

# Not Just “Sustainable”: Communicating Growing Practices in a Statewide Directory

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## Abstract

*While food texts like labels and descriptions are considered persuasive, few are written by growers themselves, and thus growers have infrequent opportunities to influence consumers through written communication. This study seeks to discover how retail growers frame descriptions of themselves in a print and online directory. The study employed a qualitative textual analysis of 406 growers' 460-character directory listings to identify how they frame themselves and distinguish their operations from others' operations. Results indicate growers predominantly use three frames: a product frame, a process frame, and an experience frame. Frames are sometimes used in combination with each other, and some growers use particular frames intensively. Both practices provide differentiation opportunities for growers. Growers of the same type tended to use the same type of frame, so growers seeking differentiation opportunities could use frames not commonly used by growers of their type. Since growers are not often professional communicators, agricultural communicators and extension educators can use the findings from this study to help educate growers about how to communicate about their operations.*

## Key Words

Framing theory, textual analysis, grower-authored directory listings

## Introduction

Retail-scale growers have limited opportunities to communicate with customers and prospective customers about their operations. Although opportunities exist for growers and customers to communicate directly at a farmers' market or a farm stand, those opportunities are constrained by time and the grower's need to attend to other customers. Yet these opportunities are important for growers and consumers alike as growers seek to educate consumers about their operations and as consumers seek information about how the food they are buying is grown. Communication between growers and consumers is all the more important at a time when consumers lack agricultural literacy (Goodwin, Chiarelli & Irani, 2011).

Growers can extend their communicative opportunities beyond face-to-face interactions through written formats like product labels, advertising, websites, and farm directories, among other options. These opportunities, if used by consumers, offer growers a powerful way to tell their own stories about their farms, their growing methods, their philosophies, and even personal information. Farm directories provide a communicative challenge in particular because in them — especially those distributed in print — space is constrained and growers need to describe their operations within particular character limits.

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However, growers are usually not professional communicators and so the challenge of conveying information about their operations in a way that is coherent and meaningful is significant. The opportunity to understand how growers view themselves and their work is also an entry point into this study. Since the internet has lowered barriers to publication, growers are able to do more communicative work to represent themselves – in directories, but also on their own websites and in social media. It is important to understand how growers are communicating on their own behalf because opportunities may exist for professional communicators to help growers better understand how to use these self-publication opportunities.

### **Literature Review/Theoretical Framework**

Textual representations of farms, their products, and their growing practices give growers an opportunity to describe and promote themselves, which is particularly important for farms selling products in a local setting (Leopold Center, 2003; 2004). Texts such as websites and directories that represent products, their producers, and the site of production are particularly useful for customers who have never purchased a farm's products before. Growers should not underestimate the persuasive possibilities provided to them through textual venues; the power of language as applied to food has been convincingly demonstrated in a long tradition of consumer research, as summarized in this literature review.

#### **Persuasive Food Texts**

Armand Cardello and his co-authors are responsible for much of the tradition that demonstrates the power of food texts, and Cardello (1995) himself summarizes their findings in the following passage.

Attitudes and information about food products create sensory and hedonic expectations for these foods. Subsequent perception and liking/disliking for a food is not simply a function of the intrinsic quality of the food. Rather it is a function of the expectations that a consumer has for the food and the degree to which the food matches or mismatches these expectations (p. 187).

In other words, the experience of a food's intrinsic qualities such as appearance, aroma, taste, and texture (Olson & Jacoby, 1972; Steenkamp, Wierenga & Meulenberg, 1986) does not comprise the entirety of the consumptive experience. When we consume food, we bring the whole of our background to bear on that experience. That background may include childhood memories, brand awareness, and label impression among a wide variety of other influences that may “evoke a rich range of associations ... and affective responses” (Tuorila, Meiselman, Bell, Cardello, & Johnson, 1994, p. 232). This is not to say that the intrinsic qualities of a food do not matter; rather, one's perception of a food is largely a matter of how the intrinsic qualities of the food experienced in the moment of consumption match the extrinsic qualities of the food experienced prior to consumption.

