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Culinary Deserts, Gastronomic Oases: A Classification of US Cities

Zachary Paul Neal

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Summary. This paper explores the role of restaurants, as consumption spaces, in defining the consumptional identity of 243 American cities. Specifically, it is asked whether, and how, US cities can be classified on the basis of the local prevalence of specific types of restaurants—are some cities culinary deserts, while others are gastronomic oases? A two-stage cluster analysis reveals four distinct city types, which fall along two intersecting dimensions: a quantitative dimension of restaurant availability and a qualitative cultural dimension. These four city types are characterised and connected to the existing literature on consumption spaces, with particular attention to a strong parallel between these city types and the communities discussed by Richard Florida. Several directions for future research using the city classification as a conceptual framework are offered. Additionally, these analyses involve the development and application of a new method of measuring a city's number of consumption spaces, which is theoretically superior to traditional per capita measures and which is described in a methodological appendix.

> Without bread, all is misery (William Cobbett (1763—1835)).

In the *Phoenix New Times* "Best of Phoenix 2003" issue, readers identified Olive Garden as the city's best Italian restaurant, P. F. Chang's as the best Chinese restaurant and La Madeleine as the best French restaurant. Other national chains were also named as Phoenix's best in a number of other categories and, in fact, they have been so recognised by *Phoenix New Times* readers for years (see Rentschler, 2003). What does it mean when the most popular restaurants in Phoenix—the 6th largest city in the US—are the same standardised eating-places available in nearly every other large American city?

Perhaps Phoenix is a desert in more than just the climatic sense. The term 'food desert' is used in the public health literature to refer to places with limited access to reasonably priced nutritious foods (Wrigley, 2002). However, food is not only a functional good, but also a cultural object—consumed not only for its nutrients, but also for its symbolic and aesthetic value. Thus, areas with limited culturally satisfying restaurant options might be described by a similar term: 'culinary desert'. For those who believe that "dining at a spectacular restaurant is essential to the claim that one is cultured and civilized", Phoenix just may be a 'culinary desert' (Finkelstein, 1989, p.76).

Crewe and Lowe (1995, p. 1877) have argued that "through their organisation of consumption retailers are creating particular urban landscapes and that qualitative

Zachary Paul Neal is in the Department of Sociology, University of Illinois at Chicago, 1007 West Harrison Street, Chicago, Illinois 60607, USA. Fax: 312 996 5104. E-mail: zneal2@uic.edu. *The author would like to thank (alphabetically) William Bridges, Anthony Orum, Pamela Popielarz and Jennifer Watling-Neal, and also three anonymous referees for their comments on earlier drafts.*

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differences are emerging between areas of consumption centres". Hence 'microgeographies of consumption' emerge and individuals have increasingly differential levels of access to specific types of consumption spaces, which can have important consequences for their quality of life (Mullins *et al.*, 1999; Zukin, 2004). Given the highly urbanised nature of both the American population and American consumption activity, to begin mapping these microgeographies we might ask: What *kind* of cities contain what *kind* of consumption spaces? Because restaurants are among the most varied and common, yet understudied, consumption spaces, in this study I aim to develop an understanding of cities in terms of their restaurants. In particular, I ask whether, and how, US cities can be classified on the basis of the local prevalence of specific types of restaurants—are some cities culinary deserts, while others are gastronomic oases?

In the first section, I examine the key concepts and prior work that motivate and inform this study—the roles of consumption spaces and, more narrowly, the restaurant as a consumption space. In the second and third sections, I detail the methodology and data employed and describe the city classification scheme they reveal. Finally, by characterising each of the identified city types, I consider their theoretical implications.

The Mise en Place

Consumption and the City

Quality of life. Mullins *et al.* (1999) note that

> because consumerism is a core component of contemporary culture, any consideration of a household's quality of life must therefore take into account . . . ease of access to consumption spaces (Mullins *et al.*, 1999, p. 49).

The connection between quality of life and access to consumption spaces rests on the post-materialist shift from a "focus on material necessities to issues of self-actualisation" (Mullins *et al.*, 1999, p. 49; citing Abrahamson and Inglehart, 1995). That is, because basic material needs are increasingly easily satisfied in the developed world, attention has shifted to individuals' ability to cultivate their desired identities. A significant part of individual identity—what Corner (1994) has termed 'consumptional identity'—is constructed and expressed through consumption choices (Bourdieu, 1984; Zukin, 1995, 2004). Limited access to the desired kind of consumption spaces translates into a correspondingly limited ability to self-actualise and therefore into a lower quality of life. Thus, the number and variety of *local* consumption spaces has the potential to impact directly on one's quality of life.

The specific collection of consumption spaces in an area can also impact on quality of life to the extent that it serves as a marker of the social and demographic character of a place, demarcating a sort of metageography. Certainly, such markers not only help us to navigate the social world, but they also indicate where we belong and where we do not. For example, the boutiques of Beverly Hills communicate not only that it is an up-scale area, but also that if we are not a member of the social élite, we should proceed to the nearest suburban shopping mall. As Zukin has suggested

> the debate about which kinds of goods and stores belong on the street is also a debate about who belongs in the city (Zukin, 2004, p. 284).

Lacking access to consumption spaces in which an individual 'fits in', can render him/her an outsider, inviting disapproving glances and inspiring feelings of social isolation.

While discussing consumption spaces in terms of quality of life may seem overblown, the increasingly dominant role of consumption and consumerism in advanced societies means that such phenomena cannot be ignored or marginalised. However, as these are new and evolving phenomena, they remain difficult to understand and I do not intend to test empirically the claims of Mullins *et al.* (1999) or Zukin (2004). Instead, my aim is to provide a preliminary mapping of the 'microgeographies of consumption' which Crewe and Lowe (1995)

argue are emerging, which can then serve as a conceptual framework and methodological tool for future explorations of the role(s) of consumption spaces in cities and their impact on individuals' quality of life.

Urban consumptional identities. Corner's (1994) notion of consumptional identity is useful not only when discussing individuals, as above, but also when discussing cities. Using the term 'symbolic economy', Zukin (1995) has suggested that a city's collection of broadly consumption-oriented institutions helps to specify its identity or image. By examining the kind and number of consumption spaces a city contains, it becomes possible to understand and define its consumptional identity and to know what 'kind' of city it is (Crewe and Lowe, 1995). This, in turn, makes it possible to identify patterns in urban consumptional identities which both define a microgeography of consumption and create the differential levels of access to consumption spaces which impact on quality of life.

This type of interplay between consumption spaces and urban identity has been observed in many places. The West Edmonton Mall in Canada—the largest of its kind at the time—asserted a "new urban identity of centrality for Edmonton" (Shields, 1989, p. 161). York's image as a repository of British heritage was cultivated through the development of—for example, historically themed shopping centres (Meethan, 1996). Similarly, Nottingham's Lace Market has recently been renewed through retail growth and is, as it once was in the early 20th century, a centre for British fashion (Crewe and Lowe, 1995).

Chicago's Millennium Park provides a particularly clear and current example in America. Like many other urban entertainment districts, this one offers an opportunity to consume music, art and food. What is crucial is the specific type of consumption space in which each is offered. The city did not build a concert hall, but an open-air amphitheatre; not a gallery, but two massive outdoor installations; not simply a restaurant, but a vast *al fresco* café—all of which are situated within a meticulously landscaped 25 acres near the lakefront. It is through these consumption spaces that the city (re)produces its 'urbs in horto' (city in a garden) identity.

