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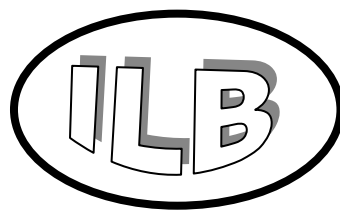
# **System Dynamics and Innovation in Food Networks 2013**

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# US Consumers' Perception of Local and Organic Food: An Analysis Based on Means-End Chain Analysis and Word Association

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## Abstract

The market of local and organic food is still a niche market in the USA, despite its strong growth rates. Both offer consumers an alternative to a globalized anonymous food supply chain. Yet local food and organic food seem to be overlapping and to some degree competing food concepts. While the organic food market somehow has managed to “mature”, being widely distributed in national supermarket chains, local food in the US still seems to be tied to a “grassroots food movement”, being mainly distributed over short food supply chains. With several trends indicating sustained growth for local and organic consumption, this paper first addresses different connotations of local food and compares them to standard definitions of organic food. The main focus is to explore the perception of US consumers towards local and organic food, using results from two different studies, both using laddering techniques and word association tests, which were undertaken at Cornell University in New York State and at the University of Florida in the city of Gainesville. These findings are used to arrive at a better understanding of the image of local and organic food, and the motives and values of local and organic food consumers’.

**Keywords:** *local food, organic food, consumer values and motives, product attributes of local food and organic food*

## 1 Introduction

Local food and organic food seem to be overlapping and to some degree competing food concepts. While the organic food market somehow has managed to “mature” in Europe and is in its growth phase in the USA – as indicators see the discussion on conventionalization of organic markets (Darnhofer et al. 2010; De Wit & Verhoog 2007) or the fact that big retail companies run their own organic private labels like Green Wise from the retailer Publix – local food in the US still seems to be tied to a “grassroots food movement”. In 2008, local food sales in the US were estimated \$4.8 billion (Low & Vogel 2011), and sales have grown steadily since then. But compared to \$22,9 billion of organic food sales in the USA there is still a long way to go for local food to reach the same economic importance (Organic Trade Association, 2009).

Besides the fact that organic food makes almost five times the sales of local food, one should not forget that both food concepts represent a niche market. Or like Dr. Oz, the US TV moderator mentioned recently in a Times magazine article: “Organic food is great, it’s just not very democratic” (Oz, 2012). He even went so far to label it as “elitist food” for the 1%. Looking at the sales numbers he is not far from right, organic food sales had a share of 3,47% of all food sales in the US in 2009 (yet with a growth rate of 15,8%, Organic Trade Association, 2009).

Local and organic food seems to be the “natural” answer to an ever increasingly global food supply. Technological and organizational innovations in the last 150 years (rise of agricultural productivity, greater durability of food, cheaper and better transport systems, global trade, ...) changed the way, how we produce and consume food significantly, making an industrialized agrifood system the predominant form, for better or for worse. An abundant food supply at affordable prices is attended by negative consequences such as food scandals of national dimensions (e.g. Chinese strawberry scandal in Germany, spinach scandal in USA; Flynn 2009; Anon 2012), loss of natural flavors, freshness and for some most importantly a non existent relation to agriculture (Pollan 2007; Singer & Mason 2007). The approx. 39.000 items in an average US supermarket (FMI, 2011) travel between 2.500 and 4.000 kilometers from farm to supermarket (Worldwatch Institute, 2008) and 85% of them stem from other states or other countries (Union of Concerned Scientists 2004). For consumers the origin of raw materials used in convenience or processed food is in most cases a “black box”. Local or organic food seems to step into this gap, bringing the consumer nearer to the source of production. Local food tells “the story behind the food” (Thompson et al., 2008) and “reconnects” consumers with what they eat and who is the producer (Ilbery et al., 2005).

With several trends indicating sustained growth for local consumption, this paper first illustrates key market data about local and organic food in the US, before explaining different connotations of local food and comparing them to standard definitions of organic food. The main focus is to explore the perception of US consumers towards local and organic food, using results from two different studies, which were undertaken at Cornell University in New York State and at the University of Florida in the city of Gainesville. The applied method in both cases is laddering technique and word association test. These findings are used to arrive at a better understanding of the image of local and organic food, and the motives and values of local and organic food consumers’.

