46

Authenticity in America

Class Distinctions in Potato Chip Advertising

FOOD IS A ROBUST MARKER of group identity. What you had for dinner yesterday says a lot about your national identity, ethnicity, or social class, and this link between food and culture has filled the pages of blogs, cookbooks, and journals—evidence of the ubiquity of our verbal fascination with food. The breadth of the writing (covering many genres, social classes, geographic regions, and age groups) and the depth (many examples of each type of food writing) suggest that food descriptions themselves might be a superb way to investigate many of these linked cultural and social factors. In this article we take up the challenge, asking whether the language of food can reveal something about the representation and perception of socioeconomic class identity in contemporary America.

Language, of course, is also a powerful marker of group identity. Regional accents are widely used as markers of local affiliation, and language differences are closely related to socioeconomic class. In an influential study of speech in New York in the 1960s, William Labov showed that accents correlate very strongly with socioeconomic status. Working-class speakers drop the "r" in words like *quarter* and park, while upper-middle-class speakers pronounce the "r," following the standard American "prestige" pronunciation.1 These facts have long been clear to politicians, who are especially likely to pronounce the "-ing" suffix as "-in" (goin', likin') when speaking to working-class audiences.² Linguistic style is thus a resource that language users employ and recognize for claiming and marking class identity and class aspiration.

When trying to identify with or target a particular group like the working class, speakers do more than just alter pronunciations. They use vocabulary and metaphors designed to appeal to a particular constituency. By studying these metaphors and phrasings, it is possible to uncover the subtle presuppositions underlying our everyday language and expose the attitudes that speakers believe their audiences hold. Because food descriptions are so widespread and so broad in their audience, they provide an excellent

tool for this analysis. We propose to study differences in the representation of socioeconomic status in contemporary America by studying the words and metaphors employed in one genre of food writing: food advertising. Our goal is to examine advertising texts directed at different classes to see how the words express representations of class identity. We also explore the closely linked concept of authenticity—the idea that some aspects of culture, lifestyle, class identity, or language are in some way more authentic than others.

Comparing targeted language requires a food that is consumed by all social classes, yet comes wrapped in textual description. We chose the great American snack food: potato chips. Consumers across wide socioeconomic lines eat these snacks, which are available in many different brands at a wide range of prices. Furthermore, the advertising language on the packaging offers a number of linguistic indicators presumably designed to appeal to differing consumers.

Our goal, then, is to explore whether advertising on chips targeted toward consumers of high socioeconomic status uses different language than that on chips designed to appeal to lower status consumers. We hope to better understand how advertisers distinguish the concepts of food for the upper class and the working class or lower-middle class in America. How are different social identities expressed in modern America with respect to food culture? What in particular is the role of working-class or lower-middle-class identity? Of course, by investigating advertising language our study is perforce indirect: it can only tell us about social class through the language that advertisers use to appeal to them. Nonetheless, analyzing advertising language, like analyzing the language of politicians, gives us a window into how a particular speaker models class differences, which is an important component of how class is treated in public discourse.

Right: A sample from the authors' data: packaging of expensive and inexpensive potato chips.

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Our study examines the language on twelve bags of potato chips. We used all potato chip brands available at neighborhood supermarkets, and for each brand took the most basic flavor of chip in the most standard size package. For most of our studies we simply separated the chips into two groups, six more expensive and six less expensive based on price per ounce. This separation relies on the fact that lower-class consumers are more price-elastic and price-sensitive (especially for nonessentials like snacks) and factor cost more highly into food purchasing decisions.^{3,4} Other factors, including standard package size (larger packages for inexpensive chips),⁵ further indicate that this bifurcation reflects a real distinction between upscale and downscale chips.

The more expensive chips, or those targeted at higher-class consumers, are Boulder, Dirty, Kettle Brand, popchips, Terra, and Season's, which average sixty-eight cents per ounce. The inexpensive chips (Hawaiian, Herr's, Lays, Tim's, Utz, and Wise) average forty cents per ounce. Separation into two groups is not as fine-grained as the continuous relationship between price and advertising words, so for other studies, as we discuss below, we also model price as a continuous variable.

High-Falutin

Don't use high-falutin words for the non-high-falutin audience.