Cardello calls product names, product information, brands, labels, packaging, and the nutritional information that can influence consumer expectations about food “informational variables” (1995, p. 187), and he and others have convincingly demonstrated that our consumptive experiences are heavily influenced by those variables. In general, descriptive and precise language is perceived more positively than general and imprecise language. This finding has been discovered in relation to labels (Cardello, Maller, Masor, Dubose & Edelman, 1985), menu items (Gueguen & Jacob, 2012; Hartwell & Edwards, 2009), branding (Cardello & Sawyer, 1992; Cardello, Bell, & Kramer, 1995;

Enneking, Neumann & Henneberg, 2007), and product origination information (Howard & Allen, 2006; Leopold Center, 2004; Loureiro & Hine, 2002).

Descriptions of how a product is grown also may influence consumer perception. Research has clearly indicated consumers are concerned about how the food they eat is produced (Howard & Allen, 2006; Hartwell & Edwards, 2009), specifically with regard to the use of synthetic pesticides. Citing a number of studies on consumer perception of synthetic pesticide, Govindasamy and Italia (1997) summarize “70-85% of consumers exhibit a medium to high degree of concern toward pesticide residues and pesticide usage” (p. 1).

Govindasamy and Italia cited these studies to support the concept of integrated pest management (IPM); however, their study and others have indicated consumers do not understand what IPM is (Zehnder, Hope, Hill, Hoyle, & Blake, 2003). After IPM is explained to them, consumers have a favorable attitude toward it by, for example, indicating that they would “preferentially purchase IPM or organic produce if labels/information were provided at the point of sale to reflect pest management practices” (Zehnder, Hope, Hill, Hoyle & Blake, 2003, Discussion section, para. 3).

Consumers’ misunderstandings of the highly regulated term “organic” also have been documented. The actual attributes of organics as defined by the National Organic Program (NOP) pertain only to growing practices and not to the product itself. In other words, a product labeled “organic” means that it has been grown or raised without synthetic pesticides (for the most part), synthetic fertilizers (for the most part), genetically modified organisms (GMOs), irradiation, and unprocessed manure/sewage (USDA, 2013). As a regulated term, the definition of “organic” is necessarily limited, yet consumers misunderstand it to mean better nutritional value (Klintman, 2006; Klonsky & Greene, 2005), opposition to “corporate” food (Conner & Christy, 2004), and support for local food systems (Conner & Christy, 2004).

One explanation for why consumers misunderstand the organic label may be due to predominant media frames. As identified by Meyers and Abrams (2010), the most commonly emphasized frame is the ethical frame, which portrays organic food as environmentally and socially responsible. Other frames include the health frame, which identifies organic food as nutritious and pesticide-free; the production frame, which addresses costs, regulations, labeling practices, and the distinction between “organic” and “natural” food; and the industrial frame, which poses distinctions between industrial production and small-scale, family-operated, and local farms. In assessing the sources used in presenting these frames, Meyers and Abrams indicated media “perpetuate an ideology” rather than balancing their coverage of organic food with “scientific evidence or other viewpoints” (p. 33).

Due to the average consumer’s lack of agricultural literacy (Goodwin, Chiarelli & Irani, 2011) and the gap that exists between food production and consumption (Blue, 2010), it can be challenging to communicate with consumers about growing practices, and the studies cited above about IPM and the NOP summarize some of those challenges.

Despite this lack of agricultural literacy, customers generally react favorably to information that indicates attempts to reduce synthetic inputs, regardless whether those attempts are part of a named or regulated pest management program. Anderson, Hollingsworth, Van Zee, Coli, and Rhodes (1996) point out the fallacy that “customers do not want to know how their food is grown and become extremely fearful at any mention whatsoever of pesticides” (p. 105). Instead, they offer the correction that consumers will “accept some pesticide use if they understand that efforts are being made to minimize that use” (p. 105). The Leopold Center (2004) has contributed further in this area with its discovery that consumers prefer locally grown foods with some pesticides over organic foods grown non-locally.