The development of these specific types of consumption spaces suggests that Chicago is a city that values music, art and architecture. It also suggests that it values recreational amenities, especially those that draw on Lake Michigan as a natural resource. Together, these values, as expressed through consumption spaces, point to a city interested in capturing and holding the attention of a demographic sub-segment that includes at once a bohemian-outdoorsy element and a bourgeois-high culture component. That is, by constructing a specific consumptional identity through its consumption spaces, Chicago casts itself as a specific kind of city in a broad social and demographic sense.

While a city's consumptional identity frequently serves to differentiate it from other cities, it is not necessarily so. Scott (1997, p. 324) distinguishes between urban cultures that are place-bound and those that are instances of "non-place globalized occurrences and experiences". Italo Calvino (1974) captured the experience of the non-place place when he observed that the shops, signs and even hotels do not change as one travels from city to city; "Only the name of the airport changes" (p. 102). Numerous instances of this phenomenon have been offered, among which Ritzer's (1996) explorations of society's increasing 'McDonaldisation' may be the most prominent. Even microbreweries, which Schnell and Reese (2003) have specifically identified as a mode of local identity construction, have recently been franchised and mass distributed. In the wake of these and other observations, Zukin (1998, p. 837) concludes that the "multiplicity of standardised attractions ... reduce[s] the uniqueness of urban identities".

Clearly, cities can construct (whether intentionally or not) many possible consumptional identities, ranging from the vibrant and unique to the utterly featureless. Thinking about cities in terms of their specific consumptional identities, as Crewe and Lowe

(1995) have suggested, brings a new perspective to urban studies to the extent that it reveals previously obscured geographies. Moreover, when these microgeographies of consumption have consequences for individuals' quality of life, identifying them allows for a fuller understanding of the social processes involved in consumption. (For a more thorough review of the growing literature on the roles and landscapes of consumption spaces, see Jackson and Thrift, 1995; Wrigley and Lowe, 1996, 2002).

The Restaurant as Consumption Space

Although a city's consumptional identity certainly has many components, this study focuses specifically on the role of food consumption spaces—restaurants. This raises two important questions, one conceptual and one methodological. First, among the myriad other kinds of consumption spaces, why study restaurants? Secondly, how can restaurant-focused research deal with the extreme variety among restaurants? I respond to the first question here, while the latter question, as a methodological issue, is dealt with in the following section.

Why study restaurants?. The most straightforward reason restaurants warrant exclusive consideration in a study of consumption spaces is that "the geography of dining out ... seems to be a neglected area of research" (Johns and Pine, 2002, p. 126). First, much work on the locational patterns of restaurants has been conducted outside the US, focusing primarily on Canada (Smith, 1985), Australia (Mullins *et al.*, 1999) and the UK (Clarke *et al.*, 2002), Zelinsky's (1985) study of North American ethnic foodways being a notable exception. Secondly, several recent books which address the claim that 'You are *where* you eat' have examined restaurants from a cultural and historical, but not explicitly geographical, viewpoint (Fine, 2001). Finally, while Smith (1985) and Zelinsky (1985) have offered the most direct examination of restaurant location patterns to date, their data are now more than a quarter of a century old. Moreover, both were narrowly focused—the former on business-oriented site selection issues, the latter exclusively on ethnic restaurants. This study is an opportunity to update the record, widen the scope and improve upon the methodology (see below and Appendix).

Mullins *et al.* (1999) used more recent data and adopted a much wider scope, but the breadth of their study led to the consideration of restaurants as consumption spaces only to the extent that they "essentially arouse taste and smell" (Mullins *et al.*, 1999, p. 48). This conception neglects a wide range of other senses restaurants aim to arouse. Since the "semiarchitectural confections" of Antonin Carême, *haute cuisine* has focused as much on the visual as on the olfactory or gustatory senses (Ferguson, 1998, p. 614). More recently, an entirely new mode of food consumption has been identified, in which entertainment—through audio and visual displays, and opportunities to buy non-food items—is the primary focus (Bell and Valentine, 1997; Gottdiener, 2000; Miele and Murdoch, 2002). Beyond exciting the senses, restaurants have also been identified as serving important social functions ranging from ordinary socialising (Oldenberg, 1989; Gaudio, 2003) to enforcing social norms and hierarchies (Gottlieb, 1957; Finkelstein, 1989) and might be considered as a "symbolic space or theater for thinking [that] is connected to self-fashioning" (Shelton, 1990, p. 507). Crang, for example, has offered a detailed participant-observer account of one restaurant in which

> the function of the dining out experience ... is not just about the biological necessity of eating but about social and cultural positionings, interactions, and experiences (Crang, 1994, p. 699).

Moreover, food consumption spaces—in particular, the English coffeehouse and German *Tischgesellshaft* (table societies)—have been recognised by Habermas (1989, ch. 5) as some of the most transformative institutions in the public sphere. Restaurants are, therefore, more than just places to taste and smell, and restaurant-focused consumption

research will help to situate them more centrally among consumption spaces.

Finally, while not specifically aimed at issues of consumption, Freeman and Hannan (1983) have identified several methodological advantages to studying restaurants. First, because even moderately sized cities contain some restaurants, research is not restricted to a focus on only the largest cities. Secondly, to the extent that restaurant success depends on local visibility, the *Yellow Pages* provides a ready sampling frame. Finally, there is a great deal of variability among restaurants. Freeman and Hannan (1983, p. 1131) alone noted that restaurants are distinguishable in terms of "type of cuisine, style of service, hours of operation, price range, diversity of menu items, and range of services". This variability allows restaurant-focused research to consider a wide and nuanced range of institutions within the broad category of 'restaurant'.

Some Expectations

In this study, I seek to uncover patterns in the way that restaurants are distributed in cities across the US. Can US cities be grouped on the basis of their populations of specific types of restaurants and what can these groupings tell us about their consumptional urban identities and their broader social and demographic character? Beyond this relatively exploratory aim, previous studies offer a number of theoretically driven preliminary expectations.

Examining restaurant locational patterns in Canadian cities, Smith found that cities with larger populations inevitably have a greater number and diversity of restaurants, which he attributes to "small town traditions of relying on family and friends for entertainment", or what might now be called 'social capital' (Smith, 1985, p. 590). More specifically, he found that smaller towns contain fewer 'regular restaurants', but more 'pizza parlors' and 'fast food outlets' than larger towns. Thus, I expect that population size will play a significant role in the consumptional identities of American cities. Urban modes of transport are also likely to be important, as he suggests that "fast food outlets are an automobile-related phenomenon, catering to a mobile population of workers and shoppers" (Smith, 1985, p. 597).

Zelinsky's (1985) examination of ethnic restaurants in North America is of only partial relevance to the present study because, whereas he focused on specific ethnicities of cuisine, and Mexican, Italian and Chinese in particular, I examine ethnic cuisine as a unitary category and, moreover, one which excludes Mexican, Italian and Chinese (see below). Nonetheless, he offers three observations which are sufficiently general to apply in this case. First, he suggests that "the higher the mean level of affluence, education, and associated characteristics the more likely we are to find more eating places offering ethnic specialties" (Zelinsky, p. 68). Secondly, the "turnover of tourists and other affluent transients" (p. 68) is also expected to be positively associated with the presence of ethnic restaurants. Finally, although less easily observed, "the general cultural-cum-socioeconomic character of a region . . . helps determine its receptivity to exotic dishes" (Zelinsky, p. 68).

Mullins *et al.* (1999) also offer some potentially useful insights. First, they found that the majority of consumption spaces are located in recently gentrified urban communities characterised by high socioeconomic status and ethnic diversity. Secondly, urban communities located at the periphery of the metropolitan area experience a 'locational disadvantage' because they contain relatively few consumption spaces. Finally, and surprisingly, they found that this 'locational disadvantage' is uncorrelated with poverty. That is, both affluent and poor communities can be found in areas with limited concentrations of consumption spaces. These findings suggest that socioeconomic features and a place's proximity to an urban centre will be influential although not dispositive.

