

EAT THEIR WORDS:
A CORPUS-BASED ANALYSIS OF GROCERY STORE DISCOURSE

by

TIFFANY STRICKLAND

(Under the Direction of Jonathan Evans)

ABSTRACT

Through a corpus-based discourse analysis of various texts from four different food-selling chains— Earth Fare, Trader Joe’s, Kroger, and Family Dollar – this study examines how different grocery stores use language to express representations of class identity of their intended clientele. Textual analysis shows that food advertisers target affluent consumers by using more complex language and words that emphasize the naturalness of products. To appeal to working class customers, food advertisers choose language that emphasizes convenience and value. Negation emerges as a discoursal trend used to create distinction. Overall, the patterns of language use that emerged in this corpus suggest that a class disparity exists in the experience of grocery shopping in the United States and that this disparity is linguistically-coded in grocery store discourse.

INDEX WORDS: advertising language, food language, corpus-based, discourse analysis

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BA, University of North Carolina Wilmington, 2011

A Thesis Submitted to the Graduate Faculty of The University of Georgia in Partial

Fulfillment of the Requirements for the Degree

MASTER OF ARTS

ATHENS, GEORGIA

2014

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DEDICATION

To my mother, to celebrate the convergence of our parallel lives,

and

To Martin, to rejoice in what comes next.

ACKNOWLEDGEMENTS

I would like to thank my major professor, Dr. Jonathan Evans, and my committee members, Dr. Charles Doyle and Dr. Don McCreary, for their involvement in the completion of this project. I would also like to express my gratitude to Dr. Dan Noland and Dr. Bill Atwill at UNCW for their continued support and encouragement in all my pursuits, academic and otherwise.

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INTRODUCTION

Many have nominated human language as the evolutionary trait that sets humans apart from other animals; cooking shares this nomination (Wrangham 2). In his article “The Culinary Triangle,” Claude Lévi-Strauss connects language with cooking: “Cooking...is with language a truly universal form of human activity: if there is no society without a language, nor is there any which does not cook in some manner” (28). Eating and speaking are not only related by their universality but also through physical proximity: language leaves the body from the same place that food enters—through the mouth (Gerhardt 4).

The concurrent study of language and food has become a growing area of research in recent years, as evidenced by the 2013 publication of an anthology entitled *Culinary Linguistics* (Gerhardt, Frobenius, and Ley). In the introduction to this volume, editor Cornelia Gerhardt endorses this interdisciplinary pairing, emphasizing the potential rewards of studying together “these two fundamental human social acts” (5). My own interest in “culinary linguistics” lies in the intersection between language and the experience of grocery shopping in the United States, as represented in the written discourse of what I have termed “grocery store rhetoric.”

This study follows a 2011 sociolinguistic inquiry by Freedman and Jurafsky entitled “Authenticity in America: Class Distinctions in Potato Chip Advertising,” in which the authors analyze the language found on twelve bags of potato chips. By comparing snacks of varying price, Freedman and Jurafsky endeavor to “better

understand how advertisers distinguish the concepts of food for the upper class and the working class or lower-middle class in America” (46). In a similar fashion, the present study examines various texts from four different food-selling chains – Earth Fare, Trader Joe’s, Kroger, and Family Dollar – chosen to represent divisions (albeit sometimes slight or overlapping) in the socioeconomic status of anticipated clientele.

As Freedman and Jurafsky rightly observe, analyzing advertising language is an indirect way to learn about actual shoppers and social class distinctions (46). The ease of access to advertising materials recommends them as a basis for analysis when time and other restrictions prevent access to more naturally-occurring language data.

Nevertheless, Freedman and Jurafsky defend this approach, arguing that “analyzing advertising language... 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” (46). From another perspective, the market responds to what consumers signal about their wants and needs (Barham 352), which suggests that marketing language should reflect the actual tendencies of consumers. While the approach taken in this study is admittedly indirect, I argue that the analysis of grocery store rhetoric can reveal some interesting insights into the relationship between language and social class.

The following research questions motivate the present study:

- 1- How do different grocery stores use language to express representations of class identity of their intended audience/clientele?
- 2- To what extent does the rhetoric of each grocery store express concern for factors such as convenience, value, naturalness, health, and distinction?

In order to approach these questions, I will first introduce the chosen grocery stores and establish some socioeconomic characteristics of each store's target audience. Due to the complexity of identifying the socioeconomic profile for the target market of large grocery store chains, I will focus on a few specific aspects to support my own perceptions. First, I will consider average price per ounce,¹ with the supposition that cost is a more important deciding factor for lower-income consumers (Freedman and Jurafsky 48). Furthermore, using census tract data for each grocery location in Athens, GA, I will discuss which stores are located in areas designated as “food deserts” – low-income communities with limited access to fresh, healthy, and affordable food² (ERS). Finally, where available I will include information reported by the companies themselves regarding target demographics.

Earth Fare is a small North Carolina-based “natural food market” with over thirty locations in nine states throughout the southeast and midwest (*Earth Fare*). Of the four grocery stores considered for this study, Earth Fare has the highest average price per ounce. Earth Fare's higher prices suggest that the customers they seek are less cost-sensitive. Indeed, like their closest competitor, Whole Foods Market, Earth Fare caters to affluent shoppers who are interested in the healthy lifestyle they promote (Ryan). The Earth Fare location in Athens, GA is situated in a census tract that is not designated as a food desert (ERS). For the purposes of this study, Earth Fare will represent a grocery store catering to a higher-class clientele.

¹ Based on the prices of three products selected for the study—pasta, tomato sauce, and a toasted oats cereal. Each grocery store sells a comparable version of each of these products. See Appendix A for price data.

² See Appendix B for census tract data.

Trader Joe's is a "specialty retail grocery store" headquartered in Monrovia, California, with over 400 locations in thirty-nine states (*Trader Joe's*). This company's core clientele is a little harder to define. In his book *The Trader Joe's Adventure*, Len Lewis offers descriptions of the target customer as cited by company and industry analysts; the list includes "yuppies," "health-conscious label readers," and "people with champagne tastes and beer incomes" (71). Interestingly, the average price per ounce of products chosen for analysis was lowest for Trader Joe's products. While this observation alone seems to suggest that the company may be after a lower-class, more price-sensitive clientele, these low prices are in fact indicative of the "unlikely combination of upscale marketing [and] downscale pricing" that characterizes Trader Joe's (Lewis ix). Indeed, the Trader Joe's in Athens, Georgia is located in a census tract that is not designated as low income nor as a food desert (ERS). Contrary to what the low prices might suggest, "Trader Joe's consumers have relatively high household income" (Lewis viii). Therefore, this somewhat mixed picture will underlie the analysis of language intended for Trader Joe's customers.