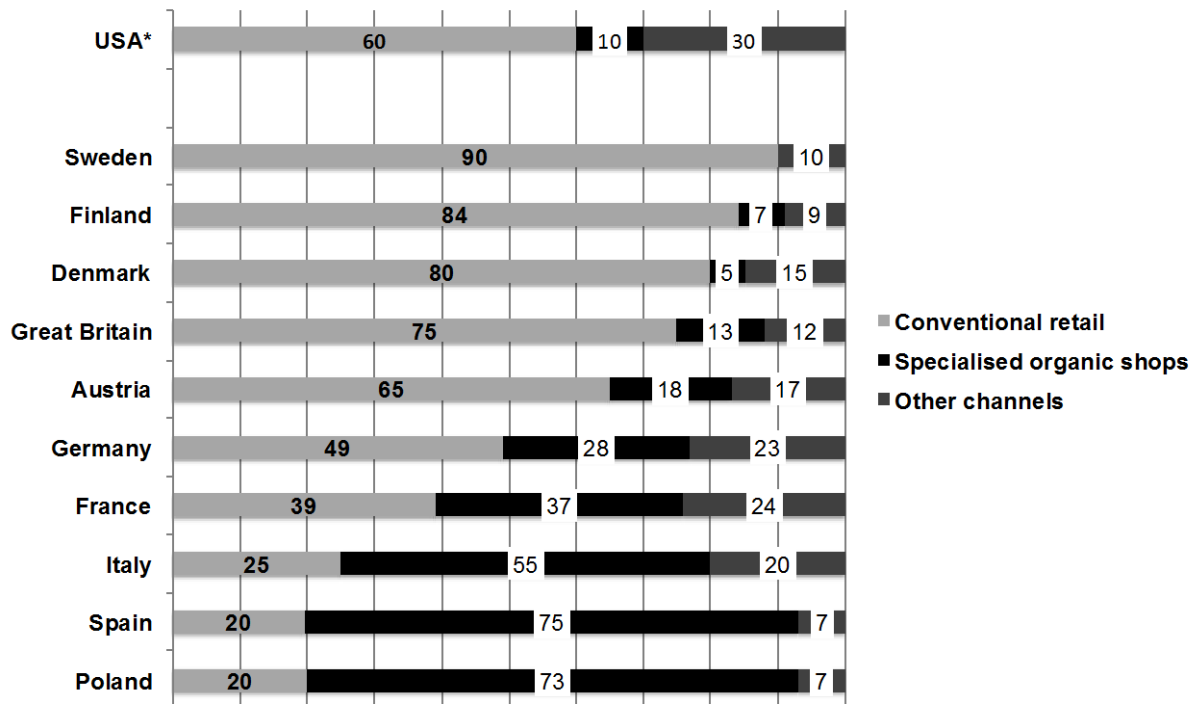
## 2 The market for local and organic food in the USA

Of all US farms that produce *local products*, 43% of them produce vegetables, fruits or nuts and sell them mainly over two groups of distribution channels (Low & Vogel 2011). Main distribution channels are direct-to-consumer outlets (farmers’ markets, roadside stands, farm stores or community supported agriculture) or short intermediate channels (local and regional grocers, restaurants and distributors).

Also in the *US organic market* the fruit and vegetable category is the biggest one and accounts for 37% of total organic food sales in 2008. The second largest organic categories (14%) are beverage and dairy (Organic Trade Association 2009). The maturing organic market shifted gradually from short direct distribution channels to specialized organic stores to large retail chains in Europe and as we can see now in the USA as well. Organic Retailer Association (ORA, 2008, 378) analysed 27 European countries (incl. Switzerland, Croatia and Norway; excl. the Baltic states) and found that in 15 of the 27 countries more than 50% of all organic food & beverage is sold through the distribution channel “conventional supermarket” (see Figure 1).

For the US market only estimates of the Organic Trade Associations are available. Different to the European retail landscape there are nation wide operating “natural” retail chains such as Trader Joe’s or Whole Foods, former with estimated \$2,6 Bn. and later with \$6,8 Bn.

annual sales in 2007 (Howard 2012). They are not comparable to the 100% organic supermarket chains, which are operating in Europe. The term “natural” is insofar fuzzy as it allows the retailers to sell organic products and other “natural” products as well. The Organic Trade Associations estimates for 2008 that conventional mass-market food retail chains account for one third of organic food and beverage sales, the same amount as national natural food chains. Regional natural food chains and independent health food stores account for 10% of organic sales (see Figure 1; Organic Trade Association 2009, 4).



**Figure 1.** Market shares of organic food and beverage sales of different distribution channels (own chart, source: ORA, 2008 und OTA, 2009); \*Conventional retail USA contains conventional mass-market retailers and national natural food chains

Organic food price premiums of 30% and more compared to conventional food (HAAS et al. 2010, 33) provide enough incentive for discount retail chains like Walmart in the USA or Aldi in Europe to enter this market and offer organic products often cheaper than their competitors. Many of the most successful organic brands in Europe are private labels (Haas et al. 2012) and a similar development can be seen in the US, for e.g. Safeway introduced “*O Organics*”, Walmart “*Great Value*” and “*Parent’s Choice*”, Target “*Archer Farms*” (Howard 2012). In fact what we see now is a split into a “mass organic market” and an artisan “premium organic market”. The tendency towards an organic mass market with the threat of conventionalization of organic farming could bring consumers to look for alternatives like local, sustainable or “slow food”.

Compared to organic food brands the situation of local food in the USA is more complex due to a different legal framework, which is the result of different political and cultural views and historical pathways. Organic food and agriculture is more strictly regulated than local food. In 1990 the “Organic Food Production Act OFPA” was the legal foundation to implement national standards for organic agriculture and organic food. In 2002 the USDA implemented

the “National Organic Program NOP” (GOLD, 2007, s.p.), which led in Feb. 15, 2012 to an US EU organic equivalence agreement. On the other side local food in the USA is regulated mainly over trademark law. There is a variety of trademarks connected to specific geographical locations such as “Philadelphia Brand Cream Cheese” or Lea & Perrins “Worcestershire Sauce” or the brand “Tabasco” belonging to McIlhenny (Giovannucci et al. 2010). Worcestershire is a county in England and Tabasco is a state of Mexico, both parts of brand names owned by US companies. These examples show that trademark law may be a mean to protect intellectual property for companies but not necessarily a mean to help consumers identify local food.

Yet there are examples of local food products, which are strongly associated with a geographical location in the USA. Wisconsin Cheddar Cheese is a trademark owned by the Wisconsin Milk Marketing Board (Patel et al. 2009). Florida oranges, Vidalia onions or Idaho potatoes are certification marks based on legal state regimes like the 1949 Florida Citrus Code, the Georgia’s Vidalia Onion Act 1986 or the Idaho Potato Commission in 1937 (Giovannucci et al. 2010, 98). In September 2008 the USDA implemented a Country of Origin Labeling (COOL) on specific not processed food categories (ranging from muscle cut and ground meat for beef, veal, pork, chicken, lamb, goat, over wild fish to fresh and frozen fruits and vegetables and different nut varieties. COOL “is a labeling law that requires retailers, such as full-line grocery stores, supermarkets, and club warehouse stores, to notify their customers with information regarding the source of certain foods” (AMS 2012).