Finally, Florida's (2003) typology of communities, derived from his popular 'creative class' construct (2002), provides a specific classificatory scheme against which this study's results may be compared. Although

an oversimplification of his theory, Florida suggests that a city's economic and social viability depends crucially on its ability to attract members of the creative class (such as scientists, professors and artists), who are the driving-force behind the new creative economy. Drawing on the work of Robert Cushing, he offers a four-part classification of communities based on a variety of indicators of the presence of, and their potential to attract, members of the creative class.

The least viable community in the new creative economy is the 'Classic Social Capital Community', which has high levels of social capital, but little diversity (for example, Baton Rouge, Winston-Salem). Such places might be expected that to have few restaurants generally (see Smith, 1985) and especially few ethnic restaurants. The 'Organisational age community' scores high on Florida's 'working class index' and represents "the classic corporate centers of the organisational age" (Florida, 2003, p. 14) (for example, Detroit, Cleveland). This community may not be able to support more than the most traditional and inexpensive dining options, but may feature a token élite restaurant to serve the social needs of the corporate brass.

The 'Nerdistan' is characterised as a fast-growing region plagued by sprawl and pollution, and focused on high-tech industry (for example, Phoenix, Los Angeles, Houston). The availability of inexpensive land in these areas may encourage the construction of large casual dining and themed restaurants, while long commutes may elevate the demand for fast food restaurants. Finally, the 'creative centre' is the primary residence of the 'creative class' and is distinguished by its high levels of Florida's three Ts: technology, talent and tolerance (for example, San Francisco, Seattle, Chicago). The creative centre's diversity may support large populations of ethnic restaurants, its concentrations of wealth may support larger than average numbers of élite restaurants and its role as home to intellectuals and creatives may suggest the existence of a lively coffeehouse scene.

Methodology

This study counted the number of restaurants in 243 of the 245 incorporated places (for practical purposes, cities) in the US with estimated populations of more than 100 000 in 2003 (US Bureau of the Census, 2004a). New York was excluded because data were unavailable for individual boroughs and city-wide data cast the city as an extreme outlier, while McAllen, TX, was excluded because, for unknown reasons, data were unavailable from the sources discussed below. To deal with the variability noted by Freeman and Hannan (1983), it was necessary to identify several types of restaurant and count them separately.

However, Warde and Martens (1998) have recognised that classifying restaurants is extremely difficult, comparing it with a 'certain Chinese encyclopedia' in which

> animals are divided into: (a) those that belong to the Emperor, (b) embalmed ones, (c) those that are trained, (d) suckling pigs, (e) mermaids, (f) fabulous ones, (g) stray dogs, (h) those that are included in the present classification, (i) those that tremble as if they were mad, (j) innumerable ones, (k) those drawn with a very fine camel's hair brush, (l) others, (m) those that have just broken a flower vase, (n) those that resemble flies from a distance. (Borges, 1964, p. 103)

Even a brief glance at the previously employed restaurant classification schemes confirms that the Chinese encyclopedia entry is not an entirely inappropriate parallel (see Table 1). They include simple binary distinctions (Miele and Murdoch, 2002), cuisine-style lists (Warde *et al.*, 1999), nominal categories (for example, Smith, 1985), and complex hierarchical typologies (Finkelstein, 1989).

Unfortunately, none of these schemes alone is suitable for the design of this study. The categories they identify are, at times, too narrow (for example, Doughnut stores), too broad (for example, Other types of restaurant), inappropriate for an American context (for

Table 1. Summary of existing restaurant classification schemes

Authors	Categories
Smith (1985)	Pizza parlours Regular restaurants Ice cream and frozen dessert stores Fast food restaurants Doughnut stores
Finkelstein (1989)	*Fête spéciale* Formal Informal *Amusement* Parodic Bistro mondain *Convenience* Café mundane Fast-food chain Local ethnic
Cherulnik (1991)	Luncheonette/Sandwich shop Inexpensive dinner restaurant Family dining Expensive dinner restaurant
Muller and Woods (1994)	Quick service Moderate upscale Business dining Midscale Upscale
Beardsworth and Bryman (1999)	*Modes of Theming* Reliquary (e.g. sports autographs) Parodic (e.g. Wild West) Reflexive (e.g. branding) Ethnic
Mullins *et al.* (1999)	Ethnic restaurants International fast food Café/Coffee shop Other types of restaurant National (Australian) fast food
Warde *et al.* (1999)	Pizza, Fast food, Fish and chip, Wine bar, Roadside diner, In store/Shopping mall, Café or teashop, Steakhouse, Pub (bar meal), Pub (restaurant), Hotel restaurant, Other British, Indian, Chinese, Italian, American-style, French, Greek, Other ethnic, Vegetarian, Other
Miele and Murdoch (2002)	*Restaurants may subscribe to:* an Aesthetic of entertainment *or* a Gastronomic aesthetic

example, Fish and chips) or too difficult to operationalise (for example, 'formal' versus 'informal' Fête spéciale). Thus, I compiled a hybrid classification scheme that draws on the individual strengths of these earlier efforts, but which also aims to capture those types that have been prominently featured in recent academic work involving restaurants. Each of the categories discussed below serves both as a conceptual type and as an operationalised count variable.

Elite restaurants. Highly regarded and expensive restaurants might be described as élite in two ways: with respect to the quality of the food served and with respect to the status they confer on diners. This dichotomy is captured by Finkelstein's (1989) formal and informal 'Fête spéciale' categories, respectively. Restaurants adopting Miele and Murdoch's (2002) 'gastronomic aesthetic' also belong to the former group, but other classifications have dealt with élite restaurants without making such a distinction (Cherulnik, 1991; Muller and Woods, 1994). Because the question of whether a restaurant is élite on account of its food or status is primarily the domain of food critics, this category includes both types.

Because judging a restaurant to be élite is an inherently subjective task, the operationalisation of such a variable is difficult and subject to a level of imprecision. The most obvious sources of such information are travel guidebooks, because they typically employ some scheme of distinguishing restaurants on the basis of the quality of the food, service and dining experience. While many such guidebooks exist, those published by the American Automobile Association (AAA) are superior for the present purposes for several reasons. First, they cover the widest number of cities, rather than focusing only on the largest or on top tourist destinations (for example, Zagat's). Secondly, they consider the widest range of restaurants, rather than focusing only on the most exclusive (for example, Michelin). Thirdly, they employ a longstanding system of awarding restaurants 1–5 diamonds based on well-defined objective and subjective criteria (see AAA, 1997). Because a three-diamond establishment is described as "the entry level into fine dining" which aims at providing "an experience rather than just a meal", (AAA, 1997)

this variable counts the total number of establishments that have been awarded three or more diamonds, as indicated in the AAA TourBook's on-line edition (accessed 2004).

Coffee shops. Although the coffee shop appears explicitly in only two prior classifications (Mullins *et al.*, 1999; Warde *et al.*, 1999), it has been the subject of much recent scholarship. Oldenberg (1989) identified the coffee shop as an example of a 'third place'—a place outside home and work/school where people can interact socially. Others have examined coffee houses and their effect on local culture (Thompson and Arsel, 2004), social behaviours (Gaudio, 2003) and modernity (Örs, 2002).

Data on this, and the remaining restaurant types, were obtained from the ReferenceUSA database (Version 2004.10) of American businesses. While many prior studies have noted the usefulness of *Yellow Pages* telephone directories for identifying restaurants (Freeman and Hannan, 1983; Smith, 1985; Zelinsky, 1985; Mullins *et al.*, 1999), they have also noted some problems. Using the ReferenceUSA database avoids a number of these problems: it is compiled from multiple sources to avoid undercounting, verified through telephone screening to avoid overcounting and produced by a single firm using consistent cataloging standards which reinforce intercity reliability. This variable counts the number of establishments defined as 'Coffee shops' by ReferenceUSA.

