Developing marketing education for sustainable food culture: outline for hotel, restaurant and catering sector

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Abstract

The hotel, restaurant and catering sector represents an important channel for consumption of sustainable food, as the sector eventually reaches customers from local to global contexts. Restaurants and catering businesses have also often expressed interest in supporting sustainable territorial developments by marketing 'local', 'regional', 'domestic' and fair-traded food. Furthermore, food has been interpreted sustainable through more specific technical and socio-economic descriptions. These initial marketing approaches, promising for sustainable territorial developments, suggest that restaurateurs and caterers as well as their employees would benefit from education based on scientifically elaborated understanding of sustainable food systems.

This paper seeks to outline such education by referring to European and Nordic research results regarding both customers' and researchers' ways to conceive sustainable food as well as their relation to its promotion. These conceptions are analysed as abductive and deductive ways of making sense of sustainable food and are suggested to be deployed in planning marketing education for sustainable food culture.

Abductive approaches to sustainable food include story lines supported by pictorial data when marketing various food items such as local specialties, fair-traded food or animal based products. In order to communicate with customers exhibiting critical interest in environmental and socio-economic dimensions of sustainability, deductive-inductive interpretations are included into marketing, in line with more conceptual and scientific expressions about sustainable food systems. These include notions such as carbon foot prints, economically viable industry structures and actors' occupational wellbeing within food supply chains. The paper thus seeks to outline marketing education for sustainable food systems, broadly covering the tripod structure of sustainable development. This outline allows educational implementation to reflect contextual possibilities while suggesting common ground for sustainability interests to be shared by customers, hoteliers, restaurateurs and caterers.

1. Introduction

Recently, a Finnish hotel and restaurant chain informed on their web pages about the use of organic and fair-traded ingredients in their menu at one of their down town restaurants. The offer regarded (imported) red and white wines, cheeses, olive oil and bread. According to the ethos of this large player both on retail and restaurant market, their business aims at very reasonably priced services to customers while also supporting local and sustainable food systems (Hingley et al., 2011). In similar vein, a large public caterer presented posters informing about the use of local and organic food at a flag ship personnel restaurant in downtown office quarters. These everyday encounters arranged for ordinary customers to consume organic and local food (Morgan & Sonnino, 2008) by out-of-home eating sector seem to suggest the trend of mainstreaming the niche. However, the banality of these encounters becomes obvious as no information is provided

by the businesses for customers, who are (left) to lean on their particular constructions of these food qualities.

The intensity and extent of the Finnish celebration of local food has been characterized by a Finnish academic as a “social movement”, and keen interest in organic food has been visible by several reports (Rahtola, 2010), seminars and promotional organizations, the latest one of them established jointly by leading retail chains and organic farmers’ association. The political recommendations include consumption of organic, seasonal and vegetarian food, to be served once a week by 2010 and twice a week by 2015 in governmental public catering (Ministry of the Environment, 2009). Similar political intentions regarding consumption of local and organic, even local organic food seem to prevail in Europe (CEC, 2004; ICLEI 2008a,b) across small municipalities and big cities, from north to south (Mikkelsen et al., 2007; Mikkola, 2009; Morgan & Sonnino, 2008). Furthermore, the political strategies also look forward into developments of sustainable markets, whereby businesses and consumers increase their competence about how to eat healthy food, prevent climate change and eutrophication while staying economically viable (HM Government, 2011).

The out-of-home eating increases slowly but continuously; in Finland, 850 million meals were consumed in 2009 (Finnish Food Information, 2011). Hotel, restaurant and catering sector can be seen to represent an important market in terms of development of the food system. However, the public and commercial caterers find the concept and implementation of sustainable food dilemmatic (Mikkola & Post, 2012; Post & Mikkola, 2012). Hence, education of managers about local and organic food beyond banal displays would seem to respond to current marketing needs and customer demand. Furthermore, this kind of education would signal about the correspondence between societal aims at large and the content of education (Biggs, 2003).