Research suggests consumers may even react unfavorably to a lack of information about growing practices and production methods when contrasted to a product description that does include that information. For example, Golan, Kuchler, and Krissoff (2007) believe that “consumers learn to ‘read between the labels’ and make deductions about unlabeled products” (Companies Will Voluntarily Label if Their Benefits Outweigh Their Costs section, para. 7). They cite tuna labeling as an example. Confronted with one can of tuna labeled “dolphin friendly” and one with no such claim, consumers likely would assume the unlabeled tuna was caught with dolphin-endangering practices. In a competitive marketplace, the presence of a label is a signal of quality, and *the lack of a label on competing brands implies the absence of the quality attribute* (Companies Will Voluntarily Label if Their Benefits Outweigh Their Costs section, para. 7, emphasis added).

Just as the absence of a “dolphin-friendly” claim on a can of tuna can signal dolphin unfriendly practices, the absence of information about an attempt to reduce synthetic pesticide use — especially in comparison to other farms’ descriptions of such efforts — could signal that no such attempts are made.

Some studies suggest consumers appear to be becoming more skeptical of certain sensory terms and general descriptions. Cook, Read, and Twiner (2009) discovered that focus group participants paid the “least attention to poetic descriptions, and preferred to assess factual statements” (p. 167). The word “succulent” in particular was identified as one that food marketers use with confidence but that consumers regard with caution. Goodwin, Chiarelli, and Irani (2011) found similar results in their study of agricultural messages. Phrases in messages that participants received unfavorably included “best management practices,” “scientifically proven,” and “best quality product” (p. 28). To counter participants’ skepticism about such language, they recommended including “examples and explanations in conjunction with messages” (p. 29). Again, Cardello’s finding that precise, descriptive language is perceived more positively than general, imprecise language is a useful correction to “poetic” descriptions of food.

Growers who are writing descriptions of their products also should be aware of the ways consuming food exceeds simple sustenance. Today, food consumption can be considered political, economical, social/cultural, technological, or environmental action (Alkon, 2008; Beer, 2008; Cook, Read, & Twiner, 2009; Howard & Allen, 2006). Whether explicit as in the form of a boycott or a “buycott” (Stolle, Hooghe, and Micheletti, 2005) or implicit as an action “embedded in a broader consumer politics” such as the purchase of organic milk cited by Blue (2010, p. 153), consumers purchase food for reasons that far exceed a food’s intrinsic qualities.

### **Framing Theory**

Framing theory is commonly used in mass communication research to understand how news media interpret and portray issues. Frames are a powerful concept in the context of mass communication, understood to determine the relevance and salience of some aspects of reality over others (Kuypers, 2010). Framing can occur consciously or unconsciously and serve as a “central organizing idea for making sense of relevant events and suggesting what is at issue” (Gamson, 1989, p. 157).

Frames also can be understood to operate outside of traditional mass media contexts. Goffman understands frames to be used to organize and make sense of everyday life experiences (1974), and Kuypers describes them as a “natural and normal part of the communication process” (2010, p. 301). Based on Burke’s concept of terministic screens (1966), Kuypers advocates using framing theory as a tool of rhetorical criticism. He writes, “similar to much of the social scientific literature, a rhetorical version of framing analysis begins with the assumption that frames induce us to view issues and situ-

ations in a particular way” (2010, p. 301). In analysis, frames can be identified by looking for specific properties such as key words and phrases that appear consistently in texts and “convey thematically consonant meanings” (Entman, 1991, p. 7).

### **Purpose and Research Questions**

The purpose of this exploratory study was to discover how growers frame their descriptions of themselves in a state-sponsored directory that is published online and in print. From that purpose, two research questions follow:

1. How do growers frame their directory descriptions?
2. Do growers have opportunities to further distinguish themselves from each other in their descriptions?

The findings from this project will indicate growers’ predominant practices in describing themselves and opportunities for growers to author their directory listings to better distinguish themselves from similar operations. Since growers are not professional communicators, agricultural communicators and extension educators can use the findings from this study to help educate growers about how to communicate about their products.