Kroger is the largest supermarket chain in the United States, operating 2,641 grocery retail stores in thirty-four states (*Kroger*). According to Kroger's 2012 *Fact Book*, the company believes that their customer base is becoming "increasingly diverse" in terms of ethnicity and income levels, among other factors (10). Kroger is embracing this broadening customer base by providing "a multi-tier offering of price points and product experiences" through multiple corporate brands (*Fact Book* 25). Kroger's corporate brands include Simple Truth Organic, Private Selection, a "banner brand" (i.e. Kroger Brand), and a "value brand" which "aims to offer our price sensitive Customers

[sic] a choice of basic products that are priced to fit their budget” (*Fact Book* 26). Given this all-inclusive approach, Kroger’s grocery store rhetoric will span different intended audiences. In fact, by comparing the packaging language of Simple Truth Organic and Kroger Brand products, I will analyze how this one company varies its rhetoric to appeal to different types of customers. Thus, Kroger’s divergent corporate brands will provide a further point of study within the overall investigation.

Family Dollar is a “small-format convenience and value retailer” with 8,000 stores in forty-six states (*Family Dollar*). The company describes their core customer as “female head of household in her mid 40’s making less than \$40,000/year” (*Family Dollar*). When asked what demographics Family Dollar looks for, the company answers that they serve “low to middle income customers” (*Family Dollar*). The home page of the website as well as in-store signage prominently display the words “We accept SNAP/EBT³ card benefits,” which also signifies a focus on low-income customers. The average price per ounce for Family Dollar products was undercut only by Trader Joe’s. Finally, three out of four Family Dollar locations in Athens, GA are in census tracts that are designated as food deserts (ERS). Therefore, for the purposes of this study, Family Dollar will represent a convenience store catering to the working class or lower-middle class.

I expect that the rhetorical language of each store will vary depending on the type of consumer they are trying to reach. More specifically, lower-end stores (Family Dollar, Kroger) will use less complex language and emphasize notions of convenience and value, while the higher-end stores (Trader Joe’s, Earth Fare) will use more complex language

³ SNAP (Supplemental Nutrition Assistance Program) is a federal food assistance program for low-income individuals and families (*SNAP*). EBT (Electronic Benefit Transfer) is the electronic system that allows benefit recipients to pay for products (*EBT*).

and focus on naturalness, health, and distinction. For the comparison of two of Kroger's corporate brands, I expect that the Kroger Brand will use less complex language and more closely align with the rhetoric of convenience and value, while the Simple Truth Organic brand will use more complex language and utilize language emphasizing health, naturalness, and distinction.

It is a well-known truth of marketing that people buy products "not only for the functional utility they provide, but also the symbolic meaning they possess" (Underwood 62). Food advertisers make linguistic choices in order to carefully craft the symbolic meaning of food products in the hopes of selling these products, symbolism and all. The investigation of this type of discourse can reveal the role of language in shaping our tastes and identities through the quotidian act of grocery shopping.

REVIEW OF LITERATURE

While the concurrent study of food and language has been gaining ground as a subject worthy of academic consideration, few studies exist that investigate the language of food labeling and other grocery store rhetoric from a linguistic perspective. Two notable exceptions are Freedman and Jurafsky's aforementioned 2011 study, and Cook, Reed, and Twiner's 2009 report, "But It's All True!: Commercialism and Commitment in the Discourse of Organic Food Promotion." In their study of potato chip packaging, Freedman and Jurafsky found that the language appearing on expensive bags of chips emphasizes factors that resonate more with consumers of high socioeconomic status (53). The design of their study inspired the present study to include the socioeconomic aspect when investigating grocery store rhetoric. Using corpus-based analysis, Cook, Reed, and Twiner examined "organic food promotion texts" and identified key themes in organic food promotion in Britain (154). Their study served as a model for what type of investigation is possible using corpus-based discourse analysis.

Other inquiries into the language of food labeling have focused on how consumers' (mis)interpretation of labels affects their health literacy. In his article "Supermarket Semantics: The Rhetoric of Food Labeling and Advertising," Welford argues that the language used in food advertising is crafted to make products seem healthy regardless of actual nutritional value. This leaves consumers in a "quagmire of confusion" when trying to interpret food labels and the health claims they make (Welford 5). Similarly, Boehl maintains that language, especially the language on food labels, is

an important factor in an individual's understanding of healthful eating, which entails that "the problem of low literacy translates directly into a problem of low health literacy" (380). Investigating the effects of misinterpretation more specifically, Schuldt and Schwartz found that consumers infer that a food labeled "organic" is lower in calories than its conventional counterpart, even though the designation "organic" has no bearing on calorie content. From a marketing perspective, Wansink investigated how language found on package labels influences consumers' beliefs about health claims. He found that claims are judged most believable when packages combine short statements on the front and longer claims on the back of a product package (Wansink 305).

Within the realm of grocery store rhetoric, some studies have focused on the discourse of brand identity and consumers' relationships to the products they purchase. Kniazeva and Belk's 2010 article "Supermarkets as Libraries of Postmodern Mythology" explores how consumers create meaningful stories that fit their individual desires from the packaging rhetoric they encounter. Likewise, the symbolic meanings generated from product packaging has been investigated both from a marketing perspective (e.g. Underwood) and from a communication studies perspective (e.g. Serazio). Underwood and Serazio's studies each illustrate that product packaging rhetoric, both verbal and visual, plays a powerful role in creating brand meaning and "strengthening the consumer-brand relationship" (Underwood 62).

One final theme that emerged from my review of the relevant literature is the relationship between food-related discourse and the creation of individual and group identity. Freedman and Jurafsky based their potato chip study on the premise that food and language are both "robust marker[s]" of group identity (46). Likewise, in her article

entitled “Identity à la carte: You are what you eat,” Robin Lakoff argues that “our identity is predicated on what we know about food” (150). An important link in the connection between food and identity is the idea of distinction, which Pierre Bourdieu investigated in his important sociological work *Distinction: A Social Critique of the Judgement of Taste*. Using data collected from an extensive survey of French society in the 1960’s, Bourdieu illustrated that taste is determined by negation; that is, the taste preference of a group is negatively defined by distinction from another group’s preference. To give a more current example of Bourdieu’s distinction principle, Guthman’s paper discusses the rise of organic food, or “yuppie chow,” and argues that the success of this growing trend was inextricably tied to gentrification and class differentiation.

As this brief overview shows, the study of food and language can take many forms and focus on a number of themes including how food labeling relates to health literacy, brand identity, and individual and group identity. While the literature does contain many studies in this vein, few studies exist that treat food labeling and grocery store rhetoric from a linguistic standpoint. To my knowledge, corpus-based research methods have never before been applied to the study of culinary linguistics.

METHODS

By conducting a corpus-based analysis of a variety of texts from one genre of food language – grocery store rhetoric – this study explores how different linguistic representations reflect different representations of class. The corpus forming the basis of analysis consists of various texts from four grocery stores – Family Dollar, Kroger, Trader Joe’s, and Earth Fare. The selected texts include package labels from three of each store’s corporate brand products (pasta, tomato sauce, and a toasted oats cereal),⁴ and discourse found on web pages designed to inform customers.