Currently, vocational education for cooks and waiters/waitresses about local and organic food is not specifically mentioned in the curricular basis of hotel-, restaurant and catering sector. However, the students learn to look after the “ethical aspects of services” and follow “sustainable courses of action” (Opetushallitus, 2010, 8-9). Furthermore, vocational ethics, health, safety, entrepreneurship and sustainable development are cross-sectional aspects of education. Educators see that vocational education has recently developed towards economic interests and performance-oriented service roles for learners, but schools are allowed to offer optional courses, also regarding local and organic food (Jauhiainen, 2009; Taskinen, 2007). Education of the universities of applied science develops currently to include teaching about sustainable food. These institutions place particular emphasis on the quality of education. It is expected to reflect the latest scientific understanding and research about local and organic food, and to be implemented in education for procurement, meal production and marketing.

This paper aims at drawing on research of local and organic food to support the outlining of professional education for sustainable food systems. However, as local and organic food may currently be evaluated as a highly empirical research fields in their early developmental stages, with plenty of contextual variation, there are controversial views about the topics. The paper therefore offers first a brief overview of the contested issue of local and organic food, and then develops a ‘two-channel’ educational approach as a meta-level solution for the educational content. Furthermore, the paper sketches an educational tool, which may be additionally re-used for marketing of local and organic food by the students in their future jobs. However, the appeal of this kind of education to the students, the future use and applications of this educational/marketing tool and its impacts on businesses and customers as well as the whole food system remain objects for future research.

2. Local and organic food as contested issues

2.1 Positive attributes for local and organic food

Citizen-consumers' perspectives on local and organic food (and should the two go together, on local organic food), as interpreted and advocated academically, often emphasise their quality as epitomes of sustainable food systems. Local food, although more or less opaque as a concept, is thus seen to represent environmental concerns, local livelihoods and economies embedded in place (Seyfang, 2006; Weatherell et al., 2003), as well as citizens' local involvement and good social relations (Feenstra, 1997, p 28, in Morgan & Sonnino, 2008, p 1-19). Within the globalised food system, re-localisation efforts "celebrate" "the local" vis-à-vis "the global" (Morgan & Sonnino, 2008, p 1-19), whereby the local is understood as "radical and subversive" in contrast to the global, which is "hegemonic and oppressive" (Born & Purcell, 2006, p 200, in Morgan & Sonnino, 2008, p 1-19). The re-localisation movement has advocated a "proximate system" of "locally grown food, regional trading associations, locally owned processing, local currency, and local control over politics and regulation" (Kloppenburg et al., 2000). Learning to re-localise has been identified as a challenge among food system actors such as farmers and consumers (Morgan & Murdoch, 2000). The original concept of "foodshed" by Kloppenburg et al. (1996), as well as the "terroir" of Barham (2003, in Morgan & Sonnino, 2008, p 1-19) refer to bio-regionalist connotations of satisfaction at 'belongingness', conveying the identification with and livelihoods due to the regional natural environment and its resources (McGinnis, 1999). Furthermore, food transport with its negative implications for energy consumption, pollution and additional cost, is suggested to be cut by more re-localised food systems (Morgan & Sonnino, 2008, p 1-19). In short, as a concept, local food advocates decentralisation, understood as a pillar of sustainable development; food in sustainable societies is to a significant extent local rather than global (Morgan & Sonnino, 2008).

From the beginning, organic farming basically represented an alternative agricultural paradigm by its principles and practices (Council Regulation, 2007), referring to decentralised, community-based and holistic production methods (Atkins & Bowler, 2001). Organic farming seemed to cause fewer environmental impacts in terms of nutrient run-off than the conventional one, and as more labour intensive business it maintained agricultural employment while providing organic farms in general with economic returns comparable with those of conventional farms, including during the state-assisted conversion period with certification schemes (Atkins & Bowler, 2001). Obviously, organic food has been considered as an alternative to industrialised food (Magnusson et al., 2003; Morgan & Sonnino, 2008, p 1-19) and interpreted by consumers as being authentic, healthy and environmentally friendly, without pesticides and fertilisers (Magnusson et al., 2003; Seyfang, 2006). The market potential for organic food has been suggested to be considerable, even huge, when the supply chains mature and supply and demand match up to one another (Wier & Calverley, 2002).

