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INTRODUCTION

As the market for sustainable (or ‘green’) food expanded worldwide in the 1990s, supermarkets took up dominant roles as channels for its commercialization. Alternative natural food and grocery stores and farmers’ markets were forced to assume a secondary role. Countries where most organic products are sold via supermarket chains tend to be the countries where the organic market shares are the highest as well (Willer and Yussefi, 2004). And although the organic food movement in Europe dates back more than fifty years, it is only since the 1990s that organic foods are achieving mainstream status largely through these supermarket chains. Levels beyond the individual nation-state or region are involved in this. We use the plural to refer to transitions as we consider these levels beyond the individual nation-state or region to be of crucial and even further increasing importance with respect to the future provisioning of green food products worldwide. But, although supermarkets are playing a growing role in our daily lives as consumers, academic research on its social, economic and political implications are still infrequent. Environmental and rural sociology as Marsden et al. (2000) observed, have left important issues such as analyzing new trends in food provisioning, including the relationship between changing consumer demands for ethically and environmentally acceptable products, the responses from companies through new products and new information and marketing approaches, to environmental economists and marketing specialists.

This chapter aims at filling this omission and contributing to the analysis of the roles played by supermarkets from the perspective of sustainability. We start by introducing a theoretical and disciplinary outlook for understanding the emerging societal trends in the transitions towards sustainability in food provision and in particular the roles of consumers and retailers therein. We will characterize the sustainable food consumer and add four story lines to show some of the complexities involved in this. A review of concrete provider and consumer strategies is presented that will allow us to start developing an analysis of social practices at the shopping floor of retail outlets. We conclude by presenting a first outline of a research agenda.
on supermarkets as consumption junctions that are of crucial importance for the future greening of food consumption in global modernity.

CONCEPTUAL TOOLS FOR UNDERSTANDING CONSUMER BEHAVIOR

What exactly signifies the growing role of retailers in the provision of sustainable food? In answering this question we look at a theory that is embedded in the context of social, political, and cultural processes. The theory has been developed in the 1980s to make sense of the processes of environmental change emerging in modern industrial (mostly OECD) societies from the 1970s onwards. Among the core tenets of this theory is the claim that there are – within industrial production and consumption systems – emerging sets of criteria to be used by actors within these systems to assess and judge the environmental performance of products, technologies and processes. The ecological performance becomes part of the game, next to and parallel to economic performance indicators. By taking on board criteria for ecologically rational production and consumption, actors become involved in the modernization of the organization of production and consumption from an environmental point of view. Because of their central position, economic or market actors such as producers, retailers and consumers are assigned important roles in this modernization process. From the mid-1980s onwards, governance and environmental NGO's are pressurizing, facilitating and regulating these key economic actors on the basis of horizontal governance networks, applying policies and (co-)voluntary instruments which are attuned to their needs and possibilities (Mol and Sonnenfeld, 2000).

While ecological modernization theory has been used to study and predict changes in production processes and providers’ strategies at the upstream ends of production-consumption chains, from the mid 1990s onwards the theory has also been used to study consumer behavior at the bottom end of production-consumption chains (Spaargaren, 2003). In its application to the sphere of consumption, the theory has had to be complemented and adapted to some specific ways, since the rationalities governing everyday life and consumption are different from the rationalities dominant in the production sphere. The criteria for ecological consumption behavior are to be embedded in the life-world rationalities which shape daily routines. This asks for a ‘translation’ of many of the technical goals and regulatory schemes used in expert systems involved in environmental policy making. In order for people to ‘recognize and understand’ the kind of behaviour involved in sustainability transitions, a series of ‘environmental heuristics’ needs to be developed for use by both the expert systems and the people themselves. By providing a definition or indication of sustainability goals to be realized in these specific contexts and domains, the heuristics in this series provide a practical route for action frame that people themselves can apply in the specific context concerned, contributing to sustainability transitions. In the case of retail shopping for sustainable food, these heuristics can take different forms, ranging from devices for sustainable packaging of products to reading authorized and controlled labeling schemes attached to sustainable products, or the use of special discount and saving systems bringing together groups of more sustainable products and services. What kind of heuristics (to be understood as short-hand versions of the ‘story lines’ and ‘figures in discourse theory’) will become the dominant ones in specific situations and societies depends very much on the actors involved in their construction and cannot be analyzed without taking into account the relationships between the central actors in the provision system on the one hand and groups of citizens-consumers with specific lifestyles and consumers demands on the other.