The described situation shows that different to organic food with a clear national and supranational regulatory framework in place, a comparable legal framework for local food is not in place. Despite the growing demand for local food it is not easy for consumers to find local food. Because the variety and supply of local food is way bigger than the existing trademarks and certification marks are covering.

### 3 Defining organic food and local food

Organic farming and organic food are terms, which are clearly defined and legally regulated, which is not the case for “local food”. In accordance with the official IFOAM definition the USDA National Organic Standards Board defines organic agriculture by addressing

- environmental (“...ecological production management system that promotes and enhances biodiversity, biological cycles and soil biological activity” (Gold 2007)
- production process (“...products produced under the authority of the Organic Foods Production Act” (Gold 2007)
- health and social responsibility issues (“The primary goal of organic agriculture is to optimize the health and productivity of interdependent communities of soil life, plants, animals and people” (Gold 2007)

Local food has neither a clear environmental, neither production process nor health related definition. In the 2008 Farm Bill the US Congress states that to be considered as „... *locally or regionally produced agricultural food*” the *total distance* has to be less than 400 miles from its origin or it has to be within the State in which it is produced (Martinez et al., 2010). Besides the attempt of the US Congress to define the range of within one can speak of “local food”, there is no generally valid or one-size-fits-all definition of “local food” and there is

even no common agreement on the distance between production site and location of consumption.

Some authors refer to a radius of varying size of the “local food shed”. Thompson et al. (2008) defined for San Francisco an area of a 100-mile radius around the Golden Gate Bridge to be defined as local food. Winterton defined it even narrower with 30 miles (Winterton 2008). The New Oxford Dictionary defines a “locavore”, as a local resident who tries to eat only food grown or produced within a 100-mile radius. Pirog and Rasmussen (2008) reported in their survey that 66% of US citizens see local food within a range of 100 miles or less. One third sees local from their state or region.

Some use *political borders* as the defining criterion. Darby et al. (2003) found in their study about locally produced strawberries, that the state boundaries serve to define local food. But according to Brown (2003), consumers of the southeast Missouri defined local as exactly from that area and not from the whole state of Missouri. Consumers of Wisconsin defined local food even more divers. Some defined it as being within 6 to 7 hours of drive, others as produced within the State, others within the State and surrounding States and some accepted even the area of the USA as local (Zepeda and Leviten-Reid, 2004). Ibery and Maye (2005) illustrate the complexity of the term “local food” on the example of the United Kingdom. Depending on *who* you ask, local is seen as a smaller or wider geographical area:

“For a number of surveyed retailers, ‘local food’ equates to the county level, while others use descriptors such as ‘Scottish’ or ‘British’ produce. Respondents also use distances such as ‘within 20miles’, ‘within 30 miles’, “within 50 miles’ and ‘within 100 miles’, and often use the words local and regional interchangeably. It is, in short, an elastic concept. Indeed, population density is important [...] because what counts as ‘local’ in [some] very sparsely populated areas [...] may be very different from what is considered ‘local’ in a less sparsely populated county [...]. Elsewhere, Morris and Buller (2003, 565) refer to this as ‘flexible localism’, with retailers using ‘local’ in very fluid terms, determined by the need to source supplies from ‘local enterprises’ that may be 25 miles away or somewhere in Britain.”

This “flexible localism” seems to be a global phenomenon. Haas et al. 2010 report similar perceptions of regional organic food in Austria. While for managers and owners of specialized food stores a regional food product is a product purchased in a region in its narrow sense. A region is recognized as having a distinctive identity on the basis of its social and/or economic and/or natural characteristics. Managers from conventional supermarket chains see a regional organic product in a wider geographical sense, basically of Austrian origin. But managers of retail chains located in Vienna define it even bigger. It’s regional if it stems from a radial area encompassing neighboring countries, such as Czech Republic, Slovakia or Hungary (Haas et al., 2010); a definition, which reflects the common historical and cultural grounds of the Austrian-Hungarian Monarchy. In that sense “local” would have a specific cultural and historical meaning (see also the Basque country laying in France and Spain). It definitely carries a *community aspect* demonstrated by size and scope of Community Supported Agriculture in the USA.

The divers approaches show that local food is a multi-layered phenomenon, which has to be peeled like an onion. In its core we find the geographical distance, which some define radial,

some use linear distance measures others political borders. Then there is a layer for specific natural conditions, weather, climate, precipitation and soil conditions. And last but not least there are intangible layers of social identity, community related aspects, cultural heritage or artisan knowledge of specific production processes. This inclusion of human and natural factors is indirectly reflected in the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS, article 22) for Geographical Indications: "... identify a good as originating in the territory of a Member, or a region or locality in that territory, where a given quality, reputation or other characteristic of the good is essentially attributable to its geographical origin". The EU council regulation (EC) No. 510/2006 regulating protected designation of origin and protected geographical indication emphasizes the human and natural aspect much stronger than TRIPS:

"... 'designation of origin' means the name of a region, a specific place or, in exceptional cases, a country, used to describe an agricultural product or a foodstuff:

- originating in that region, specific place or country,
- the quality or characteristics of which are essentially or exclusively due to a *particular geographical environment with its inherent natural and human factors*, and
- *the production, processing and preparation of which* take place in the defined geographical area

Thompson et al. (2008) uses the term "provenance" of local food in the same sense like it is used for art objects to identify its authenticity. There seems to be a time line for local food, which is relevant because it influences the connotation of it. At the beginning it is simple "local food", having its merits from the nearness, maybe the community character, maybe some sustainable or organic production method. Maybe later a savvy entrepreneur adds a specific artisan processing method to this local food. Other small companies nearby imitate him and apply the same process. Combined with the specific natural and human conditions and with the time it needs to gain reputation *outside* of the 100 miles radius, after 20, maybe 50 or 100 years, this simple local food becomes "provenance food", inheriting intangible credence attributes – it became a "locality product" (Ilbery and Maye 2006) known and appreciated outside its original food shed.

