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Restaurant Organizational Forms and Community in the U.S. in 2005

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Recent sociological theory and research highlights food, drink, and restaurants as culturally meaningful and related to social identity. An implication of this view holds that the prevalence of corporate chain restaurants affects the sociological character of communities, as many activists, popular-based movements, and theorists contend. The analysis we report here seeks to identify the ecological niche properties of chain and independent restaurants—which kinds of communities support restaurant chains, and which kinds of communities tend to support independent local restaurants and food service providers instead. We analyze data from a 2005 sample of 49 counties across the United States with over 17,000 active restaurants. We argue that demographic stability affects the community composition of organizational forms, and we also investigate arguments about a community's income distribution, age distribution, population trends, geographic sprawl, and commuter population. We find that communities with less stable demographic make-ups support more chain restaurants, but that other factors, including suburban sprawl and public transit commuter, also have some impact.

INTRODUCTION

With increasing interest, sociologists view food and dining as an attractive social context for examining both organizations and culture.[1] Within this domain, an emerging, new theoretical theme trumpets food, drink, and restaurants as culturally meaningful and related to social identity.[2]

Developing this theme, we examine here the organizational composition of local populations of restaurants and other food service locales in real American communities. In particular, we study the prevalence of organizational forms of restaurants distinguished by chains and independent operators. In the 49 county-based communities for which we collected data, the percentage of chain restaurants varies from a low of 17 percent to a high of 47 percent. In the analysis, we ask: Which kinds of communities support

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restaurant chains, offering conditions for proliferation? And which kinds of communities prove resistant to chains, harboring conditions that allow local restaurants and food service to persist? In essence, these questions concern the ecological niche of the chain restaurant.

Why does this matter? First, the basic facts demonstrate social and economic importance. As an industry, restaurants represent the largest private employer sector in the economy but pay the highest proportion of minimum wages. Chain restaurants also witness, and possibly structure, much of daily life. Schlosser (2001, p. 3) reports that "on any given day in the United States about one-quarter of the adult population visits a fast food restaurant."

Theoretically, two sociological ideas potentially speak of the chain-form distribution issue: (1) the production of culture and (2) the loss of community. Production-of-culture arguments contend that the features of the production process affect cultural outcomes (Peterson and Anand, 2004). Although not usually recognized as such, popular and scholarly criticism of modern food and the contemporary food production system often contain implicit arguments similar to production-of-culture arguments. This criticism often takes either of the two forms: (1) that the corporate (mass) food production system destroys flavor, quality, and nutrition, as well as abusing animals, and (2) that the association with a large profit-oriented corporation taints the product. The first claim is about real effects; the second is about identity by association. In our view, the ambivalence, and even distress, voiced when Wal-Mart decided recently to embrace organic food and organic producers reflects this type of identity effect (see Brady, 2006). Such effects are perhaps strongest with chain-based fast food businesses.

Concern about the loss of community takes many forms in sociological theory and research. Within urban sociology, loss of local control and local variation implies to many analysts a breakdown of community and its meaning to individuals (Warren, 1972). Food and dining may seem a minor (or even trivial) context for exploring this theme but every individual in society intersects with it every day—usually on more than one occasion. As such, it represents an ordinary everyday experience that helps to form the basis of our culture (Carroll and Wheaton, 2009; Ferguson, 2004). Whether this culture originates in local communities and varies from one place to another, or lands in areas as a uniform package of standard routines developed in an outside corporation, makes a huge qualitative difference in the experience of life (Appadurai, 1995). Food dining venues and products also often strongly affect the socially constructed identity of a place, and the interpretations individuals make about it (Alkon and Traugot, 2008; Borer, 2006). This aspect of a place's social identity squares nicely with urbanists' views of modern communities being increasingly constructed around consumption and its local variations (Clark, 2004; Crewe and Lowe, 1995; Zukin, 1995).

Moreover, sociologists increasingly see local organizational variation or diversity as important to the culture and character of local communities (Zukin, 1998). In comparing the Californian coastal communities of Santa Barbara and Ventura, Molotch, Freudenburg, and Paulsen (2000) find that they differ appreciably in place character and tradition, and react differently to the same exogenous events, despite fairly similar geography and socioeconomic characteristics. They attribute these differences to the variations in the number and diversity of organizations in the two communities, and to the resulting synergies generated through their connections with one another. Similarly, Sampson

et al. (2005) find that the density of nonprofit organizations in a community is positively associated with civic engagement and social action. This finding suggests a durable base to civic engagement levels that transcends the characteristics of the human population.

It is, of course, now commonplace among academics, social critics, and activists to frown on—or even disdain—chain restaurants and their food (Nestle, 2006; Singer and Mason, 2006). It is popular in some circles to blame chains for the breakdown of local communities and the loss of local character. We do not deny or affirm these possibilities. Rather, we choose not to join this debate directly here, arguing neither for nor against the social value of chains. Instead, we take a different tactic and argue speculatively that the chains find demographically unstable communities—those "in flux"—to be viable conditions for store placement and growth. By this view, demographically stable, socially strong communities present formidable challenges for the chains and likely do not prove nearly as supportive. Accordingly, the chains follow, rather than create, a certain type of community disruption.

For better or for worse, national chain restaurants also play a role as cultural institutions, unifying a diverse and heterogeneous society such as the United States. For instance, the historian Hogan (1997, p. 6) claims that fast food pioneer White Castle "changed American culture dramatically. . .the primary importance of the White Castle story is how its new food and approach to eating transformed American culture." He also contends that "White Castle and its imitative progeny were instrumental in creating a uniquely American ethnicity" (p. 3). And Schlosser (2001, p. 3) states that, "During a relatively brief period of time, the fast food industry has helped to transform not only the American diet, but also our landscape, economy, workforce and popular culture."

The article proceeds as follows. In the next section, we give a brief summary of the history of the chain organization in the United States, especially among restaurants. We then turn to theory, focusing first on our theoretical argument about demographic instability, and then on other arguments that have been proposed, both by academics and the media. The next section describes the research design, data collection procedures, and methods of analysis. We then review the empirical findings, before finally turning to a broader discussion of their implications.

CHAIN ORGANIZATIONS AND RESTAURANTS

The chain form of organization can be defined as a multiunit enterprise where the various units operate under the same name, according to more-or-less standardized procedures controlled by a central administrative office, and generate a somewhat uniform customer experience. The units of a chain might be company-owned and operated by employees or franchised and operated by separate local owners.[3]

Competitive advantages of chains come from widespread recognition and familiarity, as well as scale advantages in advertising, purchasing, preparation, and distribution. In many restaurant chains, the staff prepares food fully or partially in centralized facilities and then ships it frozen to local establishments, ready to be microwaved prior to serving. In addition to a common name, the establishments of a chain typically feature the same atmospheric "look," similar menus, and common logos. For this reason, chain restaurants are sometimes referred to as "formula" restaurants.