-David Ogilvy, Confessions of an Advertising Man, 1963

Education and health are two factors that have been strongly associated with differences in socioeconomic status for a long time. Indeed, education is one of the main ways that class status is defined in social scientific studies, along with work and income. The link between health and class has been robustly documented: studies in the United States and many other countries over the last 100 years have found higher mortality rates in people of lower-class status.⁶

We, therefore, begin our study with these two variables. If the language used on expensive chips is indeed designed in some way to appeal to consumers of higher status, we expect to see advertisers attempt to appeal to these consumers by creating differences in the educational level of the text itself and in how the text talks about health.

To confirm this link between educational capital and advertising vocabulary, we examined the potato chip advertising language from the perspective of linguistic complexity, which is known to correlate with education level.⁷ Texts at higher levels of complexity are longer, use more complex

grammar, and use rarer words than texts at lower levels.⁸ Complexity itself is not a measure of socioeconomic status; every speaker tends to use more complex language in some situations (such as writing documents for work) than others (conversations or emails with friends). Because educational capital does vary with socioeconomic status, however, advertisers may attempt to appeal to these consumers by using complex language as a marker. If so, we predict that more expensive chips would be packaged in more complex language.

We investigated this prediction using the Flesch-Kincaid readability test, which measures how difficult a text is to comprehend. A text's Flesch-Kincaid number is a weighted value of the length of each sentence in the text (longer sentences tend to be more complex) and the length of each word in the text in syllables (longer words tend to be harder to read): the lower the metric, the more complex the language. We computed the Flesch-Kincaid readability metric for all the sentences on every bag of chips.⁹

As predicted, expensive chips use more complex language than inexpensive chips. Expensive chips have a lower (more complex) Flesch-Kincaid score (48; about tenth to eleventh grade level) when compared to the inexpensive chips (56; about eighth grade level).¹⁰

Expensive chips also have more words overall (142 words per bag, compared to 104 words per bag for the inexpensive chips). ¹¹ Notice in the following examples that although both chips focus on manufacturing process and taste, the expensive chip uses longer and more complex sentences and words:

Inexpensive: "What gives our chips their exceptional great taste? It's no secret. It's the way they're made!"

Expensive: "We use totally natural ingredients, hand-rake every batch, and test chips at every stage of preparation to ensure quality and taste."

In addition to having fewer and shorter words, the inexpensive chips use more common words. Using a standard measure of word commonality based on how frequently the words occur in standard reference texts, we assigned each word on all the packages a frequency score. On average, words on expensive chips had a frequency of six occurrences per thousand in the Switchboard reference corpus, while inexpensive chip words were 33 percent more frequent (a frequency of eight occurrences per thousand).¹² Uncommon words that occur in the expensive chip advertising but not the inexpensive chips include *fluorescent*, *flair*, *savory*, and *culinary*. Common words that occur in the inexpensive chip language but not that of the expensive chips include *fresh*, *light*, *basic*, and *extra*.

More expensive chips thus come wrapped in more complex language, presumably designed to draw a potential buyer into believing that the product is somehow consonant with his or her educational capital.

Health

The second factor, health, was surprisingly prevalent: potato chips are not objectively a healthy food, yet most of the chips we studied emphasized the healthiness of their products, using phrases like o grams trans fat, healthier, no cholesterol, lowest sodium level, never fried, and low fat.¹³

Though many chips include at least one word related to health, we still found striking differences. Expensive chips talk about health six times as much as inexpensive chips (about six times per bag versus once per bag). ¹⁴ Most of the expensive chips emphasize their lack of MSG and gluten, and every expensive chip notes that it is lower in fat and completely lacks trans fats.

Again, this difference in health language is not, as far as we can tell, due to actual differences in the chips. None of the chips in our sample contain trans fats, but while all six of the expensive ones mention the lack of trans fats, only two out of the six inexpensive chips mention it.

These differences confirm that on expensive chip packaging, advertisers use significantly more words or claims relating to health than on inexpensive chip packaging. This result, along with our finding that expensive chips use more complex language, reinforces our hypothesis that food advertising language is a window into the targeting and representation of different socioeconomic groups. We need to look deeper, however, to investigate more subtle distinctions in the advertising language and their reflections on social class.

Distinction

In matters of taste, more than anywhere else, all determination is negation; and tastes are perhaps first and foremost distastes, disgust provoked by horror or visceral intolerance ('sick-making') of the tastes of others.