#### **4 Methodology**

Two separate surveys with consumers from two different locations in the USA were done. Local food consumers were interviewed in Gainesville, Florida and organic food consumers in Ithaca, New York. In both survey consumers took part in semi-structured qualitative interviews, containing a word association test and laddering interviews. Laddering interviews are a tool for means-end chain analysis. The means-end chain describes the cognitive structure of consumers' by linking specific product attributes with consequences of product use and the values standing behind these consequences. So the means-end chain approach gives insight in consumers' motivation for purchasing products by linking consumers' needs and product characteristics (Zanoli and Naspetti, 2002, 644). For understanding means-end approach, thinking of consumers' decision making as a problem-solving process can be helpful. To make a decision and to reach an "end" consumers are setting a course of actions, i.e. means (Reynolds and Whitlark, 1995, 9). Reynolds and Gutman (1988) suggest a stage process for measuring means-end chains. It starts with the selection of most relevant

product attributes for consumers. Then an in-depth interview, the so-called “laddering”, is used to find out how consumers link product attributes to consequences and values. Further a hierarchical value map (HVM) is developed (Zanoli and Naspetti, 2002, 645). In our surveys free elicitation was used to collect the product attributes. The mentioned attributes were ranked by participations, starting each laddering interview in the order of importance.

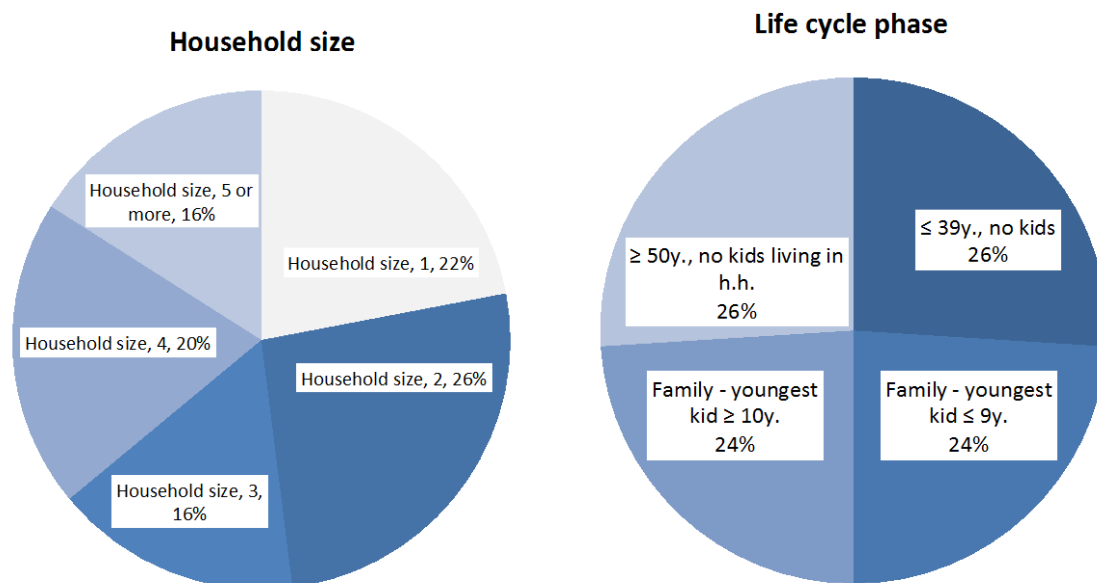
The technique of word association is a projective technique. Projective techniques have been used to help reveal non-conscious processes such as consumer attitudes and feelings that would not be necessarily discovered by more straightforward questioning (Steinman 2009). In the word association technique, the respondent is given a word of interest (e.g. “local food”) and asked to respond to the first thing that comes to mind. The association can be a picture, a thought or a word. The word of interest can generate many associations, which reveals consumer’ attitudes, images and beliefs about a specific topic. It does not require necessarily a big sample. Analyzing a small number of answers is possible, as did Roininen et al. (2006) in their research about consumers’ perception of local food in Finland with samples of 25 and 30 persons.

The interviews in Ithaca, NY, took place in a local supermarket called ‘Greenstar’ and in downtown Ithaca between March 3<sup>rd</sup> and March 18<sup>th</sup> 2011. Also a few interviews were performed in cafes and neutral places after making an appointment. In all of the mentioned places people had time and were able to sit down during the interviews. The interviews in Gainesville, Florida, took place downtown at the Gainesville Union Street Farmers’ Market.

**Table 1.** Description of Samples

	Organic Food Sample, Ithaca, NY	Local Food Sample, Gainesville, FL
Sample Size	50 for association test, n=25 for laddering	42 for association and laddering test
Gender	52% female, 48% male	64% female, 36% male
Age	Ranging from 18 to 65, average age 37 years	Ranging from 18 to 25, average age 24 years
Education	34% High School, 54% university degree, 12% other	48% High school, 54% university degree, 8% other

For the organic sample we also measured the household size and life cycle phase. Family members with kids represented 48% in the organic sample.