The initial spread of the chain form in the early 20th century generally sparked considerable public concern. Controversy over chain organizations roiled many communities. The feared damages to the community were both social and economic in kind; they included issues involving labor market stability, local business competition, and the social life of a community.[4] In many states, opposition hardened so much that opponents attempted to enact legislation designed to handicap chain stores and intended to limit severely their proliferation and viability. These bills typically imposed higher taxes on chains than on independent stores. Ingram and Rao (2004) find that state legislatures formally considered hundreds of bills and adopted a number of them between 1923 and 1970; at the high point of anti-chain sentiment in 1939, 19 states had such laws in place. The states that were most likely to pass anti-chain bills were those with large numbers of homogenous independent retailers, whereas states with greater numbers of chains already operating were least likely to enact such legislation.

RESTAURANT CHAINS

Within the food service sector, the prevalence of chains rose during the WWII and post-WWII eras, but not by great amounts. Relying primarily on 1972 Census of Retail Trade data, Wyckoff and Sasser (1978) report that in 1967 chains held 6.97 percent of the 323,659 units classified under "eating and drinking" establishments and 18.41 percent of sales. By 1972, the chains held 10.84 percent of the units and 26.57 percent of sales. Of restaurants alone, chains held 4.5 percent of units in 1963 with sales at 8.9 percent and 19.4 percent in 1975 with sales at 30.7 percent and estimated for 1980 to hold 28.7 percent of units and 50 percent in sales.

Within the contemporary food service domain of the United States, fast food enterprises constitute the largest and most visible chains (e.g., McDonald's, Burger King, KFC, Taco Bell, Pizza Hut). But the chain form today can be found in use by many different types of restaurants offering very different kinds of food at highly varying price ranges, including steakhouses (e.g., Morton's, Black Angus, Ponderosa), seafood (Red Lobster), ethnic cuisines (e.g., Olive Garden, Bucca di Beppe, Hacienda, Mr. Chau), hybrid or fusion cuisine (e.g., PF Chang's China Bistro), and soups and salads (e.g., Panera, Fresh Choice).

The initial appeal of chains and fast food restaurants in the early and mid 20th century stands in stark contrast to the complaints aired about them today. Historians often lament the poor quality of American cuisine in the late 19th century. For instance, Levenstein (1988, p. 5) talks of "the enormous amounts of meat and starch and the short shrift given to fresh fruits and vegetables." He describes "the major characteristic" of American food at that time as "an overwhelming heaviness." He reports that "the favored method for preparing meat was to roast large fatty joints. Big chunks of meat or whole fowl were also boiled, but boiling was particularly popular for preparing vegetables, which were often subjected to this treatment for hours before being mashed into paste. . . . Foods fried in large quantities of lard or butter were also well appreciated." Compared to such local places, chains typically offered a clean, sanitary place to eat what was then considered nutritious food at a reasonable cost. Hogan (1997, p. 177) claims that, "The fast food industry. . .in fact, perhaps significantly improved the collective diet by providing the

public with food that was usually standardized and uniform in terms of content and hygienic preparation."

Although some newer chains such as Panera (which emphasize more wholesome foods) might escape the worst criticism, and some older chains appear to be adapting in response, a number of popular modern observers find much at fault about chain restaurants. Following activists' claims, Ritzer (2004, p. 17) purports to see "a wide array of adverse effects on the environment," including excess waste of food and paper, and pollution from fertilizers and packaging materials. He also charges that "fast-food restaurants are often dehumanizing settings in which to eat or work." A prominent journalist, Schlosser (2001, p. 8) adds that fast food chains have deteriorated the "nation's rural life" (by demanding uniform agricultural products that favor agribusiness), "its environment" (by pollution through chemicals, fertilizers and packaging), "its workers" (by creating millions of deskilled low-wage jobs that do little to improve human capital), "and its health" (by offering tasty high-fat products that are produced in ways susceptible to contamination). Beyond these purported effects of chains and their food, the symbolic aspects of chain organizations in a community have taken on ever-important roles in shaping individuals' reactions and perceptions of community social identity.

COMMUNITY

Urbanists agree that in the contemporary United States, commercial rather than production activity often plays a stronger role in defining local community life and identity (Glaeser, Kolko, and Saiz, 2001; Urry, 1995; Zukin, 1995). Within commerce, consumption-oriented activities and organizations are viewed as central. For instance, Zukin (1998, p. 835) writes, "By the end of the 1990s, consumption is understood to be both a means and a motor of urban social change." Similarly, Miles and Paddison (1998, p. 822) claim that "fundamentally, cities act as the main loci of control and power in which the symbolic forms of consumption play a prominent role."

When it comes to chain stores, many activists and critics believe that they significantly degrade community and collective social identity. For instance, Schlosser (2001, p. 5) takes this position when he decries that:

> America's main streets and malls now boast the same Pizza Huts and Taco Bells, Gaps and Banana Republics, Starbucks and JiffyLubes, Foot Lockers, Snip N' Clips, Sunglass Huts and Hobbytown USAs. Almost every facet of American life has now been franchised or chained. . . . A person can now go from cradle to grave without spending a nickel at an independently owned business.

That is, these critics see the chain form itself—regardless of a firm's specific actions or behavior—as a major contributor to the erosion of local community values, social attachment, and solidarity. Others see chains as promulgating a standardized life-style and culture in conflict with the expression of distinctive social identities (Zukin, 1998). Currently, companies such as Wal-Mart and Home Depot (so-called "big box retailers") attract the greatest critical attention (Mitchell, 2006) but the chain restaurants are often considered to exert similar effects.

The view of chains as socially destructive is behind much of the ever-growing public resistance and grassroots civic action against the chain restaurant in certain communities. According to the Institute for Local Self-Reliance (ILSR), based in Washington D.C., at least 20 U.S. cities now hold or enforce laws that exclude, limit, or restrict the location and other operations of chain or "formula" restaurants within their jurisdiction.[5] These restrictions typically define their target (e.g., chain or formula business) by criteria of homogenization and standardization. According to the ILSR, "formula businesses include retail stores, restaurants, hotels, and other establishments that are required by contract to adopt standardized services, methods of operation, decor, uniforms, architecture, or other features virtually identical to businesses located in other communities."[6]

Legal restrictions on chain restaurants often cover entire municipalities but occasionally have been limited to certain districts or neighborhoods. Sometimes these laws apply specifically to restaurants; at other times restaurants simply fall under broader chain restrictions. A few places do not ban chains completely but instead require their number to stay under a quota or cap. Finally, it is important to recognize that by outlawing standardized formula businesses per se, these laws do not legally exclude certain companies or individuals from operating within a community—they simply require that the formula be abandoned and that a relatively unique customized approach be taken instead. Of course, this requirement robs the chain restaurant of many of its economic advantages and effectively precludes entry by these particular companies.

In almost all cases, the rationales stated for excluding or restricting chain restaurants (of all price and quality levels) involve the preservation of a community's distinctive social and economic life. According to Walkup (2006, p. 1), citizens believe that "the neighborhood character is best enhanced by independently owned mom and pop businesses" which would "preserve a 'sense of place'." Murphy (2006, p. 1) notes that members of these communities oppose chains because "there is a sense that the chains impart a feeling of homogenization and sameness."[7]

Figure 1 provides a glimpse into the articulation of these and other concerns that communities hold when they contemplate restricting or excluding chains.[8] The figure reproduces a set of guidelines offered to communities by the ILSR in Washington, DC. Note that the top item addresses the community breakdown claim, suggesting that this is the strongest articulated complaint against the chains.