Exotic ethnic restaurants. Many of the existing restaurant classifications include one or more categories for ethnic restaurants. However, the classification of restaurants as ethnic is uniquely problematic in America. Because "Americans have often suspended traditional racial prejudices and opened themselves to a range of diverse culinary and cultural experiences" (Barbas, 2003, p. 669), certain 'ethnic' cuisines have become so fully Americanised that their identification as ethnic is misleading. Barbas (2003) offers the example of Chinese food, but a similar claim can be made of Mexican (*nachos* and *tacos*) and Italian (pizza and pasta) food (Zelinsky, 1985). Thus, in an attempt to capture only restaurants serving ethnic cuisine that is still somewhat exotic to the American palate, Chinese, Mexican and Italian restaurants are excluded. This variable, then, counts the number of establishments specialising in the 14 varieties of ethnic cuisine (excluding Chinese, Mexican and Italian) distinguished in the ReferenceUSA database.

Fast food. Fast food dining is a ubiquitous part of American life and nearly every classification scheme includes at least one fast food category. Moreover, even the two papers that do not directly classify fast food restaurants still include discussions of such establishments. Beardsworth and Bryman (1999, p. 243) identify reflexive theming in fast food chains through "corporate décor, logos, and architectural motifs" (such as McDonald's golden arches), while Miele and Murdoch (2002) discuss fast food as antithetical to the slow food movement. Finally, Ritzer (1996) secured fast food's position as a permanent object of social scientific interest by placing it at the centre of his work on rationalisation. Because the fast food segment of the restaurant industry is concentrated in a few very large firms (US Bureau of the Census, 2004b) and because fast food restaurants often "locate close together to create highly visible fast food strips" (Smith, 1985, p. 598), a measure of the number of locations operated by the largest firms is a reasonable proxy for the size of an area's total fast food restaurant population. Thus, this variable counts the number of locations operated by the 20 fast food chains with the most locations in the US. Pizza concepts are excluded because many operate both quick-service and full-service units. For example, some Pizza Hut locations offer takeout/delivery only, while others feature dining rooms.

Casual dining. This category is meant to include those establishments which have been termed Café mundane (Finkelstein,

1989), Inexpensive dinner restaurant (Cherulnik, 1991) or Midscale/Moderate upscale (Muller and Woods, 1994). Finkelstein (1989, p. 92) describes such restaurants as establishments where "hybrid fare is presented as more gastronomically respectable than it is" to local suburban patrons who are "not disturbed by a sauce too strong ... or the use of inexpensive ingredients", but also notes that they are ideal for "an undemanding evening". Relying on the same logic of concentration, this variable measures the number of locations operated by the 10 casual dining chains with the most locations in the US. Concepts identified as 'family dining' by the industry publication *Restaurants and Institutions* are excluded because they do not typically maintain the same pretences of casual dining establishments, aiming rather at serving a more utilitarian function in a more 'down-scale' atmosphere (for example, Denny's, IHOP).

'Eatertainment' restaurants. While nearly all restaurants aim at providing the diner with an enjoyable and entertaining experience, this category includes only that sub-group of restaurants for which the provision of an entertaining experience is the primary focus. Described as having an aesthetic of entertainment, Miele and Murdoch (2002, p. 314) suggest that this is where "people go ... for the ambience, to buy clothing, and to see music and movie memorabilia". Others have approached this type of restaurant more narrowly through a discussion of theming as a mechanism of creating an entertaining experience (Finkelstein, 1989; Beardsworth and Bryman, 1999). The emergence of entertainment and theme restaurants has recently been dealt with by, among others, Bell and Valentine (1997) and Gottdiener (2000). However, unlike fast food or casual dining restaurants, theme and entertainment-focused restaurants are both less common and less concentrated. Thus, this variable measures the number of units operated by 10 themed or entertainment-focused restaurant concepts selected on the basis of size (i.e. total number of units in the US) and prominence in the academic literature.

These categories and variables (summarised in Table 2) are intended to be neither mutually exclusive nor exhaustive. For example, an individual restaurant may have the properties of multiple types (for example, an élite ethnic restaurant) and no category is provided for ice cream shops (such as Dairy Queen). This latter case points to an important caveat and limitation of this study. The data upon which the analyses are conducted are not wholly descriptive of an area's restaurant industry, as many individual restaurants are not counted by any of these variables. Certainly, a more complete or more accurate classification (if one is even possible), and data that constitute a true census of restaurants rather than just a proxy sample, would yield better results. Nonetheless, the present categories and variables do begin to capture the variability among restaurants, while relying on the most salient categories in prior classifications and in the wider academic literature.

Results

These data can be used to describe two important and differing aspects of cities' restaurant populations: the relative number (i.e. proportion) and absolute number (i.e. magnitude) of each type of restaurant. Thus, the original data were transformed to produce two sets of variables—one reflecting proportions, another reflecting magnitudes—upon which separate two-stage cluster analyses were conducted. The separate analyses were then combined and the resulting clusters are profiled.

The 'proportion' data were obtained simply by dividing each original variable by the sum of all original variables for each city, such that the resulting transformed variables indicate the relative presence of each type of restaurant within the city. The 'magnitude' data, by comparison, required a slightly more complex transformation. Because it is trivial to observe that larger cities have more restaurants, it is necessary to compare cities on the

Table 2. Summary of measurement definitions

Restaurant type variable	Definition	Source
Elite	Number of dining establishments awarded 3, 4 or 5 diamonds	AAA TourBook (on-line 2004 edn)
Coffee shops	Number of establishments listed under the heading 'Coffee shops'	ReferenceUSA
Exotic ethnic	Number of establishments listed under the heading 'Restaurants—Cuisine *X*', where *X* was replaced with each of the following: Cajun, Caribbean, Continental, French, Greek, Indian, Irish, Japanese, Korean, Middle Eastern, Spanish, Swiss, Thai, Vietnamese	ReferenceUSA
Fast food	Total number of establishments operated by: Subway, McDonalds, Burger King, Taco Bell, Wendy's, KFC, Arby's, Sonic Drive-Ins, Quizno's, Hardee's, Jack in the Box, Blimpie Subs and Salads, Popeye's Chicken & Biscuits, Church's Chicken, Long John Silver's, Chick-fil-A, Carl's Jr., Sbarro, Whataburger and Boston Market (listed in descending order by size)	ReferenceUSA
Casual dining	Total number of establishments operated by: Applebee's Neighborhood Bar & Grill, Chili's Grill & Bar, Outback Steakhouse, Ruby Tuesday's, Red Lobster, TGI Friday's, Olive Garden, Ponderosa/Bonanza, Bennigan's and Lone Star Steakhouse and Saloon (listed in descending order by size)	ReferenceUSA
Eatertainment	Total number of establishments operated by: Chuck E. Cheese, Hooters, Johnny Rockets, Hard Rock Café, Benihana, Jillian's, Dave & Buster's, Rainforest Café, Planet Hollywood and ESPN Zone	ReferenceUSA

basis of measures of the number of their restaurants which are not sensitive to population size. However, the most obvious solution—to compare cities on the basis of restaurants *per capita*—is also inappropriate because restaurant populations do not increase linearly with human populations (see Zelinsky, 1985). For example, while the needs of a city of 10 000 people may be met by a single McDonalds, it is not necessarily the case that a city of 100 000 requires or could support 10 McDonalds outlets. Therefore, a pseudo-per-capita transformation based on a set of power functions was used which accounts for the unique non-linear relationship between each restaurant type and population (see Appendix).