The retail outlet is an appropriate setting to study the (re)construction and change of the sets of heuristics used for the sustainability transitions in the food sector. The retail outlet is the proper home to work, going for a weekend holiday, etc. (Spaargaren et al., 2003) and in the Nordic countries (Boström et al., 2005) have done path-breaking work to bridge this gap, giving some examples of the heuristical quality of structuration theory for empirical research. These networks study mundane technologies and behaviors from a context-sensitive, looking at the different ways in which the minutiae of everyday life (using the fridge or the stove, cooking and lighting practices) connect to long-term (technological) changes in the systems of production. Substantial contributions to consumption research have also been made by putting forward the notion of ‘political consumerism’ to analyze the new (sub- and trans-national) political frameworks for ‘individual’ uptake and social construction of sustainable consumption patterns in globalization modernity (Micheletti, 2003).

THE SUSTAINABLE FOOD CONSUMER

There are a trend both in academic and market research to classify people consuming sustainable (and particularly organic) food as one uniform segment of the population. Essentially these views are based on the belief that when people behave in similar ways they should be explained through a correspondence in their attitude, or that consuming particular products requires the presence of similar socio-economic or cultural traits. Richter (2002) pointed at the continuous gap between consumers’ responses in research and their real life practices. Thus, data projected from these studies can indicate higher demand rates than the ones that would be obtained considering actual consumer behavior. Searching for more complex characterization about who are the organic food consumers, several marketing studies, undertaken by international consultancy companies, have been analyzing this problem. These recent studies are progressively replacing the ‘rational information processor consumer model’ by new non-rationalist perspectives, where the symbols and ideas in the food consumption process are taken into account and analyzed through ethnographic and qualitative research (Morcott, 1999).

Spaargaren (2003) argues on critics with on the need to improve the analytical perspective currently prevailing in consumption research. The social-psychological models use individual attitudes to predict concrete and future behavior employing, for example, several fixed indicators to identify environmental awareness. As an alternative for the individualist approach, the social practices model is offered. In this model different social structural elements are not considered as external variables, but are taken as crucial for the analysis of consumption behavior. Instead of taking the individual and his/her attitudes as central, the individual is regarded as a part of the way in which consumer practices, the social practices model highlights the actual consumption practices, located in the space and time shared by the individual and others. This instead of focusing on isolated aspects of behavior, the model aims at establishing the way in which a group of social actors relate to the many everyday practices in order to improve the analytical perspective. Whether or not citizen-consumers actually engage with sustainability transitions in the food sector depends on many different factors, some of which are easier to detect and analyze than others.

Individual consumer choices should thus be appraised as part of a wider context (Belk, 1995) and changes in consumer behavior should only be related to psychological (attitudinal) mechanisms, but also to wider changes in society. Macnaghten (2003) identified three macro-levels in which transition processes towards sustainable consumption. The first process relates to transformations in the production sphere and the retail sector. The second concerns personal behavioral changes and the third refers to changes in the form and content of social practices. These processes, according to Macnaghten, could be understood in terms of transitions of consumption as practical, stratified and relational.
Thus, consumption of sustainable food products in supermarkets should not be detached from transformations occurring in these three different dimensions. Our interest is to understand the supermarket orientation to the sustainable food products on offer and the strategies proposed (or the retail setting) in the complex and dynamic process. This process captures and stimulates transformations in the consumers’ food choices, which does not necessarily imply coherent social practices, making it possible to oppose the responsible and the non-sustainable food consumer. Lifestyles and social practices are like twin social concepts: ‘each individual’s lifestyle is built using a series of activities that belong to a set of social practices that individuals evoke in their routine’ (Sparrøgren, 2003, p. 689). This definition agrees with the one presented by Giddens (1991), to whom lifestyle is a set of social practices assumed by an individual, together with the narrative regarding self-identity which follows it.