The ILSR list accords with the findings of those who study community opposition to proposed new Wal-Mart locations. For instance, Norman (1999) states that the chief concerns are with how a community's life will be disrupted, how its identity will change, and how locally owned businesses will be affected. Similarly, Halebsky (2004, p. 116) emphasizes local resentment about "the extent to which global capital increasingly reaches into local communities." Sites (2007, p. 2642) notes that in many cities, "plans for new Wal-Mart stores have been met not only by labor opposition but also by a broader coalition that seeks to make the fight against Wal-Mart a social-justice campaign for fair wages, community-shared benefits, and balanced sustainable development." In her in-depth qualitative study of Ohio River communities reacting to Wal-Mart, Reineke (2006, p. 20) states that "U.S. communities are fighting back in an effort to maintain their town's character. . . . The backlash is against chain stores that create homogeneity and disrupt the unique characteristics that make a community." She finds that the main concern of opponents is with "the impending disruption of place character. . .highlighted by. . .the demise of locally owned small businesses."

"Why Support Locally Owned Businesses

Local Character and Prosperity In an increasingly homogenized world, communities that preserve their one-of-a-kind businesses and distinctive character have an economic advantage.

Community Well-Being Locally owned businesses build strong communities by sustaining vibrant town centers, linking neighbors in a web of economic and social relationships, and contributing to local causes.

Local Decision-Making Local ownership ensures that important decisions are made locally by people who live in the community and who will feel the impacts of those decisions.

Keeping Dollars in the Local Economy Compared to chain stores, locally owned businesses recycle a much larger share of their revenue back into the local economy, enriching the whole community.

Job and Wages Locally owned businesses create more jobs locally and, in some sectors, provide better wages and benefits than chains do.

Entrepreneurship Entrepreneurship fuels America's economic innovation and prosperity, and serves as a key means for families to move out of low-wage jobs and into the middle class.

Public Benefits and Costs Local stores in town centers require comparatively little infrastructure and make more efficient use of public services relative to big box stores and strip shopping malls.

Environmental Sustainability Local stores help to sustain vibrant, compact, walkable town centers—which in turn are essential to reducing sprawl, automobile use, habitat loss, and air and water pollution.

Competition A marketplace of tens of thousands of small businesses is the best way to ensure innovation and low prices over the term.

Product Diversity A multitude of small businesses, each selecting products based, not on a national sales plan, but on their own interests and the needs of their local customers, guarantees a much broader range of product choices."

SOURCE: Institute for Local Self-Reliance, Washington DC, downloaded verbatim on December 3, 2006, from URL http://www.newrules.org/retail/local.html.

FIG. 1. Excerpted text of flyer from Institute for Local Self-Reliance (2006).

More generally, this kind of reaction would appear to be a natural outgrowth of a community's socially constructed identity (Brint, 2001; Zukin, 1995). Urban sociologists increasingly recognize and analyze the importance of a place's identity and the ways it is socially constructed (Appadurai, 1995; Brown-Saraceno, 2004; Zukin, 1995). Commercial activities and businesses in a community often constitute a core component of identity that develops, including associated narratives and culture. For instance, in studying Venice, California, Deener (2007, p. 292) finds that "residents and merchants interpret the emerging Abbot Kinney Boulevard scene with its independently owned stores as an authentic version of community life in need of preservation by restricting the invasion of formula retail chains." As a public form of consumption, food and the restaurants that prepare and serve it constitute another key component of many socially constructed identities, including those based on place (Harris-Shapiro, 2006; Jarosz, 2008; Locher et al., 2005; Marte, 2007; Neal, 2006; Searles, 2002).

Nonetheless, individual communities vary in their numbers and types of restaurants, including the proportion using formulas or the chain form. Within the handful of communities with laws banning chains, this difference expresses itself in explicit public policy, perhaps initiated by activists. But in most communities, the differences likely arise from the social, cultural, and economic conditions that attract chain entrepreneurs, sustain chain restaurant organizations, and thereby circumscribe the ecological niche of chain restaurants.

A MODELING FRAMEWORK

Questions about which kinds of communities support more chain versus independent restaurants fall within the domain of organizational ecology. Ecological theory views organizational forms such as the chain restaurant as dependent on particular environmental resources as well as on other (possibly competing) organizational forms. In ecological terms, the fundamental niche of an organizational form is the *N*-dimensional resource space within which the form can be viable when no competing forms are present; the realized niche is the same *N*-dimensional space as reduced by competing forms. Macroecology focuses primarily on the "abundance and distribution of [forms] at large spatial and temporal scale" (Blackburn and Gaston, 2003, p. 6). Because it examines 49 separate communities (i.e., habitats), we report here a macroecology analysis, as it concerns the spatial distribution of organizational forms.

A framework for modeling the niche starts with specification of the carrying capacity of a form, the number of organizations that can be sustained given the resources available in a specific community or habitat. Let $K_{1(it)}$ be the carrying capacity of form 1's population in community i at time t. We can characterize this carrying capacity in terms of a constant a_0 and the weighted $X_{m(it)}$ environmental resources in the community as well as the weighted number of organizations present in form 2's population $N_{2(it)}$. It is common to start analysis by considering a form's viability across gradients of the environmental resources (Gauch, 1982). So, we use a linear specification of the niche to yield

$$K_{1(it)} = a_0 + a_1 X_{1_{(it)}} + \cdots + a_m X_{m(it)} + \alpha N_{2(it)} + e_1$$

for population 1 and

$$K_{2(it)} = b_0 + b_1 X_{1_{(it)}} + \cdots + b_m X_{m(it)} + \beta N_{1(it)} + e_2$$

for population 2 where the as, bs, and α and β are (weighting) parameters to be estimated using a simultaneous equation modeling framework, and the es are random noise terms.

An attraction of this framework is that it facilitates consistent thinking about the dynamics of change with cross-community comparisons. For example, an environmental factor that has a positive effect on the carrying capacity of a form will produce a variation in the size of the form-based population between communities that vary on the factor. Over time, changes in the factor will also produce adjustment in the size of the form-based population within a single community. For organizations, these temporal adjustments will typically manifest themselves in vital events of founding and mortality.

Another attraction of this framework is that it allows for separation of the effects of direct environmental dependence (including mutual dependence on the same resource)

from population interdependencies. Niche arguments about the environmental dependencies involve predictions about the direction and significance of the a and the b parameters; two populations with similar dependence on the same resource would show no significant difference between a_m and b_m. Intrapopulation dependence arguments concern the α and β parameters, with positive signs reflecting mutualism and negative signs reflecting competition. Because the assumptions involved in estimating α and β require stronger justification, we begin by considering niche arguments about environmental dependencies.

ENVIRONMENTAL CHARACTERISTICS

Commonly cited environmental conditions about where chains will possess higher carrying capacities include a community's income distribution, demographic age distribution, degree of suburbanization, and commuting patterns. Below we review each of these arguments in turn, but first, we propose a speculative sociological argument about community receptivity to chains based on the demographic stability and the resulting likely local culture of a community.