2.2 Negative attributes for local and organic food

It has been claimed that the labelling schemes initially supporting local food have turned into 'marketing tools' of international supply chains (Watts et al., 2005, p 30, in Morgan & Sonnino, 2008, p 1-19). Furthermore, the local food movement has been evaluated negatively to pursue "defensive localisation" strategies with less regard for wider societal interests (Campbell, 2004, p 34, in Morgan & Sonnino, 2008, p 10), and to represent patriotism and "elitist and reactionary" modes of thinking and acting (Hinrichs, 2000, 2003). It has also been claimed that economic gains of local production due to local consumption may exacerbate local social injustices (Born & Purcell, 2006, p 202, in Morgan & Sonnino, 2008, p 11) by excluding some local producers and

consumers (Hinrichs, 2000). Furthermore, parochialism, lack of diversity and action for change have been identified in decentralised societies, counteracting inherently national and international intervention in environmental problems such as climate change (Carter, 2007, p 58-60, in Morgan & Sonnino, 2008, p 1-19).

There are also critical perspectives to organic food, which is claimed currently to represent dilution of the 'original ideals', as the conventional sector 'subsumes the alternative' (Morgan & Sonnino, 2008, p 1-19). Through the large-scale farming industry, conventionalisation has, at least locally and regionally, entered into organic industry in the US (Guthman, 2004). Organic consumption has created an upmarket image, which, however, may not serve to satisfy European consumption generally due to the price premium of organic food (Goodman, 2004). Additionally, it has not been in all cases feasible for consumers to understand the relations between organic quality, quantity and price (Barnes et al., 2009). Organic farming has so far remained a rather limited form of food production and consumption in Europe (Atkins and Bowler, 2001), where its share of the total agricultural land area tends to be 1 - 2 % at the low end to 15 - 16 % at the high end among European countries (Rohner-Thielen, 2010). In Finland, agricultural land in organic farming is 7,5% of the total and the market share of organic food is only about 1% of the total market (Rahtola, 2010), underlining the 'loss' of organic food into conventional channels and thus weak access to and organization of organic supply chains in response for demand for larger volumes (Mikkola, 2008).

2.3 Environmental-technical views about local and organic food

A strictly environmental perspective on sustainable food systems has been made by conceptualising food (supply) chain processes through various modifications of the methodology of Life Cycle Assessment (LCA). Typically, these assessments focus on subsequent stages of production and consumption and record the material and energy flows attached to respective stages of supply chains. The flows are then translated into environmental impact categories, characterised, normalised and weighed according to their perceived damage using standardised procedures of the International Organization for Standardization (Kurppa et al., 2009; Usva et al., 2010). Tukker et al. (2006) list environmental impact categories such as abiotic depletion, acidification, ecotoxicity, global warming, eutrophication, human toxicity, ozone layer depletion and photochemical oxidation. The European food system, from farm to fork, has been shown to contribute from one fifth to a half of various environmental impacts due to European total consumption (Tukker et al., 2006). This very generic, top-down information, based on (American) common industrial process standards, provides the 'big picture' for the environmental impacts of food in Europe (Tukker et al., 2006), and furthermore, confirms that meat and dairy products are the most environmentally damaging food items (Weidema et al., 2008). However, the 'big picture' does not specify where the betterment should be targeted at the supply chain level, since there are several alternative combinations of different materials, technologies and energy sources, including various wastes and recycling, which introduce idiosyncracy to each (developing) supply chain (Usva et al., 2010). Life Cycle Assessment may be chain or company specific, often confidential bottom-up information, used to upgrade company environmental performance (Virtanen et al., 2009). Furthermore, savings are understood to depend heavily on environmental behaviour of individual businesses and households (Tukker et al., 2009).

