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Authenticity and Consumer Value Ratings: Empirical Tests from the Restaurant Domain

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We present two studies that together test a fundamental yet rarely examined assumption underlying the contemporary appeal of authenticity—namely, that consumers assign higher value ratings to organizations regarded as authentic. Study 1 conducts content analysis of unsolicited online restaurant reviews entered voluntarily by consumers in three major U.S. metropolitan areas from October 2004 to October 2011; the data contain information from 1,271,796 reviews written by 252,359 unique reviewers of 18,869 restaurants. The findings show that consumers assign higher ratings to restaurants regarded as authentic, even after controlling for restaurant quality in several ways. In addition, we find that consumers perceive independent, family-owned, and specialist (single-category) restaurants as more authentic than they do chain, non-family-owned, and generalist (multiple-category) restaurants. Study 2 reinforces these findings using an experimental design in which participants were presented with photos and minimal descriptions of fictitious restaurants and then asked to evaluate the likely authenticity, quality, and overall value of the restaurants in a predetermined sequence. Central to both studies is an authenticity scale that was developed through the use of an online survey that ascertains the specific language used by individuals in referencing authenticity in the restaurant domain. Taken together, these studies demonstrate that authenticity generates higher consumer value ratings of organizations; the studies also identify certain types of organizations that are more likely to receive authenticity attributions by consumers.

Keywords: authenticity; organization theory; restaurants; online reviews; consumer value ratings
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Introduction

With increasing regularity, social scientists recognize the widening appeal of authenticity among consumers making choices in advanced economies (Fine 2004, Koontz 2010). In domains of art, music, beer, tourism, chocolate, cosmetics, film, wine, architecture, furniture, neighborhoods, coffee and tea, crafts, politics, and food, analysts comment on the attraction to authenticity. Here and elsewhere in modern society, consumers increasingly embrace products, services, and forms of expression that exude and exemplify the authentic. As Potter (2010, p. i) proclaims, "The demand for authenticity—the honest or the real—is one of the most powerful movements in contemporary life, influencing our moral outlook, political views, and consumer behavior."

To benefit from this trend, consultants and marketing analysts have been quick to suggest that firms take aggressive and broad action. Brown et al. (2003, p. 21) opined over a decade ago that "the search for authenticity is one of the cornerstones of contemporary marketing." Gilmore and Pine (2007, p. 5) assert that "in industry after industry, in customer after customer, authenticity has overtaken quality as the prevailing purchasing criterion." The Australian consulting firm Principals (2013) announces on its Authentic Brand Index Web page that "the stronger a brand's Core Authenticity, the more likely people are to become advocates for the brand, and the greater the share a brand will have of high value customers in its market." And Beverland (2009, p. 3) claims that "more authentic brands have higher levels of equity in their category than other comparable brands."

The presumption behind these observations and recommendations is that consumers place value in the authentic. Yet systematic demonstrations showing that individuals translate authenticity attributions about a product, service, or organization into higher value ratings are rare (we know only of two highly limited attempts—Derbaix and Derbaix 2010 and Castéran and Roederer 2013—which we discuss in detail below). Instead, many attributions of authenticity rely on the analyst's subjective interpretations of observed consumer behaviors rather than systematic analyses of consumers' stated preferences (e.g., Peterson 1997, Rose and Wood 2005, Botterill 2007, Beverland et al. 2008, Beverland and Farrelly 2010, West 2010). Although often very insightful, two potential inferential problems arise with this interpretive approach. First, consumers

may use authenticity as a subtle or sophisticated way to convey quality judgments, meaning that the purported association with value ratings is spurious or epiphenomenal. Second, the attribution of authenticity may be a post hoc rationalization of a prior assessment of value rather than a trigger of it, a process consistent with claims that consumers are involved in "self-authentication" (Arnould and Price 2000, Rose and Wood 2005). Both issues are recognized in various interpretive studies and raise questions about authenticity in contemporary markets: Is it really important? Does it drive consumer behavior in any unique ways?

In attempting to address these questions, we conducted a set of two systematic studies of authenticity in organizational settings. Central to both studies was the identification of words that individuals use when referencing authenticity. Attributions of authenticity are embedded in cultural language and made through rhetoric. We thus first used an online survey to identify specific words used to refer to the concept of authenticity and assigned a score to each word that denotes the strength with which the word is associated with authenticity (or inauthenticity). The resulting scale reflects how authenticity claims are communicated and allows for the objective study of authenticity in the two studies.

In Study 1, we analyzed the complete set of ratings that patrons voluntarily assigned to restaurants in online restaurant reviews in three major U.S. cities across a seven-year period. We tested for empirical associations between descriptors of authenticity used in the discursive public commentary about a restaurant on the one hand and the approval ratings assigned to the restaurant by a focal reviewer on the other hand. We introduced several different kinds of controls for quality assessments about the restaurant and its offerings in an attempt to isolate the effects of authenticity. We also investigated the empirical associations between organizational characteristics and perceptions of authenticity.[1] This study offers evidence for the claim that consumers value authenticity above and beyond quality. It also offers insight into the possible ways that certain kinds organizations might project an image of authenticity.

In Study 2, we recruited participants to an online survey with an experimental design that presented photos and minimal descriptions of fictitious restaurants. We asked participants to first evaluate the likely quality of the restaurant shown, then to assess its authenticity, and finally to make an overall value judgment of the restaurant. The experimental environment offers better control over information used by the respondents and makes the responses private. Moreover, because of the temporal ordering of prompts built into the experimental design, this study gives potentially stronger clues about causal direction. It also attempts to replicate the findings related to the organizational antecedents of authenticity.

Through these two studies, we aim to make several contributions to organizational theory in general and to understanding authenticity in particular. First, we offer unique and rare tests of the widely held presumption that consumers place value in the authentic. The online reviewer test is unique in that it adopts the consumer's point of view and uses archival data recording actual detailed consumer remarks about an organization to ascertain attributions of authenticity as well as consumer ratings of overall value of the organization. The experimental test is unique in that it forces the authenticity attribution to precede the value rating. Importantly, both tests introduce multiple and different controls for the perceived quality of the organization and its products and services. Accordingly, we believe that these studies hold promise to elevate the concept of authenticity from a folk concept to one that bears scientific weight.

Second, we explore the extent to which organizations might generate higher value ratings by projecting authenticity to customers and other publics. We do this by examining how perceptions of authenticity vary across certain types of organizations. In particular, we draw on research about firm ownership to examine whether independent and family-owned firms are more likely to be perceived as authentic. We also draw on theory about institutional categories and organizational niche width to investigate whether specialist organizations are more likely than their generalist counterparts to be regarded as authentic. Investigation of these issues not only contributes to an understanding of how organizations might go about creating an image of authenticity but it also deepens and extends the broader body of contemporary research on organizational identity.

Third, we identify specific words that are used to communicate claims of authenticity and inauthenticity in the food and dining context. Not only does this effort show how authenticity is embedded within the cultural language, it provides a tool that can be used in further research on authenticity.

Theoretical Framework

Authenticity and Consumer Value Ratings

Consumers frequently make assessments of the value of organizations and their offerings. The value of a product or service offered to a consumer can be regarded as the person's "overall assessment of the utility of a product [or, brand, service, or experience] based on perceptions of what is received and what is given" (Zeithaml 1988, p. 14). The dimensions of value are often categorized as emotional, social, functional, and financial (e.g., Sweeney and Soutar 2001), but at its core, value is an assessment of what is given up for what is received (Gupta and Zeithaml 2006).[2] Consumers are largely "value driven" (Sweeney and Soutar 2001) in that value ratings tend to drive consumer choice and action.

Consumer value ratings are increasingly declared in public forums through online reviews that are posted on producer websites, review websites such as Yelp, or both. The impact of these consumer value ratings on organizational performance is noteworthy; one recent study reported that a one-star increase in Yelp ratings for a restaurant leads to a 5%–9% increase in revenue for that restaurant (Luca 2011). Simply put, consumer value ratings are of critical importance for organizational performance and even survival.

The primary research question addressed here is whether the authenticity of an organization affects the consumer value ratings of its offerings. In abstract formulation, authenticity can be defined as an attribution accorded by social agreement to certain objects, persons, or places—entities, in a general sense—about whether the entity is "genuine" or "real" (Trilling 1972). When it pertains to goods and services transacted in a market, the value accorded authenticity is usually regarded as conveying direct literal meaning: objects perceived as authentic are considered more valuable than other inauthentic objects with the same characteristics. As Lindholm (2008, p. 1) observes, "Authenticity, in its multiple variations, exalted and ordinary, is taken for granted as an absolute value in contemporary life." Similar observations arise in a variety of specific contexts where sociologists and others study market processes. For instance, Fine (2004, p. 237) notes that in the market for self-taught art, "authenticity becomes a credential" that signifies value. In analyzing the market for urban hip-hop music, Samuels (2004, p. 152) points out that "authenticity sells records." In studying country music, Peterson (1997, p. 211) recognizes that, "authenticity imputes value relative to inauthenticity." Chen (2009, p. 65) states that "people seek out . . . authenticity . . . to validate worth." In all of these cases, authenticity is believed to enhance consumer value ratings and thereby generate value for the producer. Grazian (2005, p. 17) goes so far as to describe "a symbolic economy of authenticity" where perceptions about authenticity take on "an arbitrarily measured kind of value, like money."

