### University of Massachusetts Amherst ScholarWorks@UMass Amherst

International CHRIE Conference-Refereed Track

2010 ICHRIE Conference

Jul 30th, 10:15 AM - 11:15 AM

# Assessing the Utility of Restaurant Descriptors and Typologies for Advancing the Body of Knowledge in Restaurant Management

Bonnie M. Canziani *University of North Carolina at Greensboro*, bonnie canziani@uncg.edu

Barbara A. Almanza

Purdue University - Main Campus, almanzab@purdue.edu

Merrick J. McKeig
University of North Carolina at Greensboro, mjmckeig@uncg.edu

Canziani, Bonnie M.; Almanza, Barbara A.; and McKeig, Merrick J., "Assessing the Utility of Restaurant Descriptors and Typologies for Advancing the Body of Knowledge in Restaurant Management" (2010). *International CHRIE Conference-Refereed Track.* 3. https://scholarworks.umass.edu/refereed/CHRIE\_2010/Friday/3

This Empirical Refereed Paper is brought to you for free and open access by the Hospitality & Tourism Management at ScholarWorks@UMass Amherst. It has been accepted for inclusion in International CHRIE Conference-Refereed Track by an authorized editor of ScholarWorks@UMass Amherst. For more information, please contact scholarworks@library.umass.edu.

## Assessing the Utility of Restaurant Descriptors and Typologies for Advancing the Body of Knowledge in Restaurant Management

Bonnie M. Canziani University of North Carolina at Greensboro Greensboro, North Carolina, U.S.A.

> Barbara A. Almanza Purdue University – Main Campus West Lafayette, Indiana, U.S.A.

> > and

1

Merrick J. McKeig University of North Carolina at Greensboro Greensboro, North Carolina, U.S.A.

#### **ABSTRACT**

The study begins with a review of existing typologies in the restaurant management literature. Segment labels from three typologies are used as keywords to collect 251 empirical studies from nine relevant academic journals serving the restaurant management discipline. Content analysis of titles, abstracts, and methodology sections reveals inconsistent use of existing typologies and limited use of effective restaurant descriptors. Recommendations are offered to optimize the use of restaurant descriptors so that the content of empirical studies may be more effectively accessed, digested, and compared across, thereby enhancing the communication of advances in the restaurant management body of knowledge.

Key Words: Classification, Meta-analysis, Methodology, Restaurant, Sampling, Typology

#### INTRODUCTION

Good empirical research contributes to a body of knowledge in a field in such a way that new advances or important intelligence can used as a basis for further research and informed applications in operational settings. In order to make such contributions, the content of empirical studies must be readily accessible to future researchers and practitioners. Such content must also be easily identified as applicable to a researcher or practitioner's needs or context, i.e., the setting in which the new researcher or the practitioner plans to apply the findings or learning presented in the empirical study he/she is reading during the literature review process. This notion is akin to the "apples" to "apples" adage which peppers much of our commonsense deliberations about the importance of situational context in decision making.

In structuring the write-up of a journal article, authors of empirical studies generally have an obligation to convey information about the context in which the research was conducted; in so doing, authors infer the type of organizational setting to which the findings of the study might be applicable. Within the restaurant management literature, specifying *context* often involves describing attributes about the restaurant firm or operation that was the source of collected data, or about which respondents were surveyed. Successful communication of the restaurant context in empirical studies requires consideration of at least two primary activities on the part of the researcher: *classification* and *description*.

Classification involves the labeling of a restaurant using a typology which ideally is sufficiently standardized as to permit the reader of a report to immediately identify a studied restaurant as having one or more

characteristics "typical" of entries in the typology category or "type" being discussed. *Description* of the restaurant may involve pinpointing characteristics closely related to the typology category it falls in or may introduce new terms or *descriptors* to further enhance a reader's ability to easily picture the setting and to more efficiently determine whether the restaurant studied is relevant to the context of his/her own interests. The dilemma currently in the restaurant management literature is that no typology is clearly marked as the gold standard for specifying restaurant contextual information in research and practitioner reports and even the predominant industry segmentation typologies seem to be taken for granted, rather than clearly specified in current industry and academic reporting practices. The term restaurant management literature in this study is an encompassing one, indicating academic work in any business aspect of the restaurant field.

#### The Role of Industry Segment Typologies in Communicating Restaurant Context

Industry segment is one of the most common contextual attributes revealed within empirical studies in the restaurant management literature. However, a review of the literature reveals only one seminal work on a proposed standardized typology for the assignment of a restaurant to an industry segment class (Muller and Woods, 1994). Little evidence exists in the restaurant literature of any call to use either standardized restaurant typologies or standardized descriptors in specifying the methodological context in which restaurant scholarship is performed.