When choosing texts from each company’s web page to form the Website Corpus, I included anything directly addressing “food philosophy” (i.e. company guidelines on what types of foods to stock), FAQ’s about food inventory in general, and information about corporate brands. I excluded recipes, coupons, information about reward programs, corporate information, career information, and contact information. When forming the corpus of package texts, I excluded the highly technical language found in the list of ingredients and the table of Nutrition Facts. I also excluded as irrelevant distribution information, contact information, and recipes. The Grocery Store Corpus totaled 7,268 word tokens and 1,584 word types. Table 1 shows the numerical breakdown of the sub-corpora.

⁴ These products were chosen because they are common enough that each store’s corporate brand makes a version and because the packages are large enough to have an adequate amount of language for analysis.

Table 1 Snapshot of Grocery Store Corpus

Website Texts	Family Dollar	Kroger	Simple Truth	Trader Joe's	Earth Fare	TOTAL
Word Tokens	284	830	1040	1437	1324	4915
Word Types	150	370	455	520	506	1339
Package Texts	Family Dollar	Kroger	Simple Truth	Trader Joe's	Earth Fare	TOTAL
Word Tokens	233	572	611	519	418	2353
Word Types	58	200	232	233	213	545
Total Tokens	517	1402	1651 ⁵	1956	1742	7268
Total Types	188	485	608 ⁶	664	632	1584

In the investigation of the Website Corpus, I used corpus analysis software (AntConc 3.2.4) to identify frequent words and collocations, as well as “keywords,” or unusually frequent words as compared to a reference corpus.⁷ In order to capture only the meaningful lexical items, high frequency function words (e.g. *the*, *and*, *to*) were excluded from wordlists.

In order to explore the hypothesis that higher-end stores use more complex language to appeal to the higher educational levels of their target audience, the quantitative analysis of product packaging language focused on measures of linguistic complexity. As Freedman and Jurafsky point out, linguistic complexity itself does not directly correlate to socioeconomic status, because every speaker can vary the complexity of their language depending on the goal of the discourse (48). However, “because educational capital does vary with socioeconomic status... advertisers may attempt to

⁵ 3053 tokens for Kroger overall.

⁶ 898 types for Kroger overall.

⁷ The Brown Corpus, a one million word corpus of general English (Francis and Kučera).

appeal to these consumers by using complex language as a marker” (Freedman and Jurafsky 48). Linguistic complexity was measured in three ways: total number of words per product label; total number of words dedicated to what I have termed “longform rhetoric” (i.e. two or more contiguous punctuated sentences describing the product, product quality, or customer satisfaction); and Flesch Reading Ease scores, a weighted readability metric based on sentence length and word length in syllables (Flesch 223).

To complement the quantitative approaches outlined above, the study also incorporates qualitative linguistic and rhetorical analysis, offering interpretation of numerical results and broader implications of what the corpora texts show.

Not surprisingly, the word *family* occurs most frequently within the Family Dollar website corpus, along with the word *dollar* as the fifth most frequent. The second person pronouns *you* and *your* are also among the top ten, suggesting that Family Dollar rhetoric tends to address the customer directly. Recurring collocates for these pronouns include “you need,” “you’ll love,” “you’ll find,” and “your favorite.” The first person plural possessive pronoun *our* also appears frequently in the corpus, occurring with collocates such as “our everyday savings.” Tellingly, the words *quick* and *easy* are also among the most frequent in the Family Dollar corpus, occurring with collocates like “quick recipe” and “easy recipe ideas” (*recipe* is also frequent in this corpus). This finding lends some support to the hypothesis that Family Dollar rhetoric tends to emphasize convenience.

With fourteen occurrences, the most frequent word in the Kroger website corpus is *help*, which appears in collocations such as “help you” (3 tokens), “help prevent” (2 tokens), and “help lower the risk” (2 tokens). The high frequency of the word *brand* reflects the fact that Kroger promotes four corporate brands of their own (*Fact Book*). As in the Family Dollar corpus, the pronouns *you* and *your* occur frequently on Kroger’s website in collocations like “help you” (4 items), and “you can X” (3 items; e.g. “you can trust,” “you can feel good,” “you can only find at Kroger”). The frequent collocation “your family” (7 tokens) also accounts for the frequency of *family* in the corpus. The frequency of words like *healthy*, *nutrient*, *vitamin*, *fiber*, and *fruit* indicate Kroger’s emphasis on health, which we will explore in more depth in the “Health” section.

Coming in at thirty-two occurrences, *organic* is the most frequent word in the Simple Truth website corpus. The name *Simple Truth Organic* accounts for much of this frequency (11 tokens), as well as the frequency of *simple* and *truth*. Nevertheless,

Kroger's Simple Truth website provides consumers with an abundance of information about organic foods. Unsurprisingly, the words *food*, and *product* are also among the most frequent. As in the Family Dollar corpus, the word *our* occurs frequently throughout the Simple Truth website, appearing in collocations such as "our Customers" (3 items), and "our livestock" (2 items). With nineteen occurrences, the word *natural* is the fifth most frequent in this sub-corpus, while *artificial* occurs twelve times. Like *organic*, the presence of these words indicates a certain emphasis on product quality for consumers that are concerned with choosing more natural products. Finally, the frequency of the word *sodium* in the corpus stems almost entirely from the web page entitled "Free From 101" which contains a list of 101 artificial preservatives and ingredients that are left out of Simple Truth and Simple Truth Organic foods (*Simple Truth*). Consistent with my hypothesis, the high frequency of words like *organic*, *natural*, *artificial* and *sodium* suggests that the language of Kroger's Simple Truth website places much emphasis on notions of naturalness and health.

The Trader Joe's website corpus also contains some expectedly frequent words such as *product*, *Trader*, and *Joe*. The frequency of *ingredients* (16 tokens) indicates a measure of concern not only with *products*, but also with exactly what those products contain. As with the Family Dollar and Kroger sub-corpora, the pronouns *you* and *our* are also frequently occurring. However, the first person plural subject pronoun *we* also appears frequently in the Trader Joe's corpus (40 tokens). The frequency of this pronoun is characteristic in the language of Trader Joe's, and gives the impression that some collective entity—personal although corporate—is speaking to you directly. Interestingly, the word *no* is fifth most frequent in this corpus, appearing in collocations

like “no artificial flavors,” “no genetically modified ingredients,” and “no synthetic colors.” Similar to Simple Truth’s “Free From 101,” the frequency of the negative marker reflects a tendency in food advertising to emphasize the absence of undesired components, a phenomenon that we will revisit in the “Distinction” section. *GMO* (genetically modified organism) is the ninth most frequent word in the corpus, usually appearing as *non-GMO* (7 tokens). The frequency of this word can be attributed to a customer update regarding Trader Joe’s position on GMO ingredients. Finally, with twelve tokens, the tenth most frequent word in this corpus was *great*, appearing in collocations such as “great prices,” and “great quality.”