When defined in technical terms that can be answered with objective facts, the value of authenticity is self-evident. For example, a painting that is represented as a Picasso either was painted by him or was not.[3] If Picasso was indeed the painter, then it is an authentic Picasso; if not, the painting is a copy, replica, or fraud. Obviously, the original Picasso accords greater value than a replica. The focus in such cases is on authenticity as originality, or what Dutton (2003) calls "nominal authenticity" (see also Becker 1982). So defined, authenticity can be objectively and definitively evaluated based on a set of pertinent facts—a painting was either painted by Picasso or not, a gown was either worn by Princess Diana or not, and so on—and the underlying facts are potentially knowable, even if hard to ascertain without ambiguity. An object can gain value from nominal authenticity if it possesses a "historical link to a person, event, time, or place of some significance" (Frazier et al. 2009, p. 1); this effect is known in social psychology as a contagion effect. There is also evidence that value derives from nominal authenticity because individuals regard originals as unique creative expressions (Newman and Bloom 2012).

In the modern context, however, authenticity is often a more problematic concept because it is frequently a social construction. Authenticity is socially constructed when various facts can point in different directions and authenticity can be put in doubt (Trilling 1972). As such, authenticity is ultimately not about facts per se but rather about interpretations regarding those facts (Beverland et al. 2008, Carroll and Wheaton 2009, Potter 2010). When objectively analyzed, the facts upon which interpretations about socially constructed authenticity rest may be ambiguous or even superfluous. For instance, wearing a cowboy hat and boots may make a musician appear as an authentic country performer, yet these facts obviously have nothing to do with the music itself (Peterson 1997). Moreover, when socially constructed, definitive evaluations about whether an entity is authentic or not become virtually impossible because there is no objective answer to the question and because interpretations vary across audiences and change across time (Grazian 2005).

Whether or not a producer is regarded as authentic often depends on the identity of the producer rather than specific characteristics of the products or services it offers. As Fine (2003, pp. 175–176) explains about the art of self-taught artists,

> What is true of art worlds generally, nowhere is truer than in the artistic domain of self-taught art in which the authenticity of the artist justifies the authenticity of the art work. . . .
>
> Perhaps the work is more important than the story, . . . but at the moment the "who," the identity, matters greatly. . . .
>
> Ultimately self-taught art is a form of identity art in which the characteristics of the creators matter as much as the characteristics of the work.

Potter (2010, p. 80) illustrates this point when he talks about pop star Avril Lavigne's authenticity resting more on her ability to skateboard rather than to write songs, given her projection as "a real-deal skater chick from the streets of small-town Ontario." Similarly, the authenticity of hip-hop artists rests upon their "street credibility," life experiences, and acts that usually have little to do with any technical aspect of their music (Samuels 2004).

Just as the authenticity of a painting or music recording might hinge on the identity of the artist who created it, so too does the authenticity of a product or service often depend on the identity of its underlying

producer organization. Accordingly, we focus on producer organizations because it is the producer that makes products, offers services, and provides experiences for consumers. It is typically the underlying producer organization's identity that is evaluated when consumers make and verbalize authenticity attributions. It is also, of course, the producer organization that stands to profit from such attributions of authenticity. Moreover, many modern organizations go to great lengths to project an image of authenticity, believing it will create value for them (Holt and Cameron 2012).[4]

When authenticity depends on the subjective interpretations of an organization's identity, it often possesses a kind of cultural character. That is, interpretations of authenticity by consumers typically involve the "automatic" activation of institutionalized social codes of what is collectively regarded as authentic. The collective definition of what is authentic for any particular entity evolves over time as consumers engage with producer organizations and as they conduct dialogues with each other.

The touch point for making attributions of authenticity is thus language. Attributions of authenticity are made when a person verbalizes something that invokes the concept of authenticity; this might entail the use of the word "authentic" or any of a host of words closely associated with the concept. For example, commentary describing an organization and its offerings as authentic might use language such as "real," "true," or "genuine." Alternatively, commentary describing an organization and its offerings as inauthentic might use language such as "fake," "bogus," or "sham." Irrespective of the particular words used, language is at the foundation of making attributions of authenticity, and these attributions become shared when they are articulated and their meanings are commonly understood.

For this reason, we seek to investigate empirically the widely held assumption that authenticity imputes value for an organization by focusing on the rhetoric and specific words used by consumers to articulate authenticity. An advantage of this approach is that a major part of the empirical investigation relies directly on the explicit representational claims made by consumers about authenticity rather than viewing the claims through an analytical filter. That is, we initially take consumers' expressed attributions about authenticity at face value and do not attempt to reinterpret them. In this sense, the analysis builds models based on the "observable" comments of consumers.

We know of only two other empirical studies that attempt to measure a systematic empirical association between authenticity and consumer value ratings. In the first, Derbaix and Derbaix (2010) questioned attendees at "generational" music concerts (comeback tours referred to in French as *Âge tendre et Têtes de bois* concerts). To measure authenticity, they used a survey asking for Likert-type responses to 12 questions underlying the authenticity scale of Camus (2004). The authenticity questions ask for the extent of agreement to statements such as "the Âge tendre concert is a little like a reflection of my personality" and "the Âge tendre concert defines me." To measure value ratings, they asked for Likert-type responses to statements such as "I really enjoyed going to this concert" and "during this concert I shared strong emotions with the rest of the audience." The responses were used in developing LISREL-based structural measurement models with key latent variables of perceived authenticity and value ratings, which were found to be positively correlated. In the second study, Castéran and Roederer (2013) conducted an online survey of opinions about the Strasbourg Christmas market (SChM) in 2010, using links in local newspapers and the city's site as well as direct emails. (One apparently did not need to attend to answer the survey questions.) To measure authenticity, 645 respondents were asked to indicate their Likert-like degree of agreement with seven items from another Camus (2010) scale of authenticity. The items contained statements such as "the SChM is the original, not a copy" and "the SChM includes artificial elements." These items were then regressed on responses to questions about how often the fair was visited and how recently. The estimates are interpreted as implying that perceived authenticity leads to more visits (30.2% more) and a more recent visit (by 22 months). The analysts then used archival data on the attendance and money spent to calculate that a one-point decrease in authenticity would represent a potential annual loss of 17.6 million euros.

Even though these studies offer some evidence for the claim that authenticity imputes value, the evidence is limited. Both studies used far less direct measures of authenticity that do not consider how attributions of authenticity are embedded in language, leaving interpretation open in our view. Moreover, both studies captured measures of authenticity and value from the same source, questioning claims of causality. In addition, both examined very different social contexts, which appear to by highly idiosyncratic, putting generalizability into question. We believe that the set of studies we present overcomes these obstacles.

We conducted our empirical investigation at two levels of analysis, each of which we regard as theoretically significant. On the one hand, the authenticity of a producer organization only generates value to the extent that the consumer herself perceives the organization to be authentic. So attributions of authenticity may vary from one consumer to the next, and such variations can be expected to create variations in value ratings across consumers. As such, the effects of authenticity on consumer value ratings can be regarded as an individual-level phenomenon reflecting an individual's perceptions and cognitions. On the other hand, the authenticity of a producer organization is generally

collectively agreed upon through public discourse and other means; it possesses shared meaning that is conveyed through the interpretation of its identity. In other words, collective attributions of authenticity for a given producer will emerge, possibly even fluctuating over time, and should vary from one organization to the next. Such variations can be expected to correspond to variations in collective ratings of value across organizations if shared cultural meaning is involved. As such, the effects of authenticity on consumer value ratings can also be appropriately regarded as an organization-level phenomenon. Both levels are addressed in the empirical analysis. In sum, we hypothesize that organizations will be more highly valued by consumers to the extent that the organization is regarded as authentic, even after accounting for ratings of quality.

HYPOTHESIS 1. *Organizations referred to as authentic by consumers will generate higher consumer value ratings.*

Ownership Structure and Authenticity

The ownership structure of an organization can play a significant role in shaping perceptions of its identity. Chain-affiliated organizations may be the most visible manifestation of this phenomenon in contemporary society. Examples include large big-box retailers such as Walmart and Home Depot as well as pervasive chain restaurants such as McDonald's and KFC. For decades, activists and social critics have viewed the chain form of organization as corrosive to local community values, social attachment, and solidarity (Ingram and Rao 2004). Others indict chains for fostering a standardized lifestyle and culture in conflict with the expression of distinctive—that is, authentic—social identities (Zukin 1998). In certain communities, activists have even persuaded their local governments to adopt regulations that restrict the entry and proliferation of chains. In the case of contemporary chain restaurants, the stated reasons for excluding chains involve the preservation of a community's distinctive social and economic life. The individuals behind these efforts are of the view that "the neighborhood character is best enhanced by independently owned mom and pop businesses" which would "preserve a 'sense of place'" (Walkup 2006, p. 1). Some communities and activists oppose chains because "there is a sense that the chains impart a feeling of homogenization and sameness" (Murphy 2006, p. 1). Consequently, one can expect chains to be regarded as inauthentic because they involve the routinized application of formulas of operation, usually in the interests of efficiency and a profit motive (Carroll and Torfason 2011).

By contrast, independent businesses are thought by many to reflect more individualistic or original expression, or at least to the have the potential for doing so. For instance, sociologist Deener (2007, p. 292) concludes that in Venice, California, "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." Independent businesses will also reflect greater diversity in look, operations, and the like than will a set of chain organizations. At the far end of the spectrum from chains lie family-owned businesses, those organizations owned and operated by identifiable community members. Family businesses tend to be smaller in size, do not always appear to be profit maximizers, and often reflect the idiosyncrasies of their owners. The homogeneity and standardization that leads to the rejection of a chain restaurant is overcome by the down-home touch often found in family businesses.

For these reasons, we suspect that consumers will tend to regard independent organizations, and especially family-owned businesses, as more authentic than others. Beverland (2009) claims that explicit family ownership and involvement provides a visible connection to the people behind the business; he relates that "consumers often tell stories of meeting family members, and affectionately refer to them on a first-name basis" (p. 44). We surmise that this type of perception is enhanced by the oppositional way that activists and others have framed chains on the one hand and independent and family-owned businesses on the other. When the scale and efficiency of corporate chains cause a community's independent and family businesses to fail, the associated attributions of inauthenticity and authenticity likely become more compelling. Consumers will likely be able to more easily identify the social values and associated actions of independent and family-owned organizations than those belonging to a chain. In sum, we propose that independent and family-owned organizations will be regarded as more authentic than their chain and corporate-owned counterparts.