Demographic Stability and Local Culture

Somewhat speculatively, we contend that communities with greater demographic stability (specifically those that have more long-term residents) will be more likely to embrace and support local restaurants and to disavow chain restaurants. In other words, demographically stable communities will display higher carrying capacities of local restaurants. To use the language of anthropologist Appadurai (1995, p. 213), long-term residents are centrally involved in the "the task of producing locality (as a structure of feeling, a property of social life, and an ideology of situated community)." We see three distinct but interrelated reasons why this may be the case.

First, people who grow up in a community, or who live there for a long time, will be more familiar with the local restaurants and their reputations. Whereas an outsider might be fearful of a dingy looking "mom-and-pop" place and prefer the more familiar national chain for a meal, the long-term resident will be more likely to possess accurate information about the local place. The local resident is also more likely to have had experiences or heard accounts about local places that might over-ride any initial wariness based on appearances.

Second, long-term community residents may feel solidarity with local business people and frequent their establishments as an act of social support. The local business people and their families may be more familiar to long-term residents than outsiders as a result of shared histories of local civic activities and overlaps in social circles.

Third, demographically stable communities foster the development of stronger local cultures. These cultures spawn a sense of identity in the community and generate a more intense attachment to it and its natives. Such processes clearly contribute to the abovementioned propensity to support local business. But they may also prompt a search for distinctive characteristics of the community, some of which may take the form of local eating places and local food products and recipes. The outwardly mobile person returning home to such a place often places high priority and satisfaction on visiting such uniquely local venues and eating such local food (something unlikely to happen with

a chain restaurant, we suspect, no matter how long it has been there or what experiences it has witnessed).

For instance, in the sample of communities we use in our empirical analysis, Berks County, PA (home of the city of Reading), represents such a community. Berks in 2003 had a nativity ratio of 78 percent, making it the fifth highest in the sample. In other words, only 22 percent of Berks residents were born outside their state of residence—compared with 71 percent in Washoe, NV, the county with the lowest nativity ratio. Berks also features on its official county web site a page for "Authentic Berks county recipes," which include such items as "Scrapple, Kugelis, ShooFly Pie, and Segar Cheese." Although just one indicator, it does suggest the existence of a local food culture attached to the identity of the place and its inhabitants. One might therefore not be surprised to observe relatively few chain restaurants in this community. This is indeed what we find, as Berks has the lowest ratio of chain restaurants of all counties in our data.

Income Distribution

Generally speaking, food offered in chain restaurants is economical. Lower income groups thus show a natural attraction to eating in these kinds of places, and one might therefore expect to see a negative relationship between income and a community's carrying capacity of chain restaurants. However, this effect may be countered by a potential concern with negative reputation effects. Chains prevalent in low-income areas risk becoming known as "poor peoples' food." For instance, McDonald's reportedly for many years systematically avoided the saturation of low-income areas with establishments over concern about the identity implications of such a strategy. If this is a general pattern among chains, we might therefore expect to see a positive, rather than negative, relationship between income and chains.

Age Distribution

That the marketing strategy of some major fast food chains target children is obvious by the numerous games and popular culture characters such as Ronald McDonald. For families, children often determine where the family will eat when going out. Families with children often search for familiar and more economical places to eat, such as chains. Chain restaurants almost always encourage families with children. And chain restaurants, especially fast food chains, create evening and weekend places where teenagers tend to congregate. Teenagers also constitute a fertile source of low wage, part-time labor of the kind chains need. All these factors serve to make communities with higher proportions of children and teenagers more attractive.

Suburban Sprawl

The movement of jobs and families out of center cities to suburbs is often regarded as contributing to the spread of chain restaurants. New housing in the suburbs was constructed in undeveloped places without sufficient existing restaurants, and chains thrived in the proximity of shopping centers and malls built nearby. According to Schlosser (2001, p. 67), the suburbs proved especially attractive to fast food chains, which even helped spur the sprawl: "The fast-food chains profit from the new suburban sprawl, encourage more sprawl, and help determine what the sprawl looks like." He claims that McDonald's and other fast food chains use aerial photography to understand and predict the pattern and future direction of sprawling suburbs. To facilitate the movement of suburban

populations, sprawl typically involves the extension and improvement of roads; the interchanges created in the process likely provide attractive sites for chains.

The roads themselves also facilitate a fully transient group of potential restaurant customers—namely, travelers who merely pass through and choose an eating place as a one-shot interaction (they may be unlikely to return). While the prevalence of this customer group might potentially be correlated with demographic instability in a community, we see this as a separate and distinct mechanism for facilitating chain restaurants, and accordingly control for this in our examination of the demographic instability of residents in the community.

Commuting Patterns

Populations where long commutes are prevalent tend to be populations with more pressing demands on time. Cooking at home becomes more difficult under such circumstances, and chains offer a familiar and economical way to eat out. Commuters also often need to eat while traveling and chain restaurants, especially fast food chains, provide reasonably priced food on the go and while in transit. Indeed, many major fast food chains have expanded in recent years with scaled down "express" venues located at airports, bus terminals, and other transportation points. Finally, commuters often eat alone, meaning that they face no embarrassment as a result of being seen eating in places that do not agree with their self-identity or social status. Eating alone frees one to eat food from places where one might not eat in the presence of familiar others. As a result of these forces, communities with disproportionate numbers of long-distance commuters likely serve as homes to chains.

POPULATION INTERDEPENDENCIES

How do chains and independent restaurants affect each other's prevalence in a community? Much of the activist discussion and associated rhetoric contains at least an implicit assumption that populations of the two forms compete directly with each other: banning or suppressing the chains in an area supposedly would allow independent restaurants to thrive. This may indeed be the case. But, in our view, the relationship between the populations may very well be mutualistic. Restaurants beget restaurants, regardless of form. As more eating venues become available in a community, the more people eat out—and accordingly, the more a local culture develops which encourages a social life organized around meals in public places. In our sample, the bivariate relationship between the two populations is positive (the Pearson r is .25), although we note that the direct correlation is likely to be impacted by confounding variables that affect both populations. In terms of the simultaneous equation modeling framework, this view implies positive coefficients for the terms associated with population interdependencies, the α and β parameters.

RESEARCH DESIGN AND METHODS

OBSERVATION SCHEME

In compiling data to examine the theoretical argument, the most appropriate unit is that of a community. This allows us to make inferences about the effects of community-level

variables on the prevalence of both chain and nonchain restaurant establishments within that community. Of course, this level of analysis does not allow a detailed examination of the links between individual behavior and organizational outcomes, but it provides a good test of the theoretical mechanisms we have proposed and is consistent with our macroecological focus. We therefore used as the unit of analysis the Metropolitan Statistical Area (MSA) of the Census Bureau.[9] Using counties as building blocks, the MSA unit aggregates contiguous counties according to their economic relatedness. Among the advantages of sampling MSAs and recording all information for the cities each contains are: (1) that this approach would likely include some sizeable cities and (2) it would cover a good deal of organizational variation among restaurants. The disadvantages of this approach involve intractability; some MSAs are very large, containing literally tens of thousands of restaurants, and also circumscribe numerous cities that might each take a distinctive approach to controlling and zoning restaurants, requiring in-depth legal analysis of each.