Global warming has recently gained extremely wide attention due to its causes and consequences, particularly in terms of current economic activities and long-term developments (Stern Review, 2006). Thus systems for producing comparable and reliable real-time carbon footprint data for products become increasingly important in the design of food systems (Usva et al., 2009). Certified Carbon Footprint assessments enable producers to analyse their own

processes or those at the chain level in order to identify rewarding stages for greenhouse gas emission reduction (Usva et al., 2010). In order to support consumers in steering their consumption into a lower-carbon food system, consumer information about the environment and carbon footprints of products is suggested as a means to this end (HM Government, 2010; Huomisen ruoka – Esitys kansalliseksi ruokastrategiaksi, 2010; Usva et al., 2010).

Currently, consumer choice of individual food items is tentatively supported by various carbon calculators such as “personal” or “bonus” versions or by environmental labels such as Type I labels or “exact” carbon footprint labels (Usva et al., 2010). However, the 25 carbon calculators analysed by Amani and Schiefer (2011), available to consumers on the Internet, covered supply chains to various extents and furthermore, exhibited very different methodologies for carbon calculations. This kind of vagueness seems to render these carbon calculators inappropriate as a basis for making consumption decisions. Rather, reliability, transparency and accuracy of calculations on a uniform basis are necessary when using greenhouse gas emission data for public information (Usva et al., 2010). Regarding consumer education, school meals offer a showcase for learning about sustainable choices as the greenhouse gas emission data for food may also be applied to meals and their components (Kurppa et al., 2009). In order to develop certified carbon footprints of products, the system should be based on shared general principles, agreed rules for calculation, a database for the modular information regarding individual process activities, as well as transparent validation and verification; the system could be initiated through demonstration projects by voluntary partners (Usva et al., 2010). This kind of information may induce changes in consumption patterns on a more reliable and commensurable basis. The modular information in particular would enable the users to evaluate their situation in relation to the chain level and to consider redesign of the supply chains towards reduced carbon footprints, and perhaps module by module towards increased sustainability.

3. Educational reasoning about local and organic food

3.1 Integrative education about local and organic food

The academic literature about local and organic food is remarkably extensive and contradictory, hardly allowing simple and uniform conclusions while revealing inherent contextual and idiosyncratic dependencies. However, as learning about local and organic food are of importance for hotel-, restaurant and catering sector, the marketing education could look for patterns of reasoning which support managers’ (and customers’) constructive efforts about the issues. This kind of education could also offer basis for further education and future information to be integrated into actual marketing later on. Furthermore, mastering and disseminating more profound discursive patterns about local and organic food would allow engaging in conversations and negotiations with suppliers and customers, increasing managers’ ability to deal with various situations in procurement, meal preparation and marketing. This means ’enabling’ sustainability to gain ground as orientations for implementation by “actor-promoters”, who cannot foresee ‘defined’ and ‘ready-made’ systems (Mikkola, 2011). This kind of educational approach aligns with the concept of integrative curriculum, looking for locally implementable solutions for teaching and learning, designed to remedy contextual societal problems (Beane, 1997; Dewey, 1915). An example of interactive information source with plenty of miscellaneous content is produced by USDA (Accessible 2012). However, the education about local and organic food could ‘dig’ into deeper layers of learning through different kinds of ways to make discoveries about the sustainable food system.

3.2 Abductive inferences about local and organic food

In Peircian sense, abductive and deductive-inductive approaches to make discoveries (Paavola, 2006) about organic and local food offer different options for the grounding of marketing education for the service sector. The abductive way to understand the 'logic' of the world is a weak form of inference which is, however, useful in enigmatic and open situations whereby useful discoveries may be made without knowing the mechanisms of the functions under exploration (Paavola, 2006). Sustainability of the food system may well be understood as such an enigmatic object, which is to be developed co-creatively as there is the system of activities to be 'reorganised' (Porter & Kramer, 2011; Prahalad & Ramaswamy, 2004). The abductive agenda corresponds to most qualitative and partly quantitative empirical research; it produces results from particular points of view regarding idiosyncratic supply chains, without strong capacity for generalizations (Paavola, 2006). However, this kind of research results enable the incremental building of the 'big picture' of local and organic food. To enable a discovery about the sustainable qualities of local and organic food, the event paths of business establishment and expansion may offer material for constructive activities by teachers and learners alike. One particularly understandable mode of making sustainability impacts intelligible is the life story (used in Mikkola, 2008), or story about one's initial ideas, efforts and subsequent activities in terms of food production, processing, marketing and consumption from a business point of view (Mikkola, 2008). These stories may represent ways to make one's livelihood meaningful for one self as well as others, and to communicate one's sustainability status to teachers, students and customers alike.