The same clustering techniques were applied, separately, to both the 'proportion' and 'magnitude' data. First, all variables were standardised to range between 0 and 1, which Milligan and Cooper (1988) demonstrated is superior, for the purposes of cluster analysis, to more traditional standardisation using z-scores. A hierarchical cluster analysis was then performed, using squared Euclidean distance as a measure of similarity and Ward's method as the clustering algorithm. The resulting cluster solutions and their corresponding agglomeration coefficients were inspected and, in each separate analysis, the two-cluster solution was selected as optimally homogeneous and interpretable (see Hill *et al.*, 1998). Finally, using the cluster centroids generated by the hierarchical clustering as starting-points, the cities were reclustered using the iterative k-means algorithm to fine-tune cluster memberships (Punj and Stewart, 1983).

One cluster identified using the 'magnitude' data contained cities with above average values on all variables (i.e. many restaurants of all types per person), while the other cluster contained cities with below average values on all variables (i.e. few restaurants of any type per person). Thus, the clusters were named, respectively, Oasis and Desert. Among the clusters identified using the 'proportion' data, one contained cities with above average proportions of Coffee shops, and Elite and Exotic ethnic restaurants, while the other contained cities with above average proportions of Fast food, Casual dining and 'Eatertainment' restaurants. The former cluster was named Urbane, while the latter cluster was named McCulture, following the tradition of Ritzer (1996) and others of using the prefix 'Mc' to denote the kind of standardisation and ubiquity commonly associated with McDonalds.

Finally, because these two dimensions were largely independent (lambda $= 0.013$, $p > 0.1$), it was possible to intersect them orthogonally, yielding four unique and non-empty clusters that simultaneously capture the contributions of both dimensions. That is—for example, cities identified as both oases *and* urbane form a single cluster. Figure 1 graphically profiles these four groups, while Table 3 indicates each city's cluster membership.

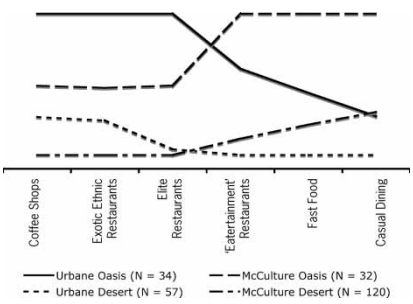

Figure 1. Graphic profile of cluster centers. *Notes*: For clarity of presentation, the figure displays cluster means on each value in the 'magnitude' data only. Because the scales of each variable are not substantively meaningful, each set of four cluster means is displayed as ranging between the same minimum and maximum values.

Discussion

Returning to the case highlighted in the introduction, it turns out that Phoenix is not a culinary desert at all, but is in fact a gastronomic oasis. However, it is a very specific *kind* of oasis—a McCulture oasis. This finding and the other results discussed above suggest that with respect to their consumption opportunities, there are indeed identifiable types of American cities. Specifically, there are four types defined by two intersecting dimensions: one quantitative, the other qualitative.

The quantitative dimension captures the number of restaurants in a city, after controlling for the obvious inflationary effects of population size. Cities with many restaurants are oases, while cities with few restaurants are deserts. This is complemented by the qualitative cultural dimension, which captures the mix of different types of restaurants in a city. Cities with a greater-than-average proportion of coffee shops, and ethnic and élite restaurants offer distinctively cultured (i.e. urbane) consumption opportunities, while cities with an above average dominance of fast food, casual dining and entertainment-aimed eating establishments cater to the tastes of mass culture.

To explore these four types, I will first present a characterisation of each type of city, both in terms of the consumption spaces upon which the classification is based and by examining some of the cities' other social and demographic features. Then I will compare these results with the preliminary expectations discussed above. Finally, I will conclude by reviewing the study's principal limitations and by offering some suggestions for future research.

Culinary Deserts and Gastronomic Oases

Urbane oases. Cities in this group are places where one finds an abundance of restaurants of all sorts. However, certain types of restaurants—those that offer a more refined, bohemian or fashionable experience—are found in higher proportions than elsewhere. Although establishments like McDonalds

Table 3. Cluster memberships

Urbane oases				
Los Angeles, CA	Chicago, IL	Philadelphia, PA	San Diego, CA	San Jose, CA
San Francisco, CA	Baltimore, MD	Charlotte, NC	Boston, MA	Seattle, WA
Washington, DC	Denver, CO	Portland, OR	Las Vegas, NV	Sacramento, CA
Atlanta, GA	Honolulu, HI	Minneapolis, MN	Pittsburgh, PA	Anchorage, AK
Madison, WI	Scottsdale, AZ	Tacoma, WA	Reno, NV	Salt Lake City, UT
Providence, RI	Fort Lauderdale, FL	Pasadena, CA	Alexandria, VA	Ann Arbor, MI
Berkeley, CA	Cambridge, MA	Charleston, SC		
McCulture oases				
Houston, TX	Phoenix, AZ	San Antonio, TX	Dallas, TX	Indianapolis, IN
Jacksonville, FL	Columbus, OH	Austin, TX	Memphis, TN	Milwaukee, WI
Oklahoma City, OK	Tucson, AZ	Albuquerque, NM	Cleveland, OH	Tulsa, OK
Miami, FL	Colorado Springs, CO	St Louis, MO	Tampa, FL	Cincinnati, OH
Raleigh, NC	Louisville, KY	Birmingham, AL	Baton Rouge, LA	Rochester, NY
Orlando, FL	Grand Rapids, MI	Richmond, VA	Knoxville, TN	Savannah, GA
Columbia, SC	Clearwater, FL			
Urbane deserts				
Long Beach, CA	Fresno, CA	Oakland, CA	Santa Ana, CA	Anaheim, CA
Buffalo, NY	Riverside, CA	St Paul, MN	Newark, NJ	Fremont, CA
Glendale, CA	Chula Vista, CA	Yonkers, NY	Spokane, WA	Huntington Beach, CA
Arlington, VA	Worcester, MA	Irvine, CA	Garden Grove, CA	Santa Clarita, CA
Overland Park, KS	Santa Rosa, CA	Springfield, MA	Vancouver, WA	Paterson, NJ
Syracuse, NY	Hollywood, FL	Torrance, CA	Corona, CA	Eugene, OR
Hayward, CA	Bridgeport, CT	Naperville, IL	Orange, CA	Fullerton, CA
Sunnyvale, CA	Concord, CA	New Haven, CT	Hartford, CT	Elizabeth, NJ
Stamford, CT	Simi Valley, CA	Inglewood, CA	Bellevue, WA	Downey, CA
Costa Mesa, CA	Manchester, NH	West Covina, CA	Allentown, PA	Lowell, MA
Ventura, CA	Burbank, CA	Richmond, CA	Santa Clara, CA	Daly City, CA
Visalia, CA				
McCulture deserts				
Detroit, MI	Fort Worth, TX	El Paso, TX	Nashville, TN	Kansas City, MO
Virginia Beach, VA	Mesa, AZ	Omaha, NE	Arlington, TX	Wichita, KS
Toledo, OH	Aurora, CO	Corpus Christi, TX	Stockton, CA	Bakersfield, TX
Lexington, KY	St Petersburg, FL	Plano, TX	Norfolk, VA	Lincoln, NE
Glendale, AZ	Greensboro, NC	Hialeah, FL	Fort Wayne, IN	Garland, TX
Henderson, NV	Akron, OH	Chandler, AZ	Chesapeake, VA	Modesto, CA
Lubbock, TX	Montgomery, AL	Durham, NC	Shreveport, LA	Laredo, TX
Des Moines, IA	San Bernardino, CA	Irving, TX	Mobile, AL	Augusta, GA
Winston-Salem, NC	Boise, ID	Columbus, GA	Little Rock, AR	Newport News, VA
Oxnard, CA	Jackson, MS	Amarillo, TX	Ontario, CA	Oceanside, CA
Huntsville, AL	Aurora, CA	Dayton, OH	Tempe, AZ	Moreno Valley, CA
Brownsville, TX	Chattanooga, TN	Pomona, CA	Tallahassee, FL	Fontana, CA
Rockford, IL	Rancho Cucamonga, CA	Springfield, CA	Pembroke Pines, FL	Salinas, CA
Hampton, VA	Kansas City, KS	Gilbert, AZ	North Las Vegas, NV	Pasadena, CA
Salem, OR	Lakewood, CO	Grand Prairie, TX	Escondido, CA	Warren, MI
Sioux Falls, SD	Mesquite, TX	Palmdale, CA	Peoria, AZ	Coral Springs, FL
Sterling Heights, MI	Lancaster, CA	Fort Collins, CO	Fayetteville, NC	Thousand Oaks, CA
Joliet, IL	Cedar Rapids, IA	Topeka, KS	El Monte, CA	Flint, MI
Vallejo, CA	Cape Coral, FL	Lansing, MI	Evansville, IN	Waco, TX
Carrollton, TX	Abilene, TX	Springfield, IL	Peoria, IL	Beaumont, TX
Independence, MO	West Valley, UT	Lafayette, LA	Gainesville, FL	Waterbury, CT
Clarksville, TN	Norwalk, CA	South Bend, IN	Port St Lucie, FL	Provo, UT
Olathe, KS	Pueblo, CO	Westminster, CO	Fairfield, CA	Athens, GA
Wichita Falls, TX	Arvada, CO	Green Bay, WI	Erie, PA	Antioch, CA