Unsurprisingly once again, the words *food* and *product* appear frequently in the Earth Fare website corpus. As in the other corpora, the pronouns *our*, *we*, and *you* are also frequently occurring. As in the Trader Joe’s corpus, the word *no* appears frequently on the Earth Fare website, with five of ten tokens in the collocation “no artificial.” In fact, with twenty-five occurrences, the word *artificial* is the most frequent overall in this corpus, revealing Earth Fare’s prevalent concern with expressly avoiding artificial colors, fats, flavors, ingredients, preservatives, and sweeteners. The high frequency of the words *fat* and *flour* stems from the repeated mention of these food components in Earth Fare’s “Food Philosophy.” Finally, the description of the company’s Food Philosophy also accounts for the nine tokens of *HFCS* (high fructose corn syrup).

Keywords

Using a large corpus of general English as a reference corpus,⁸ the corpus analysis software generates a list of keywords, or words that are unusually frequent in the target

⁸ In this case, the Brown Corpus served as a reference corpus.

corpus, along with a “keyness” value for each word.⁹ Examining the top keywords of our grocery store Website Corpus offers a glimpse at the unique lexical tenor of each body of discourse (Biber, Connor, and Upton 138). Words that are part of store names or brands were excluded from the keyword list (i.e. *family*, *dollar*, *gourmet*, *Kroger*, *simple*, *truth*, *Trader*, *Joe*, and *Fare*) since these words are understandably integral in the language of each company’s web site and do not offer any valuable insights into the rhetoric employed. Table 3 shows the top ten most key words for each sub-corpora.¹⁰

Table 3 Top 10 keywords in Website Sub-Corpora

	Family Dollar	Kroger	Simple Truth	Trader Joe’s	Earth Fare
1	recipe	brand	organic	product	artificial
2	idea	fruit	food	ingredient	food
3	easy	nutrient	sodium	GMO*	HFCS**
4	snack	vitamin	natural	we	flour
5	quick	healthy	ingredient	customer	our
6	saving	help	artificial	our	sweetener
7	favorite	fiber	product	antibiotic	fat
8	delicious	potassium	preservative	label	antibiotic
9	ingredient	product	certify	genetically	product
10	dinner	antioxidant	potassium	item	boot
*genetically modified organism					
**high fructose corn syrup					

⁹ The keyness value of a keyword is calculated with log-likelihood statistics (Anthony).

¹⁰ For comparative purposes, words that do not also appear among the top ten most frequent are highlighted in green.

The most noteworthy keyword from the Family Dollar website corpus is the word *saving* (realized as *savings*). The keyness of this word supports the hypothesis that Family Dollar uses language that emphasizes the low cost of their products. In the Kroger website corpus, the keyness of words like *nutrient*, *vitamin*, *fiber*, *potassium*, and *antioxidant* reflect Kroger's choice to provide consumers with specific information about the nutritional value of certain foods—a practice that aligns with growing concern for the healthfulness of food products. Within the Simple Truth corpus, the keyness of the words *natural* (fourth most key) and *artificial* (sixth most key word; cf. Earth Fare, most key word overall) indicates a preoccupation with the valuation of the *natural* / *artificial* dichotomy. Kroger's incorporation of this type of language in their Simple Truth website offers some support for my original hypothesis about how this company would vary its rhetoric between different corporate brands.

Most notable among Trader Joe's top ten keywords are the words *antibiotic*, *GMO*, *genetically*, and *we/our*. As predicted, the keyness of words like *antibiotic*, *GMO*, and *genetically* (as in *genetically modified* or *genetically engineered*) indicates great concern for factors such as naturalness and health. While the word *we* was frequent in both the Trader Joe's and Earth Fare sub-corpora, it only appears as one of the top ten most key words in the Trader Joe's corpus. The keyness of the pronouns *we* and *our* in the Trader Joe's corpus suggests that the company has developed a corporate identity with a strong sense of self.

Unsurprisingly, words like *artificial*, *HFCS* (high fructose corn syrup), and *antibiotic* appear among the top ten keywords for the Earth Fare website corpus, reinforcing this company's concerns with promoting and providing natural foods. The

tenth most key word for this corpus—*boot*—requires a bit of context to understand. Part of Earth Fare’s “Food Philosophy” includes a “Boot List” which provides information on banned ingredients. Items containing such ingredients then “get the boot” from their stores (*Earth Fare*). The website even urges customers to assist in this endeavor by incentivizing involvement in the “Boot Patrol”¹¹ (*Earth Fare*). The ludic use of this keyword suggests that while Earth Fare is serious about eliminating certain ingredients from their shelves, they also want the work of food philosophizing to seem interactive and fun.

Before moving on to the analysis of individual factors, a brief summary is in order of what the corpus overview has revealed. For the Family Dollar corpus, the top ten most frequent and most key words offer some support for the hypothesis that this company uses language that emphasizes convenience and affordability. For the Kroger corpus, frequency and keyword lists show that this company *does* tend to use language that emphasizes health, while words signifying value did not emerge among the most frequent or most key words (negates hypothesis). However, the frequency and keyness of the word *help* does lend some support to the hypothesis regarding convenience. For the Simple Truth website, the corpus snapshot offers some support for the hypothesis that this brand’s rhetoric would focus on naturalness. For the Trader Joe’s corpus, frequent words and keywords upheld the hypothesis that this company’s rhetoric focuses on factors like naturalness, health, and distinction. For the Earth Fare corpus, keywords and frequently occurring words revealed an underlying concern for distinction, health, and naturalness, often realized as a concern with artificiality (hypothesis upheld).

¹¹ Earth Fare offers a \$50 gift card to anyone who finds an item in the store that contains an ingredient on their Boot List (*Earth Fare*).

ANALYSIS OF INDIVIDUAL FACTORS

To complement the overview of corpus findings presented above, the discussion will now turn to linguistic and rhetorical analysis of each factor under investigation.

While the frequency and keyword lists provided a broad view of patterns in language use, exploring the language of the Grocery Store Corpus within the original contexts will allow for a closer focus on how food advertising rhetors use language to emphasize certain features and appeal to different customers. The analysis in this section will begin with a look at linguistic complexity and will then continue to unravel the notions of distinction, convenience, value, naturalness, and health.

Linguistic Complexity

Linguistic complexity is known to correlate with education level, which in turn correlates with health and socioeconomic status (Berkman and Epstein; Eide and Showalter). According to Freedman and Jurafsky, “texts at higher levels of complexity are longer, use more complex grammar, and use rarer words than texts at lower levels” (48). Therefore, I expect that the product labels for Family Dollar (i.e. Family Gourmet) and Kroger Brand products will have fewer words per package than Kroger Simple Truth, Trader Joe’s Brand, and Earth Fare Brand product labels. Likewise, I expect that the language found on the labels of the three higher-end store brand products will be more complex than the language of the lower-end products.

Table 4 shows the data for the total number of words per package (recall that words found in ingredient lists, Nutrition Facts, distribution information, contact information, and recipes were excluded from the count).

Table 4 Words per package

	Family Gourmet	Kroger Brand	Kroger Simple Truth	Trader Joe's Brand	Earth Fare Brand
Pasta	51	205	251	182	135
Tomato Sauce	34	81	144	71	113
Cereal	148	286	216	266	170
Total	233	572	611	519	418

As anticipated, the Family Gourmet product labels had the fewest words overall. This dearth of advertising language makes sense, as one of the best ways a store brand can pass on savings to the customer is by cutting on advertising and promotional costs (“Store Brand Facts”). This finding lends further support to the hypothesis that Family Dollar’s primary focus is on low prices and that they are less concerned with using language to impart symbolic appeal to their products.