3.3 Deductive-inductive inferences about local and organic food

The deductive-inductive style of teaching and learning includes environmental-technical understanding made visible to supply chain actors. The deductive part of communication includes particularly scientific knowledge such as the mechanism of climate change, eutrophication and resource depletion (as well as other impact categories), their 'crucial' impacting compounds, and material flows in food chains (Tukker et al., 2006). These are important and essential aspects of scientific discovery about food systems and their environmental impacts, and as such need to be communicated to businesses and consumers. The deductive strength of climate change, from the absorptive capacity of solar energy of various compounds seems unquestionable; however, as human role in climate change seems disputable to some, the precautionary principle may be revived to defend the need to learn about these issues. While huge systems such as the global one present equally huge research challenges, followed by political disputes about how to organize sustainable development in economic terms (Stern Review, 2006), the focus should be set on local and regional activities inherent for food systems. Thus the inductive part of discovery could mean the analytical description of environmental impacts of idiosyncratic food chains, allowing the co-creative development of these as the "big ideas" (Porter & Kramer, 2011) by local actors. However, inductive descriptions of particular supply chains' environmental impacts seem to present a current research challenge, which appears to be possible to disclose within near future as LCA data banks grow in terms of data points across food systems' unit activities (Usva et al., 2009).

4. Educational content development

4.1 Storylines as approaches to local and organic food

The local or organic business story in its variability seems like a proper mode of description and analysis about the developments towards sustainability. Typically, the stories present a

somewhat coherent pattern of business sustenance or growth from the point of the teller; however, the stories may be independently corroborated (Mikkola, 2008). This social validity increases the trustworthiness, which justifies further elaborations as modeling approaches to visualize the supply network (Mikkola, 2008). Storylines have several advantages in educational content development. First, they share rich and 'naturalistic' data, intelligible and interpretable by receivers. This data includes several aspects of reality, and may be used to analyze these strands in terms of sustainability. In addition to economic relations (Mikkola, 2008), stories may be analyzed as expressions of wellbeing at work (Mikkola & Post, 2012), conceptual understanding about sustainability and activities towards it (Mikkola, 2009) or a host of other aspects embedded in stories. Second, stories make concrete and contextual problems evident, showing the limitations within which actors look for solutions (Mikkola, 2009). This mode offers evidence about 'social realities', unlike romantic views often evoked by local or organic food (Hingley et al., 2011; Mikkola & Post, 2012), and focuses discourse towards aspects relevant for actors. Third, stories are rather feasible to collect and present in textual or pictured modes, which allows this kind of educational material to be collected and mounted contextually in educational or service environment. Fourth, stories allow a supply chain mapping to be made whereby local or regional actors and their impacts become visible on a chain level, a view which is very rare currently. This mode of descriptive composition emphasizes the locally or regionally based sustainability activities on the chain level, extremely important to sustainability views based on re-localization of the food system and the ones underlining the (fair) economic exchange between parties within and across regions (Jaffee et al., 2004; Mikkola, 2011).

4.2 Infographics as an approach to local and organic food

Infographics is a new way to present data which is collected in large numbers and may include sophisticated and systemic measurements of particular activities; this kind of data and their elaboration are often inaccessible for citizen-consumers and SME businesses, and to some extent within reach for large companies and researchers. Furthermore, infographics offer an intelligible way to perceive the data as crystallized and designed in such a way as to make sense for the viewers. When planning education about local and organic food, the points of departure for compaction and design are obviously principal ecological, economic and socio-cultural dimensions of sustainability. Should these designs adopt a more or less stable sign, they could be seen to represent new modes of icons, indexes and symbols (Fiske, 1990), which express thrust towards sustainability by their infographic base. The designed character of this communication becomes very crucial because the visual form as sustainability communication needs to be learned in order to be understood (Fiske, 1990). This kind of sustainability communication could also be used by introducing it on food products like commonplace food labeling or by placing it nearby the food served for customers. Infographics may offer plenty of possibilities in creating and levering foothold into constructive capacities of viewers. Additionally, important aspects of infographic designs are the ones of data storage, immaterial property rights and dissemination, which need more research about their potential.