### **Methods**

This study employed qualitative textual analysis methods based on framing theory and analysis. In contrast to a quantitative framing study, a qualitative framing study is exploratory, tends to not use predetermined codes or categories, and offers an interpretation of the texts in question (Kuyper, 2010). Examples of this methodological approach in the *Journal of Applied Communications* include Meyers and Abrams’ (2010) study of organic food media coverage and Barr, Irlbeck, and Akers’ (2012) analysis of coverage of the 2008 and 2009 salmonella outbreaks, among others (Abrams and Meyers, 2012; Ashlock, Cartmell, and Kelemen, 2006; Cannon and Irani, 2011; Irlbeck, Akers, and Palmer, 2011; Ruth, Eubanks, and Telg, 2005).

The directory used for the project is known as Minnesota Grown (MN Grown) and is published by the Minnesota Department of Agriculture. It is similar to other state-sponsored directories such as the Indiana Agritourism and Farmers’ Market directory, the Iowa Fruit & Vegetable Growers Association farm search, North Carolina Farm Fresh, and Arkansas Grown, for example. The directory is published annually online and in print and is a popular form of publicity for retail agricultural operations in the state. In 2012, there were 840 listings in the directory. More than 200,000 unique visitors used the online directory in 2012 (Minnesota Department of Agriculture).

Fruit and vegetable growers were identified through the directory’s search. All of the growers’ discrete data as published in the directory was logged, which included each grower’s name, city, website, email address, phone number, up to five products that they could select from a pre-existing list, and a 460-word description of the grower’s operation; however, it was the 460-word descriptions that provided the focus of analysis.

No pre-existing themes or frames were used in analyzing the directory listing descriptions. Instead, consistent key words and phrases emerged through analysis of the descriptions. After a thematic base was established through a preliminary analysis of the descriptions, all of the descriptions were subsequently analyzed based on the emergent frames that had been identified.

## Findings

Initially, 465 fruit and vegetable growers were identified through the directory's search but that number was reduced to 406 after nurseries, wineries, and duplicates were removed. Duplicates were removed because of directory errors and, in one case, because a grower with roadside stands in multiple locations used identical directory listing language to describe each roadside stands. Although nurseries and wineries were included in the search results for fruit and vegetable growers, they were excluded because nurseries and wineries do not sell fresh produce intended for immediate consumption.

### Research Question #1: How do growers frame their directory descriptions?

Analysis of the descriptions indicated three dominant frames that growers used to describe themselves: a product frame, a process frame, and an experience frame.

The product frame was typified in descriptions that included the number of varieties grown or breeds raised. Alternatively, rather than quantifying varieties or breeds, their diversity was described as "abundant," "impressive," or "huge" or, in other cases, as "heirloom" or "heritage." Some listings included named varieties, which was a common technique for apple growers. "Fresh" and "local" were used frequently as were subjective terms like "beautiful," "best," "delicious," "finest," "flavorful," "luscious," "tasty," and so on. Additional descriptions typified by a product frame included evocative terms like "crisp" and "juicy." Other growers claimed "specialties" or to grow "your favorite."

The process frame was represented by key words or phrases in descriptions that referred to "organic," "natural," "sustainable," and variants of those terms were the most commonly used indicators of the process frame followed by "free of ..." chemicals/pesticides/GMOs, hormones/antibiotics/herbicides/fungicides. Growers who also raised livestock described the livestock operations as "grass fed," "pasture raised," or "free range." Growers that could not claim the complete absence of pesticides added qualifiers like "if needed," "as a last resort," "infrequently used," and "try our best." While still speaking to an effort to reduce pesticide use, growers used even more indeterminate and varied means of describing their processes and growing philosophies. "Earth and people friendly," "intensive soil stewardship," "outside the traditional-industrial paradigm," and "grown in harmony with nature" are some examples of non-standard and non-regulated claims growers used in their process-oriented descriptions.