To mitigate these concerns, we limited the sample to those MSAs defined by a single county in 1999. In most instances, the largest city was the only place of significant economic and social activity and represented the identity of the MSA, but in a few cases the MSA contained a pair of proximate cities. Places with more than two large cities separated by more than 15 miles were excluded. On the plus side, this design yields highly comparable county units that bound most of the cities' activity; such comparability also makes it easier to identify needed control variables. The possible limitations of the design have mainly to do with the modest sizes of some of the places. Accordingly, to eliminate the smallest of these units, we chose the 50 largest MSAs meeting the criteria without expanding to more than one county. Thus, each observed environmental habitat consists of a city and its surrounding suburbs. The sampled counties range in population from around 80,000 persons to 900,000. Distributed around the country, none of the sampled counties is immediately adjacent to other urban areas, which eliminates some potentially confounding noise.

RESTAURANT DATA

We attempted to compile a comprehensive dataset on the organizational populations of restaurants and other eating places in each of these 50 counties. In doing so, we first examined the characteristics of data available from any of the several suppliers of corporate directory listings. We compared multiple providers to evaluate the accuracy of data, and attempted to evaluate the comprehensiveness of different databases using count data that were available prior to purchase. Following this comparison, we decided to purchase data from The List Company (http://www.tlclists.com/).

The data set contains a list of restaurants within 49 of the counties in the sample, since the data on the 50th county, Anchorage Borough AK, were not available from this supplier, and we reasoned that including data from a different supplier for one county might introduce reliability problems. This data set contains information on over 17,000 individual restaurants. Each entry includes information about the business name; address and contact information; and city, county, and state. For businesses that do not operate under their own name, the data set includes a "Doing Business As" field, containing the name under which the company operates.

Each entry also includes a dummy variable indicating it is purportedly a franchise. We say purported because it seems clear from inspection that all establishments associated with chains are flagged as franchises regardless as to whether the individual operating establishment is a franchisee or a company-owned store. Upon inspection, we also found some "franchises" were not tagged as such. We therefore conducted a cleanup procedure where we inspected all restaurant names for which multiple establishments were found, but where (at least) some establishments were not marked as franchises. For those names which could be confirmed to be the name of a franchise, all restaurants with that name were changed to "franchise" or chain status. We think this is a reasonably good measure of chain affiliation even if it may undercount chains slightly, especially those that are local or very small.

The data closely match aggregate numbers of chains in these counties which we procured from other sources, including Dun & Bradstreet, which offers business mailing lists similar to those we procured. While cost considerations prevented us from purchasing disaggregated data from multiple sources, we obtained aggregate counts from Dun & Bradstreet, including both restaurants in general and those specially marked as chains and franchises. For the 49 counties in the sample, the correlations between the two data sources range from .96 to .99 for the variables in question.

In the sample, we calculate the ratio of restaurants to people in each county. In our sample, this ratio has an average of 5.2 restaurants per 10,000 people. The comparable ratio for nonchain restaurants is considerably larger, 9.8 restaurants per 10,000 people. The number of chain restaurants per person varies considerably between counties, ranging from 2.3 restaurants per 10,000 residents for Berks PA to 7.7 restaurants per 10,000 residents in Monroe IN. Other counties in the sample with unusually many chain restaurants per person include: Comanche, Smith, Mclean, Taylor, Lubbock, Shawnee, Tom Green, Victoria. In addition to Berks, other counties in the sample with unusually few chain restaurants include: Honolulu, Whatcom, Dane, and Yakima.[10]

In the sample, over a third of all chain restaurants belong to the 10 biggest fast food companies. These companies are all household names: Subway, McDonald's, Pizza Hut, Burger King, Dairy Queen, KFC, Wendy's, Taco Bell, Arby's, and Domino's Pizza.[11] This list shows again that while fast food chains dominate the sample, their numbers vary considerably, as do the types of food they offer and their sizes.

SOCIODEMOGRAPHIC COVARIATES

For sociodemographic covariates, we rely on data from the American Community Survey (ACS) of the U.S. Census Bureau (2005). This survey provides data on a large number of characteristics, which are available for the vast majority of U.S. geographies, and for a number of different levels of aggregations, including the 49 counties in the sample. Covariates based on sex, age, race, income, native language, place of birth, poverty levels, and other characteristics are available.

To examine the arguments made above, we use the following covariates from the ACS:

Demographic instability is captured with two variables measuring the number of residents that have moved to a community. In examining demographic instability there are tradeoffs involving short-term versus long-term and short-distance versus long-distance moves, and theoretically, they could have somewhat different effects. For robustness, we

therefore include two different variables that are available in the ACS. One variable is based on the number of persons in the county who were born outside their current state of residence and the other is based on the number of persons in the county who have moved from another county in the past year.

For the *income distribution* of an area we use variables such as aggregate household income. We also include a variable measuring the fraction of *high-income residents*, defined as those who reported an annual income of $200,000 or more. *Age distribution* effects are examined by estimating the relationship of chain prevalence with the population of person under 21 years of age (and other such specifications). Suburban sprawl is measured by the geographic population density as well as the number of linkages a county has with the federal interstate highway system. The number of *interstate highway linkages* was manually coded using maps and satellite images of the individual counties. The variable counts the number of interstate highway spokes emanating from the city, such that a single highway running through the city received a score of two, while a highway that ends in the city received a score of one.[12] To capture the influence of *commuting patterns* and the extent to which residents are faced with long-distance commuting, we use a variable measuring the average length of worker commutes. We also use dummy variables to control for *region* effects. Using census definitions, we identify four regions (East, Midwest, South, and West) and use the East variable as the omitted category in our specifications.

ESTIMATION

Restaurant populations are widely thought to adjust rapidly to changes in exogenous conditions. Since they typically operate on low margins, they fail quickly when economic times turn bad, but they also spring up fast during upturns. Freeman and Hannan (1983) singled out restaurants for studying organization–environment relations because of these features and compared them to the fruit fly populations which biologists study for similar reasons. For these reasons, we expect local restaurant populations to be fairly close to equilibrium in their relationships with environmental characteristics. Accordingly, it makes sense to estimate cross-sectional regression models to identify the niche characteristics of restaurant populations (Tuma and Hannan, 1984).

We estimate regressions with the dependent variable specified as the ratio of chains per 1,000 persons in a locality.[13] Since the variance on estimates of ratios and averages is larger for smaller towns than larger towns (one is dividing by a smaller number of people), observations should be weighted when performing estimations. We use the *aweights* option in Stata to weight the observations by the number of persons in each county. We specify controls for other characteristics of each locality, as well as regional dummies.

We use a modeling strategy based on incremental complexity. We begin by estimating ordinary least squares regressions of the per capita restaurant variables on the sociodemographic variables (with robust standard errors). In these models, we do not include the variable for the prevalence of the other restaurant population on the right-hand side, preferring to use only exogenous variables[14]; we regard these models as reduced form estimates. In a second set of estimates, we treat the two restaurant populations as simultaneously interdependent. Here we use common two-stage estimation methods, where the first stage uses only exogenous variables and the second stage includes the endogenous variable (predicted from the first-stage regression) as well as the exogenous variables.