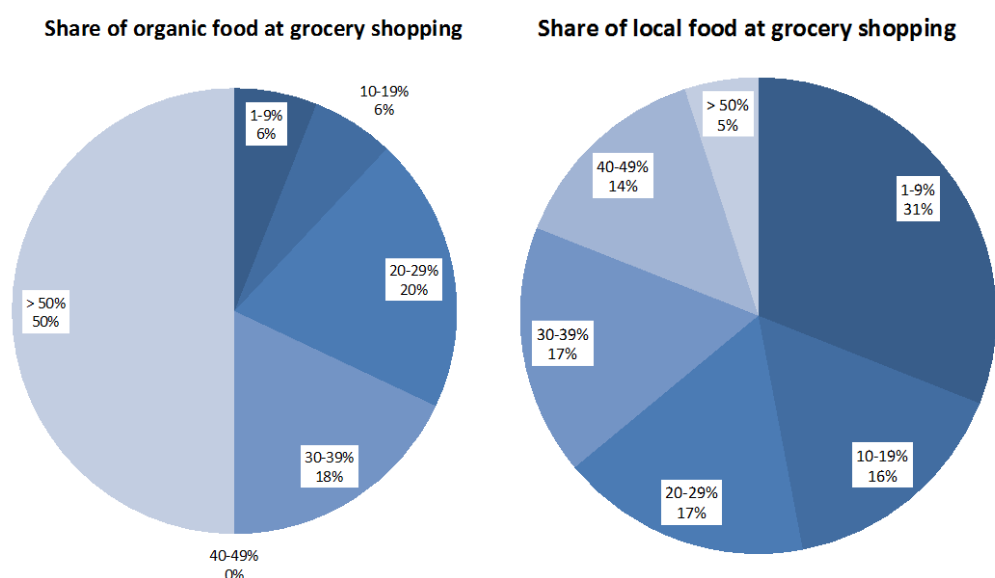
**Figure 2.** Household size and life cycle phase

Moreover interviewees were asked some additional questions in following categories:

- Share of shopping of organic food / local food
- Knowledge about organic labels / local food labels
- Geographical area of local food

## 5 Results

Concerning the share of organic or local food shopping the two samples show different patterns. In the organic food sample there are 50% of consumers spending more than 50% of their food shopping for organic food. Compared to the approx. 6% of market share of organic food of all food sales, this shows that our sample consists of a more than average share of organic food heavy users compared to the rest of the population. The local food sample represents a more equal distribution of spending for local food (see Figure 3).



**Figure 3.** Share of organic (n=50) and local food shopping (n=42)

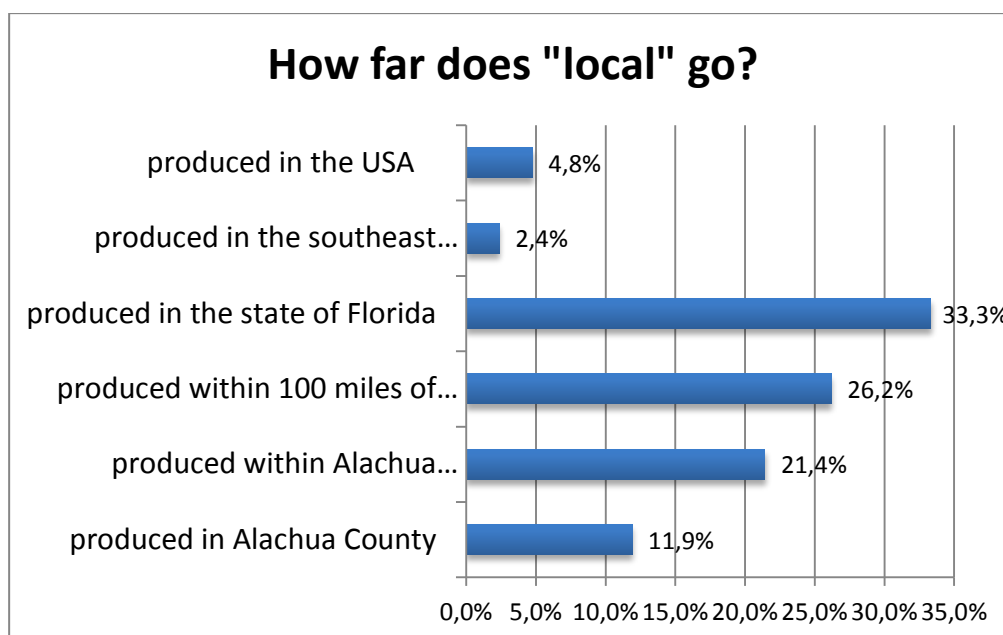
There was a very high knowledge of the USDA organic food label. 46 of the 50 respondents knew the USDA organic food label. We additionally asked about the knowledge of correct organic food labels. We showed them six labels and asked them to pick the two correct ones. The phrases were 100% organic, all natural, organic, locally grown, eco farmed and 100% natural. 48 of 50 interviewees picked the first correct phrase “100% organic” and 46 of 50 interviewees picked the second correct phrase “organic”.