Do food consumption practices constitute a particular category in the wider field of consumption ethics? According to Halkier (2001), yes, since food is literally incorporated into the body, or purposefully kept out of it. It is a daily experience that cannot simply be compared with consumption of other goods that are considered as part of a social practice. As such, they are not close to a conventional model. According to Warde (1997) defines, food practices belong to the analyscs of Beck (1994) and Giddens (1991), to whom lifestyle is a set of social practices assumed by the individuals evoking in their routine.”

Halkier takes the relationship between food consumption and ambiguity one step further. She defines it in her paper (1999), that consumption is characterized by the concept of ambiguity, which refers to the indeterminate and open processes in social life, especially in modern societies, where it is impossible for individuals to achieve secure and committed order with respect to knowledge about society and themselves. Ambiguity, or the balance of trust and risk in food consumption, evolves over time and can acquire many different shapes depending on many different factors. One obvious conclusion can, however, already be formulated: trust-generating mechanisms operating in local settings will not work effectively in the global circuits of food provisioning. Talking to the farmer at the local food market and visiting the farms where our daily food stuffs are produced, can no longer remain the most dominant and relevant trust-generating mechanism in reflexive modernity. People have to rely on abstract systems, scientific expertise and various information systems, to make long-distance assessments on the quality of the products and the reliability of the information flows which come along with them. With the growing significance of global food chains, the food practices and the need for trust-building mechanisms based on abstract systems and expert knowledge forcibly increases. Relevant expert systems include medical professions, nutritionists, experts on social care, etc. But trust is not necessarily blind. From the analyses of Beck et al. (1994) and Giddens (1990) on risk, it can be derived that, in conditions of reflexive modernity, trust is in (abstract) expert systems:

- is fragile (since people are aware that systems considered safe today can be hit by some food crisis tomorrow) and needs constant monitoring/working, commitment;
- is related to the (shop and production) systems and their organizational principles as well as to the people/experts who make these systems work;
- is reproduced/disturbed (re-established especially by processes occurring at the so-called “access points”, where lay-people meet the experts or their representatives) of the systems in a regular and more or less organized way.

The awareness of the need to make daily choices in food consumption and of the presence of uncertainties and ambiguities in trusting food products is what makes the consumer becoming a ‘choicer.’ This involves a mix of decisions and routines. A tension and ambiguity between them is what Halkier observes for highly industrialized countries, where she states that:

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These loaded normative assumptions cause problems in the analysis of large-scale and industrialized organic production. Several observers consider the emergence of agribusiness to develop on the organic market is material with what organic principles should be, and therefore, as this trend is not desirable, it should not be studied (Michelsen, 2002). Others focus on the role of ‘consequentialization’ of the organic industry as a crucial process in the transformation of the organic sector and are prepared to consider redefinitions of public policies in relation to agribusiness (Guthman, 2002; 2004; Raynolds, 2004). Goodman (2003) states that new localized economic arrangements are often unobtrusively seen as precursors of an associative economic model, which reinforces the definition in liberal terms, ties of reciprocity and trust. In this way, local personal relations, and also tend to be, idealized in the evaluation of rural development strategies based on territorial value added. The AAFNs perspective is not only used to characterize local markets, but also points at cultural aspects of global and mainstream markets. Culture values are attributed to the consumption formations, while the conventional mainstream markets is deplated as just following a narrow economic rationality. Opening up such normative definitions requires that we go beyond the linear story lines with respect to sustainable food production and consumption are emerging in different countries and among different groups of consumers. Applying a methodology of this type prima facie is conceiving green consumerism as a multidimensional category, covering a number of different ‘consumer concerns’ about food, all of them including some forms of sustainable food production and consumption practices. These studies are essentially based on a dichotomy between the food production of the ‘industrial world’ with its heavily standardized quality conventions and logic of mass commodity production, on the one hand, and the ‘domestic world’ on the other, where quality conventions embedded in trust, tradition and place support more differentiated, localized and ‘ecological’ products and forms of economic organization. The concept of ‘quality’ evokes the cultural aspects of this model but remains mainstay of the product. The analysis of AAFNs makes it possible to express strong normative commitments to the social movements contesting mainstream, large-scale, industrial-agro-food systems, among others, organic agro-food systems, which are related hegemonic agricultural technological scientific complex. In this arena, AAFNs figure as material and symbolic expressions of alternative eco-social imaginaries, and the literature is replete with works on the capacity of these systems to negotiate the tension between organic and agro-food systems, the capacity to withstand the corporate agribusiness and create a domestic, sustainable, and egalitarian food system. It can be regarded as a form of resistance to the disruptive effects of global competition in the food market.