Note: Within each group, cities are ordered by population size.

and Burger King are still common in these cities, stylish haute cuisine, hip coffee houses and exotic ethnic fare are also easy to find. The élite restaurants here cater not only to the well-heeled, but also to gastronomes and 'foodies' who want to eat at the culinary cutting edge; the coffee houses provide a culture of 'café cool' sought by a

new generation of beatniks and literati (Thompson and Arsel, 2004); the global diversity of ethnic restaurants allows the adventurous to sate their wanderlust (Zelinsky, 1985).

The defining features of the Urbane oases go beyond simply their restaurant consumption options—they are also distinguished by a number of social and demographic characteristics (see Table 4). Most obviously, they tend to be populous, dense urban centres. The primary exceptions are home to major universities (for example, Harvard and MIT in Cambridge and state universities in Berkeley, Ann Arbor and Madison) and have large student populations—they are college towns. In addition, the general population is highly educated and tends to work in professional, rather than manufacturing, occupations, earning a relatively high per capita income. These features of affluence and urban-ness converge to suggest a haven for yuppies and hipsters, which may explain the lack of households with children. The same features, together with the cities' narrow gender earnings gap and large immigrant populations, also seem to suggest a more liberal population and a culture of equality and tolerance. Gastronomically, but also more generally speaking, these cities are trendsetting and progressive—places that Zelinsky (1973, p. 138) aptly foresaw as "latter-day bohemias".

McCulture oases. Like the cities in the previous group, these cities also have many restaurants. However, unlike 'Urbane' cities, 'McCulture' cities have larger than normal concentrations of highly standardised eating-places designed for mass consumption. While a walk—or, in these places, more likely a drive—down the street will yield a wealth of restaurant options, Big Macs and The Olive Garden's trademarked 'Hospitaliano' atmosphere are more the *specialité du jour*. Because many of the restaurants found in these cities are nationally franchised, residents of McCulture oases are all eating roughly the same food when they dine out. Recalling Calvino's (1974) observation, when deciding where to eat, one need not know if one is in Houston, or Phoenix, or Indianapolis—the choices are the same. However, the predictability of the food available at such places—and amenities like McDonalds Playland or Chuck E. Cheese's video games—also make the McCulture dining scene more family-friendly.

These cities are quite different from their 'urbane' counterparts in other respects as

Table 4. Means for selected social and demographic characteristics of clusters

Characteristic	Urbane oasis	McCulture oasis	Urbane desert	McCulture desert
Oasis vs Desert				
Percentage employed in manufacturing	8.34	10.67	**14.34**	**13.03**
Percentage of households with own children	25.57	28.69	**34.47**	**35.50**
Difference in median earnings for males and females (US$)	6 731	6 301	**9 145**	**8 994**
Number living in college dormitories (per 1000)	**21.33**	**13.28**	7.60	8.58
Population	**598 475**	**507 979**	174 339	189 602
Urbane vs McCulture				
Percentage employed in management, professional or related occupations	**41.08**	33.00	**35.15**	31.70
Percentage with BA or higher	**35.51**	25.49	**27.22**	23.40
Percentage foreign born	**18.04**	10.64	**24.52**	12.17
Per capita income (US$)	**24 546**	19 281	**22 090**	19 383
Population per square mile	**6 079**	3 273	**6 289**	2 879

Source: US Bureau of the Census (2000).
Note: Values in **bold** are above the overall mean.

well. While they have similarly large populations, they are not nearly as dense. Instead, they are the models of urban sprawl, designed for a driving public. Both classic socioeconomic status indicators—educational attainment and income—are lower. The population is more ethnically homogeneous, despite many of the cities being located in some of the country's primary points of entry—Texas and Florida. There are more households with children and, relative to these cities' lower per capita income, the gender earnings gap is wider. Finally, there are many fewer people employed in professional occupations—only service, sales and office occupational categories have above average employment levels. As a sprawling agglomeration of housing developments filled with homogeneous families, and an economic landscape of service industry and office parks, McCulture oases seem to be typical of American suburbia.

The deserts. While Urbane and McCulture deserts share the same proportional distribution of restaurant types as their oasis counterparts above, overall they have few restaurants of any type. For example, in a McCulture desert, there may be only one or two fast food establishments, and no coffee houses at all. Similarly, a family may find a cluster of ethnic restaurants or a single stylish bistro in an Urbane desert, but have to drive to the next town for a meal the kids will eat.

In many respects, Urbane and McCulture deserts differ socially and demographically in the same way as their oasis counterparts, although the differences are narrower. As a result, they are more difficult to characterise individually. As a group, however, the culinary deserts are easily distinguished from the gastronomic oases. Three features in particular come together to suggest a coherent image for these places: a high level of employment in manufacturing, a large number of households with children and a wide gap in median earnings between men and women. These seem to suggest that traditional gender roles still have currency in culinary deserts—the men work in factories and the women care for the children at home. Furthermore, the small student population indicates that these are not small college towns, but rather exemplify 'small town' America.

A comment on political geography. A brief glance at the cluster memberships reveals that the Urbane/McCulture divide roughly parallels the 2004 'Red' state/'Blue' state dichotomy (i.e. states whose electoral votes went to George Bush (Republican) and John Kerry (Democrat) respectively, in the 2004 presidential election). Although such observations are especially fashionable at the time of writing, some have suggested that the 'red' state/'blue' state mentality is misleading (Gastner *et al.*, 2004; Vanderbei, 2004). Mapping election outcomes, especially when the election is so divisive and contentious, is highly sensitive to choices of measurement (for example, winner-take-all vs proportional), unit of analysis (for example, state vs county), and scaling (for example, land size vs population size). To be sure, political alignments are likely to differ systematically between the four clusters identified by this study, but the methodological difficulties involved in connecting such a phenomenon to a mapping of 2004 presidential election outcomes places it beyond the scope of this paper.

