studied particularly in the hotel sector through a Likert scale 7 (Chiang & Hsieh, 2012) based on Spreitzer (1995). It examines the relationship between four concepts: perceived organizational support (POS) in the company, empowerment, organizational citizenship behavior (OCB) and work performance. They showed that empowerment and POS positively affect OCB that mediates work performance.



4.2. Leadership

Definition

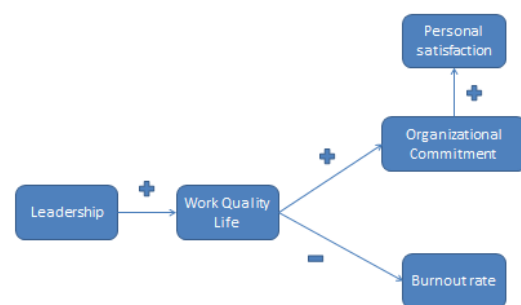
Two kinds of leadership can be studied, transformational and transactional. Transformational leadership is based on charisma, motivation, intellectual stimulation and individualized consideration. Transactional leadership is defined as contingent rewards, management by exception and laissez-faire.

to improve operations and increase profits (Raub & Robert, 2012). In fact, it has an impact on job satisfaction (Martín de Castro, Emilio Navas López, López-Sáez, and Alama-Salazar, 2006) and the burnout rate (Yagil, 2006). *Empowerment* can be defined as a set of practices combining information sharing and authority delegation that increases employee autonomy (Kim & D. Perdue, 2013; Raub & Robert, 2012). From a structural point of view it involves less direct supervision, less hierarchical level and release time for managers to their strategic work.

Organizational Citizenship Behavior (OCB) Voice of behavior represents employees who are proactive with a lot of constructive feedback that exceeds their tasks. This behavior is oriented around

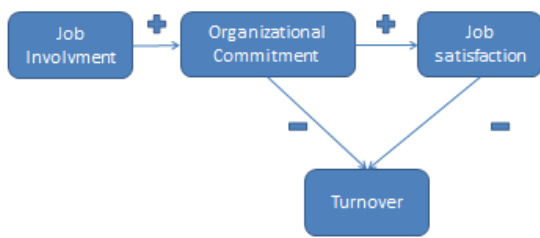
Results

Kara, Uysal, Sirgy, & Lee, 2013 studied the impact of these two kinds of leadership on employees' well-being. This one included work quality life, personal satisfaction, organizational commitment and burnout rate. They showed that transformational leadership had a significant impact on work quality life and it was positively related to organizational commitment and life satisfaction then negatively with burnout rate. Burnout rate is negatively related to life satisfaction. Finally, organizational commitment is linked with life satisfaction.



4.3. Turnover of measures

Zopiatis Constanti, & Theocharous, 2014 studied the causal relationships between job involvement, organizational commitment (normative and emotional) and job satisfaction (intrinsic and extrinsic) with turnover intention. Job involvement impacts on organizational commitment which is related to job satisfaction. Finally, affective organizational commitment impact negatively on turnover intention and extrinsic job satisfaction.



4.4. Polychronicity

Polychronicity (Hall, 1983) means the way where each person prefers or not handle multiple tasks in the same time. Jang & George, in 2012 worked on relationship between this concept, job satisfaction and employee turnover intention. In fact in the hospitality sector, polychronicity is a researched skill because of tasks diversity (Bluedorn, 1999). Authors showed that employee polychronicity impacts on job satisfaction and turnover intention, positively for the first and negatively for the second. Moreover job satisfaction negatively impacts on turnover intention.



4.5. Employees commitment

Organizational commitment (Becker, 1968) includes affective commitment, continuous and normative. Emotional involvement is most often used and has an impact on turnover intention (Meyer, Stanley, Herscovitch, Topolnytsky & 2002).

Several parameters can be considered as antecedents of organizational commitment and particularly the work-related stress, leadership (here Leader - Member Exchange) and perceived organizational support (POS).

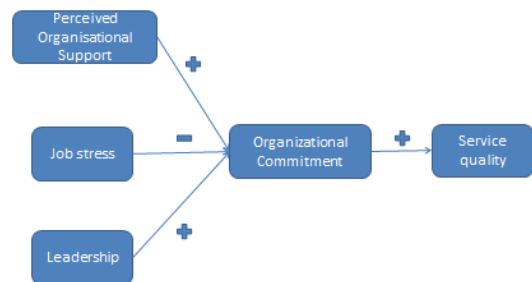
Work-related stress is the adverse reaction people have to excessive pressures or other types of demand placed on them at work (HSE, 2014).

The LMX (Leader - Member Exchange) (Graen et al, 1975) is defined as strength of relationship between a leader and his subordinates.

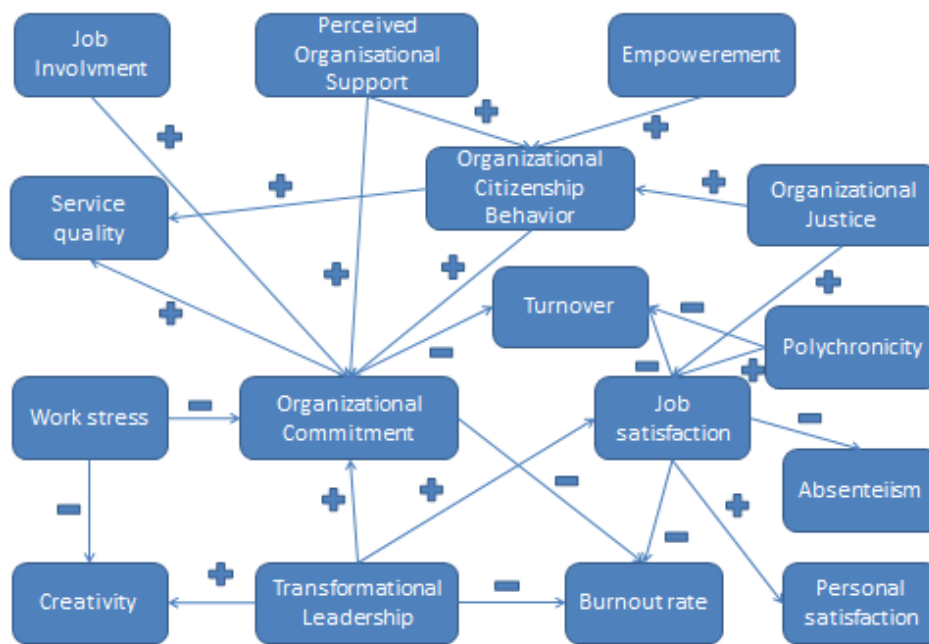
Perceived Organizational support (POS) (Eisenberg et al., 1986) is the existence of reciprocity between employees and organization.