-Bourdieu, Distinction: A Social Critique of the Judgement of Taste

Pierre Bourdieu's groundbreaking work on the sociology of tastes and culture illustrated that position in society heavily influences taste in food, just like taste in music, film, or art. ¹⁵ Bourdieu surveyed French society in the 1960s, examining the daily habits and tastes of high-status upper class and the lower-status working class. Tastes in music

and painting correlated strongly with class position, ranging from the "popular" tastes of the working class for the Blue Danube Waltz to the preferences of the high-status class for the Well-Tempered Clavier or Breughel. In food, the lower class expressed preferences for traditional hearty meals, heavy in starch and fat and generous in portion size. The high-status classes instead tended to value and eat more exotic foods, such as newly arriving ethnic foods like curry, or health foods like brown rice.

Bourdieu proposed that many of these tastes of the highstatus class functioned as a public indicator of class, with the goal of maintaining status by distinguishing upper-class culture from those of the others, independent of inherent artistic merit. A high-status group maintains its status by legitimizing some tastes but not others and by passing on these tastes as cultural preferences.¹⁶

To test whether Bourdieu's distinction plays a similar role in food advertising directed at different classes in modern America, we looked at words that explicitly emphasize or contrast differences between expensive and inexpensive chips.

One way to differentiate is to compare with other chips, using linguistic markers of comparison such as the words *more* or *less*, suffixes like *-er*, or superlative words (*most*, *least*, *best*, *finest*). Phrases like "best in America" or "less fat than other leading brands," or relational words like *unique*, for example, assert that one kind of chip possesses some quality or ingredient (goodness, fineness, fat) to a greater or lesser extent than some other kind of chip, thus acting to differentiate one brand of chips from another. Geoffrey Leech has shown that this kind of emphasis on the uniqueness of a product is characteristic of advertising language in general.¹⁷

A second way to differentiate is to use linguistic negation ("nothing fake" or "never baked"). A negative marker is a word or affix whose meaning changes truth values. Negative markers can be adverbs or particles like not or never, quantifiers like no, verbal clitics like n't in don't or didn't, a pronoun like nothing or no one, verbs with negative meaning like deny or avoid, or prefixes like un- or mistive meaning like deny or avoid, or prefixes like un- or mistive meaning like deny or avoid, in prefixes like un- or mistive meaning like deny or avoid, or prefixes like un- or mistive meaning like de

We coded each use of comparatives and negation and compared expensive to inexpensive chips. The results support our hypothesis: distinction is used five times more frequently in expensive chips. On average a distinction-related word or phrase is mentioned fourteen times on each expensive bag; inexpensive chips, by contrast, use distinction words fewer than three times per bag. ¹⁸ The table on page 50 shows a number of examples of the use of distinction in expensive chips:

Distinction in Expensive Chips			
Unique	because of our <i>unique</i> baking process		
Unique	X brand potato chips are in a class of their own		
Unique	deliciously different		
Comparative	judged best in America		
Comparative with a crunchy bite you won't find in any other chip			
Comparative	less fat than other leading brands		
Negation no wiping your greasy chip hands on your jeans			
Negation	never fried, never baked		
Negation	we don't wash out the natural potato flavor		

The difference between expensive and inexpensive chips is particularly striking with negation. Expensive chips use negation fourteen times as often as inexpensive chips (more than nine uses of negation per expensive bag, versus only two-thirds of a single use per inexpensive bag). We also tested a more fine-grained relation between negation and price by running a linear regression to relate the number of negation instances with the price per ounce. We found that each additional negation word on a chip package is associated with an increase of about four cents in the price per ounce. ¹⁹ Here is a particularly salient example from the most expensive chip brand, popchips: "nothing fake or phony. no fake colors, no fake flavors, no fluorescent orange fingertips, no wiping your greasy chip hand on your jeans. no, really."

One reason we did not expect negation to be such a popular strategy is that linguistic negation is linked to negative feelings or emotions; as Chris Potts²⁰ and Michael Israel²¹ have shown, linguistic negation is more likely to be used when the context being discussed includes repudiation, rejection, deprivation, and evil.²² The fact that advertisers nonetheless use negation in such large amounts indicates the strength of this attempt to distinguish their product from competing chips.

This link between negation and food description goes beyond potato chips. As a research report from the language of food politics project at the United Kingdom's Open University points out, "Organic food and farming are often described as what they are not"; among the most frequent words in the organic food literature are words "referring unfavorably to nonorganic farming." The marketing of organic food thus implicitly or explicitly defines organic

farming by contrast with nonorganic farming. Of course, organic food has a similar link with the educated and the upper class,²⁴ suggesting that this use of negation in the area of organic foods is also related to class status and Bourdieu's distinction.