The experience frame was commonly typified by indicating the number of years the farm was in operation, the number of acres farmed, number of years in the family, or number of generations that had farmed. Following from those descriptions, "small" and "family owned" also were common indicators of the experience frame. Beyond the types of claims made for a limited-size family operation, descriptions framed by experience listed activities one could participate in if visiting the farm, activities like lunch, pick-your-own, hikes, or picnics; or attractions like hayrides, petting zoos, live music, or mazes. Some farms referenced their family- and child-friendliness as well as the affordability of a visit. Finally, farms listed natural features like meadows, ponds, and valleys or subjective descriptions of the farm like "scenic," "charming," and "picturesque."

The product frame was the most commonly used frame by growers, with 76% ( $f = 309$ ) of them using that frame in their descriptions. 65% of growers ( $f = 263$ ) used the experience frame. The least commonly used frame was the process frame, with only 42% ( $f = 169$ ) using it.

## **Research Question #2: Do growers have opportunities to further distinguish themselves from each other in their descriptions?**

Growers used multiple frames and different degrees of framing to represent their operations more distinctively; 49% ( $f = 199$ ) represented themselves through product and experience frames; 32% ( $f = 128$ ) represented themselves through product and process frames; and 25% ( $f = 101$ ) represented themselves through experience and process frames. It was rare for growers to write descriptions framed by all three approaches; only 18% ( $f = 72$ ) represented themselves through all three frames. It also was possible for growers to write descriptions that did not incorporate any of these three frames. Those descriptions focused on providing directions to the farm or indicating locations and hours of their operations.

Growers also used frames to different degrees. Since frames were identified through key words and phrases, the presence of more of those key words and phrases within a particular frame indicated a stronger emphasis on that frame. For example, 11% ( $f = 43$ ) of growers used five key words or phrases representative of the experience frame; 5% ( $f = 19$ ) of the descriptions used five key words or phrases representative of the product frame; and only 2% ( $f = 8$ ) of the descriptions used five key words or phrases representative of the process frame. The presence of more keywords and phrases for each frame indicates a more intensive use of that frame, where each grower strongly distinguishes his or her operation in terms of a product, process, or experience orientation.

## **Discussion and Conclusions**

The descriptions written by growers provided distinctive contrasts in terms of the three dominant frames they used. While these frames were used by a majority of growers, it was less likely for a grower to use multiple frames in combination or to use a more intensive degree of framing, which would be two means by which growers could distinguish their operations from other growers' operations.

It was noted that certain types of growers used particular frames predominantly. For example, apple growers uniformly used the product frame by listing the apple varieties grown. Operations that also raised livestock framed their farms in terms of process as they described their "grass fed" or "free range" operations. Agritourism operations, those with attractions like petting zoos and corn mazes, framed themselves in terms of experience. Since growers of the same type tended to use the same type of frame, growers seeking differentiation opportunities could use frames not commonly used by growers of their type; for example, vegetable growers could adopt the product frame that apple growers use by listing examples of varieties they grow.

Since many of the key terms relevant to the process frame are misunderstood, like "organic," or are contested or malleable, like "natural," and "sustainable," growers could provide examples or detailed descriptions of what the terms mean to them. Research has shown consumers react unfavorably to indefinite phrases like "best management practices," "scientifically proven," and "best quality product" (Goodwin, Chiarelli, and Irani, p. 28) and "poetic descriptions" (Cook, Read, and Twiner, 2009, p. 167). Encouraging growers to use precision, elaboration, and examples in their descriptions will help them refrain from moving into unfavorable marketing jargon. Precision, elaboration, and examples also will educate consumers while at the same time distinguishing one grower's operation from another.

There were some notable similarities between the process frame identified in this project and the four frames Abrams and Meyers identified in their work on media framing of organic food (2010). Their ethical frame portrayed organic food as environmentally and socially responsible; the health frame identified organic food as nutritious and pesticide-free; the production frame addressed costs,

regulations, labeling practices, and the distinction between “organic” and “natural” food; and the industrial frame posed distinctions between industrial production and small-scale, family-operated, and local farms. Evidence of each of these four frames was found in the process frame within this study, which indicates that growers have adopted the media’s framework for discussion of organic food in their representations of their own processes. This co-optation of predominant media frames signals either an internalization of those frames in the way that growers think about their own production or a savvy recognition that consumers are accustomed to organic food being represented in these ways by the popular press.