Contrary to expectation, both of Kroger’s corporate brands fairly consistently display more words per package than Trader Joe’s or Earth Fare brand products. However, this discrepancy may be due to Kroger’s larger packaging, which offers more space to fill with repeated words (e.g. the words “from our family to yours” appear five times on the Kroger Brand cereal box). Inflated with this sort of filler language, the total

number of words per package does not best represent the amount of rhetorical language found on a product label.

To better represent the persuasive language that is most of interest in this study, I was also interested in comparing each package's use of what I have termed "longform rhetoric," two or more contiguous punctuated sentences describing the product, product quality, or customer satisfaction. Table 5 presents the data for the number of words per package that fit this definition of "longform rhetoric."

Table 5 Words per package – Longform rhetoric

	Family Gourmet ¹²	Kroger Brand	Kroger Simple Truth	Trader Joe's Brand	Earth Fare Brand
Pasta	21	68	142	77	47
Tomato Sauce	21	31	104	56	94
Cereal	21	105	103	148	83
Total	63	204	349	281	224

As we can see, the numbers for words found in longform rhetoric more closely align with the expected number of words per package. Family Gourmet displays by far the fewest words in this category, followed by Kroger Brand. Earth Fare Brand and Trader Joe's Brand dispense more words overall to longform rhetoric, while Kroger Simple Truth product labels devote the most words to this purpose. Perhaps Kroger's Simple Truth brand, situated within a company that caters to a broad clientele, uses wordiness as a sort

¹² Word counts were the same for each Family Gourmet package because each package had the same two sentences that qualified as longform rhetoric: "Not 100% satisfied? Return empty package within 30 days to any Family Dollar store for a refund (with receipt) or exchange."

of linguistic over-compensation. Unlike Earth Fare, whose place in the natural food market is well-established and well-apparent when you enter the store, Kroger as a whole does not follow any strict guidelines or “food philosophy.” Therefore, Kroger’s private label seeking to fill the natural, health food niche must provide an abundance of “natural food” rhetoric to legitimize and claim their place in the market.

As another measure of linguistic complexity, Flesch Reading Ease scores were calculated for the longform rhetoric portion of each product label (since the metric requires complete sentences). This weighted readability metric is based on sentence length in words and word length in syllables (Flesch 223). Higher scores correspond to texts that are easier to understand.¹³ Table 6 shows the Flesch Reading Ease score for each product label.

Table 6 Flesch Reading Ease Scores

	Family Gourmet ¹⁴	Kroger Brand	Kroger Simple Truth	Trader Joe’s Brand	Earth Fare Brand
Pasta	67.3	73.4	71.5	84	50.5
Tomato Sauce	67.3	81.7	69.7	52.5	71
Cereal	67.3	68.4	78.4	86.6	39.9
Average	67.3	74.5	73.2	74.4	53.7

Texts that score between 60 and 70 qualify as texts of standard difficulty, while texts that score between 70 and 80 can be considered fairly easy, and texts that score above 80 are

¹³ See Appendix C for Flesch’s table explaining patterns of reading ease scores.

¹⁴ Unfortunately, Family Gourmet Reading Ease scores were based only on two complete sentences. If longer texts were available, we would expect to see higher scores, indicating a style that is easy to read.

easy to understand (Flesch 230). As Table 6 shows, most package texts from Family Gourmet, Kroger Brand, and Kroger Simple Truth fall within the 60-80 range. Trader Joe's package texts also average within this range, although the pasta and cereal texts both qualify as less complex. Texts that score between 50 and 60, such as Trader Joe's Tomato Basil Marinara and Earth Fare Brand pasta, are more complex, and can be interpreted as fairly difficult to understand (Flesch 230). Scores from 30 to 50 (e.g. Earth Fare's Organic Toasted O's Cereal) indicate a text that is more complex, or difficult to understand (Flesch 230).

Overall, the language samples from this set of product packages qualify as fairly easy to read (Kroger, Simple Truth, Trader Joe's) or as texts of standard difficulty (Family Dollar). Earth Fare Brand products form the exception, with texts that on average qualify as fairly difficult to read (i.e. more complex). In order to interpret these findings more conclusively, a much larger sampling of texts from each store brand would be necessary. Nevertheless, the numbers do suggest that Earth Fare tends to favor more complex language on their product packaging, a finding which supports the hypothesis that language found on these higher-end store brand products is designed to appeal to customers with higher levels of education.

Distinction

Sociologist Pierre Bourdieu wrote, "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 of the tastes of others" (56). The Grocery Store Corpus reveals that the language of food advertising reflects Bourdieu's idea by

creating distinction through negation. Table 7 shows the distribution of the use of negation throughout the corpus (including website texts and package texts).

Table 7 Distribution of negation words

	Family Dollar	Kroger	Kroger Simple Truth	Trader Joe's	Earth Fare	Total
no	0	1	6	25	12	44
free	1	1	10	6	7	25
not	0	3	11	2	1	17
non	0	0	0	7	0	7
without	0	0	1	2	3	6
nothing	0	0	1	0	0	1
Total	1	5	29	42	23	100
% Total	1%	5%	29%	42%	23%	100%

As the numbers indicate, the higher-end stores and Kroger's Simple Truth distinguish themselves by emphasizing what they are *not*, what their products do *not* contain. On the contrary, Family Dollar does not create distinction in this way. In fact, *free* is the only negation word that appears in the Family Dollar corpus, within the context of *stress-free* (a collocation that evokes convenience). Similarly, Freedman and Jurafsky found that words of distinction are used five time more frequently on expensive chip bags, and that each additional negation word on a chip package is associated with a price increase of about four cents per ounce (49-50).

As Table 7 shows, Trader Joe's uses negation to distinguish their company and products the most frequently. The following excerpt from their website provides a striking example of how this is done:

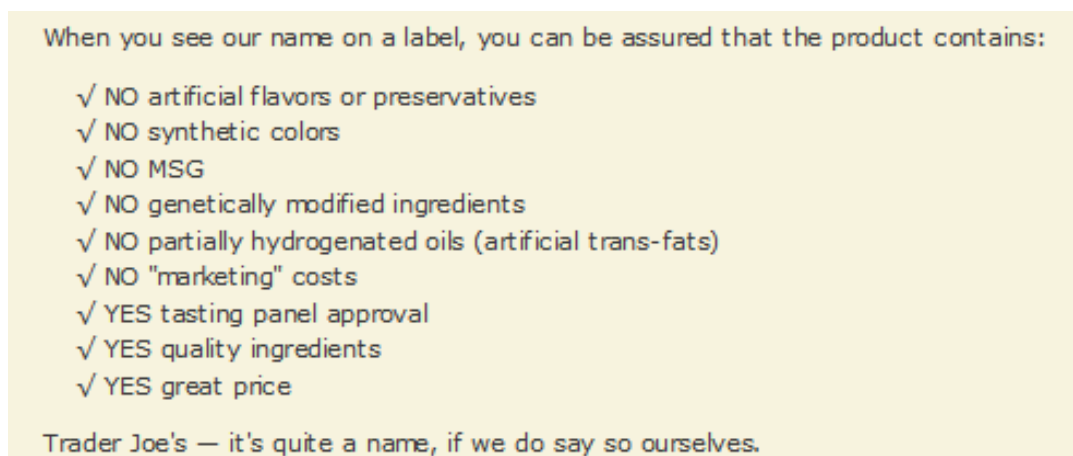


Figure 1 Trader Joe's "Our Name" screenshot

Earth Fare uses this tactic almost identically in establishing their "Food Philosophy," as Figure 2 shows.