In summary, advertising on more expensive potato chips is vastly more likely to use language that compares the brand to other brands, or that relies on negation to implicitly denigrate undesirable properties of other brands. These striking differences support Bourdieu's claim that an important component of taste is negative. The notion of upper-class taste promulgated or reinforced by food advertising is one that is defined at least partially to contrast with tastes of other classes; what it is to be upper class is to be not lower class. As Adam Drewnowski, an epidemiologist at the University of Washington, told *Newsweek*, "In America, food has become the premier marker of social distinctions, that is to say—social class. It used to be clothing and fashion, but no longer, now that 'luxury' has become affordable and available to all."²⁵

Authenticity

While our research shows that advertisers use negative language to emphasize product differences, there are also positive attributes of a brand that consumers or advertisers desire to emphasize. One of these attributes is *authenticity*, which has been called "one of the cornerstones of contemporary marketing." Mentions of authenticity in food and dining have increased sharply in the last twenty years, ²⁷ and recent studies have looked at food language to analyze how advertisers and consumers understand authenticity in food.

Through interviews with luxury winemakers and consumers, Michael B. Beverland showed that in addition to high quality and consistency, historicity (old firms emphasize their early founding and long histories, as well as rituals like their links with the Burgundy wine auctions; younger firms emphasize stories of their recent founders), relationship to place (in particular the concept of terroir), traditional method of production and focus on the ingredients, and the downplaying of commercial motivations are among the factors that contribute to a luxury wine being considered "authentic." 28 Beverland and colleagues found similar results in a study of consumer attitudes toward Trappist beer brewed in Belgium and the Netherlands: Trappist beers were considered more authentic if they were more historic or traditional, if they had a relationship to place, and if they were seen to be small, handcrafted productions by artisans with little commercial motivation.²⁹

These features of authenticity in upscale wine and beer are consistent with what appears in upscale food writing. Josée Johnston and Shyon Baumann looked at the language used in every article that appeared in 2004 in four upscale food magazines: Bon Appétit, Saveur, Food and Wine, and Gourmet, confirming that these magazines framed food as high status by emphasizing authenticity.³⁰ Food is presented as authentic by virtue of its locality (every article talked about food coming from particular places like Bologna, Italy, New Iberia, Louisiana, or Vietnam's Phu Quoc island); simplicity (89 percent of articles emphasized food which was handmade rather than industrially produced, rural rather than urban in origin); and historicism (76 percent of the articles focused on food that had a long historical tradition of being produced in the area). Similarly, the fervor among upper-middle-class eaters for local regional eating, for the use of natural rather than artificial ingredients, and an obsession about the quality and origins of the ingredients and their cooking process permeate upscale culinary magazines and discourse.

The search for authenticity in the modern upscale consumer is not just confined to tastes in food and drink. The *New York Times* recently called the word *authentic* "a buzzword for selling handmade products," noting that "the exultation of the 'authentic' reaches near-hilarious heights in the design community, with young bloggers creating endless catalogs of 'authentic' items like denim or Prouvé chairs." A wide variety of studies confirm this trend, such as those of James H. Gilmore and B. Joseph Pine. As social critic Andrew Potter points out, "when we take a closer look at many supposedly 'authentic' activities, such as loft-living, ecotourism, or the slow-food movement, we find a disguised form of status-seeking."

These activities described by Potter are characteristic of the upper class. Yet some aspects of authenticity, such as the historicism or locality discussed by Johnston and Baumann in food or Beverman in wine or beer, might just as well characterize working-class taste. The work of sociologist Marjorie DeVault, for example, who showed that working-class women are more likely to base the kinds of foods they cooked on traditional dishes, suggests that working-class or lower-middle-class identity is more likely to be based around family and tradition.³⁴ Holt (1994), in his study of Americans in rural Pennsylvania, similarly found that lower-class consumers were more likely to eat traditional and conventional foods. This preference for traditional meal structures and family recipes in the working classes mirrors what Bourdieu found in France fifty years earlier.

These results suggest that authenticity in food may mean different things for consumers of different socioeconomic

classes (or advertisers targeting them). While Bourdieu and recent Bourdovian work tend to associate authenticity only with the preferences of the upper class, the work of DeVault and Holt leads to a prediction that inexpensive chip advertising may promote authenticity as well. The authenticity promoted for a lower socioeconomic class would presumably be a different type of authenticity, emphasizing family and the tradition and historicity of the product. We would thus expect more mention of words like *tradition* and more references to the company's founders, tradition, and associated local geographic regions.