HYPOTHESIS 2A. *Independent organizations are more likely to be regarded as authentic than chain-affiliated organizations.*

HYPOTHESIS 2B. *Family-owned organizations are more likely to be regarded as authentic than corporate-owned organizations.*

Institutional Categories and Authenticity

An organization's identity might arise in part from proactive measures undertaken by the organization itself. For example, an organization can shape its identity by using names that project an authentic image, by marketing stories—true or untrue—that highlight its historical roots or the originality of its products, or by making visible processes that highlight its craftsmanship (Guy 2002, Beverland 2005). At an even more basic level, an organization may be able to shape its identity, including its authenticity, by positioning itself relative to existing

institutional categories, what some theorists call "niche width."

An organization's niche width can be defined relative to existing institutional categories (Hsu et al. 2010). First, it can operate exclusively within a single existing category. For example, a restaurant that serves only Chinese food or a music recording company that records only traditional country music would occupy a single category. This positioning corresponds to organizations often regarded as specialists. Second, an organization could operate within multiple existing categories at the same time. For example, a restaurant may serve both Chinese and Indian food or a music recording company may produce country music with a pop flair. Such organizations are seen as generalists, to a degree that can be measured and compared. Third, an organization could fall outside the scope of any existing institutional categories, perhaps in an effort to create its own original style.

Organizations that fall clearly into a single institutional category are easier for observers to understand and evaluate than producers that span multiple categories. The social codes used for identifying and evaluating single-category organizations are less ambiguous and more coherent (Zuckerman 1999, Hsu 2006). Producers spanning multiple categories often display features unlike those of any of the single-category specialists, and this makes them more difficult to evaluate (Kovács and Hannan 2010). Moreover, audiences can perceive category spanning as an indicator of low skill and hence lesser value (Phillips and Zuckerman 2001, Hsu et al. 2009). Because claims about authenticity require evaluation to resolve (especially when the end result is a positive resolution), single-category membership makes this process easier because default schema can be more readily invoked. We therefore postulate that single-category restaurants are more likely to be regarded as authentic than those occupying multiple institutional categories.

HYPOTHESIS 3. *Organizations will be regarded as more authentic to the extent that they operate within fewer institutionally defined categories.*

Research Design Strategy

In testing these hypotheses, we designed and executed two interrelated studies that explore different aspects of the relationship between authenticity and value. Both studies are situated in the restaurant domain, in which we find it appealing to study authenticity for several reasons. First, restaurant patrons and critics frequently refer to the authenticity of food and restaurants when discussing their experiences and preferences. As we describe below, we uncovered thousands of reviews in which people explicitly mention authenticity and closely related words. Second, restaurants vary widely in their perceived authenticity as collectively agreed upon by reviewers, ranging from "phony" and "bogus" to "truly authentic." Third, multiple public sources provide information on restaurants that allows for the control of other important distinctions such as the price; the type of cuisine; and, most importantly, the quality of food, service, and décor.

The two studies were conducted in sequence and build on each other in compiling evidence that attempts to overcome the objections and methodologies of either study in isolation. Central to both studies was an authenticity scale, which was developed through the use of an online survey about authenticity; it was designed to identify the exact language descriptors consumers use when attributing authenticity. It took the identified descriptors and created a scale of words implying authenticity in common discourse to some degree or another.

The first study involved a statistical analysis of self-prompted online consumer reviews of all restaurants in three major cities; it was designed mainly to estimate the strength of the empirical association between restaurant authenticity on the one hand and consumer value ratings on the other. This study uses the authenticity scale to assess and quantify the actual textual comments made by reviewers regarding specific restaurants. Moreover, this study introduces several variables that can be regarded as controls for restaurant quality. The study also estimates the strength of the empirical association between a restaurant's attributed authenticity and organizational characteristics of family ownership, independent (non-chain) status, and narrow market niche width (specialism).

The second study used an experimental design and imposed a predetermined sequence on consumer attributions and value ratings. The experiment presented participants with photos and short descriptions of fictitious restaurants written in ways that introduced variations corresponding to the findings of the second study. Specifically, participants were given clues that some restaurants were family owned, some independent, and some specialized in their types of cuisine. Participants were then asked initially to provide (1) the likely price and quality of the restaurant, (2) the likely descriptors used by consumer reviewers (chosen from a menu using words from the authenticity scale), and finally (3) the overall rating they would likely give the restaurant. This study was intended to provide additional "cleaner" evidence about the associations discovered in the first study because the amount of information available to respondents is greatly reduced; responses are also private rather than public. A primary purpose for the experiment was to force an ordering in the prompts and responses to ensure that the authenticity attribution preceded the value rating, thus reducing the likelihood of reverse causation through post hoc rationalization or reduction of cognitive dissonance. Such a control seems pertinent given claims in marketing research

about self-authentication as a driver of the consumption of goods and services perceived as authentic (Beverland and Farrelly 2010).

Identifying Words Expressing Authenticity

How do consumers make claims and attributions of authenticity? What language do they use? Which specific words are invoked? Some previous research on authenticity analyzes various kinds of texts and dialogue about a product or firm and then attempts to infer authenticity as a possible underlying meaning. For example, in searching for authenticity messages in advertisements of jeans, Botterill (2007, p. 115) claims that settings presenting "the desert, the rooftop, the edge of town, the street, [or] the everyday . . . can be understood to encode enticements of authenticity." In athletic shoe ads, she also claims that Reebok's link of its brand to hip-hop "resonated with authenticity, not only because its roots lay in black musical cultures, but because it calls forth the creative expression of audience members" (p. 119). Similarly, West (2010) interprets the use of popular and pure aesthetics by individuals in response to greeting card sentiments as reflecting their understandings of authenticity.

By contrast, we prefer to stay closer to the raw data—to literal interpretations of texts and language—by taking respondents' comments at face value. Thus, rather than infer a broader reference to, say, a specific type of setting as implying authenticity, we believe it is more credible and reliable to use words that expressly articulate the idea of authenticity or some synonym thereof. This is a conservative approach to measurement and holds great potential value in its transparency and ease of replication. We also think this approach helps in understanding public discourse about authenticity because these words possess shared meaning.

To identify specific words that individuals commonly use to describe authenticity, we used a novel kind of survey. Participants were recruited from an online participant pool of a major private West Coast university. A total of 35 participants (16 men and 19 women, with an average age of 37 years) signed up to fill out a "survey on restaurants" for a $5 gift card. The survey was conducted through an external survey platform called All Our Ideas (http://www.allourideas.org). Participants were presented with a simple instruction (italics in original): "Please choose the word below that would best describe a restaurant as *authentic*," along with a series of two-word pairs. For each pair of words, the participant was asked to choose which of the two words was most appropriate. Participants could also choose an "I can't decide" option, in which case they could answer either "because both are good answers" or "neither are good answers." The pairs of keywords were randomly selected from a keyword list that we describe below. This format was used because it allows for simple and direct comparisons between two words, which has been shown to place a much lighter cognitive burden on participants than alternative structures such as rank-ordering a long list of keywords in decreasing order of relevance (Thurstone 1927, Salganik and Levy 2012). Each participant was asked to complete at least 50 such comparisons in order to receive the gift card.

The list of keywords used in the surveys came from two sources. First, we generated an initial list of keywords by seeking synonyms of "authentic" and "inauthentic" (as well as antonyms of "authentic") found in the 2012 editions of *Roget's Thesaurus Online* and *Merriam-Webster's Online Thesaurus*. This resulted in 56 keywords. Second, participants were allowed to propose new keywords that they considered related to the prompt to which they were responding. We reviewed these proposals as they appeared; each proposed word was added to the keyword list unless it was clearly unrelated to authenticity (e.g., "cold"). An additional 34 keywords were added in this way (see Table 1 for the full list of keywords). Keywords added later in the process would typically have fewer numbers of observations in randomly selected keyword pairs, but the All Our Ideas platform increases the chance that such keywords will be presented (Salganik and Levy 2012). Each keyword was presented an average of 58 times, and 2,624 pairwise comparisons were completed.

An important feature of the All Our Ideas platform is that it can be used to estimate "public opinion" from the set of pairwise votes. Using a Bayesian algorithm (described in Salganik and Levy 2012), the platform assigns a number between 0 and 100 to each keyword. This number comes from the aggregation of the individual votes and reflects the probability that the keyword will be chosen as a "winner" when presented as an answer. An attractive feature of this scoring system is that it may be interpreted as capturing the subjective nature of interpretations of authenticity; words with lower scores reflect claims about which there is less agreement about its interpretation and perhaps less confidence in the underlying judgment.

Table 1 shows the scores assigned to the resultant keywords based on the survey results. As might be expected, the keyword that received the highest authenticity score is "authentic" with 95 points, denoting that the algorithm predicts that when the option "authentic" is presented, it will almost certainly be chosen by the respondent. Other words that scored high on authenticity include "genuine," "real," "skilled," "faithful," "legitimate," "original," and "traditional." Alternatively, the lower the score (i.e., closer to 0), the more strongly the keyword is associated with inauthenticity. Scores around 50 denote keywords that are weakly associated with authenticity and inauthenticity. For easier interpretability, in the analyses we present below, we renormalized the 0–100 authenticity score to a -1 to $+1$ scale, where -1 denotes perfect inauthenticity and 1 denotes perfect authenticity.