Economic dimension offers several options for infographics such as the price structure and quality of economic relations between supply chain actors (Mikkola, 2011). When studying the supply chain, these variations across a particular period and including the share of value added taxation would offer customers important information about the economic sustainability status of the chain. The environmental-technical data and its construction to a meaningful interpretation such as LCA offer plenty of possibilities to be used in education. However, there are complications such as the number of environmental impact classes and their top-down perspective (Tukker et al., 2006) which hardly allows for supply chain specific information to be

dealt with or disseminated. Therefore particular emphasis needs to be given to the transparency of the calculation and possibly individual supply chains' data should be collected. There are also interactive carbon footprint calculators set up on experimental basis in the internet, aimed at enabling learning about sustainable consumption (Shanahan et al., 2011). The key feature of these virtual tools is to offer carbon emission information for citizens regarding their optional routes of action in terms of environmental impacts. This kind of 'infographic' view could be available when serving different meals and explaining about the developmental work going on at a particular supply chain actor. As procurers are currently not using (Bergström et al., 2005) and find it dilemmatic to use environmental information (Post & Mikkola, 2012) it is no wonder that they do not communicate about the sustainability of their meals in more profound terms. However, the experimental work planned here for purposes of marketing education seems to be one of the necessary preconditions for this kind of communication, which could support learning by managers and customers alike, and entail sustainability developments within the food system. The appeal and usability of this kind of virtual tool to industry is also the condition into more profound and determined sustainabilization of supply chains. The dynamics captured and enabled by infographic communication is a matter of future research both at the level of (future) supply chain actors and their customers.

5. Discussion and concluding remarks

The paper emphasizes the current marketing value of local and organic food for hotel, restaurant and catering sector while pointing out that these aspects appear rather banal in the current service environment. This situation calls for education about sustainable food, often specified as local and organic. However, the ephemeral references to sustainable courses of action within the industry hardly enable the tackling of specific negotiations for sustainability when trading food or marketing it to customers. The lack of teaching and learning about local and organic food seems to be typical for the educational sector as a whole, which again stresses the novelty value of this kind of management education. Therefore, vocational education and universities of applied science educating future professionals for the food businesses could be the first ones to apply such food education for sustainability. Here the need for confidential and knowledge-intensive co-operation with research institutes and the businesses of the supply chain becomes crucial.

The paper sketches food education for sustainability in terms of local and organic food, in the awareness that there are several contradictory views about these food categories. However, the planned education consists of two kinds of modes, of which the abductive one, based on stories, may evoke interpretations of different kinds of local and regional aspects by the learners. In similar vein, the deductive-inductive mode of discovery may elicit new kinds of interpretations regarding sustainability of local and organic food and search for new, scientifically based solutions as they are brought to the viewers' level of conceptualization. This is enabled by infographic applications including crystallized data from transparent sources. Combining these two modes of analyzing, learning and communicating about supply chains enables the making of inferences regarding their sustainability status.

This education as described is currently in its planning phases; however, as sustainability transitions may include trials and errors, conceptual discoveries and co-operation within supply chains and the customers, even unexpected and whimsical activities (Vellema, 2011), the two modes of this education intend to support actors by offering more elaborated groundings for their future orientations. The results of this kind of education will not be immediate in practice, but they avoid the sheer focus on economic results and exhibit grounding qualities towards sustainability instead of just following trends – however popular local and organic food might eventually be. In other words, the paper suggests food education for sustainability, in local and regional interest,

which is based on sustainability discourse rather than market or bioregional discourse (Mikkola & Risku-Norja, 2012).

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