To identify the simultaneous system, we exclude an exogenous variable from each model in the second stage, using exclusion restrictions based on hypothesized drivers of demand for chain and nonchain restaurants. As Schlosser (2001) noted, suburban sprawl and highway linkages have been implicated in influencing chain restaurant prevalence, but no such connection has been suggested for independent restaurants. We therefore exclude our measure of interstate linkages from the second-stage estimation of nonchain prevalence. Arguments about chains as "poor people's food" suggest that residents with very high incomes have little impact on the demand for chains, leading us to exclude the fraction of high-income residents from our second-stage estimation of chain prevalence. Both of these restrictions are further justified by nonsignificant first-stage coefficients.

Analysts may vary in how much complexity they are willing to accept in these models, and in their views on the use of exclusion restrictions. This is the main motivation for approaching the issue using incremental complexity, but we do find strong consistency in estimates of the effects of the key environmental characteristics across the various models (and in many not reported in detail here).

FINDINGS

Table 1 presents regression estimates of reduced form models examining the association of various measures of community demographic stability with the prevalence of chains. These models include in the right-hand side specification only exogenous variables. Models 1–3 use the per capita number of chain restaurants as the dependent variable and Models 4–5 use the comparable variable for restaurants that are not associated with chains.

Models 1 and 2 establish the main finding of the study, the association of chain prevalence with our two complementary measures of democratic instability in a locality.[15] Model 1 examines how the chain ratio varies with the number of persons born in another state. The coefficient is positive and significant, suggesting that communities with many people moving from out of state support more chain restaurants. Model 2 shows the impact of people who have moved from a different county in the last year. This coefficient is also positive and significant, showing the effect of demographic instability as measured over both smaller distances and shorter time-frames.[16]

In Model 3, we include the possible effects of other factors that have been argued to foster chain restaurants: household income; fraction high-income residents; number of interstate linkages; the average length of worker commutes; and the number of persons 20 years of age or less. We find no evidence of a significant effect of income on chain restaurants. Although the coefficient for interstate highway spokes emanating from the city is large and positive, it is not significant in this specification, although we found a significant effect for this variable in other specifications not shown here, which included fewer collinear covariates. The coefficient for the average length of commute is small and not statistically significant. Perhaps surprisingly, we find that the number of persons under the age of 20 shows a negative relationship with the prevalence of chains. This finding concurs with other models that we have estimated for the effects of children and teenagers: the coefficients for these subpopulations, when significant, are typically negative.

Table 1. Reduced Form Regression Estimates of Restaurants Per Capita by Organizational Form

	Chains Model 1	Chains Model 2	Chains Model 3	Nonchains Model 4	Nonchains Model 5	Nonchains Model 6
Dummy for West	.052	.041	.104*	−.207	−.263*	−.075
	(.067)	(.065)	(.051)	(.105)	(.085)	(.094)
Dummy for South	.212*	.164*	.231*	−.335*	−.389*	−.092
	(.076)	(.069)	(.057)	(.068)	(.066)	(.098)
Dummy for Midwest	.209*	.175*	.185*	−.091	−.139*	−.112
	(.072)	(.073)	(.053)	(.066)	(.065)	(.090)
Born in another state	.265*			−.037		
	(.099)			(.291)		
Moved from another county		2.74*	2.01*		1.85	−1.15
		(.762)	(.913)		(1.46)	(1.39)
Average HH income			−.013			.016
			(.008)			(.018)
High income residents			1.19			−12.8
			(7.94)			(16.5)
No. of interstate linkages			1.67			−2.99
			(2.16)			(5.28)
Average length of commute			−.006			−.015
			(.007)			(.015)
Pop. 0–20-year-olds			−1.94*			−3.34*
			(.436)			(.950)
Constant	.273*	.218*	1.17*	1.16*	1.1*	2.18*
	(.063)	(.065)	(.221)	(.0438)	(.0511)	(.42)
Observations	49	49	49	49	49	49
R-squared	.39	.48	.67	.21	.24	.51

Note: Robust standard errors in parentheses.
*$p < .05$.

Models 4–6 use as the dependent variable the ratio of nonchains (independent restaurants) per 1,000 persons in a locality. To facilitate comparison, these specifications parallel exactly those of Models 1–3, respectively. In general, these estimates suggest strongly that demographic instability is associated exclusively with chains and not with nonchains or restaurants generally: the point estimates associated with the demographic movement variables are not significant, and are negative in value for all but the intercounty movement variable in Model 5. Together, the estimates paint a consistent picture of demographic instability as an important factor in making communities attractive and receptive to chain restaurants.

In Model 6, the effects of the other community characteristics variables are included in the model with the demographic variable of movement from another county. Of these, only the size of the youth population shows a significant effect, and it is negative as with the chain analysis in Model 3. The pattern suggests that communities with high numbers of children support fewer restaurants in general, both chain and independent. If families eat at home more frequently, then such a pattern would make sense.

Table 2 presents the two-stage estimates of the structural equation models with the organizational form variables considered to be endogenous. Models 7–10 comprise the estimates for a simultaneous system using the born in another state demographic variable; Models 11–14 show comparable estimates for a specification using the moved from another county demographic variable. In both sets of estimates, the first two models (i.e.,

7–8 and 11–12) show the associated reduced form specifications including only the exogenous variables, whereas the second two models (9–10 and 13–14) show the structural estimates with the simultaneous endogenous component included.[17] For modeling clarity, we use here pruned specifications of the exogenous variables.

Models 7 and 8 continue to show patterns seen above in Table 1. Specifically, demographic instability as measured by the number of persons born in another state shows a significant and positive association with the prevalence of chains; it also shows no significant relationship with independent restaurants and a negative coefficient. Interstate highway linkages show a significant positive effect on chains and no significant effect on nonchains. Conversely, there is a positive and significant effect of high-income residents on nonchains, but no significant effect on chains. These patterns provide support for the identifying structural equation specification, which assumes that the effects of interstate linkages are exclusive to chains and that the effects of high-income residents are exclusive to nonchains. The results of this specification are reported in Models 9 and 10. These estimates reinforce and confirm above findings: the number of persons born in another state shows a positive and significant association with chains and no relationship with independents, interstate linkages positively affect chain prevalence, and high-income residents affect nonchains. The endogenous components of the model are both positive, suggesting that the two organizational forms work together to enhance community support for restaurants generally. However, neither effect is statistically significant.

Models 11–14 report a comparable specification using the movement from another county as the demographic stability variable. These estimates agree with those of the above specification: the demographic variable shows a significant positive effect on chains and no effect on independents, interstate linkages are positively associated with chains, high-income residents are positively associated with nonchains (falling just short of significance at the 5 percent level), and the endogenous components of the model show nonsignificant positive simultaneous relationships with each other.

DISCUSSION

We began this article by noting that recent sociological theory proclaims that food and restaurants are more tightly connected to culture and social identity than previously considered. With this backdrop, the age-old debate about chain versus independent restaurant organizations takes on nuanced meaning: it highlights the interpretations and cultural meanings that consumers read into their restaurant experiences, as well as the impact of the distribution of restaurant organizational forms on a local community's culture and identity. Accordingly, we set out to map the ecological niche of the chain restaurant form, asking which kinds of communities support chains.