Examining the Classification

The above characterisations indicate that there are at least a few easily recognisable types of cities, consumptionally speaking. This suggests that Ritzer's (1996), Zukin's (1998) and others' warning that America is becoming increasingly standardised and homogenised may be premature. There are still cities with unique place-bound identities. Moreover, Urbane cities, with their more eclectic mix of consumption opportunities, are nearly as common as McCulture cities. On the other hand, the most fully 'McDonaldised' city type—the McCulture desert—is more common than the other three types combined. And, in more than two-thirds of the cities,

there are more fast food chains than all other restaurant types combined. Thus, the role of such consumptional isomorphism in these city types remains somewhat ambiguous.

There are, however, a number of unambiguous connections between this classification and the preliminary expectations identified earlier. Smith's (1985) relatively obvious observation that larger cities have more restaurants is confirmed, but also expanded by the finding that populous gastronomic oases have more restaurants than their smaller desert counterparts even after adjusting for the inflationary effects of population size. This study did not directly confirm that small towns have few regular restaurants and many fast food restaurants, but did find that culinary deserts, which tend to be small, are also often McCulture cities dominated by fast food. Finally, his observation that "fast food outlets are an automobile-related phenomenon" (Smith, 1985, p. 597) helps to explain why cities with more disperse populations that must commute tend to be in the McCulture groups.

Returning to the hypotheses offered by Zelsinky (1985), the results are mixed. It is confirmed that cities with a greater proportion of ethnic restaurants—urbane cities—contain populations of greater affluence and educational attainment. However, it does not seem that such 'affluent' places also have the highest tourist turnover. Although not directly measured, there is significant facial validity (see Table 3) to a connection between high levels of tourism and cities with large restaurant populations generally (for example, oases), rather than only with ethnic restaurant populations. This inconsistency may be due in part to the fact that Zelinsky (1985) conflates 'tourist' and 'affluent transient'. Finally, while defining a region's 'cultural-cum-socioeconomic character' is a thorny task indeed, the categories divide cities into cultural geographical regions roughly similar to those identified by Zelinsky (1973, 1985), albeit with numerous exceptions—McCulture cities are dominant in the South, Southwest and Middle West, while Urbaneness tends to be a bi-coastal phenomenon.

While Mullins *et al.* (1999) found that consumption spaces of all kinds are concentrated in areas of high socioeconomic status and diversity, I found that such places—urbane cities—tend to have concentrations of a particular type of consumption space. Findings concerning 'locational disadvantage' were more consistent. The culinary deserts—those places lacking in consumption spaces—seem to be largely peripheral to or distant from major urban centres. Detroit, however, is a notable exception—although highly urbanised, its residents still experience a locational disadvantage. Also confirmed was the finding that locational disadvantage has little to do with poverty, since the culinary deserts span a range of socioeconomic conditions.

Among the elements expected to emerge in this classification, the clearest was the role of Florida's creative class. The four city types profiled above seem to correspond closely with Florida's (2003) four community types. Moreover, in a recent expansion of his theory, which appeared after the inception of this study, Florida notes that

> The industrial economy emphasized big-ticket amenities like professional sports, the fine arts, and cultural destinations. Creative economy amenities typically revolve around outdoor recreational activities and lifestyle amenities. While there is not much in the way of systematic and comparable data that allows one to examine these differences (Florida, 2005, p. 70).

The results of this study provide the kind of systematic and comparable data Florida believes is necessary to understand a pivotal difference between cities that can and cannot attract members of the creative class.

Florida's (2003) classic social capital community shares a number of features with the McCulture desert. Both are non-diverse and have lower levels of educational attainment. One key feature of this type of community for Florida is the importance of Putnam's (2000) conception of social capital, which includes such elements as faith-based

institutions, social clubs, volunteerism and civic leadership. While not measured here, levels of social capital are likely to be high in the small, largely rural, manufacturing cities common among McCulture deserts. As expected, places with these features have few restaurants and are particularly lacking in ethnic establishments.

The parallels between the organisational-age community and the Urbane desert are more difficult to identify. However, consistent with their characterisation as older, corporate-dominated areas, the population is densely concentrated and slightly more educated, and employment is dominated by a mix of both manufacturing and management occupations. The striking presence of Californian cities in this category may obscure a clearer connection. Nonetheless, as expected these areas offer limited dining options, but show a slight tendency towards more upscale restaurants.

The McCulture oasis seems to correspond to Florida's unceremoniously labelled 'Nerdistan'. Both have been characterised as big, sprawling regions with economies focused on the service sector. As places that concentrate on building "sports stadiums, freeways, urban malls, and tourism-and-entertainment districts that resemble theme parks", it is certainly not surprising to find a dominant presence of 'eatertainment' venues and unpretentious casual dining chains. However, as these regions have been "lauded by some as models of rapid economic growth", some may be incubating a handful of more Urbane consumption spaces (Florida, 2005, p. 44). For example, in the 2004 *Phoenix New Times* "Best of Phoenix", a more élite establishment had unseated the La Madeleine chain as the city's best French restaurant.

The connection appears strongest between the Creative centre and Urbane oasis. Florida's three Ts of economic development—talent, technology, and tolerance—can be found prominently in both places. A highly educated public employed primarily in a professional and managerial capacity suggests high levels of talent. Because "fledgling high-technology enterprises are typically incubated in and around the districts surrounding major university campuses" (Florida, 2005, p. 81), the significant student population denotes (the necessary conditions for) the presence of technology. Finally, a large immigrant population and the narrowest (relative to per capita income) gender earnings gap indicate a clear climate of tolerance and diversity.

The parallel structure of this classification with Florida's supports one of his central claims: members of the creative class prefer to live in areas with many lifestyle amenities, especially participatory ones. As culinary deserts, social capital and organisational-age communities cannot attract these 'creatives' and may be nearing the end of their urban life cycle. The McCulture oasis offers more amenities in the form of an abundance of restaurants and thus may be slightly more attractive. However, few experiences are more mundane and less participatory than obtaining food at a fast food chain.

It is, instead, the particular kind of amenities available in an Urbane oasis that are sought by the creative class. Coffee houses can be participatory venues when they feature music by local artists, when they become social gathering spots or when WI-FI (wireless internet access) is available for getting work done. Ethnic restaurants are participatory to the extent that they engage the diner in a gastronomic voyage. Finally, although the more bohemian factions of the creative class may not frequent élite establishments, they still provide a desirable "external symbol of [the] region's vibrancy" (Florida, 2005, p. 84).

The relationship between a city's consumption spaces and the desires of the creative class underscore the ideas at which this study was initially aimed. Consumption spaces allow us to map the world socially, providing hints about whether a city is upscale or industrial, yuppie-friendly or family-friendly, on its way up or down. These metageographies demarcate specific regions within which certain types of people may or may not have access to the kinds of consumption spaces that are constitutive of their consumptional identities. That is, to the extent that post-materialism binds quality of life to consumption space access, these social maps are

maps to consumptional happiness. For example, those seeking a more bohemian or bourgeois lifestyle—perhaps Florida's creative class or Brooks' (2000) Bobos—may be happier in an Urbane oasis. In contrast, a young family needing room to grow and child-friendly restaurants may prefer living in a McCulture oasis. And for those few Americans who still do not bowl alone, the lack of consumption spaces in a culinary desert may be offset by the less urbanised environment. What is really crucial to recognise is that, just as people have or desire different consumptional identities, places also have unique consumptional identities. Consumption spaces help us to navigate the terrain, but when the consumptional identities of the individual and the place are inconsistent, quality of life can suffer.

Some Limitations

Although cluster analysis is a powerful tool for uncovering typological structures, it is also constrained by a number of important limitations. Perhaps most conspicuous in this paper is the absence of a series of traditional hypothesis tests and significance levels, which are generally not suitable for evaluating cluster analyses. As a result, this classification must be considered tentative, pending further validation using alternative measures and sources of data, and statistical techniques more amenable to significance testing.