Because there is a variety of local food labels we asked the local food sample if they knew any label for local food. The answers were 50% yes and 50% no. Further, a picture of the logo “Fresh from Florida” was presented to them with the question: Do you know this label? Taking into account that the survey was conducted in Florida, a share of 36% of respondents knowing this label seems pretty low. We further asked “Can you name any label for local food?” 50% of the respondents could name a local food label. The respondents mentioned a variety of labels; some of them were names of product, names of farms, names of processors or distribution outlets:

- “Florida’s Natural” juice (a brand of orange juice that is sold by a Florida citrus agricultural cooperative)
- Farms involved in local food marketing
- The name of chefs making tempeh (a vegetarian dish) in Gainesville
- “Greenwise”, an organic store brand of the supermarket chain Publix
- “Organic Coffee Roasters”, which is located in Gainesville and imports fair trade and organic coffee that is subsequently roasted in Gainesville
- the farmers’ market
- Ward’s, which is a family operated grocery store committed to purchasing local produce.

What is interesting is that 5% of the users mentioned the name of an importing company as a label for local food (Vigo). It sells basmati rice from Thailand and couscous from Morocco. It means that the perception of local food here is mixed with the perception of provenance products from overseas.

Results from the question regarding the geographical distance to be considered local, are summarized in Figure 4. This was an open question without predefined categories to answer. The majority of the respondents (1/3rd) said it should be produced in the State of Florida. The second most answer was that the product has to be produced within 100 miles of Gainesville (26%), and the third most answer mentioned the political county of the city in which the survey took place (21,4%).



**Figure 4.** Geographical area of local, n = 42

The variety of the answers concerning local food labels and the geographical distance of local food illustrate the diversity of the meaning of local food to consumers.

#### 5.1 Word associations for local food and organic food

To better understand the meaning and associations with local food we asked the respondents: "when you think about local food, what comes spontaneously into your mind?" In general, the meaning of local food is positive ("happy cows," "smiles," "genuine love," etc...).

**Table 2.** Word association test results for local food

Themes	Some constitutive words	Proportion of the answers
Fruits, vegetables, flowers	Produce, tomato, strawberries	16.3%
Farm, farmers, animals	Farmers in hats, happy cows	15%
Organic	Organic	13.8%
Landscape	Rows of crop, pasture	8.6%
Fresh	Freshness, fresh	8.6%
Local food venues	Farmers' market, coop, stands	7.5%
Community	Community, friends	7.5%
Happiness	Smiles, happiness	5%
Hard working	Hard working, have to be cautious	3.8%
Green, colors	Green, colors	3.8%
Animal productions	Meat, fish, honey	2.5%
Environmental awareness	Environmental awareness, hippie	2.5%
Good cause, integrity	Good cause, integrity	2.5%
Ward's	Ward's	1.3%
Crisp	Crisp	1.3%

Concerning the associations local food stands mainly for fresh produce and flowers. Second images of farms, farmers, happy animals (animal welfare) are strongly associated with local

food and in third position organic was mentioned, which illustrates the overlapping of local and organic food. Beauty of landscape, freshness, the community aspect and happiness were strong associations of local food.

**Table 3.** Word association test results for organic food

Themes	Some constitutive words	Proportion of the answers
Healthy	Nutritional value, strengthen immune system, balance, alive, vital, natural	23%
Better production methods	More natural & less processed, more sustainable, better animal feed, no GMOs	22%
Food	Fresh, fruits, veggies, dairy, cheese, meat, better packaging, higher price, no GMOs	16%
Organic farmers/farms	Beautiful farms, supporting farmers, local, standards	13%
No chemicals	No fertilizers, pesticides, no poison, natural, only water sun and soil	11%
Better for the environment	Less pollution, less waste, nature	8%
Taste	Tastes better	6%

Main associated categories for organic food are: “healthy”, “better production methods” and “food”. Healthy nutrition and the health factor were the main associations organic consumers made. Balancing live, being vital and to strengthen the immune system were mentioned by more than 30% of the respondents. Personal health and the health of the family, nutritional value and natural are important associations consumers made too. In the category “better production methods” interviewees associated mostly more sustainable processing, less processed food and natural way of production (more than 30% of respondents). In addition to that, also better animal feed and no use of GMO’s in production was mentioned.

An important category is also ‘food’. More than 30% of participations associated different kind of products like milk & cheese, veggies and fruits. Further the ‘fresh’ factor was also mentioned by more than 30%. Better packaging of food products, especially less or no plastic was associated with organic food too (10-20%). Regarding food also pureness and no GMO’s in food were mentioned (10%). But also the negative fact of higher prices was associated with organic food a couple of times (10%).

Most associations made in the category ‘organic farmers/farms’ were regarding beautiful farms and nature (more than 30%). But also supporting of organic farmers was mentioned, especially local farmers and standards farmers have to follow were mentioned.

‘No chemicals’ was an association interviewees often made with organic food too. No chemical fertilizers, pesticides, poisons, etc. and only natural inputs were mentioned by more than 30% in this category.

In addition to that ‘better for the environment’ was also an association made by organic consumers. For example less waste and pollution and better for the nature were named.

## 5.2 Hierarchical value maps for local food and organic food

The following Figure 5 shows the hierarchical value map (HVM) of organic food consumers. 25 respondents generated 63 ladders. A ladder represents a sequence from product attribute to consequences to values. The average elements per ladder of the organic HVM are 4 and in average one respondent produced 2,5 ladders. The cut-off level is 3, which

means that only links (direct and indirect) between categories that are at least listed three times are taken into account for the graphical display. Looking at the HVM of organic food consumers there are three obvious ladders: one for *health*, one for *environment* and one for *supporting organic farmers*.