Within the United States, the National Restaurant Association (NRA) acknowledges at least five major restaurant industry segments: quick service restaurants/fast food, midscale, moderate/casual/themed, upscale/fine dining, and more recently, fast casual. The NRA also distinguishes among independent and multi-unit [chain] restaurants in many of its publications. Muller and Woods (1994) introduce an additional segment, business dining. A popular industry and financial intelligence company referred to on the NRA website, Hoovers, breaks its *Restaurant and Café* category down into casual dining restaurants, fast-food & quick-service restaurants, specialty eateries, e.g., coffee shops/ice cream, and upscale dining segments—largely replicating the NRA type categories. The U.S. Census Bureau's *North American Industry Classification System* (NAICS) uses four primary subcategories under their code 722 Food Services and Drinking Places: full-service restaurants, limited-service eating places, special food services, and drinking places. Additional descriptive adjectives are presented as subcategories of the NAICS classification system, i.e., diners, family restaurant, fast food, fine dining, pizzerias, steak houses, takeout /carryout restaurants. *Restaurant & Institutions Magazine* segments its reports using restaurant types that overlap with those in NRA and NAICS reports.

While not extensive, and sometimes hard to find, there are a few published explanations of some of the restaurant segmentation terms used by these various institutions and publishers. For example, *chains* are defined on the Restaurant & Institutions website as having "five or more units operating under a single brand name, such as Subway" (http://www.rimag.com/article/368146-Top\_400\_Methodology\_2009\_.php). In another example, Figure 1 shows that the U.S. Census website provides descriptions of what *full-service* and *limited-service* mean within their NAICS taxonomic system.

The various published industry segment types and their corresponding definitions, when available, comprise the foundational vocabulary used to describe restaurants to readers of industry and academic reports, at least within the United States. With this in mind, we turn to our current study and the methods by which we explore the use of these available typologies and other restaurant descriptors in communicating restaurant contextual information in empirical studies.

## Figure 1 Description of Full-Service and Limited Service Restaurants on www.census.gov

#### 7221 Full-Service Restaurants

This industry group comprises establishments primarily engaged in providing food services to patrons who order and are served while seated (i.e., waiter/waitress service) and pay after eating. Establishments that provide these types of food services to patrons with any combination of other services, such as carryout services are classified in this industry. http://www.census.gov/epcd/ec97/def/7221.TXT

#### **7222 Limited-Service Eating Places**

This industry group comprises establishments primarily engaged in providing food services where patrons generally order or select items and pay before eating. Most establishments do not have waiter/waitress service, but some provide limited service, such as cooking to order (i.e., per special request), bringing food to seated customers, or providing off-site delivery. http://www.census.gov/epcd/ec97/def/7221.TXT

#### **METHOD**

The present research centered on a content analysis of titles, abstracts, and methodology sections in a sample of empirically-based restaurant management articles. The following industry segment terms extracted from the NRA website, Muller and Woods (1994), and the US Census website [quick service, fast food, midscale, moderate, casual, upscale, fine dining, fast casual, business dining, full-service, limited-service, chain, multi-unit, independent, and family] were used in combination with "restaurant, food, menu, dining, cuisine, chefs, and catering" as keywords to collect 251 empirical studies from ten relevant academic journals identified as being primary outlets for restaurant scholarship:

- 1. Cornell Hotel and Restaurant Administration Quarterly
- 2. FIU Hospitality Review
- 3. International Journal of Contemporary Hospitality Management
- 4. International Journal of Hospitality Management
- 5. Journal of Foodservice
- 6. Journal of Foodservice Business Research
- 7. Journal of Hospitality Marketing & Management
- 8. Journal of Hospitality & Tourism Research
- 9. Journal of Quality Assurance in Hospitality and Tourism
- 10. Journal of Restaurant and Foodservice Marketing

Journals were accessed online using an additional criterion requiring the article to be published within the decade of year 2000 to year 2009. Studies were included regardless of their unit of analysis; that is, studies that involved data from people [patrons or staff], intercept encounters, menu and sales data analyses, and operational analyses were all considered within the scope of this study. Reports on industry data from SEC filing related databases were not unless specific characteristics of restaurant companies were detailed in the article, beyond being publicly traded.

Manual content analysis of each article's title, abstract, and methods section was performed; due to our interest in observing additional descriptors used to describe restaurant context in these journal articles, as well as to note any formal influence of NRA, Muller and Woods (1994), or the US Census NAICS on methods design, we felt this method more useful than automated content analysis.