Because potato chips, unlike luxury wines, are not ancient products historically associated with the upper class, we might not expect the same emphasis on historicity in expensive chips. But other aspects of authenticity, such as an emphasis on the ingredients, the cooking process, and naturalness, seem likely to play an important role in this domain.³⁵ For expensive chips, we thus hypothesize they will use language that emphasizes the naturalness of the product and focuses on the ingredients, their provenance, and their cooking process.

We once again coded all bags for uses of these four categories of authenticity words:

Naturalness: uses of the phrases *natural* or *naturally*, *real* (as in *real food*), as well as negative phrases like *absolutely nothing artificial*, or *no artificial flavor*.

Ingredients/process: mentions of ingredients and their processing (Yukon Gold potatoes, finest ingredients, sea salt, premium potatoes, peanut oil).

Historicity: mention of tradition (*family recipe*, *traditional recipe*), or the founding or founder of a company (*Since* 1921).

Locality: mention of a geographic location where the chips are made (America, Hawaii, in the great Pacific Northwest).

We found that naturalness is 2.5 times more likely to be mentioned on expensive bags (a natural word or phrase is mentioned on average about seven times on each expensive bag but fewer than three times on each inexpensive bag). Ingredients are also 2.5 times more likely to be mentioned on expensive bags, and process about three times more likely.³⁶

Historicity and locality, by contrast, were both more common on inexpensive chips (more than twice per bag each) than expensive chips (less than once per bag each). Combining these two variables, and after controlling for text length, each additional mention of historicity or locality is associated with a ten cent decrease in the price per ounce.³⁷ The table on page 52 shows examples of these results.

Naturalness/Ingredients in Expensive Chips		Historicity/Locality in Inexpensive Chips	
Naturalness	all natural	Historicity	using an old family recipe
Naturalness	great tastenaturally	Historicity	time-tested standard
Naturalness	nothing fake or phony	Historicity	almost 85-year-old recipe
Naturalness	still made with all natural oil	Historicity	a time-honored tradition
Naturalness	totally natural	Historicity	since 1986
Naturalness	absolutely nothing artificial	Historicity	since 1921
Naturalness	only real food ingredients	Historicity	the chips that built our company
Ingredients	Yukon Gold potatoes	Historicity	Jim Herr, Founder
Ingredients	Sea salt	Historicity	Bill and Sally Utz believed
Ingredients	only the finest potatoes	Location	in the shadow of the Cascade Mountains
Process	hand-rake every batch	Location	made in the great Pacific Northwest
Process	kettle cooked	Location	classic American snacks
Process	special cooking techniques	Location	freshness and authenticity of the islands

In contrast with concepts like negation or health, which we found to be a factor mainly for expensive chips, authenticity is a positive quality that appears both in expensive and inexpensive chips. The two classes are differentiated instead by exactly how they define authenticity.

For the upper class, being authentic means being natural, using quality natural ingredients and avoiding artificial ingredients, preservatives, and so on. Words like *artificial* or *fake* are used solely in the expensive chip advertising. Even though most of the inexpensive chips also contain no preservatives, this fact is only mentioned in expensive chip advertising. This emphasis on authentic food as natural and nonartificial is prevalent in the popular press as well in books like Michael Pollan's *In Defense of Food*, which contains rules for avoiding what Pollan calls "imitation foods:" ³⁸

AVOID FOOD PRODUCTS CONTAINING INGREDIENTS THAT ARE A) UNFAMILIAR, B) UNPRONOUNCEABLE, C) MORE THAN FIVE IN NUMBER, OR THAT INCLUDE D) HIGH-FRUCTOSE CORN SYRUP.

By contrast, for the working class, authenticity is rooted in historicity, including family tradition, the model of a company as a family business with an explicit founder, and regional American locations.

Our results suggest that historicity and locality are properties of inexpensive chip advertising, while Johnston and

Baumann and Beverland found historicity and locality to be properties of upscale food and wine. We hypothesize that the difference lies in the domains. The locales and histories that Johnston and Baumann found in magazines like Saveur were the history of poor ethnic people in faraway exotic locales. Historicity and locality are thus "exotic" properties of the other. Historicity and locality in Beverland's wine interviews were properties of a traditionally upper-class product with centuries of prestige. The historicity in potato chip advertising, on the other hand, is neither that of the poor exotic locales that might be a bourgeois travel destination, nor the upscale European wine producers that are linked with the upper class. Instead, potato chips highlight the history of empowered non-ethnic Americans running family businesses with whom the consumer is intended to identify. The historicity and locality discovered by Johnston and Baumann and Beverland, by contrast, might be better described as an indicator of distinction, distinguishing the consumer who is able to appreciate the exotic fish sauce or luxury wine producer.