Our theoretical arguments featured the role of demographic instability in fostering chains, but we also included popular arguments about income distribution, age distributions, suburban sprawl, and commuter populations. In the empirical analysis of data on over 17,000 restaurants in 49 urban counties across the United States, we found that demographic instability is associated with chain prevalence (and not with the prevalence of nonchains or independents) in a community.

Estimates of various models support the argument that demographic instability in a community proves conducive to chain restaurants and not to independents. Our

Table 2. Simultaneous Equation Estimates of Restaurants Per Capita by Organizational Form

	First Stage: Chains Model 7	First Stage: Nonchains Model 8	Second Stage: Chains Model 9	Second Stage: Nonchains Model 10	First Stage: Chains Model 11	First Stage: Nonchains Model 12	Second Stage: Chains Model 13	Second Stage: Nonchains Model 14
Chain restaurants				1.09				.946
				(.734)				(.887)
Nonchain restaurants			.098				.014	
			(.215)				(.268)	
Dummy for West	.074	−.175*	.092	−.256	.058	−.249*	.061	−.303*
	(.046)	(.078)	(.075)	(.125)	(.048)	.072)	(.090)	(.123)
Dummy for South	.222*	−.291*	.250*	−.532*	.174*	−.343*	.178	−.507*
	(.057)	(.051)	(.094)	(.195)	(.053)	(.062)	(.120)	.188)
Dummy for Midwest	.178*	−.171	.195*	−.365	.156*	−.194*	.158*	−.342
	(.057)	(.090)	(.067)	(.195)	(.059)	(.084)	(.074)	(.202)
Born in another state	.203*	−.239	.226*	−.459				
	(.098)	(.232)	(.109)	(.289)				
Moved from another county					2.42*	.851	2.41*	−1.44
					(.787)	(1.45)	(.827)	(2.87)
High income residents	2.10	21.4*		19.1*	.226	16.7		16.5
	(6.24)	(9.84)		(8.61)	(5.34)	(11.5)		(8.87)
No. of interstate linkages	5.41*	5.88	4.84*		4.58*	4.33	4.52*	
	(2.23)	(4.93)	(2.19)		(2.10)	(4.93)	(2.12)	
Constant	.226*	1.00*	.127	.759*	.192*	.985*	.178	.803*
	(.059)	(.084)	(.252)	(.234)	(.057)	(.079)	(.296)	(.237)
Observations	49	49	49	49	49	49	49	49
R-squared			.46	.30			.53	.29

Note: Robust standard errors in parentheses.
* $p < .05$.

interpretation is that demographically stable communities support a local restaurant organizational population due to a combination of general familiarity, preference for restaurants that support a local identity, and active protection of that identity.

The empirical analysis also found positive associations of: (1) interstate highway linkages and chain restaurant prevalence and (2) high-income residents in a community and independent restaurants. Both of these findings agree with popular expectations. By contrast, the negative association of the size of the youth population with chains appeared as an anomaly until we also found the youth population to be negatively associated with independents, suggesting that communities with lots of families with children simply support fewer restaurants, because such families tend to eat out less. In auxiliary analysis (not reported here), we found that measures of single-person versus multiperson households had effects that were very similar to the effects of the size of the youth population, lending further support for this view.

Demographic instability in a community might arise from several mechanisms. In our view, the most interesting distinction for this study involves community growth versus churn or high migration in a somewhat stably sized community. Both yield unstable demographies but usually for very different reasons. Further analysis not reported in detail here suggests that it is primarily the latter types of communities that attract chain restaurants—the effect of recent (last five years) human population growth does not show significant effects. An interpretation of this pattern is that chain restaurant prevalence does not simply reflect these organizations reacting more quickly to an expanding community. Rather, chains may be drawn to communities that lack a stable core population, which would thwart the assault on local identity implicit in the proliferation of chain restaurants within the community.

Exactly how, the specific mechanism by which demographically stable communities attract local establishments and repel chains, remains an open question. Is the influence on chains exerted through a relatively passive preference for local establishments, and avoidance of chains, because of the general preferences of long-time residents who feel secure in their identity? Or is the influence exerted through community-based social activity encouraging support for local organizations and hostility toward outsiders? A related question concerns how the chains make location decisions, and how chains approach and try to counter inhospitable environments. While we cannot answer these questions using the current data, they do suggest possible researchable ways to increase our understanding of the relationship between food, restaurants, and place identity.

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Notes

[1] Food as culture is a dominant theme in the social histories of Levenstein (1988, 1993), and the interpretative accounts of Ferguson (2004) and Fantasia (1995), among others. Restaurants as organizations has a long tradition and remains of interest for the ethnographies of Reiter (1991) and Fine (1992, 1995, 1996), and the social histories of Hogan (1997), Love (1995), and Spang (2000).

[2] For instance, Watson (1997) describes how McDonald's takes on very different identities and meanings in different developing countries. Carroll and Swaminathan (2000) claim that contemporary U.S. drinkers of microbrewed beers consume them because of the perceived authenticity of their organizational form rather than any real product characteristics. Searles (2002) links the identities of modern Inuits to their food consumption and discourse. Guy (2003) links champagne to the national identity of France, much as Boisard (2003) does the cheese camembert. Rao, Monin, and Durand (2003, 2005) trace the advent of the nouvelle cuisine movement in France to the cultural unrest of the late 1960s and show that restaurants need to manage their identities with respect to the nouvelle label carefully. Finally, Negro et al. (2006) find that the identities of traditional and modern (or international) wines define and structure much of the production regions of Brunello and Barolo in Italy.

[3] Although chain organizations pervade contemporary society, the form is not a recent invention. Within the U.S., early chains include the Great Atlantic & Pacific Tea Company (established in 1859), F. W. Woolworth (1879), and the Kroger Grocery and Baking Company (1882). By 1929, chains held 13.6 percent of sales in the restaurant sector, a figure which increased to 14.9 percent by 1933 (Phillips, 1937). A prominent early fast food chain was White Castle (Hogan, 1997).

[4] Consider the following early summary by Palmer (1929, p. 276): "The principal charges that have been leveled against the chains are the following: (1) They take money out of the local community and thus tend to bring about its impoverishment. (2) They drive out of business local retailers who are desirable citizens and whose interest should be protected. (3) They destroy the flavor of the community by their policies of standardization, and tend to 'depersonalize' the community. (4) They concentrate ownership in the hands of a few absentees, as a consequence destroying opportunities for young men. (5) They are tending to produce a 'nation of clerks' as a result of their policy of centralizing control at the home office. (6) They pay low wages. (7) They do not bear their full share of the local tax loads. (8) They practice unfair competition in order to destroy the independent merchant. (9) They tend toward monopoly and, if allowed to develop, will be able to control prices. (10) They disorganize distribution, forcing readjustments all along the line, thus raising the costs of marketing. (11) They exert undue influence in buying, thus compelling manufacturers to sell at less than cost. (12) They do not save money for the consumer, the popular impression that their prices are lower than those of the independent being a result of the use of 'leaders' and not based upon actual fact."