#### FINDINGS and DISCUSSION

#### The Use of Typologies to Guide Research Methodology in Restaurant Studies

Content analysis of the articles collected for this study revealed inconsistent use of NRA, Muller and Woods (1994), or the US Census NAICS restaurant type terminology in the empirical studies sampled herein. NRA restaurant types were by far the most widely used to describe restaurants in this set of empirical studies. Of the 251 scanned articles, 104 (41%) referred to one or more of the restaurant segment types reflected in NRA reporting practices; 23% included mention of QSR or fast food restaurants, 16% involved upscale or fine dining restaurants, 12% included moderate or casual restaurants, 3% mentioned midscale restaurants, and 3% mentioned fast casual as an identifying characteristic of their study context. No article specifically mentioned business dining (Muller and Woods, 1994) as a distinguishing characteristic of its sample or focus. The number of articles referring to a chain or multiunit context was 38 (15%) of the set of 251 articles studied, while 4% of the articles identified independent restaurants, and less than 1% identified a mix of independent and chain restaurants as their focus of study.

With respect to the Census NAICS type categories, of the 24 articles that mentioned the terms *full* or *limited-service*, 20 articles reported including full-service restaurants in their study, one included mention of limited-service, and three included both limited and full-service restaurants in their study. Other standard NAICS terms frequenting the sample set of articles were: *family* restaurant (9 articles), *pizza* restaurant (2 articles), *steakhouse* (6 articles) and *cafeteria* (2 articles).

A closer look at the manner in which authors described the restaurants that they studied revealed additional concerns with the quality of descriptive information that is offered to the reader. Very few studies (10% only) offered concrete descriptions of the restaurants studied in order to substantiate the appropriateness of labeling them as a particular industry type, e.g., QSR, casual, or upscale. A few authors who did explain how they conceived of appropriate type labels relied on menu prices as the differentiating factor to assign the studied restaurants into midscale, moderate/casual/themed, or upscale type categories. Unfortunately, there was no consistency across the four articles in terms of the price points researchers used for specifying differences in restaurant type categories. Very little information such as menu variety, menu complexity, take-out or self-service, payment sequence, or service style appeared in the methods sections of articles, and was not specifically used to justify the typological placement of the restaurant(s) studied, and seldom used to justify the selection of restaurant sampling units. Geographic location is given in most articles, but often with vague allusions to regions, such as the US Midwest, or a large city in the southwestern US.

Incredibly, no studies directly cite any of the aforementioned typologies as the basis for justifying the use of industry type labels in describing restaurants studied. This is odd, given the fact that published information, including Muller and Woods' (1994) characterizations of restaurant industry types, exists to spell out the traditional distinguishing characteristics of many of the type labels used by the National Restaurant Association and by the US Census (NAICS).

#### The Difference between Providing Restaurant Context and Explaining Sampling Design

Rather than providing typological information about the restaurants studied, some authors tend to default to an explanation of the sampling frame used to select restaurants for inclusion in their studies, as if to validate their use of specific restaurants based on the assurance of impartial random sampling techniques. Eight articles specified the use of US public trading systems databases, two used the UK's *Good Food Guide*, and several more relied on state restaurant association mailing lists and yellow page directories. While information about sampling frames is useful to readers, it does not offset the need for viable contextual information about the final sample of restaurants studied, so that readers may make informed comparisons and good use of the studies' findings. The provision of contextual information does not require the use of random sampling techniques; rather it is closely related to

decisions regarding what types of restaurants to focus inquiry on and what restaurant characteristics are vital to document for the sake of either controlling the study parameters or better explaining the findings after the fact. As a majority of the studies were convenience samples, providing clearer contextual data is certainly an appropriate activity for researchers hoping to increase the face validity of their studies.

An additional observation is that when the unit of analysis of a study is not the restaurant operation per se, but its employees, managers, executives, or patrons, authors are often negligent in their descriptions of the restaurant context, relying on the provision of demographic or psychographic profiles of their human sample to allow readers to interpret an article's findings as useful or not. Studies in our sample that have a consumer or organizational behavior slant seem to fall prey to this lack of restaurant specification more so than do studies of menu analysis, technology, or food safety, which offer more details describing restaurant attributes.

Interestingly, fewer than 15% of the articles listed the names of actual restaurant companies or sites involved in the study. This likely corresponds to the institutionalized practice in academic studies of guaranteeing confidentiality to participating subjects and organizations. While direct acknowledgement of participating companies would go far to alleviate some of the loss of contextual information in the restaurant management literature, it is imperative to honor the rights of study participants who wish to remain incognito.