When the technique is used for urban classification, the selection of a unit of analysis can also serve as a limitation and source of bias. This study focused on the politically defined 'incorporated place'—that is, the city proper. However, other units of analysis are also possible and it is likely that they would yield slightly different results (Crewe and Lowe, 1995). Using a larger unit (such as a Metropolitan Statistical Area) may be appropriate because it groups together consumption spaces that may be located in adjacent but unique political municipalities. A smaller unit (such as a census tract) could yield a more nuanced picture and reveal whether the consumption spaces which drive a city's classification are actually concentrated in a few 'consumption centres'. The most ambitious, but also most robust unit of analysis, might be a contextually and behaviourally defined one. That is, for example, the specific geographical boundaries for each region might be defined in terms of the distance residents typically travel for a consumption experience.

Finally, various measurement errors common to quantitative analyses are particularly salient in cluster analyses as they can lead to misclassifications. For example, the coffee shop measure used here includes all coffee shops, including Starbucks, which might more properly be classified as an instance of a McCulture rather than Urbane establishment.

Conclusion

I have taken care not to embed this study within any particular discipline or its attendant body of literature as this is rarely a fruitful approach. Therefore, and by way of conclusion, I would like to note some connections of this study to the concerns of those several academic disciplines which heretofore have examined issues of consumption in relative isolation from one another, and offer some potential directions for future (and hopefully interdisciplinary) work along these lines.

A first broad collection of issues concerns the impact of consumption on individuals, especially as they are embedded in particular social roles and structures. It has been suggested that "what is critical . . . is how contemporary consumption is intrinsically linked to quality of life" (Crewe and Lowe, 1995, p. 1881). While this linkage undoubtedly is driven by the roles that consumption plays first in constructing (Zukin and Maguire, 2004) and later in paradoxically both constraining and enabling (Miles, 1998), the consuming subject, more questions remain than have been answered. How is one's consumptional identity constructed and lived out through the available consumption spaces? For whom, and under what conditions, does leisure consumption have constraining or

enabling effects, especially as the result of a lack of access to consumption spaces of a specific type? And most closely related to this study's aims, how does matching occur between individuals' consumptional identities and the consumptional identities of the cities in which they live and to which they move?

Moving to the next higher level of analysis, this study raises a parallel set of questions about places. That is, what role do various types of consumption practices and spaces play in the cultivation of an urban identity and what is the relative importance of the restaurant qua consumption space in this process? Many explorations of this topic have offered largely descriptive and idiosyncratic accounts of the branding of a particular city. In contrast, I have attempted to identify the urban (consumptional) identities themselves. The next step in this process towards a generalisable theory, then, is to specify a model whereby a place's cultural capital, in the form of consumption and other cultural amenities, and certain relevant exogenous elements are causally connected to the cultivation of a specific type of identity. Beyond the question of cultivation, there are two other important but poorly understood processes. First, there is the issue of the institutionalisation and maintenance of identity. How, that is, do urban identities become legitimate and embedded in the local culture, and how are they sustained or how do they change over time? Secondly, as Mullins (1991, p. 331) has observed, "cities compete with one another for the consumption dollar ... for capital, for state expenditure, and for the control and command functions of corporations and the state ... image becomes vital". How does the necessity of a competitive image strategy impact the specific image and consumption offerings a city develops?

Finally, this study raises questions about how specific types of consumption spaces fit into models of urban economic development. For years, the dominant model of urban economic development identified human capital as the key driving variable (Florida, 2003). More recently, however, some have questioned this position, noting that "human capital theory is ... contextually incomplete, underspecified, in that it does not explain where and why human capital locates" (Clark, 2004, p.106). They contend that levels of human capital can be explained by the presence of urban amenities, which include restaurants and other consumption spaces. While this addition makes the model *more* specified, it certainly does not make the model *fully* specified. First, while the new model distinguishes between the effects of natural amenities (such as good weather) and constructed amenities (such as opera, juice bars), it does not distinguish between different types of constructed amenities, as the results of this study suggest is important. Secondly, and parallel to Clark's (2004) criticism, it might be said that this new urban amenities theory is underspecified in that it does not explain where and why urban amenities locate. Therefore, the next incarnation of urban development theory must explain why certain places have few urban amenities while others have many and why even the specific types of amenities differ from place to place.

This study has only provided a rough-and-ready framework within which these types of question can be addressed. It has its limitations, but the breadth of the suggestions for future research above highlights its potential usefulness. There are, at the level of the individual, issues of identity formation and quality of life which are influenced by the consumption space and urban context. Turning to the more macro scale of cities and regions, urban identities must play a significant role in understanding urban competition and the uneven distribution of urban amenities must play a significant role in understanding urban development. These three broad streams of future inquiry—on individuals, on urban identity and competition, and on urban amenities and development—stand to benefit from this study to the extent that they draw upon three parallel typologies explored herein: types of people (see Table 4), types of places (see Table 3) and types of amenities (i.e. Urbane and McCulture), respectively. To be sure, these processes are complex and much additional work is necessary. Luckily, the data are tasty.

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Appendix. Power-based Transformation of 'Magnitude' Data

Restaurants enjoy an economy of scale with regard to the number of establishments that are necessary to serve a population. While larger populations require more restaurants to satisfy their needs, the specific number of restaurants necessary per capita decreases for each additional person (i.e. at the margin). Moreover, the rate at which it

decreases depends in part on the type of restaurant. Thus, it was first necessary to understand how restaurant population size and human population size are related for each type of restaurant under consideration. To do so, a trial-and-error search method was employed to identify (to two decimal places) the power to which a city's human population size must be raised to maximise its linear correlation with each restaurant type's population size (see Gujarati, 2003, p. 566). A unique exponent value was obtained for each restaurant type: Coffee shops (0.74), Exotic ethnic (0.64), Casual dining (0.41), Fast food (0.36), Elite (0.31) and Eatertainment (0.19).

Apart from their role in this transformation, these exponent values hold some interesting substantive information. As a city's population grows, in order to keep pace with consumer needs, its population of coffee shops must grow at nearly the same rate, while a city's population of élite restaurants must grow at only a fraction of the human population growth rate. That is, the economy of scale enjoyed by coffee shops is minimal because each additional coffee shop meets the needs of nearly the same number of customers as the previous one, while eatertainment venues enjoy a dramatic economy of scale. Although its confirmation is beyond the scope of this study, one possible explanation is that coffee shops and ethnic restaurants cater to and depend on a loyal group of regulars who consume most of their output, while élite and themed restaurants diffuse their output through a constantly circulating group of status-seekers and tourists. To oversimplify, perhaps each new coffee-drinker wants his own seat in a place where 'everybody knows your name', while patrons of theme restaurants are less likely to have the same sort of personal affinity for any particular establishment.

Whatever the explanation of the specific exponent values that correspond to certain types of restaurant, they indicate the rate at which each type of restaurant might be expected to grow as a city's human population increases. Put another way, they indicate the degree to which each additional person necessitates an additional restaurant of a specific type (i.e. the diminishing marginal utility of people to restaurants). Therefore, through a series of six equations parallel in form to

$$\frac{\text{Number of élite restaurants}}{\text{city population}^{0.31}} = \text{élite magnitude}$$

six 'magnitude' values were obtained that are conceptually parallel to per capita measures, but which accord lesser weight to each additional person at a rate which corresponds to the specific restaurant type. While the resulting values are difficult to interpret substantively, higher values indicate more restaurants per person and lower values indicate fewer restaurants per person *considering the restaurant type and city size*. Hence, these values are employed as pseudo-per-capita measures of restaurant population suitable for making comparisons across cities of different sizes.