[5] Within California, these include Arcata, Berkeley, Calistoga, Carmel-by-the-Sea, Coronado, San Francisco, Pacific Grove, San Juan Bautista, Sausalito, and Solvang. Cities with chain-restricting laws in other states include Detroit MI, Bainbridge Island and Port Townsend WA, Bristol RI, Concord MA, Nantucket MA, Port Jefferson NY, Sanibel FL, Ogunquit ME, York ME, and Portland OR. And, in signs that this movement may become very widespread, active discussion by local officials about instituting such laws currently are occurring in Chicago, San Antonio, Palm Beach, and New York City, among other places.

[6] A specific example of such a definition can be found in the Nantucket warrant:
"Formula Business—A type of retail sales establishment, restaurant, tavern, bar, or take-out food establishment which along with 14 or more other establishments maintains two or more of the following features:

(1) Standardized menu or standardized array of merchandise with 50% or more of in-stock merchandise from a single distributor bearing uniform markings.
(2) Trademark or service mark, defined as a word, phrase, symbol or design, or a combination or words, phrases, symbols or designs that identifies and distinguishes the source of the goods from one party from those of others, on products or as part of store design.
(3) Standardized interior décor including but not limited to style of furniture, wall-coverings or permanent fixtures.
(4) Standardized color scheme used throughout the interior or exterior of the establishment.
(5) Standardized uniform including but not limited to aprons, pants, shirts, smocks or dresses, hat, and pins (other than name tags)." (ILSR, 2006)

[7] For instance, the Nantucket warrant barring formula restaurants states as its purpose:
"The purpose and intent of the Formula Business Overlay District (FBOD) is to address the adverse impact of nationwide, standardized businesses on Nantucket's historic downtown area. The proliferation of formula businesses will have a negative impact on the island's economy, historical relevance, and unique character. These uses are therefore prohibited in order to maintain a unique retail and dining experience. Formula businesses frustrate this goal by detracting from the overall historic island experience and threatening its tourist economy."

[8] Of course, many others support the chains either for specific reasons, or in principle, on the basis of fair play or the value of free markets. Supporters of chain restaurants point to their low prices, their high reliability, their job generation, their low failure rates, and their contributions to the local infrastructure and amenities. Community interest by chains also often serves to build confidence in an area among local business persons and investors.

[9] In terms of local community boundaries, cities, or municipalities might seem like a natural choice. But the contiguous development of neighboring cities makes the unit less meaningful as a boundary for social and economic life in dense urban areas; conditions in a neighboring area might affect the development of a particular place. Restaurant patrons, of course, are especially likely to cross city boundaries for dining; this fact could lead to both correlations of the same variables between observations in adjacent areas and direct effects of one variable on another variable observed in a different area.

[10] It is perhaps informative to locate our sample cities within Neal's (2006) four-fold classification of major American cities by restaurant consumptional identity. We can only locate a subset of places because his sample only consider cities of 100,000 persons or more, and includes many cities contiguous with other urban area. Nonetheless, we find some of our cities in each of his four categories: urbane oases, McCulture oases, urbane deserts, and McCulture deserts. As with his cities, the greatest numbers fall within the McCulture desert category.

[11] The Appendix gives a list of the 20 most prevalent chains identified in the sample, along with selected statistics.

[12] Some cities are surrounded by ring highways, which were coded as equivalent to a single spoke. Highways that do not run through the city, but pass between 2 and 10 miles away from the city limits, were assigned half weight. Any highways further than 10 miles away from the city limits were not included in the score.

[13] In other analyses, not shown in detail here, we estimated ordinary least squares (OLS) regressions with the number of chain restaurants specified as the dependent variable. Some analysts prefer this specification to that of a ratio-dependent variable. Because the sample design limits the population range of the counties, the numbers of franchises per county fall within a comparable range. The conclusions we draw from these analyses are basically consistent with those drawn from the findings reported here.

[14] Estimates of identical models with the other restaurant variable included on the right-hand side do not differ appreciably in their implied inferences, but we regard them as less defensible.

[15] We also ran these models with the control for independent (nonchain) restaurants, an ostensibly endogenous variable. Our conclusions about the demographic stability variables from these estimates do not differ appreciably.

[16] Of course, growth also induces demographic instability and it is reasonable to wonder if the movement variables do not spuriously reflect effects of growth. In models not shown in detail here, we have explored this possibility by including a control for population change over the last five years. These estimates show that the intercounty move effect remains strong and positive, while the growth variable is not significant. This finding increases confidence in the community demographic stability interpretation.

[17] The structural equation estimates also show robustness to minor specification changes.

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APPENDIX: TWENTY MOST PREVALENT CHAINS IN SAMPLE (BY THE NUMBER OF ESTABLISHMENTS)

	Name	Number of Est.	Average Sales Volume	Average Number Employees
1	Subway	361	1,450,152	16.3
2	McDonalds	353	981,614	40.7
3	Pizza Hut	240	268,619	12.2
4	Burger King	224	2,304,252	88.1
5	Dairy Queen	190	521,095	24.7
6	KFC	184	518,763	18.2

APPENDIX: (CONTINUED)

	Name	Number of Est.	Average Sales Volume	Average Number Employees
7	Wendy's	162	3,824,786	65.6
8	Taco Bell	157	1,034,185	45.9
9	Arby's	129	617,884	22.5
10	Dominos Pizza	115	731,406	29.0
11	Whataburger	101	585,986	26.7
12	Jack In The Box	90	171,444	9.5
13	Starbucks	82	NA	NA
14	Sonic Drive-In	75	352,599	16.7
15	Little Caesars	67	301,149	11.6
16	Papa Johns	66	356,985	15.2
17	Long John Silvers	65	7,185	0.2
18	Baskin-Robbins	63	219,683	8.7
19	Denny's	60	268,750	11.6
20	Hardees	53	116,590	4.4

Modalidades organizacionales de los restaurantes y su relación con la comunidad en los Estados Unidos en el 2005 (Glenn R. Carroll y Magnus Thor Torfason)

Resumen

Las teorías y estudios sociológicos recientes destacan el significado cultural de la comida, las bebidas y los restaurantes y la forma en están conectados con la identidad social. Un corolario de esta perspectiva implica que el predominio de restaurantes pertenecientes a cadenas corporativas afecta el carácter sociológico de las comunidades, como plantean muchos activistas, movimientos de base y académicos. El análisis presentado en este artículo tiene por objetivo identificar las características del nicho ecológico de los restaurantes pertenecientes a cadenas y los restaurantes independientes: qué tipo de comunidades tiende a apoyar el establecimiento de restaurantes de cadenas y qué tipo de comunidades tiende a apoyar el establecimiento de restaurantes y servicios de comida independientes. Analizamos los datos de una muestra realizada en el 2005 de 49 condados a lo largo y ancho de los Estados Unidos incluyendo más de 17,000 restaurantes en operación. Nuestro argumento es que la estabilidad demográfica afecta las modalidades organizacionales presentes en la comunidad. También abordamos planteamientos relativos a la distribución del ingreso, la distribución etaria, las tendencias poblacionales, la expansión de la marcha urbana de cada comunidad al igual que la proporción de personas que viaja todos los días a trabajar a otros lugares. Encontramos que las comunidades con composición demografica menos estable tienden a apoyar más el establecimiento de restaurantes de cadenas pero también hay otros factores como el crecimiento de los suburbios y el transporte público suburbano.