#### The Use of Additional Descriptors in Providing Restaurant Context

As table 1 indicates, there were relatively few other restaurant descriptors that are presently widespread and well-defined enough to be helpful in systematically establishing restaurant context for the reader.

Table 1
Additional Restaurant Descriptors Evidenced in the Content Analysis

Additional	Number of Articles	Additional Descriptors	Number of Articles
Descriptors	where Term Appears	(cont.)	where Term Appears
5* Mobil/AAA	1	Low Complexity	1
A la Carte	1	Luxury	1
Bar Restaurant	1	Michelin Star	5
Branded	1	Mid-price	1
Buffet	2	National	1
Café	2	Niche Brand	1
Coffee Shop	1	Pub Restaurant	6
Commercial	2	Publicly Traded	8
Decent	1	Roadside	1
Diner	1	Seafood	1
Dinner house	2	Self-serve	1
Eatertainment	1	Small	2
Food Stand	1	Student Run	1
Franchise	5	Table Service	4
Hotel	9	University	5
Limited-Menu	1	Wine	1

This is not to mean that we recommend dispersing with additional descriptors when attempting to specify the restaurant context in which a study is conducted. Some descriptors, e.g., *hotel* restaurant, may have utility in imparting additional contextual information to readers. Hotel budgeting practices and the systematic cross-training

of employees may be situational constraints on hotel restaurants that add to the reader's ability to make sense of empirical findings from the hotel restaurant environment. In like manner, restaurants that have a primary focus on the sale of beverages, such as taverns or pubs, should continue to be identified as such. The presence in these articles of additional useful descriptors is a good thing; we only wish that more of these terms can be defined adequately and then used widely and systematically in future studies.

On the other hand, some words, lacking any accompanying explanation or further details about the restaurants, are less useful to the reader. The term *themed restaurant*, for example, is applied to a wide range of restaurants encompassing sports bars, beach restaurants, restaurants with ethnic menus, and entertainment-focused operations. The word *themed*, like the word *moderate*, may be too ambiguous to appropriately serve the research community unless researchers take time and care to carefully outline what they mean when they use these terms. *Casual* was the term of preference for denoting a restaurant between quick service and upscale/fine dining. It most often was accompanied by another term such as family, themed, seafood, and so. There was evidence of conceptual overlap, i.e., casual and midscale or casual and upscale linkages; the term *casual*, quite often linked with the word "dining" as in "casual dining" has little standardized definition in the literature or in industry reporting practices.

It should be noted that the use of certain guides such as the *Michelin Guide*, the *Mobil Travel Guide* and the *American Automobile Association Travel Guide* can be viewed as more than a simple sampling frame from which the researcher selects potential study sites or participants. In some of the studies, restaurants are selected from these guides due to the signatory value of the stars or diamonds assigned to the restaurant. Restaurant level according to these rating systems therefore is an additional piece of contextual information that can be used to inform readers about the circumstances and comparability of the restaurants studied.

One further concern exists regarding the use of *ethnic* as a restaurant descriptor. A careful reading of the articles in this sample indicates that this parameter is only very superficially understood in terms of its contextual value to the reader. Of the 251 studies, 24 (roughly 10%) refer to their studied restaurants as *ethnic* in nature. However, the definition of ethnic varies somewhat from article to article. In descriptions of US and UK restaurants in this sample, *ethnic* typically denotes that some aspect of the menu falls into the following cultural categories of cuisine: Afro-Caribbean, Asian, British, Chinese, French, Greek, Indian, Italian, Japanese, Korean, Kosher-certified, Mexican or Thai. In one study of restaurants in Denmark, *ethnic* has the opposite meaning of representing local Danish cuisine, while the term international is used to convey foreign cuisine traditions, e.g., American or Chinese. Additional difficulty arises in exploring the use of the term Chinese restaurant in this sample of studies. In two studies, one based on restaurants in Hong Kong and one on restaurants in Taiwan, the term Chinese restaurant is glaringly vague, as no clarification in terms of its cuisine or other defining attributes is provided, other than being profiled as having managers of Chinese heritage.

#### Reflecting on the Usefulness of Titles and Abstracts

Lastly we consider the use of effective restaurant descriptors for specifying restaurant contextual information in titles and abstracts. Not only is it important to provide adequately defined and standardized descriptions of restaurant context in the methodology sections of empirical studies, it is critical to communicate as much contextual information as possible through the thorough and judicious crafting of manuscript titles and abstracts for online searches. To the extent that the terms *quick-service*, *fast-food*, *fast casual*, *midscale*, *moderate*, *casual*, and *upscale* [common NRA restaurant labels] are by far the most widely used to describe restaurants in this set of empirical studies, it behooves us to examine their usefulness in article searches. To this end, we would anticipate the presence of these words as much as possible in the titles and abstracts of the articles studied. All of the articles using these typology terms have the terms in their abstracts.