Conclusion

We have investigated ways in which food advertising language can reflect our representations of social class using the potato chip as our object of study. Our investigations are of course preliminary; any such analysis of a limited sample from only one type of food must be taken with a grain of salt. Nonetheless, our work suggests that the advertising for expensive chips indeed emphasizes factors that are more representative of higher socioeconomic status: use of more complex language, known to correlate with higher educational levels, and use of more words and claims related to health.

We explored deeper implications of the differences in advertising language. Pierre Bourdieu hypothesized that taste is fundamentally negative, and our investigation of the language of potato chip advertising supports his theory. The fact that expensive chip advertising is full of comparison (less fat, finest potatoes) and negation (not, no, never, don't, won't) suggests that at least one important goal of the image of upper-class food tastes promulgated by food advertising in contemporary America is to distance the upper classes from lower socioeconomic classes and their tastes. An additional implication of our result is the importance of negation as a linguistic device: the amount of negation in expensive chip advertising is extraordinary. While distinction also was emphasized through positive comparisons and words like different, negation was a vastly more commonly used technique.

Our results also have implications for the relationship between authenticity and socioeconomic status. Previous scholars have often suggested that the desire for authenticity is solely linked with upper-class identity; our results, however, suggest that this may only be partially true. If the advertising language indeed captures veridical aspects of upper-class identity, what's linked with the upper class is merely one form of authenticity, which might be called natural authenticity. For the advertising model of the upper classes, authentic food is natural, healthy, and not artificial or processed. The working class, at least in the minds of advertisers, seems to maintain an equally valid model of authenticity, which might be called traditional authenticity. For this socioeconomic stratum, authentic food is traditional, American, rooted in family recipes and family traditions, and located in the American landscape.

The authentic experience is thus linguistically coded for the lower socioeconomic class, both phonetically, by the use of particular pronunciations (like the -in' pronunciation of the "-ing" affix), and conceptually, by reference to tradition and historicity. The authentic experience is linguistically coded for the upper socioeconomic class by its emphasis on health and natural living. While the classes may use different metaphors for defining the authentic experience, both seek it out. Authenticity, in its various forms, is a product of all socioeconomic classes and is widespread throughout contemporary America—just like the potato chip itself. •

NOTES

We are very grateful to Christopher Potts, Penny Eckert, and Tyler Schnoebelen of the Stanford Linguistics Department, Dan McFarland of the School of Education, and two anonymous reviewers for extremely helpful suggestions.