Table 1 Authenticity Scores Assigned to Keywords

Keyword	Score	Keyword	Score	Keyword	Score	Keyword	Score
Authentic	95	Truthful[a]	68	Usual	53	Bogus	13
Genuine	92	Unmistakable[a]	68	Decent[a]	51	Forgery	13
Real	88	Artisan[a]	67	Unusual	51	Fake	12
Skilled[a]	83	Unpretentious[a]	67	Caring[a]	49	Hoax	11
Faithful	81	Heartful[a]	66	Ambitious[a]	48	Cheat	10
Legitimate[a]	81	Delicious	65	Replica[a]	46	Dishonest	10
Original[a]	80	Virtuous	64	Offbeat	43	Feigned	10
Traditional	79	Normal[a]	63	Atypical	41	Ersatz	9
Pure	78	Creative[a]	62	Unassuming[a]	37	Faked	9
Historical[a]	77	Interesting[a]	62	Invented	36	Imitation	9
Sincere	77	Orthodox[a]	62	New[a]	36	Quack	9
Master chef	75	Artful[a]	60	Unconventional	36	Unreal	8
Craftsmanship	74	Special[a]	60	Peculiar	35	Humbug	7
Honest[a]	74	Righteous	58	Outlandish	32	Impostor	7
Integrity[a]	74	Substantial[a]	57	Assumed	30	Sham	7
Quintessential	74	Authoritative	56	Idiosyncratic	30	Unauthentic	7
Expert	73	Typical	56	Quirky	29	Deceptive	6
Iconic[a]	73	Awesome[a]	55	Extroverted[a]	28	Inauthentic	6
Inspiring[a]	73	Moral	55	Modern	27	False	6
Unique[a]	72	Eccentric	54	Unorthodox[a]	27	Phony	5
Wholesome	72	Ethical[a]	54	Pretentious	19	Scam	4
Professional	70	Fresh[a]	53	Untraditional[a]	17		
Skillful	70	Old-fashioned[a]	53	Artificial	14		

[a]Keywords added by participants.

The final list of keywords represents the core language of authenticity claims in the United States in 2012 as communicated to others through public discourse. The score assigned to each word reflects a degree of agreement with the meaning and among others. The relative standing of words with respect to the concept accords well with the subjective nature of authenticity: assessment is not an objective or definitive matter. However, keywords and their associated scores allow for the systematic and objective study of authenticity in the two subsequent studies. This scale plays a central role in both studies presented here.

Study 1: Authenticity and Consumer Value Ratings in Online Restaurant Reviews

Study Design

The first study attempted to measure the strength of empirical associations between attributions made about authenticity and consumers' value ratings of the restaurants. Data for this study came from reviews of restaurants in three major cities—Los Angeles, Dallas, and New York—posted to the website Yelp. The website was founded in 2004 and generates its reviews through a voluntary process in which any patron can go online and write a review. Each review captures four pieces of information that are linked to the restaurant: (1) the reviewer identification code; (2) a star rating of value, ranging from 1 to 5 as an integer; (3) a text review of unlimited length; and (4) the date of the review. Reviewers can fill out the rating and the text of the review in whichever order they want; the website does not force any temporal ordering. The data cover the entire period of a restaurant's entry in Yelp, the longest of which could start in October 2004 and end at the time of the data collection in October 2011. In total, 1,271,796 reviews were provided across the three cities.

Yelp provides comprehensive coverage of restaurants in each of the three metropolitan areas of interest and includes a wide range of customer reviews. Alternatives such as Zagat, Open Table, and Trip Advisor cover fewer restaurants and display significantly fewer reviews. For example, in the Los Angeles area in the summer of 2011, Yelp shows 725,133 reviews of 9,734 restaurants, whereas Zagat offers reviews of only 1,891 restaurants; Trip Advisor, 3,308 restaurants; and Open Table, 1,050 restaurants. In addition, Yelp encompasses a broader audience than many food and gourmet magazines and media outlets (cf. Johnston and Baumann 2007). It is decidedly nonelitist in nature and, by virtue of its ease of accessibility and participation, appears to reach a broad population. The informal attitude, apparently held by many of its users, is reflected in its online self-description: "Yelp is an online urban city guide that helps people find cool places to eat, shop, drink, relax and play, based on the informed opinions of a vibrant and active community of locals in the know. Yelp is the fun and easy way to find, review and talk about what's great—and not so great—in your world" (Yelp 2012).

All establishments listed in each metropolitan area were sampled based on the following three criteria: (1) it was listed in the "restaurant" category on Yelp,[5]

(2) at least one review had been written about it, and (3) it was still operating in October 2011 (as the website only lists restaurants that are operating at the time of viewing). This sampling design yielded a total of 18,869 restaurants: 9,734 restaurants in the Los Angeles area (municipalities throughout Los Angeles County), 7,959 restaurants in New York City (including all five boroughs), and 1,176 restaurants in the city of Dallas. Although the sample sizes roughly correspond to the human populations of the areas, proportionately more restaurants are reviewed in LA than in Dallas or NYC. This is likely because Yelp originated in California and remains more popular on the West Coast. This difference does not obviously influence the findings in a particular way, and we do control for the number of reviews a restaurant receives.

Restaurants vary dramatically in the number of reviews they receive. A few get thousands of reviews (such as Philippe's in LA with 2,413 reviews and Ippudo in NYC with 3,149 reviews), but many get only a handful of reviews. The average number of reviews per restaurant in LA is 74.49 (standard deviation of 139.53); in New York, 63.91 (standard deviation of 117.95); and in Dallas, 32.33 (standard deviation of 43.10). Reviewers also vary in the level of their reviewing activity. Each reviewer can rate as many restaurants as he or she desires; there is no limit. In the LA sample, we find 151,295 unique reviewers; in New York, 104,825; and in Dallas, 10,439.[6] The average number of reviews per identified reviewer is 4.79 in LA, 4.85 in New York, and 3.64 in Dallas.

Variables and Measurement

Consumer Value Ratings. The consumers' value ratings was measured as the number of stars (out of five) assigned to the restaurant by the reviewer. The distribution of ratings in the data shows a tendency toward the higher scores: across the three cities, roughly 25% received a score of five stars, about 40% received four stars, approximately 20% received three stars, around 10% received two stars, and 5% received one star.

Authenticity. We conducted content analysis (Weber 1990) on the text of each review entered for each restaurant. The goal was to assess whether the reviewer described the restaurant as authentic or inauthentic and to what degree. The keywords and corresponding scores in the authenticity scale were used to assign an authenticity score to each review. Specifically, for each review we averaged the authenticity values of the all the words that appear in the review and are also listed in the authenticity keyword list in Table 1. (These scores are averaged for restaurant-level analysis; further details are provided in the next section.) A notable and highly attractive feature of this measurement strategy is its complete passivity and unobtrusiveness. There was no priming or prompting or stimulus designed to elicit a consumer's view of the authenticity of a place. Rather, we relied entirely on unsolicited voluntary comments regarding authenticity.

Ownership Structure. Ownership structure was measured in two ways. First, we measured whether the restaurant was affiliated with a larger chain. We identified chain restaurants by determining the number of restaurants listed with the same name in the metropolitan area. In NYC, 18.58% of the restaurants were part of a chain; in Dallas, 22.53%; and in LA, 12.42%. Second, we measured whether the restaurant is family owned or (family operated) by searching for the term "family-owned" (or "family-operated") in the text of the review. We flagged those restaurants identified by reviewers as family owned or operated.

Niche Width. Each restaurant is categorized into a particular cuisine such as American, Mexican, Italian, and so on. Some of the most common categories include terms such as "Mexican" (1,929 restaurants), "pizza" (1,408) "Chinese" (1,294), "Italian" (1,128), "Japanese" (832), "sandwiches" (789), and "American (traditional)" (773). Some restaurants are placed into a single category; others are placed into multiple categories. The categorization is done by the website, sometimes in consultation with the restaurant. An advantage of using this categorization is that the public relies on it to identify and interpret the restaurant. Category population was measured by the count of categories occupied by the restaurant. (Findings do not differ when using a single- versus multiple-category binary measure.)

Control Variables. Most notably, we controlled for the quality of each restaurant in an effort to demonstrate significant effects of authenticity above and beyond quality, even though some analysts include quality as an aspect of authenticity (see, e.g., Beverland 2009). We attempted to do so in two different ways. First, we analyzed the text of each review and parsed out quality-related words to develop word counts of these words. For example, the mention of words such as "excellent," "great," "supreme," and "first-rate" indicate that the reviewer thinks that the restaurant is high quality, whereas words such as "second-rate," "disgusting," "one star," and "terrible" indicate that the reviewer is not satisfied with the quality of the restaurant. Refer to Appendix A for the list of quality-related keywords. This list of keywords was developed through the compilation of synonyms for high and low quality.[7] Second, we used an independent rating service's data assessing quality; specifically, we obtained data with separate ratings on the quality of food, service, and décor from the Zagat Survey. We used the 2011 Zagat guides for Los Angeles, New York City, and Dallas to obtain these ratings. We matched these ratings on a restaurant-by-restaurant basis to the review data set

from Yelp. Because Zagat only reviews a fraction of all restaurants, statistical models using this control result in a significantly reduced sample size. Specifically, Zagat reviewed 1,907 out of the 7,959 restaurants in the NYC sample (24%), 1,047 out of 9,734 restaurants in the LA sample (11%), and 140 out of 1,176 restaurants in the Dallas sample (12%).