Job involvement means the employee's active participation enabling it to meet its intrinsic and extrinsic needs (Allport, 1943).

Garg & Dhar, 2014 wanted to study parameters that affected employee commitment and the link with service quality in hotels. Authors showed that the commitment was total mediator between job stress, leader-member exchange (LMX) and POS and quality of service.



Thus, we can get a vision of all these measures of human capital through a general schema presented below.



In a hotel, these measures of human capital will depend on managerial practices, employees intrinsic characteristics and hotel ones. All the authors have attempted here to identify potential links between human capital parameters. The research project could use chosen parameters to observe how managerial practices impact on them. Indeed, observing parameters in several hotels (to be defined) could be used to deduce the good managerial practices related to human capital. We could, for instance, add polychronic employee in a hotel and observe impacts on organizational commitment for example. Study these comparisons could define what is the best efficient organization for that kind of hotel. These organizations will be used to determine basis for the hotel of tomorrow.

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References

Andriessen, D. (2006). Making Sense of Intellectual Capital, 408.

Ashill, N., Rod, M., & Carruthers, J. (2008). The effect of management commitment to service quality on frontline employees' job attitudes, turnover intentions and service recovery performance in a new public management context, *16*(5), 437–462. doi:10.1080/09652540802480944

Beattie, V., & Thomson, S. J. (2007). Lifting the lid on the use of content analysis to investigate intellectual capital disclosures. *Accounting Forum*, *31*(2), 129–163. doi:10.1016/j.accfor.2007.02.001

Bontis, N. (1998). Intellectual capital: an exploratory study that develops measures and models. *Management Decision*, *36*(2), 63–76. doi:10.1108/00251749810204142

Bontis, N. (2010). Assessing knowledge assets: a review of the models used to measure intellectual capital. *International Journal of Management Reviews*, *3*(1), 41–60. doi:10.1111/1468-2370.00053

Boshoff, C., & Allen, J. (2000). The influence of selected antecedents on frontline staff's perceptions of service recovery performance. *International Journal of Service Industry Management*, *11*(1), 63–90. doi:10.1108/09564230010310295

Bozbura, F. T., & Beskese, A. (2007). Prioritization of organizational capital measurement indicators using fuzzy AHP. *International Journal of Approximate Reasoning*, *44*(2), 124–147. doi:10.1016/j.ijar.2006.07.005

Bukh, P. N., Larsen, H. T., & Mouritsen, J. (2001). Constructing intellectual capital statements. *Scandinavian Journal of Management*, *17*(1), 87–108. doi:10.1016/S0956-5221(00)00034-8

Chen, W.-J. (2011). Innovation in hotel services: Culture and personality. *International Journal of*

- Hospitality Management*, 30(1), 64–72. doi:10.1016/j.ijhm.2010.07.006
- Chiang, C.-F., & Hsieh, T.-S. (2012). The impacts of perceived organizational support and psychological empowerment on job performance: The mediating effects of organizational citizenship behavior. *International Journal of Hospitality Management*, 31(1), 180–190. doi:10.1016/j.ijhm.2011.04.011
- Dickson, D. R., Ford, R. C., & Upchurch, R. (2006). A case study in hotel organizational alignment. *International Journal of Hospitality Management*, 25(3), 463–477. doi:10.1016/j.ijhm.2005.02.006
- Garg, S., & Dhar, R. L. (2014). Journal of Hospitality and Tourism Management Effects of stress , LMX and perceived organizational support on service quality: Mediating effects of organizational commitment. *Journal of Hospitality and Tourism Management*, 21, 64–75. doi:10.1016/j.jht.2014.07.002
- George, J. M., & Zhou, J. (2001). When openness to experience and conscientiousness are related to creative behavior: an interactional approach. *The Journal of Applied Psychology*, 86(3), 513–524. doi:10.1037/0021-9010.86.3.513
- Han, D., & Han, I. (2004). Prioritization and selection of intellectual capital measurement indicators using analytic hierarchy process for the mobile telecommunications industry. *Expert Systems with Applications*, 26(4), 519–527. doi:10.1016/j.eswa.2003.10.010
- Hon, A. H. Y., Chan, W. W. H., & Lu, L. (2013). Overcoming work-related stress and promoting employee creativity in hotel industry: The role of task feedback from supervisor. *International Journal of Hospitality Management*, 33(1), 416–424. doi:10.1016/j.ijhm.2012.11.001
- Jang, J., & George, R. T. (2012). Understanding the influence of polychronicity on job satisfaction and turnover intention: A study of non-supervisory hotel employees. *International Journal of Hospitality Management*, 31(2), 588–595. doi:10.1016/j.ijhm.2011.08.004
- Kara, D., Uysal, M., Sirgy, M. J., & Lee, G. (2013). The effects of leadership style on employee well-being in hospitality. *International Journal of Hospitality Management*, 34(1), 9–18. doi:10.1016/j.ijhm.2013.02.001
- Kim, T., Kim, W. G., Park, S. S.-S., Lee, G., & Jee, B. (2012). Intellectual Capital and Business Performance: What Structural Relationships Do They Have in Upper-Upscale Hotels? *International Journal of Tourism Research*, 14(4), 391–408. doi:10.1002/jtr.1868
- Kim, W. G., Leong, J. K., & Lee, Y. K. (2005). Effect of service orientation on job satisfaction, organizational commitment, and intention of leaving in a casual dining chain restaurant. *International Journal of Hospitality Management*, 24(2), 171–193. doi:10.1016/j.ijhm.2004.05.004
- Liebowitz, J., & Suen, C. Y. (2000). Developing knowledge management metrics for measuring intellectual capital. *Journal of Intellectual Capital*, 1(1), 54–67. doi:10.1108/14691930010324160
- Lim, L. L. K., Chan, C. C. a, & Dallimore, P. (2010). Perceptions of Human Capital Measures: From Corporate Executives and Investors. *Journal of Business and Psychology*, 25(4), 673–688. doi:10.1007/s10869-009-9150-0
- Manzari, M., Kazemi, M., Nazemi, S., & Pooya, A. (2012). Intellectual capital: Concepts, components and indicators: A literature review. *Management Science Letters*, 2(7), 2255–2270. doi:10.5267/j.msl.2012.07.018
- Martin, W. J. (2000). Approaches to the measurement of the impact of knowledge management programmes. *Journal of Information Science*, 26(1), 21–27. doi:10.1177/016555150002600102
- Meyer, J. P., Stanley, D. J., Herscovitch, L., & Topolnytsky, L. (2002). Affective, Continuance, and Normative Commitment to the Organization: A Meta-analysis of Antecedents, Correlates, and Consequences. *Journal of Vocational Behavior*, 61(1), 20–52. doi:10.1006/jvbe.2001.1842
- Montequin, V. R., Fernandez, F. O., Cabal, V. a., & Gutierrez, N. R. (2006). An integrated framework for intellectual capital measurement and knowledge management implementation in small and medium-sized enterprises. *Journal of Information Science*, 32(6), 525–538. doi:10.1177/0165551506067127
- Nadiri, H., & Tanova, C. (2010). An investigation of the role of justice in turnover intentions, job satisfaction, and organizational citizenship behavior in hospitality industry. *International Journal of Hospitality Management*, 29(1), 33–41. doi:10.1016/j.ijhm.2009.05.001
- Pierre, E., & Eric, L. (1987). *Servuction, le marketing des services*. Paris, McGraw-Hill.
- Pizam, A., & Thornburg, S. W. (2000). Absenteeism and voluntary turnover in Central Florida hotels: a pilot study. *International Journal of Hospitality*