The *health ladder* leads from the most important attribute “healthy”, which is strongly linked with the consequence of “preventing diseases” and the value of “health”, which itself leads to “quality of life”. “Healthy” and “no chemicals” are also related with the consequence “fewer intakes of harmful substances”, which also leads to the value of “health”.

The *environment ladder* starts with “good for the environment/the planet”. The strongest linkage from there is found to the consequence “protecting the environment”, which connects with the value “caring for the future”, “health” and “environmental health”.

The *support for organic farmers ladder* starts with the attribute “supporting organic farming” and leads from the consequence “supporting organic farmers” to the value of “health of community”.

For a better comparison “better production methods” and “more flavor/better taste”, attributes mentioned very often, are displayed even though connected consequences and values varied too much between interviewees to be presented in the HVM.

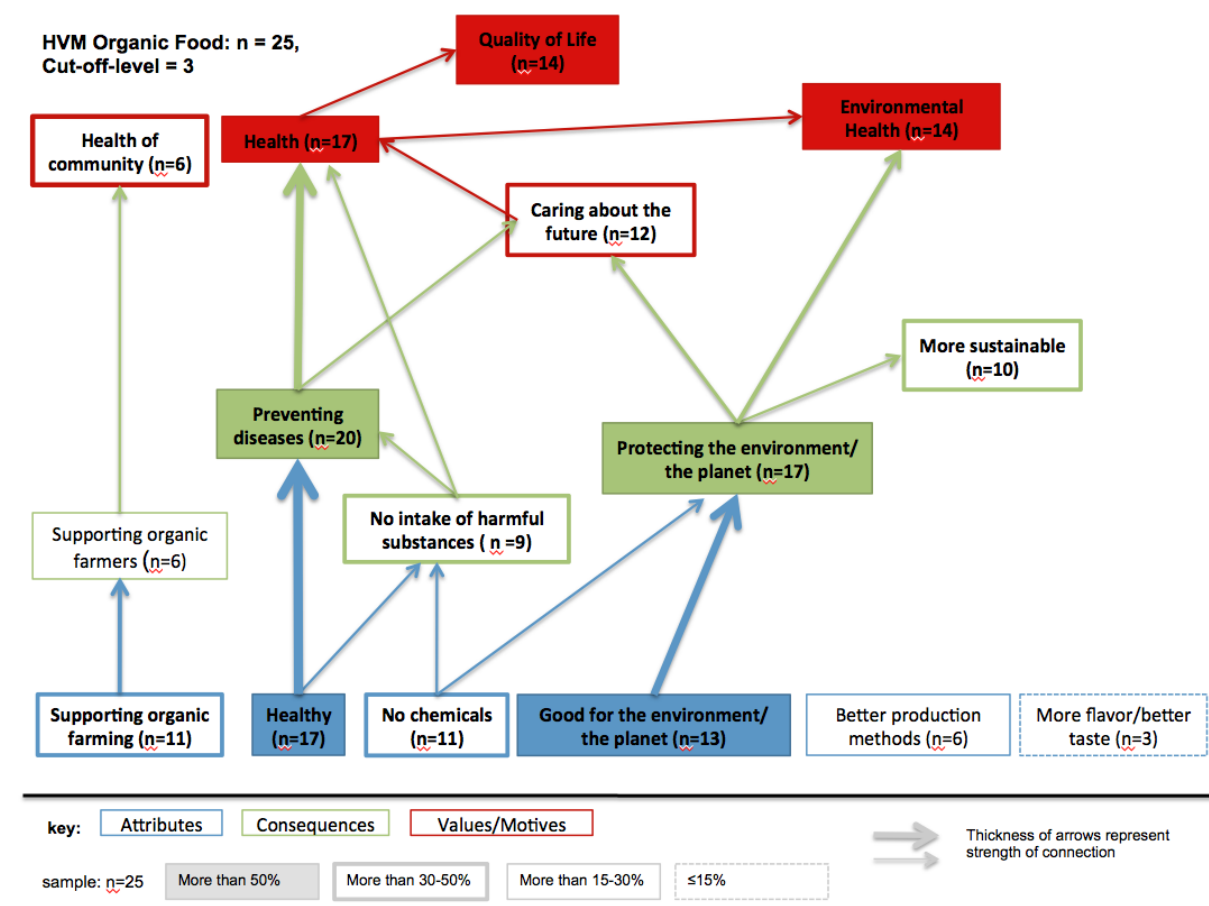


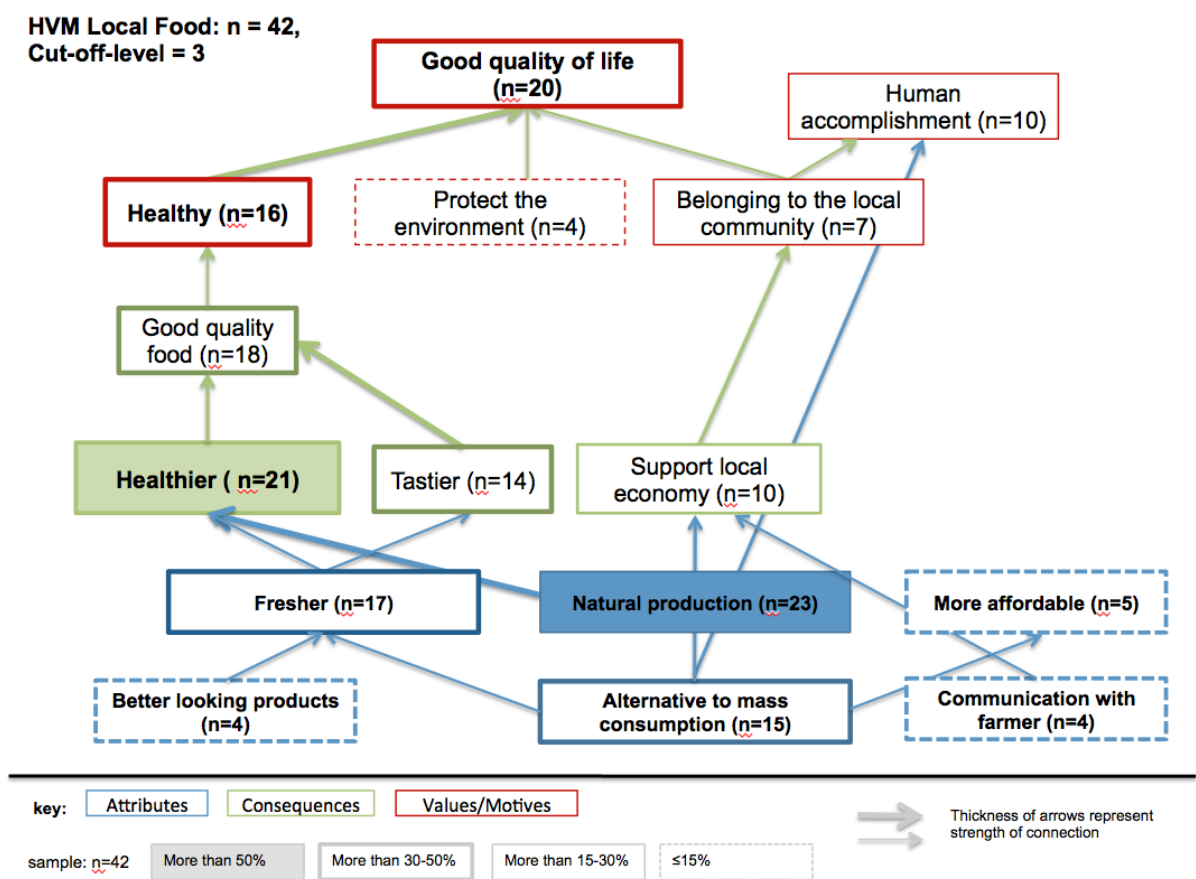
Figure 5. Hierarchical value map organic food consumers

Figure 6 shows the hierarchical value map of *local food* consumers. 42 respondents generated 69 ladders. The average elements per ladder are 2,8 and in average one respondent produced 1,6 ladders. The cut-off level again is 3. The most important product

attributes mentioned were „natural production“ (n=23), „fresher“ (n=17) and „alternative to mass production“ (n=15). Five respondents mentioned that local food is more affordable.

Looking at the HVM of local food consumers there are two obvious ladders, one for *health* and one for *supporting/belonging to the local community*. The strongest ladder (health) is going from the attributes “alternative to mass production”, “fresher”, “natural production” and “better looking products” to the functional consequences of having healthier and tastier food. The link between the attribute “natural” and the consequence “healthier” is very strong, which means that this reasoning has been evoked many times during the interviews. Fresher food also leads to a “healthier” diet. And even more important is the fact that “fresher” food results in “tastier” food. Which leads finally to a healthy lifestyle and a good quality of life. Inclined with the terminal value of “good quality of life” is the value to “protect the environment”.

The *community ladder* starts with the attributes “alternative to mass production”, “natural production” and “communication with farmer” and leads then to the consequences “support for the local economy” which contribute to the values of “belonging to the local community”, of “human accomplishment” and “good quality of life”.