- 1. William Labov, *The Social Stratification of English in New York City* (Washington, DC: The Center for Applied Linguistics, 1966).
- 2. Political figures like Bill Clinton and Sarah Palin signal authenticity for working-class audiences by emphasizing the regional accents of their younger years. Geoff Nunberg, "The Years of Talking Dangerously" (New York: Public Affairs, 2009). See also "The Real Thing," *Fresh Air*, commentary, 14 October 2008.
- 3. K. Glanz, M. Basil, E. Maibach, J. Goldberg, and D. Snyder, "Why Americans Eat What They Do: Taste, Nutrition, Cost, Convenience, and Weight Control Concerns as Influences on Food Consumption," *Journal of the American Dietetic Association 98*, no. 10 (1998): 1118–1126. Kirk L. Wakefield and J. Jeffrey Inman, "Situational Price Sensitivity: The Role of Consumption Occasion, Social Context and Income," *Journal of Retailing 79*, no. 4 (2003): 199–212.
- 4. Pablo Monsivais, Anju Aggarwal, and Adam Drewnowski, "Are Socio-economic Disparities in Diet Quality Explained by Diet Cost?" *Journal of Epidemiology and Community Health* (2010): Web, 2 January 2011.
- 5. The six more expensive chips were packaged in smaller bags (3 to 5.5 ounces), while the cheaper ones were packaged in larger bags (8 to 10 ounces). This size difference is a large predictor of price per ounce, suggesting that it is price per ounce rather than absolute price per bag that is the indicator of the target consumer.
- 6. See, for example, Lisa Berkman and Arnold M. Epstein, "Beyond Health Care—Socioeconomic Status and Health," New England Journal of Medicine 358 (2008): 2509–2510; Johan P. Mackenbach, Irina Stirbu, Albert-Jan R. Roskam, Maartje M. Schaap, Gwenn Menvielle, Mall Leinsalu, and Anton E. Kunst, for the European Union Working Group on Socioeconomic Inequalities in Health, "Socioeconomic Inequalities in Health in 22 European Countries," New England Journal of Medicine 358 (2008): 2468–2481; B.G. Link and J.C. Phelan, "McKeown and the Idea that Social Conditions Are Fundamental Causes of Disease," American Journal of Public Health 93, no. 5 (2002): 730–732.
- 7. Indeed, textbook publishers generally use text complexity metrics like those discussed below to assign a "grade level" to textbooks. D.F. Dufty, A.C. Graesser, M. Louwerse, and D.S. McNamara, Assigning Grade Levels to Textbooks: Is It Just Readability? (Proceedings of the 28th Annual Conference of the Cognitive Science Society, 2006): 1251–1256.
- 8. There are a wide variety of metrics for text complexity or readability. The most popular metrics, like the Flesch-Kincaid readability test, each combine some measure of vocabulary difficulty with grammatical difficulty. Texts are thus rated as more complex if they have longer sentences and rarer or longer words. The Flesch Reading Ease and Flesch-Kincaid Grade Level metrics are described in R. Flesch, "A New Readability Yardstick," Journal of Applied Psychology 32 (1948): 221–233; and J.P. Kincaid, R.P. Fishburne, Jr, R.L. Rogers, and B.S. Chissom, "Derivation of New Readability Formulas (Automated Readability Index, Fog Count and Flesch Reading Ease Formula) for Navy Enlisted Personnel," Research Branch Report 8-75, Millington, TN (Naval Technical Training, U.S. Naval Air Station, Memphis, TN, 1975). Earlier metrics include Fog [R. Gunning, The Technique of Clear Writing, (McGraw-Hill, 1952)] and SMOG [H. McLaughlin, "SMOG Grading—A New Readability Formula," Journal of Reading 22 (1962): 639–646].
- 9. We did not include non-sentences (mainly headings or text fragments like "o cholesterol") in the computation of the Flesch-Kincaid metric, because the metric is defined only for sentences.
- 10. The difference is statistically significant (one-tailed t-test, p=.04); all comparisons between the groups described below are one-tailed t-tests.
- 11. This difference is only a trend (p=.087).
- 12. Because the chip advertising tends to use short, colloquial sentences, we used a corpus of spoken rather than written English to measure the frequency of each word in the advertising. Each word in the advertising was assigned its frequency in the two-million-word Switchboard corpus of spoken American English (J. Godfrey, E. Holliman, and J. McDaniel, "switchboard: Telephone Speech Corpus for Research and Development," *Proceedings of IEEE ICASSP* [1992], 517–521). We then compared the average frequency (measured in expected number of occurrences per million words) of the words in the expensive and inexpensive chip packages. The difference is statistically significant (p = .0015).

- 13. We coded each mention of a health-related word or phrase on the bags. Thus, a clause like "our potato crisps are low in fat and have no trans fats" would count as two mentions of health, one for "low in fat" and one for "no trans fats," because these are independent claims.
- 14. Expensive chips have 6.67 mentions of health per bag, compared to 1.00 mentions on inexpensive bags. The difference is significant (p=.003). Because expensive chips have 60 percent more words per bag, on average, we also ran statistics after normalizing these counts per words. Expensive chips have on average .05 health mentions per word, while inexpensive bags have on average .01 health mentions per word. The difference is still quite significant (p=.015). A linear regression of health mentions against price per ounce showed each additional health mention was associated with a seven cent increase in price per ounce, $R^2=.53$.
- 15. Pierre Bourdieu, Distinction: A Social Critique of the Judgement of Taste, trans. Richard Nice (Cambridge, MA: Harvard University Press, 1984), French, original published in 1070.
- 16. See, for example, Silverstein's discussion of the self-conscious use of winetasting vocabulary by would-be elites as an attempt to demonstrate prestige [Michael Silverstein, "Indexical Order and the Dialectics of Sociolinguistic Life," Language and Communication 23 (2003): 193-229].
- 17. Geoffrey N. Leech, English in Advertising: A Linguistic Study of Advertising in Great Britain (London: Longman, 1966).
- 18. The difference in distinction words between expensive (14.0) and inexpensive chips (2.71) is statistically significant (p=.002); controlling for length by using distinction words per total word, the difference is still significant (p=.01).
- 19. Expensive chips had 9.33 uses of negation, compared to .57 uses for inexpensive chips. This difference is significant (p=.004); the difference is still significant after controlling for length (p=.007). In the linear regression of distinction terms against price per ounce, the R^2 =.61.
- 20. Christopher Potts, "On the Negativity of Negation," in Proceedings of Semantics and Linguistic Theory 20, ed. David Lutz and Nan Li (CLC Publications, 2010).
- 21. Michael Israel, "The Pragmatics of Polarity," in The Handbook of Pragmatics, ed. Laurence Horn and Gregory Ward (Oxford: Blackwell, 2004), 701-723.
- 22. This link between negative linguistic terms and negative emotions, while clear to copywriters, has received less attention from linguists and philosphers, who traditionally have defined negation solely as reversing the truth value of sentences. For example, Frege pointed out early on that "A negation may occur anywhere in a sentence without making the thought indubitably negative." The use of negation in chip advertising seems to have this aspect of what Potts calls "pragmatic negativity"; the negatives are used about something (fat, preservatives, MSG) that are presumed to be bad or harmful. For an excellent discussion of the linguistic and philosophical literature that does deal with this and other aspects of negation, see Laurence R. Horn, A Natural History of Negation (Chicago: University of Chicago Press, 1989), reissued 2001 by CSLI.
- 23. Guy Cook and the project on Language of Food Politics, "Research Report: The Discourse of Organic Food Promotion: Language, Intentions and Effects" (2007).