- Management*, 19(2), 211–217. doi:10.1016/S0278-4319(00)00011-6
- Prahalad, C. K., & Ramaswamy, V. (2004). Co-creation experiences: The next practice in value creation. *Journal of Interactive Marketing*, 18(3), 5–14. doi:10.1002/dir.20015
- Raub, S., & Robert, C. (2012). Empowerment, Organizational Commitment, and Voice Behavior in the Hospitality Industry: Evidence from a Multinational Sample. *Cornell Hospitality Quarterly*. doi:10.1177/1938965512457240
- Roberts, J. (2004). The modern firm: Organizational design for performance and growth. Oxford University Press.
- Roos, G., & Roos, J. (1997). Measuring your Company 's Intellectual Performance. *International Journal of Strategic Management*, 30(3), 413–426. doi:10.1016/S0024-6301(97)00022-8
- Rudež, H. N., & Mihalič, T. (2007). Intellectual capital in the hotel industry: A case study from Slovenia. *International Journal of Hospitality Management*, 26(1), 188–199. doi:10.1016/j.ijhm.2005.11.002
- Seleim, A., Ashour, A., & Bontis, N. (2004). Intellectual capital in Egyptian software firms. *The Learning Organization*, 11(4/5), 332–346. doi:10.1108/09696470410538233
- Shaw, J. D. (2011). Turnover rates and organizational performance. *Organizational Psychology Review*, 1(3), 187–213. doi:10.1177/2041386610382152
- Wall, A. (2005). The measurement and management of intellectual capital in the public sector. *Public Management Review*, 7(2), 289–303. doi:10.1080/14719030500091723
- Walsh, K., Enz, C. a., & Canina, L. (2008). The Impact of Strategic Orientation on Intellectual Capital Investments in Customer Service Firms. *Journal of Service Research*, 10(4), 300–317. doi:10.1177/1094670508314285
- Wang, C. J., Tsai, H. T., & Tsai, M. T. (2014). Linking transformational leadership and employee creativity in the hospitality industry: The influences of creative role identity, creative self-efficacy, and job complexity. *Tourism Management*, 40, 79–89. doi:10.1016/j.tourman.2013.05.008
- Wong, S. C. K., & Ladkin, A. (2008). Exploring the relationship between employee creativity and job-related motivators in the Hong Kong hotel industry. *International Journal of Hospitality Management*, 27(3), 426–437. doi:10.1016/j.ijhm.2008.01.001
- Zopiatis, A., Constanti, P., & Theocharous, A. L. (2014). Job involvement, commitment, satisfaction and turnover: Evidence from hotel employees in Cyprus. *Tourism Management*, 41, 129–140. doi:10.1016/j.tourman.2013.09.013

Customer orientation: a service management cornerstone

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Abstract:

Quality of service is an important part of the firm competitiveness and a lot of marketing handbooks will remind you of the importance of “excellence” in service. But firms also have to be careful toward the “excellence of service” dogma. Research shows that the emphasis on customers' satisfaction can be so strong that it may reduce customer satisfaction! Three main mechanisms can explain that phenomenon: 1) boosted by their ambition of excellence in service, managers tend to get obsessed by customer satisfaction, which alters their ability to base their judgment on a realistic image of the organization; 2) customers expect too much from the brand. They listen carefully to the advertising campaigns, take all the promises for granted and wait for such a service quality that they may feel betrayed when something goes wrong; 3) the company focuses so strongly on the customer that it forgets its employees. Yet, good service is based on mutually satisfying interactions between a customer and a frontline employee - which requires a cheerful employee to make a pleased customer. The article explores the dangers of a “blind” total-customer-orientation and is based on a state-of-the-art review at the crossroads between service management and marketing literature (how to please the customer?) and sociology of services (is service a profound contemporary societal trend?). The paper tries to sketch a refined image of service management. Customers' satisfaction is clearly crucial, but it is not the only satisfaction at stake - and it is very important that service managers care for their staff as much as they do for customers. More broadly, we advocate for a global (and not narrowly marketing) approach to service management, and suggest avenues of collaborative thinking or action-research with practitioners in the hospitality sector.

Keywords: quality of service, customer, marketing, sociology of work, sociology of services

1. Introduction

Serving customers is an essential part of what companies do. Whether you provide a new car, a high-quality electronic device or a nice dinner in a gastronomic restaurant, you have to deliver a great product but also a great service. Quality of service is an important part of the firm competitiveness and a lot of marketing handbooks will remind you of the importance of "excellence" in service. However, commercial and marketing departments have limited power, as they also have to deal with HR policies and cost management concerns, at least. In other words, firms must look forward to providing a good quality of service to their customers, but they must at the same time take other constraints into account. Some balance has to be found.

Firms have to satisfy their customers, and should therefore settle customer-oriented policies. But they also have to be careful toward the "excellence of service" dogma. Research shows that the emphasis on customers' satisfaction can be so strong that it may reduce customer satisfaction! Three main mechanisms can explain that phenomenon. First mechanism: boosted by their ambition of excellence in service, managers tend to get obsessed by customer satisfaction, which alters their ability to base their judgment on a realistic image of the organization. Second mechanism: customers expect too much from the brand. They listen carefully to the advertising campaigns, take all the promises for granted and wait for such a service quality that they may feel betrayed when something goes wrong. Third mechanism: the company focuses so strongly on the customer that it forgets its employees. Yet, good service is based on mutually satisfying interactions between a customer and a frontline employee - which requires a cheerful employee to make a pleased customer.