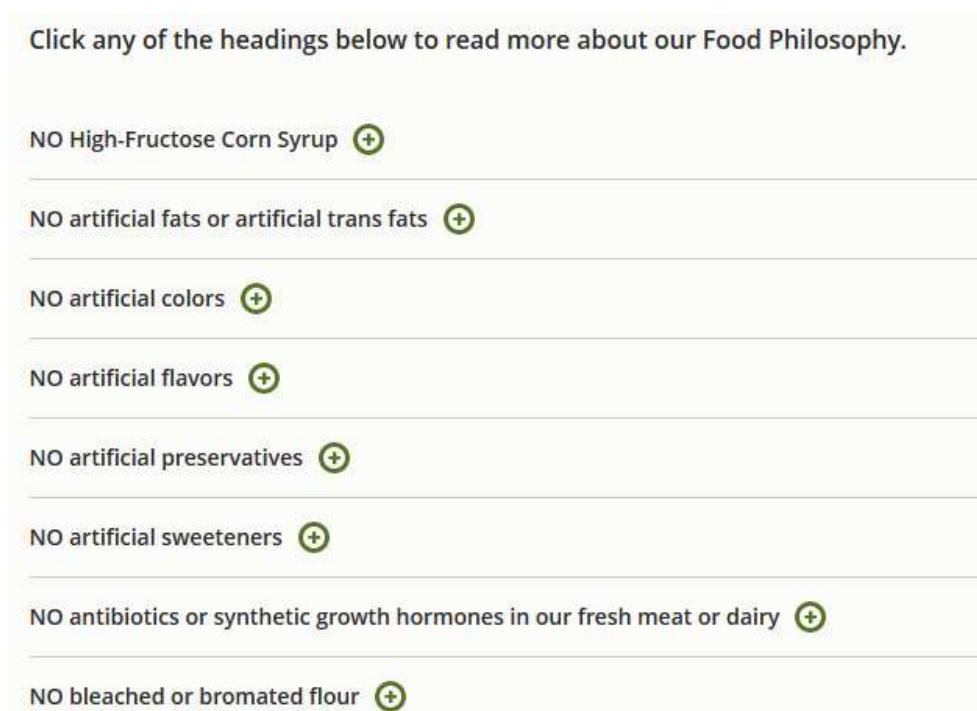


Figure 2 Earth Fare "Food Philosophy" screenshot

If this list of *NO*'s doesn't make the point, the Earth Fare website also clearly states that "The best thing we offer is what you won't find in our foods" and that "What really sets Earth Fare apart from other stores is the list of things we **don't** offer."

Coming later to the market of products distinguished by what they are not,¹⁵ Kroger's natural and organic brands have appropriated this type of negation in their discourse: "At Simple Truth, we take pride in what's NOT in our foods" (*Simple Truth*). Furthermore, Kroger's Simple Truth takes this strategy a step further by *enumerating* the missing ingredients. Each Simple Truth product is designated as "Free From 101." As the website explains, this means that "our products do not contain 101 artificial preservatives and ingredients that our Customers told us they didn't want in their foods." Looking past the absurd notion of counting items that don't exist, this rhetorical move clearly illustrates that creating distinction through negation is a current trend in food advertising.

This trend serves to distinguish products intended for consumers with higher-class tastes by setting them off from the products intended for lower-class consumers, which presumably *do* contain 101 (or more) undesirable ingredients. By defining preferences negatively, food advertising promotes the idea that "what it is to be upper class is to be not lower class" (Freedman and Jurafsky 50). Put another way, "privileged eating is intrinsically tied to impoverished eating; [...] what allows an aesthetic of food is disparity" (Guthman 55). As we have seen, this disparity is linguistically coded in the discourse of food advertising.

¹⁵ The "soft launch" of Simple Truth took place in the fall of 2012 (*Fact Book* 27).

Value

Because cost is a more important deciding factor for lower-income consumers (Freedman and Jurafsky 48), we would expect grocery stores to use language that emphasizes the value and low prices of their products in order to appeal to cost-sensitive customers. In order to investigate this hypothesis, I have identified a few words¹⁶ from the Grocery Store Corpus that represent these factors. Table 8 shows the distribution of words that suggest value or money-saving.

Table 8 Distribution of words indicating value

	Family Dollar	Kroger	Kroger Simple Truth	Trader Joe's	Earth Fare	Total
price	2	2	1	9	1	15
save	5	0	1	4	0	10
value	0	4	0	4	1	9
Total	7	6	2	17	2	34
% Total	21%	17%	6%	50%	6%	100%

The distribution of words indicating value reveals that Trader Joe's in particular emphasizes this factor. The following excerpts from the Trader Joe's website illustrates this finding: “**Value**’ is a concept we take very seriously. And by **value** we mean great everyday **prices** on all of our great products—no sales, no gimmicks, no clubs to join, no special cards to swipe,” “Trader Joe’s private label products promise great quality fare for exceptional, everyday **prices**.”

¹⁶ For words in this and the following tables (8-11), the corpus was queried using a wildcard character in order to include all inflected and derived forms of the lemma that appears in the table. (e.g. the search string *say** would return results that include *save*, *saves*, *saved*, *saving*, *savings*)

Family Dollar uses the phrase “everyday low prices” and the words *save* and *savings* to call attention to their low prices (e.g. “Visit your local store for our everyday **savings** on these products and more!”) Figure 3 below provides a few examples from the Family Dollar website of the visual appearance of this savings rhetoric.



Figure 3 Family Dollar screenshots

Of the four grocery stores under study, Trader Joe’s and Family Dollar emphasize most the value and low prices of their products. This finding aligns with the actual price comparison,¹⁷ which found that Trader Joe’s products had the lowest price per ounce, and Family Dollar the second lowest.

¹⁷ See Appendix A.

Convenience

Table 9 shows the distribution of words which point to the notion of convenience, which I expected would emerge as a prominent factor for the lower-end stores. It is easy to see how the adjectives *quick* and *easy* relate to convenience, but the inclusion of the verbs *need* and *help* requires some explanation. Since grocery shopping is a necessity for everyone, companies often use discourse that highlights how their store can help you with this need (i.e. the convenience of what they offer).