- 24. H. Torjusen, G. Lieblein, M. Wandel, and C. Francis, "Food System Orientation and Quality Perception Among Consumers and Producers of Organic Food in Hedmark County, Norway," Food Quality and Preference 12 (2001): 207-216.
- 25. Lisa Miller, "Divided We Eat," Newsweek.com, Newsweek, 22 November 2010. http://www.newsweek.com/2010/11/22/what-food-says-about-class-in-america. html> (accessed 7 January 2011).
- 26. Michael B. Beverland, "Crafting Brand Authenticity: The Case of Luxury Wines," Journal of Management Studies 42, no. 5 (2005): 1003-1029.
- 27. Glenn R. Carroll and Dennis Ray Wheaton, "The Organizational Construction of Authenticity: An Examination of Contemporary Food and Dining in the U.S.," Research in Organizational Behavior 29 (2009): 255-282.
- 28. Michael B. Beverland, "The 'Real Thing': Branding Authenticity in the Luxury Wine Trade," Journal of Business Research 59 (2006): 251-258.
- 29. Michael B. Beverland, Adam Lindgreen, and Michiel W. Vink, "Projecting Authenticity Through Advertising," Journal of Advertising 37, no. 1 (2008): 5-15.
- 30. J. Johnston and S, Bauman, "Democracy versus Distinction: A Study of Omnivorousness in Gourmet Food Writing," American Journal of Sociology 113, no. 1 (2007): 165-204
- 31. "Design Notebook: Peter Buchanan-Smith and the Urban Ax," New York Times, 30 June 2010.
- 32. James H. Gilmore and B. Joseph Pine 11, Authenticity: What Consumers Really Want (Boston, MA: Harvard Business School Press, 2007).
- 33. Andrew Potter, The Authenticity Hoax (New York: HarperCollins, 2010).
- 34. Marjorie DeVault, Feeding the Family: The Social Organization of Caring as Gendered Work (Chicago: University of Chicago Press, 1994).
- 35. See, for example, the notion of craft authenticity defined by Carroll and Wheaton in "The Organizational Construction of Authenticity."
- 36. Naturalness is mentioned on average 7.2 times on expensive chip bags and 2.4 times on inexpensive bags; the difference is significant (p=.01). When normalizing for length, the difference declined to a trend, close to significance (p=.07). Ingredients or the cooking process is mentioned 5.8 times per expensive bag, 1.9 per inexpensive bag. The difference is significant both before (p=.005) and after (p=.04) controlling for length.
- 37. Historicity is mentioned 2.3 times on inexpensive chip bags, compared to 1.0 time on expensive bags, a difference that is significant whether controlling for length (p=.01) or not (p=.04). Locations are mentioned 2.0 times on inexpensive bags, compared to 0.7 times on expensive bags, significant when controlling for length (p=.01) or not (p=.04). A linear regression of historicity plus location against price per ounce, controlled for length, has an R2=.54.
- 38. Michael Pollan, In Defense of Food: An Eater's Manifesto (New York: Penguin, 2008).