2. Methodology

In this article, we want to explore the dangers of a "blind" total-customer-orientation. The study is based on a state-of-the-art review at the crossroads between service management and marketing literature (how to please the customer?) and sociology of services (to what extent do service development correspond to profound contemporary societal trends?). Taking advantage of the confrontation of both traditions (the former being more normative and action-oriented, the latter more critical and interpretation-oriented), it will consider the basements as well as limits of the

"excellence of service" dogma and shed some light on the challenges of customer orientation for service management. Focus is on the hospitality sector (restaurants and hotels) but research results provided by fieldwork from other sectors (such as banking for instance) are also taken into account.

The article is structured as follows: first, we remind of the reasons why service firms have to care about their customers indeed. Then, we consider how they could be wrong in the excessive way they pay attention to customers - which we call blind customer orientation. We then identify three risks of this blind total-customer-orientation: "satisfaction fetishism", customer "deviant" behaviors, and asymmetrical managerial attention. "Satisfaction fetishism" refers to an obsession for satisfaction which may lead managers to unrealistic and unrefined representations of the organization. "Deviant behavior" are unexpected behavior from the customer, showing that the expectations are too high in regard with the firm's capacity (e.g. the "customer rage" of a client destroying his hotel room because he's disappointed...). Finally, "asymmetrical managerial attention" means that employees do not receive as much attention as the customers, and may feel under-estimated, which may lead to a poor customer interaction quality.

3. Results

3.1. Customer satisfaction is a vital quest in services

One of the basic features defining services is coproduction: the customer has to be at least partially present during service production to which he mostly participates. Consumption cannot be separated from production (as it is traditionally the case for industrial goods) and it turns out service companies have only to deal with interactive processes, as Christian Grönroos writes (2001). According to him, "a service is a process that leads to an outcome during partly simultaneous production and consumption processes" (p. 150). The major consequence is that service quality perceived by customers is the customers' satisfaction. Because the need-satisfying for a service emerges gradually throughout the consumption process, satisfying customers equals to deliver a good quality of service. Managers should then look forward to their customers' satisfaction (as a sign of quality, of being a "good" service organization). To offer this quality of service they rely on a set of resources

such as employees, physical resources, technology and systems, and customers.

The development of services marketing as an academic field (Berry, Parasuraman et Zeithaml, 1990) has led to several studies about service perceived quality, its roots and the connections with customers' satisfaction. In front of a product, the customer will only judge the final product. While buying a service, the customer is co-producing it, through numerous interactions with the company (for example, reserving a hotel room online may lead to mistakes, for example the choosing of two single beds instead of a large bed: the client will blame the hotel but he's maybe the only responsible for that...). In both cases (product or service), the Quality literature defines the satisfaction as a gap between what the customer expects and what he gets. Unfortunately, this is more complicated in services because the client doesn't precisely know what he wants. It anyway brings companies to focus on customer's expectation and feedbacks at every stage of the service delivery, for it is the only way to secure his satisfaction.

For number of authors, satisfied customers are the most faithful and are ready to recommend the service provider, for example through word-of-mouth communication towards friends or family. An American study on university dining facilities (Kim, Ng et Kim, 2009) investigate the relative importance of institutional factors (e.g., food quality, atmosphere, service quality, convenience, and price and value) that affect customer satisfaction return intention and word-of-mouth endorsement. They have shown that all Institutional dimensions had "a significant positive effect on overall customer satisfaction and revisit intention". This study shows that improving customer satisfaction is important because it increases return intention and positive word-of-mouth endorsement. This tends to strengthen customer loyalty but also the restaurant reputation and generates greater revenues. Last but not least, it avoids your company to spend money in attracting new consumers and then increases your profitability. All things considered, the satisfaction of their customers is critical for companies; but is there any risk to go too far in this quest for satisfaction?

3.2. Risk 1: satisfaction "fetishism", or when management gets blinded by customer-orientation

In this section, we will consider risk of turning satisfaction into a fetish, which means "something

that people get obsessed about to the point at which it can dominate their lives" (Gabriel et Lang, 2006, p. 187). As a consequence of this vital quest for satisfaction, indeed, companies are spending considerable effort to measure it. As they are looking forward a better perceived quality, they might be somehow discouraged when customer satisfaction stagnates, as studies point out. But what do these surveys precisely measure? How can the long-term comparison between numeric results take into account the fast changes in customer perceptions? As Laurent Kollen observes (Felder et Colin, 2011, p. 13), customers formerly tend to attribute a 7/10 for a non-problem relationship with a brand. Today, they will give it a 5/10! But one could answer that this is not only a measurement issue, and that consumers have become more and more demanding over time. Quantitative measurements are of course tempting because they set numbers and lead to comparison between companies and countries, or between genders, age, etc. But managers should remind that service is an interactional, situational and constantly moving process that may also be measured through qualitative surveys.

This is all the more important that service quality is not necessarily easily perceptible for customers. As Vera and Trujillo (2013) state, it is particularly difficult for firms to distinguish from their competitors in mature economic sectors, in which customer satisfaction has already achieved high standards. Clients may not be able to tell one service from the other... As a consequence, customer satisfaction may be deceptive for managers, who could not see some possible real organizational achievements on service quality.

Another way to overcome this stagnation issue is to look at your organization differently. Muriel Jougleux (2006) distinguishes between two logics of service quality: one that manages quality mainly through an *a priori* standardization of the delivery processes (basically a traditional industrial approach to quality management); the other one that complements the first logic by adjusting to real customers at the point of encounters (mostly drawing consequences of the coproduced nature of services). According to her, service companies have too exclusively relied on the first quality logic, and should therefore make some effort to promote the second one.

Precisely, several major French companies have recently gathered (first within an "atelier de l'ANVIE" and then in a corporate "club") to explore the notion of "esprit de service" (Jougleux, 2015). Such a project is clearly at the cutting edge of

service modernity, but at the same time it meets a long tradition in service literature of advocacy for a sense of service. Service scholars have insisted for a long time on the importance for service companies to diffuse a “customer orientation” among their staff (for instance, (Peccei et Rosenthal, 2000)), or to settle and maintain a “service climate” (Gracia, Cifre et Grau, 2010), so as to make sure employees will behave properly.

In a way, scholars see these approaches as means to upgrade the otherwise limited service quality and customer satisfaction – but at the same time, it might dematerialize the very notion of satisfaction. David Bowen and Benjamin Schneider (2014) list several related constructs that emerged as attempts to deal with the very need of a sense of service, among which culture of service, service orientation (individual or organizational) and service climate. In particular, service climate is defined as “employees' shared sense of the service quality”, which is a paradoxical way to deal with the limitations of satisfaction: since it is limited let us diffuse it without limit within the organization!