Growers producing food in any approach other than conventional would benefit from incorporating the process frame into their descriptions, particularly since it is the least-used frame of the three identified in this article and will serve as an important point of distinction for their operations. Anderson, Hollingsworth, Van Zee, Coli, and Rhodes remind growers that consumers will “accept some pesticide use if they understand that efforts are being made to minimize that use” (1996, p. 105). Additionally, Golan, Kuchler, and Krissoff’s 2007 findings suggest consumers may react unfavorably to the absence of a process frame when contrasted to a description that includes that frame.

It is noteworthy to recognize that many of the retail-based farms represented in this study are small and thus are unlikely to have retained the services of professional communicators to write their descriptions. It is useful to have examples of communication authored by growers themselves to understand the gaps between how growers communicate and the practices that communication professionals would advocate. It is also useful to have these examples of written communication as a counterpoint to media representations of growers, their products, and their practices. Follow-up research could include grower interviews to understand the rationale behind the choices they make in writing their descriptions and how they decide which details to include and which details to omit.

Finally, it is important not to assume customers uniformly will find value in differentiated descriptions or detailed information about growers’ products and processes in the directory. For future research, it would be useful to conduct focus groups or surveys with different consumer groups to understand their reactions to the differently framed directory listings.

## References

- Abrams, K., & Meyers, C. (2012). From opposite corners: Comparing persuasive message factors and frames in opposing organizations’ websites. *Journal of Applied Communications*, 96(1), 54-67. Retrieved from <http://journalofappliedcommunications.org>.
- Alkon, A.H. (2008). From value to values: Sustainable consumption at farmers markets. *Agriculture and Human Values*, 25, 487-498. doi: 10.1007/s10460-008-9136-y
- Anderson, M.D., Hollingsworth, C.S., Van Zee, V., Coli, W. M., & Rhodes, M. (1996). Consumer response to integrated pest management and certification. *Agriculture, Ecosystems and Environment*, 60, 97-106.
- Anstine, J. (2007). Organic and all natural: Do consumers know the difference? *Journal of Applied Economics and Policy*, 26(1), 15-28.
- Arkansas Department of Agriculture. (2013). Arkansas grown. Retrieved from <http://www.arkansasgown.org>.
- Ashlock, M.A., Cartmell, D.D., & Kelemen, D.B. (2006). The cow that stole Christmas: Framing the first U.S. mad cow crisis. *Journal of Applied Communications*, 90(2), 29-46.