Other controls were also included. First, we used the price of the food served by the restaurant as a control variable. Yelp uses four categories to classify the price level of restaurant, indicating "the approximate cost per person for a meal, including one drink, tax and tips" (Yelp 2012). A "$" ranking denotes a restaurant bill that is "cheap, under $10"; "$$" denotes "moderate, $11–$30"; "$$$" denotes "spendy, $30–$61"; and "$$$$" denotes "splurge, above $61." For example, in the Los Angeles sample, 53% of the restaurants are in the lowest price range, 41% are in the $$ range, 5% are in the $$$ range, and the remaining 1% are in the $$$$ category. Second, we control for the age of the restaurant at the time of the review. Because the founding date of each restaurant is not available to us, we use the date of the first review as a proxy for the opening of the restaurant. Third, we control for the number of restaurants in the same cuisine in the same city as well as for the average rating of those similarly categorized restaurants. Fourth, we control for the extent to which reviewers are actively engaged in the online reviewing community (i.e., their "domain enthusiasm"). This was measured as the log of the number of reviews that the individual had written since 2004. Finally, we control for the geographical location of the restaurant by including zip code dummies. We also include year dummy variables to control for possible overall trends in reviewing behavior. Appendix B shows the descriptive statistics and the Pearson correlations for the variables used.

Levels of Analysis and Estimation

The tests were conducted at two different levels of analysis: review and restaurant. The review-level analysis is appropriate because value ratings are made by individuals, and these judgments are made on the basis of individual perceptions of authenticity (among other factors). For ease of interpretability, we present results of linear regression here, but alternative modeling frameworks such as ordered logit regressions yield similar conclusions. (Results are available from the authors upon request.)

The restaurant-level analysis is also theoretically meaningful because authenticity is collectively agreed upon through public discourse such that attributions of authenticity should be increasingly similar for a given restaurant even though they may indeed vary slightly from individual to individual. For this analysis, data were aggregated to the restaurant level by creating restaurant-month panels. Restaurants that had reviews but had less than two months of ratings had to be dropped; the resulting panel data contain the ratings of 17,121 restaurants and 405,706 restaurant-month observations (i.e., 23.7 observations on average per restaurant). Note that this is an unbalanced panel data set as the periods of observations differ across restaurants. To ensure that meaning was sufficiently shared to justify aggregation of the key variables, a standard within and between analysis (WABA) was conducted (Chan 1998, Bliese 2000, Klein and Kozlowski 2000). The intraclass correlation (ICC) analysis satisfies both criteria for aggregation: the F-value is significant at $p < 0.01$ ($F = 3.84$), and thus the data pass the ICC(1) criterion; the established reliability value is 0.734, which is above the 0.7 threshold, and thus the data satisfy the ICC(2) criterion as well (see Klein and Kozlowski 2000).

The restaurant-level analysis provides two additional inferential features that seem attractive when compared with the individual-level analysis. First, by virtue of the lags in the panel design, this analysis cannot suffer from a same-source bias because the lagged authenticity scores were derived from scores different from the consumer value ratings. Second, by virtue of the repeated observations on individual restaurant-organizations, we are able to use econometric methods to control for omitted organization-specific constant sources of noise, including especially constant organization-specific quality. (A cost of this approach is that we lose the ability to estimate the effects of certain organization-specific variables.) We believe that both features strengthen inferences about the nature of the effects.

We use two specifications commonly used to control for unit-specific noise—fixed-effects estimation and first-differences estimation. For the initial organizational-level analyses, we present fixed-effects linear regressions with value ratings at $t+1$ in the dependent variable and all other variables measured at time t. We then present first-differences models where the change in value rating over a period of time is the dependent variable and the change in authenticity and change in quality are the independent variables. To account for possible heterogeneity among reviewers and restaurants, we calculated robust standard errors. The estimates presented are quite robust; similar conclusions are drawn from ordinary least squares (OLS), random-effects, and generalized estimating equation (GEE) frameworks as well. Also, the reported findings do not change substantively with alternative approaches to standard error calculations, such as clustering on reviewers or clustering on restaurants.

Findings

Hypothesis 1 proposes that organizations referred to as authentic by consumers would generate higher value ratings. We start by presenting the review-level analyses. Table 2 presents estimates of linear regression models of

Table 2 Study 1: Linear Regression Estimates of Consumer Value Rating (Review-Level Analyses)

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
Authenticity score (*from focal review*)		0.351***	0.291***	0.294***				0.336***	0.293***
		(0.003)	(0.003)	(0.004)				(0.003)	(0.004)
No. of words in the review		−0.001***	−0.002***	−0.001***				−0.001***	−0.001***
		(0.000)	(0.000)	(0.000)				(0.000)	(0.000)
Authenticity score (*from previous reviews*)					0.638***	0.418***	0.193***	0.566***	0.127***
					(0.009)	(0.009)	(0.016)	(0.009)	(0.016)
No. of reviews for restaurant (in thousands)	0.197***	0.212***	0.192***	0.115***	0.201***	0.171***	0.101***	0.216***	0.118***
	(0.003)	(0.003)	(0.003)	(0.004)	(0.003)	(0.003)	(0.004)	(0.003)	(0.004)
Price	0.025***	0.044***	0.008***	−0.050***	0.014***	−0.026***	−0.067***	0.035***	−0.050***
	(0.002)	(0.002)	(0.002)	(0.003)	(0.002)	(0.002)	(0.004)	(0.002)	(0.003)
Age (in years)	−0.015***	−0.020***	−0.017***	−0.003**	−0.011***	−0.004***	0.003**	−0.017***	−0.002
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Domain enthusiasm of reviewer(*s*)	−0.042***	−0.033***	−0.034***	−0.017***	−0.042***	−0.042***	−0.026***	−0.032***	−0.016***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Mean rating for cuisine in city	0.910***	0.886***	0.790***	0.541***	0.865***	0.712***	0.550***	0.847***	0.540***
	(0.007)	(0.007)	(0.007)	(0.012)	(0.007)	(0.007)	(0.012)	(0.007)	(0.012)
No. of restaurants in city with same cuisine (in thousands)	−0.003***	−0.006***	−0.006***	−0.016***	−0.004***	−0.002**	−0.014***	−0.007***	−0.015***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Family owned	0.152***	0.140***	0.123***	0.005	0.124***	0.101***	−0.001	0.116***	0.002
	(0.008)	(0.008)	(0.008)	(0.015)	(0.008)	(0.008)	(0.015)	(0.008)	(0.015)
Chain	−0.011***	−0.011***	−0.009***	0.006***	−0.010***	−0.007***	0.006***	−0.010***	0.006***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Niche width	−0.005***	−0.001	0.001	0.011***	0.005***	0.004**	0.011***	0.008***	0.012***
	(0.002)	(0.002)	(0.002)	(0.003)	(0.002)	(0.002)	(0.003)	(0.002)	(0.003)
Zagat food rating				0.065***			0.065***		0.064***
				(0.001)			(0.001)		(0.001)
Zagat décor rating				−0.008***			−0.010***		−0.008***
				(0.001)			(0.001)		(0.001)
Zagat service rating				0.032***			0.031***		0.031***
				(0.001)			(0.001)		(0.001)
High-quality keywords			0.153***						
			(0.001)						
Low-quality keywords			−0.565***						
			(0.003)						

Table 2 (cont'd)

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
High-quality keywords (*previous reviews*)						0.166***			
						(0.002)			
Low-quality keywords (*previous reviews*)						−1.228***			
						(0.012)			
Zip code fixed effects included	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects included	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,249,426	1,249,426	1,249,426	528,190	1,231,952	1,231,952	525,140	1,231,952	525,140
Log-likelihood	−1.917e+06	−1.903e+06	−1.835e+06	−779,801	−1.889e+06	−1.874e+06	−780,897	−1.875e+06	−775,570

Notes. Robust standard errors are in parentheses. The differences in the number of observations across models are due to (1) the unavailability of Zagat reviews for every restaurant reviewed on Yelp and (2) the fact that some of the models measure authenticity based on the focal review (Models 2–4) whereas others measure authenticity based on previous reviews or both (Models 5–9). This precludes the inclusion of the first review in the model.

** $p < 0.05$; *** $p < 0.01$.

the effects of authenticity on reviewer ratings. Model 1 is the baseline model that introduces the control variables, including the average price of a meal at the restaurant, the number of ratings the restaurant had received to date, and restaurant age. The price control has a positive coefficient such that more expensive restaurants tend to get higher ratings. More popular restaurants (i.e., those reviewed most frequently) also tend to get higher ratings. Interestingly, older restaurants generally receive lower ratings. Model 1 also introduces ecological-level variables—specifically, the count of restaurants with the same cuisine as the focal restaurant in the same city and the mean rating for those restaurants. The domain enthusiasm of the reviewer is also included. Finally, zip code fixed effects to control for possible geographical heterogeneity and year fixed effects are also introduced.

The remaining models in Table 2 present various specifications to investigate the effect of authenticity on value ratings. Model 2 introduces the authenticity rating calculated based on the text of the focal review. The effect for the authenticity score is significant even with the inclusion of these controls.[8] This finding suggests strong support for Hypothesis 1. According to Model 2, for example, a review one standard deviation above mean on the authenticity scale corresponds to a rating that is on average 0.27 stars higher than a review one standard deviation below the mean. This is a rather strong effect given that 70% of the restaurants have a mean rating between three and four stars.

Table 2 also introduces controls for restaurant quality in an effort to further test the robustness of the reported findings. Model 3 includes the quality-related words included in the focal review. As expected, the presence of high-quality words in the review tends to increase the rating of the focal review, and low-quality words tend to decrease ratings; however, including these variables does not dramatically change the effect of authenticity. Model 4 includes the quality-related ratings from Zagat reviews. Not surprisingly, the Zagat ratings variable has strong and significant predictive power in terms of the Yelp ratings; yet, even still, the effects of authenticity, although somewhat weakened, do persist. These findings lend even further support to Hypothesis 1. Moreover, they suggest that authenticity generates higher value ratings above and beyond quality, an important alternative explanation.