Table 2 shows how many of the articles actually include the term in the titles of the articles as well. Quick service/fast food leads in both the number of sampled articles dealing with this restaurant type and in the number of

manuscript titles reflecting this focus. While the number of studies dealing with casual dining restaurants is slightly smaller in this sample than the number of studies dealing with upscale/fine dining restaurants, the term *casual* appears more often than the term *upscale* does in the titles of related journal articles.

Table 2
Presence of Typology Terminology in Sampled Journal Articles

Typology Category	# Articles Where it Appears in the Abstract	# of Articles Where it Appears in the Title
QSR/FF	58	40
Fast Casual	7	2
Midscale	7	1
Casual	31	14
Upscale/Fine Dining	39	4

Specific trends in the use of different descriptive terminology are not obvious, barring a slight current preference for *quick service* restaurant over the older *fast food* terminology and the introduction of *fast casual* as a restaurant type into the literature. Researchers seem to use *quick service* and *fast food* interchangeably in article titles and abstracts with no attempt to differentiate these concepts. *Midscale* was the least prevalent term in article titles, and *moderate upscale* did not appear at all in the sample set of article abstracts and titles. *Upscale* appeared in four titles, while the term *fine dining* appeared only in abstracts. This "title search" for restaurant type indicators demonstrates that the research community is not opposed to using industry segment terms in its titles and abstracts, but may need increased reminders to do so in order to facilitate rapid access to relevant studies using restaurant type labels in keyword searches.

#### **CONCLUSION**

The purpose of this study was to assess to what extent authors of empirical studies do in fact refer to reasonably standardized industry segment typologies in their work; in addition, we provide significant insight into the adjectival or nominal descriptors used by restaurant management researchers in characterizing the restaurant settings they are studying.

With respect to the issue of reporting information about restaurant context, we can determine several inhibitors of adequate descriptions of restaurant context in the empirical literature that may relate to personal actions of researchers. First, the researchers may agree to confidentiality in exchange for access to company data, staff, or patrons, suppressing detail that might permit a company's identity to be revealed when it does not want it to be. Secondly, if the researchers' assessment or collection of useful restaurant attributes is sparse during the methods design/sampling phases, then they cannot pass on this contextual detail to their readers. Lastly, authors may be negligent in the reporting of this contextual information at the point of writing the research manuscript and its accompanying title and abstract.

Furthermore, while some documentation exists to differentiate between restaurant types in the industry/literature sources discussed previously in this manuscript, there is significant work to be done in four areas: (1) further expert analysis is required to update the characteristics that best profile distinct segments, (2) terminology crossover between segments should be eliminated if possible, e.g., *casual* appears to be linked too often in non-strategic ways with the other myriad terms while *upscale* moves across segment boundaries and thus loses

descriptive vigor, (3) communication of restaurant context using a shared typology should be encouraged as standard reporting practice, and (4) when authors choose to deviate from known typologies, they should provide adequate restaurant context. Future research may also investigate the potential for typology use from a global perspective. By advancing and citing the use of typologies, the research community can open the body of knowledge to enhanced meta-theoretical and meta-analytical reviews that will permit long-term scientific progress in the field.

#### REFERENCES

American Automobile Association. (2010). *Diamond rating ® system*. Retrieved 1/18/2010 from http://www.aaanewsroom.net/Main/Default.asp?CategoryID=9&SubCategoryID=22

Carter, Elizabeth. (2009). The good food guide 2010. United Kingdom: Which? Books.

Hoover's, Inc. (2010). Hoovers - Business solutions from Hoovers. Retrieved 12/10/2009 from http://hoovers.com/

HowStuffWorks, inc. (2010). Mobil travel guide: restaurants. Retrieved 1/18/2010 from

http://www.forbestravelguide.com/restaurants-channel.htm

Michelin Travel Publications. (2010) *Michelin red guide*. Retrieved 1/18/2010 from http://www.michelin.co/uk Muller, CC., & Woods, RH. (1994). An expanded restaurant typology. *Cornell Hotel and Restaurant Administration Quarterly*, 35(3), 27-37.

National Restaurant Association. (2010). Retrieved 12/10/2009 from http://www.restaurant.org/

North American Industry Classification System (NAICS). Retrieved 12/10/2009 from

http://www.census.gov/eos/www/naics/

Restaurant & Institutions Magazine. (2010). Retrieved 1/19/2010 from

http://www.rimag.com/archive/2010/20100101.php