- Barr, K., Irlbeck, E., & C. Akers. (2012). Salmonella and the media: A comparative analysis of coverage of the 2008 salmonella outbreak in jalapenos and the 2009 salmonella outbreak in peanut products. *Journal of Applied Communications*, 96(1), 29-41. Retrieved from <http://journalofappliedcommunications.org>.
- Beer, S. (2008). Authenticity and food experience – commercial and academic perspectives. *Journal of Foodservice*, 19, 153-163. doi: 10.1111/j.1745-4506.2008.00096.x
- Blue, G. (2010). Food, publics, science. *Public Understanding of Science*, 19(2), 147-154. doi: 10.1177/0963662508098575
- Burgess, R., Kovach, J., Petzoldt, C., Shelton, A., & Tette J. (1989). Results of IPM marketing survey. New York, NY: New York State IPM Program.
- Burke, K. (1966). Language as symbolic action. Berkeley, CA: University of California Press.
- Cannon, K.J., & Irani, T.A. (2011). Fear and loathing in Britain: A framing analysis of news coverage during the foot and mouth disease outbreaks in the United Kingdom. *Journal of Applied Communications*, 95(1), 6-21. Retrieved from <http://journalofappliedcommunications.org>.
- Cardello, A. V. (1995). The role of images, stereotypes, and expectations on the acceptance and consumption of rations. In Bernadette M. Marriott (Ed.), *Not eating enough: Overcoming underconsumption of military operational rations* (pp. 177-200). National Academies Press. Retrieved from <http://www.nap.edu/catalog/5002.html>.
- Cardello, A.V., & Sawyer, F.M. (1992). Effects of disconfirmed consumer expectations on food acceptability. *Journal of Sensory Studies*, 7, 253-277.
- Cardello, A. V., Maller, O., Masor, H.B., Dubose, C., & Edelman, B. (1985). Role of consumer expectancies in the acceptance of novel foods. *Journal of Food Science*, 50, 1707-1714.
- Conner, D., & Christy, R. (2004). The organic label: How to reconcile its meaning with consumer preferences. *Journal of Food Distribution Research*, 35(1), 40-43.
- Cook, G., Reed, M., & Twiner, A. (2009). “But it’s all true!”: Commercialism and commitment in the discourse of organic food production. *Text & Talk*, 29(2), 151-173. doi: 10.1515/TEXT.2009/007.
- Enneking, U., Neumann, C., & Henneberg, S. (2007). How important intrinsic and extrinsic product attributes affect purchase decision. *Food Quality and Preference*, 18(1), 133-138. doi: 10.1016/j.foodqual.2005.09.008.
- Entman, R. (1991). Symposium framing U.S. coverage of international news: Contrasts in narratives of the KAL and Iran Air incidents. *Journal of Communication*, 41(4), 6-27. doi: 10.1111/j.1460-2466.1991.tb02328.x.
- Environmental Working Group. (2011). Shopper’s guide to pesticides in produce. EWG Website. Retrieved from <http://www.ewg.org/foodnews/summary/>.
- Gamson, W.A. (1989). News as framing: Comments on Graber. *American Behavioral Scientist*, 33, 157-161.
- Goffman, E. (1974). *Frame analysis*. New York, NY: Free Press.
- Golan, E., Kuchler, F., & Krissoff, B. (2007). Do food labels make a difference? . . . Sometimes. *Amber Waves*. November. Retrieved from <http://naldc.nal.usda.gov/catalog/10244>.
- Goodwin, J.N., Chiarelli, C., & Irani, T. (2011). Is perception reality? Improving agricultural messages by discovering how consumers perceive messages. *Journal of Applied Communications*, 95(3), 21-33. Retrieved from <http://journalofappliedcommunications.org>.