In Models 5–7, the authenticity of a restaurant is not captured with the authenticity score of the focal review but, rather, with the average authenticity score of all reviews prior to the focal reviews. These models thus eliminate the same-source bias because the authenticity scores were derived from scores different from the value ratings. Note that this modeling approach represents a step toward organizational-level modeling as it assumes that there exists a general authenticity value of the restaurant that affects focal reviewers. These models

mirror the specifications of Models 2–4 and demonstrate that authenticity explains perceived quality even after including various controls.

Finally, Models 8 and 9 include the authenticity scores calculated from the focal review and from previous reviews. The simultaneous significance of both variables supports the use of authenticity as both an organizational-level and an individual-level construct. Note that including the Zagat controls mostly affects the effect size of the *authenticity score (from previous reviews)* variable but not the effect size of *authenticity score (from focal review)*, indicating that the perceptual part of authenticity can be explained to a lesser extent by underlying quality.

Although the main goal here is to demonstrate the positive effect of authenticity in all the three cities, we also note that further analyses show slight differences in the effect size of authenticity between the three cities. These analyses show that, on average, reviewers in Dallas give higher star ratings than reviewers in NYC or LA; however, they are less sensitive to authenticity than reviewers in NYC or LA. This pattern possibly reflects local differences in culture between the three cities.

We next present the restaurant-level analysis. Table 3 shows the estimates of the fixed-effects linear regressions. The outcome variable in these models is the average rating the restaurant receives in a month, whereas the explanatory variables are lagged by one month. Note that because of the fixed-effects approach, variables that are constant at the restaurant level are omitted from the models. Model 1 shows the baseline model with the nonconstant covariates. Models 2 and 3 demonstrate that higher levels of perceived authenticity in month $t-1$ for a restaurant lead to higher value ratings in month t. These results further demonstrate that authenticity has a strong effect on consumer value ratings, thereby lending further support for Hypothesis 1.

Table 4 reports first-differences regression results. The models in this table employ a fixed-effects estimation and regress change in mean authenticity scores from $t-1$ to t on change in mean ratings from $t-1$. (OLS estimation yields the same conclusions.) Models 1 and 2 show the estimates for the monthly aggregation, and Models 3 and 4 show the estimates for a three-month aggregation. Both models demonstrate that an increase in authenticity from $t-1$ to t leads to an increase in ratings from $t-1$ to t, even when changes in quality are controlled. These estimates provide further strong empirical support for Hypothesis 1.

Hypothesis 2 proposes that independent and family-owned organizations are more likely to be regarded as authentic compared with their chain-affiliated and corporate-owned counterparts. Table 5 presents the linear regression estimates of these organizational characteristics on authenticity. (Only restaurant-level analyses are reported because the independent variables of interest are clearly restaurant-level concepts.) The coefficients for chain restaurants are negative and significant across all models, suggesting that a restaurant is more likely to be regarded as authentic if it is independent; Hypothesis 2A thus receives support. The coefficients for family-owned restaurants are positive across all models; Hypothesis 2B is thus also supported. Family-owned restaurants receive authenticity scores that are on average about half a standard deviation higher than non-family-owned restaurants. The effect of chain ownership is quite small.

Hypothesis 3 proposes that restaurants will be regarded as more authentic to the extent that they occupy fewer institutionally defined categories. In other words, restaurants should be regarded as less authentic to the extent that their niche width is greater. As expected, authenticity scores were lower to the extent that the number of categories populated by the restaurant was higher. Hypothesis 3 is thus supported.

Finally, we tested whether authenticity mediates the effects of ownership structure and niche width on consumer value rating. We estimated a structural equation model (see Pearl 2000) based on Model 2 of Table 2 and found that authenticity mediates 6% of the effect of family ownership, 4% of the effect of chain ownership,

Table 3 Study 1: Fixed-Effects Linear Regression Estimates of the Mean Consumer Value Rating (Restaurant-Month Level)

Outcome variable =	*Mean consumer rating*		
Variable	Model 1	Model 2	Model 3
Mean authenticity in month $t-1$		0.011**	0.011**
		(0.005)	(0.005)
Mean age (in years)	−0.069***	−0.069***	−0.069***
	(0.006)	(0.006)	(0.006)
Mean domain enthusiasm of reviewers	−0.003*	−0.003**	−0.003**
	(0.001)	(0.001)	(0.001)
Mean rating for cuisine in city	0.116***	0.116***	0.114***
	(0.012)	(0.012)	(0.012)
No. restaurants in city with same cuisine (in thousands)	0.052***	0.052***	0.052***
	(0.009)	(0.009)	(0.009)
Mean high-quality keywords			0.001
			(0.001)
Mean low-quality keywords			−0.012***
			(0.004)
Constant	3.335***	3.336***	3.342***
	(0.059)	(0.059)	(0.059)
Restaurant fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Observations	405,706	405,706	405,706
Log-likelihood	−506,370	−506,367	−506,361
Number of restaurants	17,628	17,628	17,628

Notes. Robust standard errors are in parentheses. All independent variables are lagged one month.
*$p < 0.1$; **$p < 0.05$; ***$p < 0.01$.

Table 4 Study 1: First-Differences Linear Regression Estimates of Change of Mean Consumer Value Rating

Outcome variable =	*Change in mean ratings from t − 1 to t*			
	One-month aggregation		Three-month aggregation	
Variable	Model 1	Model 2	Model 3	Model 4
Change in mean authenticity score from t − 1 to t	0.238*** (0.006)	0.184*** (0.004)	0.266*** (0.009)	0.207*** (0.006)
Change in high-quality keywords from t − 1 to t		0.116*** (0.001)		0.126*** (0.002)
Change in low-quality keywords from t − 1 to t		−0.543*** (0.003)		−0.543*** (0.005)
Constant	−0.013*** (0.000)	−0.011*** (0.002)	−0.024*** (0.000)	−0.020*** (0.002)
Observations	405,706	405,706	200,779	200,779
Log-likelihood	−654,390	−636,172	−289,846	−280,768

Note. Robust standard errors are in parentheses.
*$p < 0.1$; **$p < 0.05$; ***$p < 0.01$.

Table 5 Study 1: Linear Regression Estimates of Organizational Characteristics on Authenticity Scores

Variable	Model 1	Model 2	Model 3	Model 4	Model 5
Family owned	0.062*** (0.019)	0.041** (0.018)	0.046** (0.018)	0.044** (0.018)	0.115*** (0.037)
Chain	−0.002*** (0.000)	−0.001*** (0.000)	−0.001*** (0.000)	−0.001*** (0.000)	−0.005*** (0.001)
Niche width	−0.011*** (0.002)	−0.014*** (0.001)	−0.016*** (0.002)	−0.015*** (0.002)	−0.014*** (0.002)
Mean ratings		0.060*** (0.002)	0.059*** (0.002)	0.045*** (0.002)	0.041*** (0.005)
Price			0.018*** (0.001)	0.006*** (0.002)	0.007** (0.003)
Age (in years)			−0.003*** (0.001)	−0.003*** (0.001)	−0.005*** (0.002)
Mean domain enthusiasm			0.005*** (0.002)	0.007*** (0.002)	0.002 (0.005)
Mean rating for cuisine in city			0.039*** (0.006)	0.032*** (0.006)	0.009 (0.011)
No. restaurants in city with same cuisine (in thousands)			0.306 (0.815)	1.019 (0.804)	1.558 (1.285)
High-quality keywords				0.043*** (0.002)	
Low-quality keywords				0.014** (0.007)	
Zagat food rating					0.005*** (0.001)
Zagat décor rating					−0.003*** (0.001)
Zagat service rating					0.004*** (0.001)
Constant	−0.118*** (0.022)	−0.128*** (0.022)	−0.324*** (0.031)	−0.284*** (0.031)	−0.185*** (0.057)
Zip code fixed effects included	Yes	Yes	Yes	Yes	Yes
Year fixed effects included	Yes	Yes	Yes	Yes	Yes
Observations	17,649	17,649	17,649	17,649	3,078
Log-likelihood	10,795	11,417	11,518	11,770	3,339

Note. Robust standard errors are in parentheses.
*$p < 0.1$; **$p < 0.05$; ***$p < 0.01$.

and 88% of the effect of niche width. These findings further substantiate the set of hypotheses.

Study 2: Authenticity and Consumer Value Ratings in an Experimental Setting

Study Design

We also tested for the effects of perceived authenticity of an organization on consumer value ratings in an experimental setting. Using a between-subjects experimental design, participants were presented with vignettes of restaurants and asked to rate the restaurant on quality, price, and overall value. The experiment was designed to try to bolster confidence in the findings and interpretation of Study 1. First, we designed the experiment to resemble the online reviewer system, but we eliminated much extraneous and possibly distracting information found on the website. This ensured that the focus of the respondent was on the information of interest. Second, we orchestrated the ordering of prompts and responses in the experiment so as to solicit the authenticity attributions from the respondent prior to her value rating of the restaurant. Although offering no guarantee of causal direction, this ordering does increase confidence in that interpretation. Third, the experimental setup was private, and the respondents were given the usual guarantees of confidentiality. This aspect of the design eliminated any possible public posturing in the responses and increases confidence that the responses reflect true personal opinions. Fourth, we randomized the presentation of background information presented to the respondents about the restaurants, which decreases the chances of a spurious association.

Two hundred and ten participants took part in the experiment. They were recruited through Amazon's Mechanical Turk and completed the experiment for a small monetary remuneration. To ensure the validity of the data, we excluded from our analyses surveys that were completed in less than four minutes ($n = 5$) or were completed more than once by the participant, as suggested by duplicate IP addresses ($n = 14$). The resulting data set contains 191 responses. Each of the 191 participants answered questions pertaining to two restaurant vignettes, thereby yielding 382 observations. The average age of participants was 38.4 years of age (S.D. = 12.3), and 64% were female. The participants were U.S. residents from 30 different states, with the highest number of surveys completed from California ($n = 8$), Illinois ($n = 7$), Texas ($n = 6$), and Florida ($n = 6$).