Table 9 Distribution of words indicating convenience

	Family Dollar	Kroger	Kroger Simple Truth	Trader Joe's	Earth Fare	Total
help	0	18	3	0	4	25
easy	5	0	3	0	1	9
need	3	1	0	2	2	8
quick	4	0	0	2	0	6
Total	12	19	6	4	7	48
% Total	25%	40%	12.5%	8%	14.5%	100%

As Table 9 shows, Kroger stands out as the store that focuses most on convenience, followed by Family Dollar. More specifically, Kroger's discourse shows a preference for the word *help*, as in the following example sentences from the website: "Kroger Brand products: Here to **help** you with what really matters," "Variety and great taste, that's how we **help** you delight your family everyday."

As we saw in the frequency and keyword lists, Family Dollar emphasizes convenience with the words *quick* and *easy*. The following contexts illustrate how this is

done: “With Family Dollar’s **quick** recipe ideas, you can make breakfast, lunch, dinner and snack time simple and stress-free!,” “Bring the whole family together with **easy** recipe ideas from Family Dollar!” The discourse of this convenience store also displays an awareness of filling a need: “You’ll find your favorite drinks, not to mention cereal, chips and cookies, and everything you **need** to create an **easy**-to-prepare hot meal at the end of the day.” Kroger’s discourse also shows this awareness: “Stretching your budget can sometimes make all the difference to help you buy more of what you **need**.”

As the numbers and the contextualized examples show, the discourse of Family Dollar and Kroger place the most emphasis on convenience, a finding which supports my original hypothesis for this factor.

Naturalness

Freedman and Jurafsky discuss “the fervor among upper-middle-class eaters [...] for the use of natural rather than artificial ingredients, and an obsession about the quality and origins of the ingredients” (51). Likewise, Guthman argues that “the success of the organic industry was largely wrapped up with gentrification—and the class differentiation that necessarily entailed” (47). As these authors suggest, the growing desire for organic or natural foods is a trend mostly situated among higher-class consumers. Therefore, I hypothesized that the discourse of higher-end grocery stores would reflect this concern for naturalness as an attempt to appeal to this customer base. Words reflecting the naturalness factor include, of course, *organic* and *natural*. However, these words appear in the discourse not in isolation but rather as dichotomies: *organic/GMO*, *natural/artificial*. As we saw in the overview of the Earth Fare corpus in

particular,¹⁸ the word *artificial* occupies a prominent place in the discourse of natural foods. The notion of *artificial* subsumes a number of words expressing the same concern; these include *synthetic*, *preservative*, *additive*, *chemical*, and *antibiotic*. Table 10 shows the distribution of these words throughout the Grocery Store Corpus.

Table 10 Distribution of natural/artificial words

	Family Dollar	Kroger	Kroger Simple Truth	Trader Joe's	Earth Fare	Total
organic	0	0	39 ¹⁹	4	21	64
artificial	0	0	16	6	27	49
natural	1	0	20	0	6	27
GMO/genetic	0	0	2	17	3	22
preservative	0	0	11	3	5	19
antibiotic	0	0	4	7	6	17
synthetic	0	0	3	2	5	10
additive	0	0	2	0	5	7
chemical	0	0	1	0	5	6
Total	1	0	98	39	83	221
% Total	0.4%	0%	44%	18%	38%	100%

As expected, Family Dollar and Kroger do not use language that emphasizes the naturalness of their products,²⁰ which suggests that these companies do not view this factor as a concern of their target consumers. Trader Joe's discourse uses a good deal of language that expresses naturalness negatively (e.g. "NO artificial colors or flavors"). In

¹⁸ Cf. Tables 2 and 3.

¹⁹ Excludes tokens of "Simple Truth Organic" since this is the name of the brand.

²⁰ In most cases, Kroger and Family Dollar products contain the same ingredients as the corresponding higher-end products that do display naturalness claims.

particular, the collocation *non-GMO* occurred frequently in the Trader Joe's corpus—a finding which suggests that the company perceives this aspect of naturalness to be particularly important to their customers.

Unsurprisingly, Earth Fare uses many words in the natural/artificial semantic field. The following texts from their Organic Toasted O's cereal box illustrate the use of a few of these words in context: “This classic has no hydrogenated oils, refined sugars or **artificial preservatives** and flavors,” “Buying **organic** products help [*sic*] promote healthy agricultural farming practices. It supports the environment by not utilizing **synthetic** pesticides or **chemical** fertilizers which in turn means healthier and tastier ingredients for you.”

Somewhat surprisingly, the corpus revealed that Kroger's Simple Truth brand uses natural/artificial language the most. In particular, Simple Truth Organic product labels displayed the word *organic* multiple times per product (e.g. from the Toasted Oats Cereal: “USDA **organic**,” “certified **organic** by quality assurance international,” “Our Toasted Oats are made with **organic** whole grain oats (including the nutritious oat bran) and are lightly sweetened with **organic** sugar”). Naturally, the discourse of the Simple Truth “Free From 101” campaign showcases the word *artificial*, as in “Find out which **artificial** preservatives and ingredients Simple Truth and Simple Truth Organic leave out of our foods” (*Simple Truth*). The extent to which Kroger emphasizes the naturalness factor through their Simple Truth brand is somewhat surprising, considering that the organic and natural food movement can be characterized as “opposed to large-scale globalized economic distribution chains, and supportive of more localized community-based production and consumption” (Cook, Reed, and Twiner 152). Indeed, the language

of natural food promotion originated with smaller retailers and was subsequently copied by larger supermarkets (Cook, Reed, and Twiner 157). This act of discourse appropriation reveals Kroger's eagerness to appeal to a broader clientele by addressing this growing concern.

As we have seen, the naturalness factor figures prominently in the discourse of Trader Joe's, Earth Fare, and Kroger's Simple Truth, or, in other words, the companies intending to target a higher-class clientele. This finding raises an interesting point—the natural/artificial dichotomy does not align with the nature/culture dichotomy that Lévi-Strauss, Bourdieu, and others have posited. Even decades ago, Bourdieu remarked on this irony, saying that “the cultural products which differentiate groups by their degree of culture, that is, their distance from nature, seem grounded in nature” (193). While *culture* is often contrasted with the state of *nature*, the cultivation of upper-class, *cultured* taste means appreciating the *natural*.

Health

In their potato chip study, Freedman and Jurafsky found that advertisers use more words relating to health claims on the packaging of more expensive chips, even though there were no real differences in health value (49). Based on the known correlation between social class and health,²¹ I hypothesized that the grocery stores targeting higher-class customers would use more language that emphasizes the healthfulness of their products. After perusing the corpus for words used for this purpose, I selected the following nine words: *health*, *disease*, *nutrient*, *vitamin*, *mineral*, *whole*, *fiber*, *cholesterol*, and *fat*. Table 11 shows the distribution of these words throughout the Grocery Store Corpus.

²¹ See for example Berkman and Epstein.