Put differently, there is a risk of exaggerating the importance of customer satisfaction, and turn it into a “fetish”. The very obsession of a perfect service for all customers (dogma) may prevent managers from reflexivity and in that case, from a segmented approach to service conception and delivery.

Trying to satisfy every customer leads to the risk of satisfying none of them. The satisfaction must be provided inside each customer segment, which means that lower segments may not ask for upper segments services. For example, a group as Accord decided to segment very precisely its hospitality offer between the different hotels of the group (Meyronin et Ditandy, 2011, p. 35). In France, it starts with Formule 1 (from 30€/night), then the quality raises with Ibis Hotels (from 60€/night), then the Mercure hotels (from 80€/night), then Novotel (from 150€/night) and on the luxury segment, the Sofitel hotels (from 250€/night)²². In Novotel hotels, customers will have to carry their luggage themselves. In Sofitel hotels, they will not, as a groom will do it for them. How to react, as a manager, if a Novotel customer is disappointed because he doesn't receive the groom service he thinks he deserves? By carrying his luggage, looking for his full-satisfaction, the Novotel employees may confuse the group segmentation and the quest for over-satisfaction may lead to a dead-end. Nevertheless, in particular situations, the Novotel

employees should have enough autonomy to carry the luggage of particular customers (in case of a stormy weather, in some customers may be disabled persons, etc.)

3.3. Risk 2: customer deviant behaviors, or when customers' disillusionment brings trouble on the service stage

There is another risk in devoting to customer satisfaction, which is related to an ideal representation of customers. The satisfaction paradigm is grounded in a certain view of the customer: he would be functional for organizations, which means coproducing just the way he is expected to by companies. However a growing stream of research shows customers also behave in a dysfunctional way (Fisk et al., 2010) – and research has extended this statement to hospitality industry (Daunt et Harris, 2011). The forms and motivations for such misbehaviors are very diverse indeed, with a large range of behaviors from (illegitimate) “compensation letter writers” (financially motivated) to “physical abusers” or “sexual predators” (Harris et Reynolds, 2004).

A structural factor explaining the development of such behaviors is nevertheless underlined both by marketing scholars and sociologists. Actually, the service economy is underpinned by an ideology of consumption that places the customer on a pedestal (Fullerton et Punj, 2004). According to this stream of the literature, this is a long-run societal trend (“consumerism”), which influences economic actors, and especially companies. The latter do not only recognize customers as kings, they actively support the “myth of customer sovereignty” (Korczynski et Ott, 2004) by enchanting their experience and giving them a sense of their sovereignty. However, as they argue, the possibility of the fall to disillusionment remains latent, since the individual freedom of customer is contested by the rationalizing logic of management.

These structural contradictions are concealed by the myth of customer sovereignty, at the level of marketing discourses. But they become manifest in service encounters, and customers' disillusionment frequently leads to conflicts with frontline employees. Numerous studies actually account for a prevalence of customer abuse on frontline employees (Korczynski et Evans, 2013), sometimes extremely violent as in the case of “customer rage”. The point here is not to take side and advocate for powerlessness exposed frontline workers – studies actually draw a nuanced picture

²² Prices are approximately suggested for the example.

of the situation by showing employees have their own tactics to face difficult customers (Reynolds et Harris, 2006) and can even collectively cope with them (Korczynski et Evans, 2013 ; Korczynski et Ott, 2004).

However, the consequences of such behaviors are real and do not only affect frontline employees, but also other customers and the organization as demonstrate (Harris et Reynolds, 2003). This raises and legitimates the question of the limits of marketing discourses: do they have unanticipated negative effects? And to what extent are they aligned with the operational reality of the service production? These discourses actually appear very ambivalent, since on the one hand, they may be unreal (disconnected from the operational reality), and on the other one, they may be real (creating real customers' behaviors through their performativity). In that perspective, managing customers' satisfaction requires to walk on a fine line and use marketing discourses very carefully.

3.4. Risk 3: asymmetrical managerial attention, or when frontline employees view customer-orientation as a "zero-sum game".

Each of the previous questions actually resonates with that of the frontline employees' place in the service organization - and the second risk leads us to the third one. In a perfect world of services, employees and customers are not supposed to compete with each other. At least, this is the core message influential scholars of the new service school have kept telling service managers for several years now. As Schneider has tried to popularize in the *Academy of Management Executives* (Schneider, 2004) , service practitioners should stop thinking in terms of cost minimizing – on the contrary, they should invest in their human resources.

Indeed, as they point out, there is repeated evidence for correlation between customers' satisfaction and employees' satisfaction. This basically means that you are more likely to have your customers satisfied when you have your frontline employees satisfied. Although the link is not causal, the correlation is clear and was largely used to advocate for ambitious HR policies in service, HR being then considered as a key success driver for companies. Clearly, in the real world, this is not always the case, as illustrates the banking sector example.

In this particular sector, the client satisfaction stagnates as shows the 2015 World Retail Banking Report, using a Customer Experience Index (CEI)

that drops from 73.5 in 2013 to 72.7 in 2015. The report is arguing that there is a "Generation Y" explanation factor. For the authors, the young generation are disappointed by the lack of numeric tools in the banking industry. For critics, the explanation lies in the capacity of the front line employees to deal with customer's request (Brendan, 2015), for example gaining access to a house loan. Employees are not allowed by the IT system to sell different products, the only choices available are the most profitable product for the bank. The customer perceives quickly that his demand is not fulfilled, and that he is taken for a fool. For the banking industry, the frontline employees competencies is a challenge that may have been forgotten during the 1960's-1980's but which is nowadays addressed, in order to face the complexification of the process (from 3 products 30 years ago to 100+ today) (Mathieu, 2015, p. 42). Clearly here, the main focus has been put by management on processes, without any consideration for the staff contribution (skills), or retribution (quality of interactions with customers and interest of work content).

To avoid such work environments that prevent service employees to serve well customers - for lack of tools, autonomy, training, rewards, etc., scholars insist that managers take care of their staff as much as they care of their customers. Here comes the metaphor of the "satisfaction mirror", which underlines a critical feature of service quality management: treating staff and customers on an equal footing. In this view, as long as you manage to satisfy your customers and your employees at the same time - preserving balance between them, your company should be successful.