- Govindasamy, R., & Italia, J. (1997). Consumer response to integrated pest management and organic agriculture: An econometric analysis. New Brunswick, NJ: Rutgers Cooperative Extension, New Jersey Agricultural Experiment Station. Retrieved from [http://dafre.rutgers.edu/documents/ramu/ipm\\_wtp.pdf](http://dafre.rutgers.edu/documents/ramu/ipm_wtp.pdf).
- Guégen, N., & Jacob, C. (2012). The effect of menu labels associated with affect, tradition and patriotism on sales. *Food Quality and Preference*, 23, 86-88. doi: 10.1016/j.foodqual.2011.07.001.
- Hartwell, H., & Edwards, J. (2009). Descriptive menus and branding in hospital foodservice: A pilot study. *International Journal of Contemporary Hospitality Management*, 21(7), 906-916. doi: 10.1108/09596110910985359.
- Howard, P. H., & Allen, P. (2006). Beyond organic: consumer interest in new labeling schemes. *International Journal of Consumer Studies*, 30(5), 439-451.
- Indiana State Department of Agriculture (2013). Indiana agritourism and farmers' market directory. Retrieved from [http://www.in.gov/apps/ISDA\\_FarmersMarket](http://www.in.gov/apps/ISDA_FarmersMarket).
- Iowa Fruit & Vegetable Growers Association. (2013). Iowa fruit & vegetable growers association farm search. Retrieved from <http://www.ifvga.org>.
- Irlbeck, E.G., Akers, C., & Palmer, A. (2011). A nutty study: A framing analysis of the 2009 Salmonella outbreak in peanut products. *Journal of Applied Communications*, 95(2), 48-59.
- Klintman, M. (2006). Ambiguous framings of political consumerism: Means or end, product or process orientation? *International Journal of Consumer Studies*, 30(5), 427-438.
- Klonsky, K., & Greene, C. (2005). Widespread adoption of organic agriculture in the US: Are market-driven policies enough? [Presentation]. Paper presented at the American Agricultural Economics Association Annual Meeting. Providence, RI. Retrieved from <http://purl.umn.edu/19382>.
- Kuypers, J.A. (2010). Framing analysis from a rhetorical perspective. In P. D'Angelo and J. A. Kuypers (Eds.), *Doing news framing analysis: Empirical and theoretical perspectives* (286-311). New York, NY: Routledge.
- Leopold Center. (2003). Ecolabel value assessment – Consumer perception and food business perceptions of local foods. Ames, IA: Leopold Center. Retrieved from <http://www.leopold.iastate.edu/sites/default/files/pubs-and-papers/2003-11-ecolabel-value-assessment-consumer-and-food-business-perceptions-local-foods.pdf>.
- Leopold Center. (2004). Ecolabel value assessment phase II – Consumer perception of local foods. Ames, IA: Leopold Center. Retrieved from <http://www.leopold.iastate.edu/pubs-and-papers/2004-05-ecolabel-value-assessment-phase-two>.
- Loureiro, M. L., & Hine, S. (2002). Discovering niche markets: A comparison of consumer willingness to pay for local (Colorado grown), organic, and GMO-free products. *Journal of Agricultural and Applied Economics*, 34(3), 477-487.
- Meyers, C., & Abrams, K. (2010). Feeding the debate: A qualitative framing analysis of organic food news media coverage. *Journal of Applied Communications*, 94(3-4), 22-36. Retrieved from <http://journalofappliedcommunications.org>.
- Minnesota Department of Agriculture. (2013). Minnesota grown directory. Retrieved from <http://www.mda.state.mn.us/food/minnesotagrown/procorner/mn-grown-about.aspx>
- North Carolina Department of Agriculture and Consumer Services (2013). North Carolina farm fresh. Retrieved from <http://www.ncfarmfresh.com>.
- Olson, J.C., & Jacoby, J. (1972). Cue utilization in the quality perception process. *Proceedings of the Third Annual Conference of the Association for Consumer Research*, 167-179.

- Ruth, A.M., Eubanks, E.E., & Telg, R. (2005). Framing of mad cow media coverage. *Journal of Applied Communications*, 89(4), 39-54.
- Steenkamp, J.E.B.M., Wierenga, B., & Meulenberg, M.T.G. (1986). Analysis of food quality perception processes. *Netherlands Journal of Agricultural Science*, 34, 227-230.
- Stolle, D., Hooghe, M., & Micheletti, M. (2005). Politics in the supermarket: Political consumerism as a form of political participation. *International Political Science Review*, 26(3), 245-269. doi: 10.1177/01925121050553784.
- Tuorila, H., Meiselman, H.L., Bell, R., Cardello, A. V., & Johnson, W. (1994). Role of sensory and cognitive information in the enhancement of certainty and liking for novel and familiar foods. *Appetite*, 23, 231-246.
- United States Department of Agriculture. (2013). National Organic Program. Retrieved from <http://www.ams.usda.gov/AMSV1.0/ams.fetchTemplateData.do?template=TemplateN&navID=OrganicStandardslinkNOPConsumers&rightNav1=OrganicStandardslinkNOPConsumers&topNav=&leftNav=&page=NOPOrganicStandards&resultType=&acct=nopgeninfo>
- Zehnder, G., Hope, C., Hill, H., Hoyle, L., & Blake, J. H. (2003). An assessment of consumer preferences for IPM- and organically grown produce. *Journal of Extension*, 41(2). Retrieved from <http://www.joe.org>.

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