Table 11 Distribution of health claim words

	Family Dollar	Kroger	Kroger Simple Truth	Trader Joe's	Earth Fare	Total
fat	0	11	6	5	15	37
health	0	11	2	2	8	23
vitamin	2	10	5	4	2	23
whole	0	7	4	7	0	18
nutrient	2	9	2	0	5	18
cholesterol	0	3	0	0	7	10
fiber	0	9	0	1	0	10
disease	0	8	0	0	1	9
mineral	2	1	4	0	0	7
Total	6	69	23	19	38	155
% Total	4%	44%	15%	12%	25%	100%

Contrary to my hypothesis, Kroger stands out as the store that uses health-related discourse the most. To illustrate this type of discourse, consider the following examples from the Kroger website: “Every step you take toward eating more fruits and veggies helps you and your family stay **healthy**,” “Every fruit and vegetable has a unique **nutritional** fingerprint. When striving for good **nutrition**, aim for variety.” Another example comes from the cereal box for Kroger’s Toasted Oats: “Heart **Healthy** meets the US Government requirements for low **fat**, low saturated **fat**, low **cholesterol** food. While many factors affect heart **disease**, diets low in saturated **fat** and **cholesterol** may reduce the risk of heart **disease**.”

To a lesser extent, Earth Fare and Trader Joe's also participate in this health-related discourse. For example, Earth Fare's Organic Toasted O's claims that the product is "a low **fat**, saturated **fat** free, and **cholesterol** free cereal with a perfect balance of crunch and sweetness to satisfy everyone's tastebuds." Similarly, the box of Joe's O's displays the following health-related claims: "low in sugar, low in **fat**, excellent source of 6 B **vitamins**, iron & zinc, good source of dietary **fiber**, no artificial colors or flavors."

Perhaps stores like Earth Fare and Trader Joe's, as well as Kroger's own Simple Truth, have begun to move away from the language of *nutrients* (e.g. vitamins, minerals, fats, fibers) for their health claims, preferring to create "health halos" (Chandon and Wansink) through the language of the natural/artificial dichotomy, as we saw above. Meanwhile Kroger (and the Kroger Banner Brand) has retained this more traditional language of health claims while almost completely ignoring the natural/artificial discourse (or, we might say, relegating it to one section of the store and one of four corporate brands). More research is needed to investigate the subtleties of word choice in grocery store's health claims and how customers perceive and respond to these word choices.

CONCLUSION

Designing a corpus to represent a particular kind of language can be a challenge. One limitation of the Grocery Store Corpus is its size—fewer than 10,000 words is quite small for an electronic corpus. While care was taken to keep the content of the sub-corpora balanced, it would be inaccurate to claim that the texts comprising each corpus were exactly equal (nor would we necessarily expect them to be). Moreover, the scarcity of texts for the Family Dollar portion resulted in an imbalance in the size of the sub-corpora.

Nevertheless, the corpus-based analysis of grocery store discourse has shown how different stores use language to appeal to consumers of different backgrounds. More specifically, the corpus revealed how the rhetoric of each grocery store differs in linguistic complexity, and the prominence of factors such as distinction, value, convenience, naturalness and health.

The analysis of linguistic complexity revealed that of all the store brands examined, the language of Earth Fare product labels is generally the most complex and difficult to understand. Measures of linguistic complexity partially supported the hypothesis that the Simple Truth brand would use more complex language than the general Kroger brand—while both brand's packaging displays language that qualifies as fairly easy to understand, the Simple Truth labels incorporate many more words found in longform rhetoric.

The corpus revealed that negation is a discorsal trend that food advertisers use to distinguish their company and their products from others. Trader Joe's shows a marked preference for using negation to create distinction. To a lesser extent, this rhetorical strategy also appears in the language of Simple Truth and Earth Fare.

Trader Joe's also stood out as the store that most emphasizes value and low prices—a finding which recalls the quip about Trader Joe's typical customer having champagne taste and a beer budget. As expected, the language of Family Dollar also tries to showcase low prices and savings. As for convenience, the corpus revealed that the discourse of Family Dollar and Kroger focus on this factor the most.

As hypothesized, the language of the natural/artificial and organic/GMO dichotomies figures prominently in the discourse of Earth Fare and Trader Joe's. While I also expected Kroger's Simple Truth brand to participate in this kind of discourse, I did not anticipate the extent to which they would do so. Kroger's use of this language for their Simple Truth brand represents an act of discourse appropriation.

Contrary to my hypothesis, Kroger emerged as the grocery store which most emphasizes the health factor in their discourse. As expected, Kroger's Simple Truth, Trader Joe's and Earth Fare also use the language of health claims, but to a lesser extent. These patterns suggest that the higher-end stores or stores specializing in natural foods now prefer to make health claims using natural/artificial language, but this suggestion requires more research to confirm.

Overall, the patterns of language use that emerged in this corpus suggest that a class disparity exists in the experience of grocery shopping in the United States. The affluent and better-educated portion of the population has more opportunity and incentive

to identify with healthy lifestyles, through the consumption of distinctive and natural products. Meanwhile, the food options available to the lower-class section of the population perpetuate the idea that the only factors that matter in food choices are convenience and affordability. This disparity is linguistically-coded in the discourse of the grocery stores we visit every day.

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APPENDIX A Price per ounce for selected products

	Family Gourmet	Kroger Brand	Kroger Simple Truth	Trader Joe's Brand	Earth Fare Brand
Pasta	\$0.063	\$0.063	\$0.112	\$0.062	\$0.104
Tom. Sauce	\$0.063	\$0.062	\$0.139	\$0.068	\$0.115
Cereal	\$0.163	\$0.142	\$0.216	\$0.133	\$0.378
Average	\$0.096	\$0.089	\$0.156	\$0.088	\$0.212
By Store	Family Dollar	Kroger		Trader Joe's	Earth Fare
Average	\$0.096	\$0.167		\$0.088	\$0.212

APPENDIX B Census tract data on food deserts

Chain	Location (in Athens, GA)	LI Tract?	LA Tract?	Low Vehicle Access?	Food desert?
Earth Fare	1689 South Lumpkin St.	yes	no	no	no
Trader Joe's	1850 Epps Bridge Pkwy	no	no	no	no
Kroger	191 Alps Rd	yes	no	yes	yes
Kroger	2301 College Station Rd	yes	no	yes	yes
Kroger	1720 Epps Bridge Pkwy	no	no	no	no
Family Dollar	415 Hawthorne Ave	yes	no	yes	yes
Family Dollar	1005 Baxter Street	yes	no	yes	yes
Family Dollar	498 North Ave	yes	no	yes	yes
Family Dollar	4060 Lexington Rd	yes	no	no	no

APPENDIX C Pattern of “Reading Ease” Scores

“Reading Ease” Score	Description of Style	Typical Magazine	Syllables per 100 Words	Average Sentence Length in Words
0 to 30	Very difficult	Scientific	192 or more	29 or more
30 to 50	Difficult	Academic	167	25
50 to 60	Fairly difficult	Quality	155	21
60 to 70	Standard	Digests	147	17
70 to 80	Fairly easy	Slick-fiction	139	14
80 to 90	Easy	Pulp-fiction	131	11
90 to 100	Very easy	Comics	123 or less	8 or less

(Flesch 230)