Indeed, such a balance is not necessarily easy to find - which is why a perception by employees of asymmetrical attention is a risk for every customer orientation policy. Take for instance the sector of luxury hospitality: because customers are so praised and well-treated in this kind of services, employees are expected (by managers and customers) to show deference during service encounters, which comes in tension with the precarious employment conditions they are proposed: the cost equation is apparently not found solvable for many of these institutions (Pinna, 2014).

The repeated occurrences of such imbalances between customers and employees contribute to toughen the terms of the debate. One famous and interesting example of this process is to be read in Vineet Nayar's book: *Employees first, customers second* (Nayar, 2010). The very title of this

managerial testimony reintroduces a hierarchy between customers and employees - but this time in favor of the employees. Placing these two key actors of a satisfying service delivery in competition is clearly one of the damageable outcomes of an ill-managed satisfaction policy. One consequence managers should draw from this can be stated as follows: "Don't kill the costs! Satisfy your employees to satisfy your customer."

4. Conclusion: the lure of customer satisfaction

In service management, satisfaction is a Grail that companies often intend to pursue through an optimization of quality processes. In doing so, they do not break with industrial traditional schemes and remain constrained by their intrinsic limits especially in a service context. To overcome these limited results, managers will all the more stress the priority of customer satisfaction. However, the strong focus on satisfaction entails three major risks: satisfaction fetishism (e.g. "esprit de service"), customer deviant behaviors (e.g. "customer sovereignty") and asymmetrical managerial attention (e.g. "employees first, customers second"... or the reverse!). Each of these pitfalls reveals an issue in the way service is organized (and service actors are managed) to attain the expected level of satisfaction.

By trying to shed some light on the challenges of a wise and well-thought approach to customer-orientation, we wanted to sketch a refined image of service management. Customers' satisfaction is clearly critical, but it is not the only satisfaction at stake - and it is very important that service managers care for their staff as much as they do for customers. More broadly, we advocate for a global (and not narrowly marketing) approach to service management, and suggest avenues of collaborative thinking or action-research with practitioners in the hospitality sector.

References

BERRY L., PARASURAMAN A., ZEITHAML V., 1990, *Delivering quality service: balancing customer perceptions and expectations*, Free Press, New York.

BOWEN D.E., SCHNEIDER B., 2014, « A Service Climate Synthesis and Future Research Agenda », *Journal of Service Research*, 17, 1, p. 5-22.

BRENDAN N., 2015, « Banques : l'expérience client stagne malgré les efforts », *Le blog de la relation client*.

DAUNT K.L., HARRIS L.C., 2011, « Customers acting badly: Evidence from the hospitality industry », *Journal of Business Research*, 64, 10, p. 1034-1042.

FELDER B., COLIN J.-F., 2011, « Livre Blanc Orange Business Service "Parcours client : la nécessité d'une stratégie multicanale sans rupture" », Paris.

FISK R., GROVE S., HARRIS L.C., KEEFFE D.A., REYNOLDS K.L.D. (NÉE, RUSSELL-BENNETT R., WIRTZ J., 2010, « Customers behaving badly: a state of the art review, research agenda and implications for practitioners », *Journal of Services Marketing*, 24, 6, p. 417-429.

FULLERTON R.A., PUNJ G., 2004, « Repercussions of promoting an ideology of consumption: consumer misbehavior », *Journal of Business Research*, 57, 11, p. 1239-1249.

GABRIEL Y., LANG T., 2006, *The Unmanageable Consumer*, 2nd edition, Thousand Oaks, CA, SAGE Publications Ltd, 232 p.

GRACIA E., CIFRE E., GRAU R., 2010, « Service Quality: The Key Role of Service Climate and Service Behavior of Boundary Employee Units », *Group & Organization Management*, 35, 3, p. 276-298.

GRÖNROOS C., 2001, « The perceived service quality concept – a mistake? », *Managing Service Quality: An International Journal*, 11, 3, p. 150-152.

HARRIS L.C., REYNOLDS K.L., 2003, « The Consequences of Dysfunctional Customer Behavior », *Journal of Service Research*, 6, 2, p. 144-161.

HARRIS L.C., REYNOLDS K.L., 2004, « Jaycustomer behavior: an exploration of types and motives in the hospitality industry », *Journal of Services Marketing*, 18, 5, p. 339-357.

JOUGLEUX M., 2006, « Enrichir l'approche théorique de la qualité dans les services : qualité du service et qualité de service », *Recherche et Applications en marketing*, 21, 3, p. 3-18.

JOUGLEUX M., 2015, « Démarches qualité et performances des services: quand l'esprit vient aux services... », dans *Management des services: conception, production et évaluation de la performance des services*, PUG, Grenoble, Abramovici M., Chevrier S. & Jougleux M. (Management & Innovation), p. 205-224.

KIM W.G., NG C.Y.N., KIM Y., 2009, « Influence of institutional DINESERV on customer satisfaction, return intention, and word-of-mouth », *International Journal of Hospitality Management*, 28, 1, p. 10-17.

KORCZYNSKI M., EVANS C., 2013, « Customer abuse to service workers: an analysis of its social creation within the service economy », *Work, Employment & Society*, p. 0950017012468501.

KORCZYNSKI M., OTT U., 2004, « When production and consumption meet: cultural contradictions and the enchanting myth of customer sovereignty », *Journal of Management Studies*, 41, 4, p. 575-599.

MATHIEU M., 2015, « Où vont les banques ? », *Le journal de l'école de Paris du management*, N° 115, 5, p. 38-44.

MEYRONIN B., DITANDY C., 2011, *Du management au marketing des services - 2e édition: Améliorer la relation client - Développer une véritable culture de service*, 2e édition, Paris, Dunod, 256 p.

NAYAR V., 2010, *Employees First, Customers Second: Turning Conventional Management Upside Down*, Boston, Mass, Harvard Business Review Press, 208 p.

PECCEI R., ROSENTHAL P., 2000, « Front-line responses to customer orientation programmes: a theoretical and empirical analysis », *The International Journal of Human Resource Management*, 11, 3, p. 562-590.

PINNA G., 2014, « Vendre du luxe au rabais », *Travail et emploi*, 4, p. 21-34.

REYNOLDS K.L., HARRIS L.C., 2006, « Deviant customer behavior: An exploration of frontline employee tactics », *Journal of Marketing Theory and Practice*, 14, 2, p. 95-111.

SCHNEIDER B., 2004, « Research Edge: Welcome to the World of Services Management », *The Academy of Management Executive (1993-2005)*, 18, 2, p. 144-150.

VERA J., TRUJILLO A., 2013, « Service quality dimensions and superior customer perceived value in retail banks: An empirical study on Mexican consumers », *Journal of Retailing and Consumer Services*, 20, 6, p. 579-586.