Participants completed a series of steps in the following order. First, they were asked to choose two of their favorite cuisines from the following five cuisines (which are representative of the most popular cuisines in the Yelp data set): Italian, Mexican, American, Chinese, and Barbecue. We asked participants to choose their favorite cuisines in an attempt to mirror the selection process inherent in restaurant reviewing: patrons are more likely to visit restaurants that offer cuisines that they prefer. The two most often selected cuisines were Italian (26%) and American (24%); the least often selected cuisine was Barbecue (10%).

Second, participants were presented a vignette for a fictitious restaurant for each of the two cuisines. Each vignette consisted of a restaurant name and photo (constant across conditions) and short text describing a combination of six conditions: 3 ownership conditions (family owned, chain owned, or a baseline with no information about ownership) $\times$ 2 niche width conditions (single category or multiple category). Below is an example of an entry reflecting the chain-ownership, multiple-category condition:

> Bella Italia was founded in 1997 in New York City and serves pasta, pizza, seafood, and deserts. They also serve a range of American favorites such as barbecue, hamburgers, and fries. It was founded by Food Imports, Inc., which owns and operates several restaurants throughout the Northeast.

As shown, the text of the amplified conditions was very brief and straightforward: the text of the baseline conditions was set up by removing the descriptive clauses. For example, by removing the sentence beginning with "It was founded. . . ," one gets the baseline ownership condition, and by removing the sentence beginning with "They also serve . . . ," one gets the single-category condition.

Third, participants were asked to estimate the likely cost of a dinner ("per person, with one drink") at the restaurant and to speculate about the quality of the food (on a scale from 1 to 5).

Fourth, participants were presented with a list of 30 keywords and were asked to group the words into two groups: "words that are likely to appear in customers' reviews" and "words that are likely *not* to appear in customers' reviews" for this restaurant. The list of words contained the 10 highest and 10 lowest authenticity-related keywords from Table 1 as well as 10 randomly selected quality-related keywords from Appendix A. The set of keywords presented was the same across participants and conditions. The order in which the keywords were presented was randomized during the design of the experiment but then held constant for all participants and conditions.

Finally, participants were asked to estimate how much they would like the restaurant and its offerings (again, on a scale from 1 to 5, although half points were allowed). To resemble the online review system, the ratings panel used stars for its scale and asked respondents to click on the appropriate number.

Findings

The first three models in Table 6 test Hypothesis 1 in a linear regression framework. The outcome variable is the

overall value rating of the restaurant, and the explanatory variables are perceived quality, perceived authenticity, and perceived price.

As expected, the main predictor of consumer value ratings is perceived quality: a consumer expects to like the restaurant more to the extent that she estimates the food to be of higher quality. Interestingly, perceived price does not seem to have a significant effect on value ratings. This is likely because participants may control for price when rating overall value. Importantly, authenticity has a positive and significant effect on value ratings even after controlling for perceived quality. This result confirms Hypothesis 1. The effect size is quite substantial: as the mean authenticity score assigned to the restaurants is 48.89 and its standard deviation is 34.39, restaurants that are perceived one standard deviation more authentic than average receive ratings that are on average 0.21 higher than the restaurants with average authenticity. Note that this effect holds even after controlling for the ownership structure and niche width (compare Models 2–4), suggesting that perceived quality and perceived authenticity partially mediate the effect of ownership structure and niche width on value ratings. To test the extent of mediation, we estimated a structural equation model based on Model 4 and found that authenticity mediates 85% of the effect of family ownership, 67% of the effect of chain ownership, and 65% of the effect of niche width.

Model 5 in Table 6 tests Hypotheses 2 and 3, again in a linear regression framework. The outcome variable is the authenticity score assigned to the restaurant by the reviewer (calculated as the mean authenticity scores of the words the participant grouped as "likely to be in reviews" minus the mean authenticity value of the words the participant grouped as "likely to not be in the reviews"), and the explanatory variables are the ownership and niche width manipulations. The results confirm Hypotheses 2A and 2B: family ownership increases perceived authenticity and chain ownership decreases perceived authenticity. The results also confirm Hypothesis 3: category spanning (wide niches) decreases authenticity. Moreover, the cuisine controls are not significant, indicating that participants did not attach systematically higher authenticity to restaurants in specific cuisines.

Discussion

The chief aim of these studies was to examine a fundamental yet rarely examined assumption underlying

Table 6 Study 2: Linear Regression Estimates of Ratings Assigned by Reviewer

Dependent variable =	*Value rating*				*Authenticity score*
	Model 1	Model 2	Model 3	Model 4	Model 5
Perceived authenticity	0.006***	0.006***		0.014***	
	(0.001)	(0.001)		(0.001)	
Perceived quality	0.763***	0.746***			
	(0.053)	(0.054)			
Perceived price	0.017	0.040			
	(0.028)	(0.030)			
Family owned		−0.012	0.099	0.007	6.634*
		(0.066)	(0.100)	(0.091)	(3.491)
Chain		−0.077	−0.259**	−0.116	−10.308**
		(0.067)	(0.114)	(0.092)	(4.564)
Generalist		−0.064	−0.342***	−0.121	−15.944***
		(0.058)	(0.089)	(0.078)	(3.418)
Cuisine = Chinese		0.027	0.075	0.124	−3.551
		(0.124)	(0.198)	(0.140)	(7.062)
Cuisine = Italian		0.126	0.288**	0.265**	1.697
		(0.081)	(0.127)	(0.113)	(4.298)
Cuisine = American		0.097	0.316**	0.347***	−2.272
		(0.088)	(0.126)	(0.108)	(4.724)
Cuisine = Mexican		0.211**	0.208	0.283**	−5.435
		(0.085)	(0.133)	(0.116)	(4.904)
Constant	0.494***	0.465***	3.690***	2.868***	59.413***
	(0.146)	(0.167)	(0.107)	(0.120)	(3.746)
Observations	382	382	382	382	382
Log-likelihood	−296.781	−291.940	−482.001	−419.4	−1,873.48

Notes. Robust standard errors are in parentheses. The omitted cuisine category is *Cuisine = Barbecue*.
*$p < 0.1$; **$p < 0.05$; ***$p < 0.01$.

the phenomenon of authenticity in advanced consumer economies—that is, that consumers place value in the authentic. Even though others have shown that originality or nominal authenticity carries value, no one, to our knowledge, has offered clear evidence that subjective interpretations of authenticity stand to create value for organizations. This lack of evidence is crucial given that authenticity is really only an issue when it is in doubt and can thus be interpreted in different ways (Peterson 2005). We thus set out to offer a systematic examination of the effects of authenticity on consumer value ratings as well as the organizational antecedents of attributions of authenticity.

This examination was conducted in two related studies. Both studies employed an authenticity language scale specific to the food and dining context. This scale indicates the specific words that consumers use to communicate attributions of authenticity and allowed for the objective analysis of public discourse in the two subsequent studies. The first study enabled us to test the presumption that consumers place value in the authentic in a real-world online setting. This study offers evidence at two different levels of analysis for the claim that consumers indeed value authenticity; it also offers insight into the organizational characteristics that are associated with an image of authenticity. The second study enabled us to further test this presumption in an experimental setting. This study reinforces the findings from the first study and affords greater confidence in the causal direction of our arguments. Across the studies, the effects of authenticity on value ratings persist even after controlling for different measures of quality, suggesting that authenticity and quality are distinct constructs that each stand to create value for an organization. (Interestingly, the correlations between quality and authenticity in Study 1 are notably low, further suggesting that these are distinct constructs.) In addition, these effects also persist after controlling for price, suggesting that the notion of authenticity is important for a wide range of restaurants, not just those that are expensive or that are considered "gourmet" (see Johnston and Baumann 2007). Taken together, these findings represent a rare systematic test of the effects of authenticity and thereby substantiate the theoretical claims of other scholars about the impact of authenticity on organizations.

Despite the strengths of the designs, some potential limitations of the studies should be noted. Most notably, it is possible that some Yelp reviewers may have held a particular perception of authenticity but did not articulate it in their reviews. It is also possible that some reviewers used language not included in the list of words to discuss authenticity, or that they used a keyword to convey a message unrelated to authenticity. It is also possible that the language reviewers use to describe authenticity varies slightly across the three cities, although our reading of the reviews does not suggest substantial differences in language use. These possible limitations are inherent in the measurement method and would apply to any content analysis of text that takes interpretation fairly literally (Weber 1990). We attempted to alleviate these potential concerns by developing the authenticity scale using a survey that allows for participant input and by replicating the results in an experiment in which participants chose words from an established list. We also think that the positive findings argue against these concerns because each suggests that we should not have seen the patterns that we report. Nonetheless, we would do nothing to discourage future researchers from exploring these issues to experiment with alternative measurement techniques.

Another concern some colleagues have raised is that the ratings by Yelp reviewers (or any online reviewer for that matter) are not necessarily representative of the judgments of the average consumer. That is, the concern is that data from an online reviewer system may suffer from a sample selection bias. We believe that this concern should be alleviated in large part by the findings of the experiment in Study 2. Yet, to explore how such possible selection biases might affect the findings of Study 1, we conducted a series of additional analyses (not shown here but available from the authors upon request). Specifically, we created a simulation framework that models plausible behavioral processes leading up to posting a review that might distort the data and generate a biased sample. In this simulation framework, we explored how the following properties of online reviews might bias the estimates of authenticity (or any other covariate) on ratings: (1) restaurants with higher average ratings tend to receive more reviews, (2) reviewers are more likely to post a rating if their opinion diverges from previously posted reviews, and (3) previous reviews influence the expectation of reviewers (and because a rating is a value statement relative to expectations, this would influence ratings). By comparing regression estimates in the baseline case (no selection bias) with the estimates in the setups in which any of the above three simulated biases were present, we found that these selection biases work against our case, thereby lending further confidence in our reported findings. Why? Bias 1 above leads to an underestimation of the effect size of authenticity, whereas biases 2 and 3 imply higher variance in the coefficient estimates of authenticity. Thus, the fact that we found evidence of authenticity even in face of these possible biases provides further confidence in the assertion that authenticity indeed influences consumer value ratings.