**Figure 6.** Hierarchical value map local food consumers

## 6 Discussion

Compared to the organic sample the local food respondents produced shorter (2,8 versus 4 elements) and less ladders (1,6 versus 2,5). The reason may be the higher share of heavy users (more than 50% bought more than 50% of organic food). A second reason may have been the place of the interviews. Organic food consumers were interviewed in a coffee shop and local food consumers were interviewed at the farmers' market on the street. Maybe the respondents were more relaxed in the coffee shop and had more time, leading to longer and more complex ladders.

The knowledge and awareness about organic food and organic labels seems to be better compared to local food. This is not surprising taking into account, that the organic food market is way better regulated and defined. Local food is a phenomenon, which generates a bigger variety of associations as our results show, supporting the view of a "flexible localism". Consumers asked to name labels of local food answered with names of products (Florida Natural), names of farms, names of processors (coffee roaster) or distribution outlets (farmers' market). Some even mentioned products from Thailand or Morocco as local food. There is also no common ground for a concise geographical definition of local food. Our respondents mentioned distances (100 miles) and political borders spanning from the county to the state to the national borders of the USA. These results are in accordance with the findings in the chapter about defining local food. There two extremes reaching from local food in its simplest form – a product from nearby – to provenance food, which is a complex food product carrying cultural aspects, artisan knowledge and attributes influenced by natural conditions.

The results of both word association tests for organic and local food support the hypothesis that local and organic food are telling a story of an agriculture which is the antidote to a globalized anonymous food supply chain. Picture of happy cows, beautiful landscapes and farmers, which you know, were mentioned.

The laddering interviews revealed the overlapping yet different cognitive structures with organic and local food. Organic food is connected strongly to health, the environment and the support of organic farmers. Local stands also strongly for healthy food because it is seen as fresh and natural. But there is a much stronger social dimension, represented by the wish to support and belong to a local community. The environmental aspect is there too, but much weaker. It is interesting to see that besides the missing scientific evidence, consumers perceive organic and local food as healthier. Both hierarchical value maps deliver useful insights for future communication and marketing strategies of local and organic farmers.

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