Field Note

Gastrodiplomacy as a field of research

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Abstract:

The concept of Gastrodiplomacy is emerging and needs to be explored as far as there is a long tradition in many countries to combine signatures of contacts/treaties and gala dinners. These particular moments are carefully planned and organised around products, culture and traditions. The aim of this article is to explore the interface between gastronomy and diplomacy.

Keywords:

Gastronomy – Geopolitics – Gastrodiplomacy – Peace – History - Research

1. Introduction

Last February, the President of Iran, Hassan Rohani, finally visited France; he signed many contracts; among them contracts for a large number of Airbus planes. An official gala dinner was supposed to take place on January 28th, but according to The Telegraph, the Iranian President unsurprisingly chose not to have wine during that dinner. So the French President decided to cancel the dinner arguing that wine needs to be served at all costs at a gala dinner in France. The alternative was to have breakfast with the Iranian President, but he declined....

These official meals almost compromised the relations between the two countries! France is a country that intimately mingles gourmet stories and great history.

With the previous example, one can see the extent to which the interface of diplomacy and gastronomy is crucial for a country. Gastrodiplomacy has a long tradition.

2. Historical perspective: the co-development of gastronomy and geopolitics

Since Roman times and even earlier, the kitchen has influenced the lives of men and of states.

Culinary culture thrives on tensions between tradition and modernity, external inputs and local products, traditional techniques and modern materials. Invention and academicism compete in the shadow of political change. It is noteworthy that the most important periods of influence of France coincided with the presence of great chefs and great leaders. In the sixteenth century, Catherine de Medici arrived with her Florentine cooks and marked the beginning of modern culinary art. The Italians had been until then the masters of high cuisine. Simultaneously, they ruled in the kitchen, the arts, and politics, thus largely dominating the world. They were the first to make use of the range, invented pastry and confectionery, and also revolutionized service. Butlers emerged during this time. The refinement of French cuisine took on an Italian accent. Good students that they were, the French chefs then conquered Italy leaving a lasting influence on Italian cuisine. These gastronomic exchanges are truly virtuous circles in the service of peace and good taste. The birth or rebirth of a country, therefore, is reflected in its food. One may well ask whether culinary evolution contribute to or derives from political and social evolution.

When the first cookbooks were written, the recipes were equally medical and culinary in nature. The literature was as much about the therapeutic qualities of food as it was about taste. Contributing to the well-being of people as an act of public health policy, these recipes served as a dietary plan for the population. Brillat-Savarin himself, in *The Taste of Physiology*, offers recipes for "Magisterium restaurants" that is to say, restorative beverages. Moreover, until the nineteenth century, the word "restaurant" itself meant "fortifying"! In his book about the history of cuisine, Jean-François Revel has also stressed that cookbooks were also considered medical books.

As far back as the Middle Ages, feasts were common to all the great events in Western Europe. Diplomacy was based on family ties and sharing meals. German literature mixes in French and Italian recipes with only a few products showing cultural divergence. Cooking techniques are identical. At this time, it is the high consumption of meat and fish that characterizes the diet of the aristocracy. This diet lasted until the fifteenth century. The appearance of the garden made cooking easier in the eighteenth century with the increased ready availability of vegetables. Thus, the kitchen became more convenient.

Life at the court of the kings of France, from François I to Louis XV, was deeply marked by gastronomy; feasts were numerous, orchestrated and helpful in diplomacy. In the eighteenth century the names of chefs, as Brillat-Savarin highlighted, were "almost always connected to those of their benefactors: the latter promoting status." Thus, culinary leaders invented dishes that bore the names of their political employers.

One of the most important examples of the value of combining diplomacy with gastronomy is attributed to Talleyrand at the Congress of Vienna. Between September 18, 1814 and June 9, 1815, he commissioned the finest chefs available organizing a waltz with several dishes intended to stun participants. The recipe for the famous Diplomat cake was created for the event. Talleyrand achieved his objectives both diplomatically and in gastronomy.

This quick trip through history with a few stops in kitchens throughout the ages shows us that periods of transition and political change coincide with important periods of the evolution of the palette. The geopolitical favors the evolution of cuisine and gastronomy helps to define territories and frontiers. Vatel, Escoffier, and many other important figures in French culinary development participated in the success of French diplomacy. "The cook is the supreme artist who rules the kitchen," said Jean-François Revel, just as the head of state governs the country. King Henry IV created

social policy by commanding that "I want there to be no poor peasants in my kingdom. Everyone should have his poule-au-pot (a hearty chicken dish) each Sunday." There are many electoral programs today that are less attractive!

3. Current situation

At the recent World Expo Milan 2015, the central question was how to feed the world. Looking beyond the administrative borders of countries, the primary question facing the world is how to feed and to provide a decent standard of living for all the inhabitants of the earth while avoiding conflict.

Alexandra ROVERSI, communications consultant and representative of Slow Food in Switzerland has even written a thesis on "gastrodiplomacy". This term "gastrodiplomacy" also appeared in a 2002 article in *The Economist*. Today there is a course at the American University in Washington on the subject. This follows an initiative of Hillary Clinton in 2012 to produce a "culinary diplomatic partnership" to position her country. Food and cooking have de facto become indispensable tools for better understanding: peace through the plate, as it were. The kitchen has seduced the stomachs, but more importantly the souls of world leaders. The use of food as a diplomatic tool has spawned a field of study and experimentation in ways to reinforce hope and peace, but food issues can still sometimes create a battleground. Witness the gastronomic tensions that abound on the geopolitical field in the Middle East: there are attempts at appropriation of certain preparations and recipes that stir geopolitical friction. Thus, there is a "war" of falafel and hummus between countries, for example. These conflicts are more related to economic issues for the distribution of these products, but they are indicative of the tensions in the region. Eight countries are eyeing the paternity of hummus, the most obstinate being Palestine, Lebanon, and Israel, but with Greece, Turkey, Jordan, Syria and, to a lesser extent, Egypt seeking to reap benefits from claiming the ancestry of this culinary preparation. While these arguments are sometimes irrational, there has been little progress on this front since 1995. Falafel is also causing tensions between Lebanon and Israel since 2008. Again it is the distribution of these products which generates significant revenues that arouses passions. These "wars" often cause violent upheavals in the region as was the case during the visit of Barack Obama in 2013 to Israel. During an official meal the Israelis served him hummus, to the chagrin of neighboring Palestinians, who loudly protested against the "flight of Palestinian cultural heritage." One may

ask, how did we get to this point. How did the proverbial pot boil over?