Contributions

We believe that these studies stand to offer three contributions relevant to organizational theory. First, they

present systematic tests of the widespread presumption that authenticity generates enhanced value ratings. In doing so, they resolve several issues clouding previous examinations of this claim, which have traditionally relied on subjective interpretations of observed consumer behaviors. Prior qualitative studies do not enable the analyst to systematically disentangle attributions of authenticity from quality judgments. These studies also do not allow the analyst to determine whether attributions of authenticity indeed lead to higher assessments of value rather than simply serving as post hoc rationalizations of those value judgments. The studies presented here, however, go some ways in dealing with both issues. Empirical analyses of archival data allowed for the use of external assessments of quality on value ratings; the experiment also controlled for respondents' self-assessed perception of quality. Fixed-effects estimates of the archival data at the organization level also allowed for the control of fixed omitted factors, some of which are likely quality related, as well as within-organization changes in quality over time. Finally, the experiment forced a sequence of assessments that likely generates authenticity attributions prior to any overall assessment of quality that is assigned. Accordingly, we believe that this set of studies offers a useful additional examination of the effects of authenticity.

Second, the studies offer insight into some potential building blocks of an organizational identity based on authenticity. The findings reveal that independent, family-owned, and specialist organizations are more likely to be perceived as authentic compared with their chain, corporate-owned, and generalist counterparts. These findings reinforce the notion that an organization's identity can be a source of value. We hope that scholars will be encouraged to explore other organizational (as well as contextual) conditions that may shape perceptions of authenticity.

Third, the studies highlight how authenticity attributions are culturally embedded within everyday language. We identified specific words that are used to communicate claims of authenticity and inauthenticity in the food and dining context. The language scale developed from these words enabled us to conduct the two studies presented here; it may also be useful to other analysts.

Next Steps

Where should research on organizational authenticity go next? Of course, many issues are of interest to analysts, and it is presumptive for us to think we should dictate a broad agenda. For those wishing to follow in the direction laid out here, however, several possible next steps come to mind.

First, we note that many theorists and social scientists who examine authenticity, either in the market behavior of consumers and producers or in the analytical digressions of academic investigation, come to realize that authenticity means many things to many people and that the various meanings do not necessarily agree readily at times. For example, see the typologies of authenticity offered by Beverland (2009), Carroll and Wheaton (2009), and Gilmore and Pine (2007). This observation suggests that an extension of the research examined here may be warranted. It would investigate to what extent the various meanings of authenticity are valued by consumers.

Second, as any alert modern consumer knows, scores of corporations and other organizations actively attempt to present themselves and their products and services as authentic. The findings presented here suggest that organizations may benefit from such efforts if indeed they become perceived as authentic. Yet such efforts are tricky because intentionally projected efforts at creating authenticity are often not perceived as authentic, and they sometimes even backfire. The extent to which authenticity can be fabricated or engineered and retain its appeal and value raises interesting existential questions (Rose and Wood 2005). So further research is needed to determine which organizations stand to benefit more than others from such efforts—and why.

Third, we have argued that consumer value ratings drive choice and that such consumer choices translate into the generation of value for the organization. Going forward, it would be interesting to examine the extent to which authenticity affects sustained competitive advantage among other organizations in the same market. Such research would also likely aid in exploring the generalizability of these findings beyond food and dining.

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Appendix A. Quality-Related Keywords in Studies 1 and 2

Positive quality keywords: awesome, best, best quality, blue ribbon, choice, excellent, exceptional, exemplary, exquisite, fine, finest, first class, first grade, first rate, five star, good, good quality, great, high caliber, high class, high quality, marvelous, outstanding, perfect, premium, prime, splendid, sterling, super-duper, superb, supreme, terrific, top grade, tremendous, wonderful, world class.

Negative quality keywords: bad, bad quality, detestable, disgusting, imperfect, low caliber, low class, low grade, low quality, lowest quality, one star, second class, second rate, terrible, unsatisfactory, unworthy, worst.

(Note that when a keyword contains another keyword, such as "best quality" and "best," it is counted only once.)

Appendix B. Study 1: Descriptive Statistics and Correlations

	No. of obs.	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. *Value rating*	1,249,426	3.68	1.14																
2. *Authenticity score (from focal review)*	1,249,426	0.16	0.39	0.098															
3. *Authenticity score (from previous reviews)*	1,231,952	0.16	0.12	0.087	0.110														
4. *Number of words in the review*	1,249,426	131.66	114.67	−0.084	0.241	0.044													
5. *Number of reviews for restaurant* (in thousands)	1,249,426	0.31	0.44	0.077	0.003	−0.002	0.044												
6. *Price*	1,249,426	1.91	0.71	0.020	0.028	0.073	0.124	0.089											
7. *Age* (in years)	1,249,426	3.00	1.68	−0.007	−0.006	−0.029	−0.059	0.172	0.078										
8. *Domain enthusiasm* (*log no. of reviews by reviewer*)	1,249,426	2.60	1.48	−0.053	0.031	−0.005	0.139	0.007	−0.008	−0.100									
9. *No. of restaurants in city with same cuisine*	1,249,426	4.71	1.32	−0.011	0.010	0.043	−0.044	−0.007	−0.141	−0.001+	−0.003								
10. *Mean rating for cuisine in city*	1,249,426	3.67	0.15	0.127	0.030	0.097	0.019	0.091	0.044	0.031	−0.018	−0.093							
11. *Positive quality-related keywords (from focal review)*	1,249,426	1.73	1.73	0.162	0.150	0.049	0.477	0.025	0.134	−0.025	0.046	−0.027	0.037						
12. *Negative quality-related keywords (from focal review)*	1,249,426	0.16	0.47	−0.265	0.004	−0.024	0.226	−0.018	0.004	−0.006	0.010	0.003	−0.031	0.051					
13. *Positive quality-related keywords (from previous reviews)*	1,231,952	1.76	0.56	0.102	0.051	0.230	0.116	0.046	0.392	−0.080	−0.025	−0.077	0.110	0.163	−0.016				
14. *Negative quality-related keywords (from previous reviews)*	1,231,952	0.15	0.13	−0.160	−0.025	−0.077	0.025	−0.051	0.012	−0.004	−0.011	0.012	−0.104	−0.018	0.076	−0.019			
15. *Zagat food rating*	528,190	21.43	2.82	0.207	0.064	0.268	0.086	0.193	0.401	−0.005	−0.025	0.060	0.242	0.096	−0.053	0.345	−0.251		
16. *Zagat décor rating*	528,190	16.18	4.72	0.024	0.017	0.052	0.114	−0.105	0.679	−0.043	−0.036	−0.101	0.037	0.143	0.005	0.499	0.037	0.231	
17. *Zagat service rating*	528,190	18.46	3.09	0.103	0.053	0.196	0.109	−0.216	0.669	−0.019	−0.037	−0.049	0.169	0.150	−0.019	0.528	−0.086	0.488	0.737

Note. All correlations are significant at the $p < 0.05$ level except those denoted with a plus sign (+).

Endnotes

[1]Our chief aim in this study involves determining whether perceived authenticity is associated with value, and if so, how such perceptions might interact with the identity and structure of the producer organization. Understanding consumers' motivations for seeking authentic products in the first place is a fascinating topic, but it rests outside the scope of this analysis. Readers interested in motivations of authenticity are referred to Peterson (1997) and Potter (2010).

[2]More recent work by marketing scholars (e.g., Amir et al. 2008) has suggested that consumer perceptions of value can be separated into two different judgments: monetary assessments (i.e., the willingness to pay for the product or service) and predicted utility (i.e., the extent of pleasure derived from the product or service). We view the latter as most relevant here, but we admittedly do not attempt to disentangle the two in our empirical analysis.

[3]We leave aside interesting questions regarding how much of the actual painting work had to be done by the artist herself to be authentic. In ancient and modern times, artists sometimes employ many assistants who help them with their work, at times prompting critics and historians to question the identity of the creator of the work. However, well-established conventions for attribution almost always resolve these issues.

[4]An interesting question concerns to what extent can authenticity be part of a strategic marketing plan. Some organizations clearly attempt this and succeed, whereas others find that it backfires because marketing in and of itself is considered inauthentic to many. For example, some French wineries attempt to create authenticity by conveying historical ties to specific regions (Beverland 2005). Dom Perignon did so by cultivating a myth about the origin of champagne and passing it off as fact (Guy 2002). Other examples abound.

[5]It is not easy to draw the boundaries of the restaurant domain. Should food carts be included in the sample? Grocery stores selling sandwiches? Bars that serve finger food? To avoid developing arbitrary criteria, we used Yelp's "restaurant" categorization, which is more or less used to refer to any establishment that prepares and serves food that is not exclusively prepackaged.

[6]Note that the numbers of unique reviewers for the three cities do not add up exactly to the 252,359 reviewers in the merged sample. This occurs because some reviewers review restaurants in multiple cities.

[7]We chose not to conduct surveys to explore which keywords are related to high quality given that quality is a more clearly defined concept than authenticity and because we were able to utilize alternative measures (i.e., Zagat ratings) for quality.

[8]Findings from additional robustness checks are available from the authors upon request. One set of analyses included cuisine fixed effects to account for possible heterogeneity among restaurant categories.

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