The interface of the geopolitical and the gastronomic has combined to help define today's world map. Cuisine contributes to the geopolitical definition of territory. The kitchen is the expression of a heritage of a region; it carries a tradition, techniques, and know-how which help define borders.

Some countries are even using cuisine as a tool to build recognition: the kitchen as propaganda. The culinary heritage is exported just as expansion was once exercised through military campaigning: men, budgets, investments, a strategy, a leader and iconic recipes are mobilized. Thus, from the year 2000, a country like Thailand has managed to emerge from the shadow of its prestigious neighbors through its cuisine.

Alexandra ROVERSI also commented on the appearance of food trucks in Europe offering dishes from Malaysia or South Korea. A strategy worthy of Sun Tzu has been established in Korea with the export of Korean music (K-pop) and exposure to the country's culture through its cuisine. Today this campaign has worked well: the basics of sensory and experiential marketing are carefully managed. Even the Scandinavian countries which are hardly viewed as the most expansionist have participated. (Norway engaged in a long dispute with Greece over the origins of feta cheese.)

Another common interface in "gastrodiplomacy" is the service of food. To serve is above all a state of mind. It is an essential function that defines cultural norms and ways of life. To serve customers is in a way to serve society and by extension, the state. The same concept of putting the interest of others first applies in service to the state as applies in service to customers.

Solving most geopolitical problems is akin to creating a perfect dish: it is about finding the right balance of ingredients, having the proper seasoning and getting things at the right temperature. There is even a club dedicated to understanding through gastronomy, the CCC- Club des Chefs des Chefs (chefs of chiefs of state and government), one of the most exclusive associations in the world! It aims to "promote the global culinary heritage and its regional expressions, but also friendship and solidarity between peoples". It also has a motto: "Politics divides people, gastronomy brings them together."

4. Gastronomy as the key player in the current evolution and future of French international relations

Geopolitics and French cuisine are connected to form the two axes around which our country is built. They are the building blocks from which we radiate. France is a country that is known in the community of nations for its cuisine, which even reinvented and reinterpreted is one of the country's core values. It is rich in local products as well as in ancestral know-how. French cuisine is recognized for the unique flavors it leaves on the palate, a happy marriage of delicacy and power. French cuisine, like France itself, has many roots, sometimes distant, often multiple, but rich in flavor and experience. In its dishes like its wines, a way of life unfolds. France breathes, tastes, and entertains. This applies not only to Foodies or those with trained palates, the concept of living well is sufficient to describe French people; they share the same vision of life through sharing good food.

French cuisine is synonymous with quality and cooking pleasure; it elicits simple, true, and lasting emotions and above all it brings together appetizers, main courses and desserts, game and cheeses, wines and liqueurs, terroir and provinces, protocol and tableware, formal dinners and exceptional events, toasts and conviviality in a dizzying ballet of flavors.

In France, diplomacy and politics are never far away from the kitchen. A centuries-old tradition allows us to manage conflicts and build alliances through our dining experience. Talleyrand said to Napoleon: "Give me good cooks; I will give you good treaties." Don't we say to sit at the negotiating table? Gastronomy and diplomacy share many of the same descriptors.

In a recent 2011 book, tracing the history of 150 years of official invitations to the Elysée, Jean Maurice and Francois Bertin highlight the important place of French gastronomy in diplomacy throughout the ages. Our chief executives welcome official visitors in the interest of the nation, as the authors point out, though receiving is first and foremost intended to honor the guests. The menus are much studied, the products selected with great care, taking into account the characteristics, tastes, and cultures of the guests. Originally called grand dinners and gala dinners we now speak about formal dinners or state dinners (*diner d'état*). These are high-level diplomatic events orchestrated according to a precise and rigorous ceremonial code designed to allow for moments of intense exchange while promoting the excellence of French culture.

France needs recognition. A former world power with global reach, we are now sailing in murkier waters, caught in and coming to terms with the complexity of the world around us. The need for recognition is, therefore, more significant than ever. The important thing is not the current crisis but how we will cope with the future. How will the rebirth of a new France reflect the recognition of our expertise. The Fabius commission and all initiatives to promote tourism are moving in the right direction. Registration for the Intangible Cultural Heritage of UNESCO of French gastronomy is a noteworthy initiative, but this should not mask the reality: eight cuisines and culinary traditions are already honored. So we can boast that the reference to France gastronomy evokes more than just culinary traditions, but the reality is that the Mediterranean diet, traditional Mexican cuisine, Korean kimchi (highly seasoned vegetable based dish), the traditional Japanese cuisine (the *washoku*, especially to celebrate the new year), the Arabic coffee as a symbol of generosity, culture and tradition of Turkish coffee, *lavash* in Armenia (traditional thin bread that is part of the Armenian cuisine) or even the Georgian method of wine making in the old amphorae (*Kvevris*) are all listed as World Heritage by UNESCO.

5. In conclusion

We cannot erect fortifications, a Maginot Line and stay locked in our certainties. We must be open to evolution, to reinventing ourselves without forgetting our values. We live in the 21st century, and the tourism industry enjoys unprecedented popularity. The media frenzy around the celebrity of chefs compares with that of some football players; they have become the fashion elite of yesterday and the conquistadors of yore. Even the global notoriety of some chefs and the oversized egos of many hint at conquest! Today's restaurant teams are very organized. We have always had kitchen brigades, but today there are communication brigades to mark the chef's territory, not to lose ground on the food canvas and win "friends" and "followers" who perhaps have never come to eat in their restaurants. The paradox is nonetheless revealing of our time, the gastronome is not necessarily a customer but a virtual aficionado who online will follow the lives of their favorite stars. The popularity of cooking shows reduces the boundaries between gastronomy, the kitchen and the rest of the world. We live today in a world that becomes a village. The strength of roots should enable us to grow and succeed in this new multipolar world together.

Happiness and peace are both in the kitchen!

References

Brillat-Savarin Jean-Anthelme, (2009), Physiologie du goût, Editions Flammarion

Revel Jean-François, (2007), Un festin en paroles : Histoire littéraire de la sensibilité gastronomique de l'Antiquité à nos jours, Editions Tallandier

Sacré Jean-Maurice, Bertin François, (2011), Invitation à l'Élysée : 150 ans de tables présidentielles, Editeur : Ouest-France

<http://www.telegraph.co.uk/news/worldnews/europe/france/12126123/Hollande-Rouhani-lunch-scraped-after-Elysee-Palace-refused-to-remove-wine-from-menu.html>

<http://www.letemps.ch/lifestyle/2014/01/05/diplomates-passent-table>

<http://www.economist.com/node/999687>

<http://chefs-des-chefs.fr/index.php>

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