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DEFINING SUSTAINABLE FOOD

It is important to avoid the use of exclusive definitions of sustainability, for example, when concentrating primarily on science-based (life cycle) assessments of the environmental impact of provisioning particular food products. Some observers claim that a sustainable food system is a system which can be rather clearly defined in technical terms, but such an essentialist approach is not very helpful. The different story lines with respect to sustainable food production and consumption emerge over the past two or three decades to a certain extent based on science but always mixed up with broader societal issues. Applying a sociological definition of sustainable food is required, making the definition dependent from the evolving ways in which consumer concerns about food are interpreted in specific societies. Before elaborating such a definition it deserves paying attention to a perspective on sustainable food provisioning applied within environmental and rural sociology that has attracted broad support, that is, alternative agro-food networks. The growth of green food has interested the social sciences but most studies concentrated on the analysis of the proliferation of alternative agro-food networks (AAFNs) surrounding agro-food circuits. The bias may be understandable as AAFNs provide many options for the unique experience of local, non-standardized, and ethnographic elements in the study of sustainable food production and consumption practices. These studies are essentially based on a dichotomy between the food production of the ‘industrial world’ with its heavily standardized quality conventions and logic of mass commodity production, on the one hand, and the ‘domestic world’ on the other, where quality conventions embedded in trust, tradition and place support more differentiated, localized and ‘ecological’ products and forms of economic organization. The concept of ‘quality’ evokes the cultural aspects of this model but remains mainstay of the product. The analysis of AAFNs makes it possible to express strong normative commitments to the social movements contesting mainstream, large-scale, industrial-agro-food systems, among others, organic agro-food systems, which are related hegemonic agricultural technological scientific complex. In this arena, AAFNs figure as material and symbolic expressions of alternative eco-social imaginaries, and the literature is replete with works on the capacity of these systems to negotiate the tension between organic and agro-food systems, the capacity to withstand the corporate agribusiness and create a domestic, sustainable, and egalitarian food system. It can be regarded as a form of resistance to the disruptive effects of global competition in the food market.
mainly in Europe (where the retail sector had a very determinant role), on avian flu, or on pesticide contamination. Without having read Ulrich Beck (1992) on the emergence of the risk society, consumers nowadays are aware of contemporary food risks as a new form of risk. This means that these food risks are difficult to assess from a lay perspective and impossible to safeguard completely from a national, science-based expert point of view. Today, flows of food are organized and regulated at global levels whereby no one can escape the products (and the risks) of food produced and consumed in the space of flows.

(3) Animal welfare constitutes a controversial but rather well-circumscribed dimension of consumer concerns, although very unevenly developed throughout the world, it is important to take into account. In response to widespread public concern about the specific ways of bio-industrialized production of chicken and eggs after World War II, mainstream markets for fresh eggs in Western Europe have taken animal welfare issues into account. Furthermore, the radical tactics of animal welfare activists in Europe (e.g. in the UK) have contributed to the high visibility of these concerns, although giving them in some cases a characteristic controversy as well. In most Asian countries animal welfare issues, however, are considered at best as a secondary priority, only to emerge when issues of survival and political power relations are satisfactorily dealt with.

(4) Environmental (or eco-system related) concerns related to modern industrial food production and consumption, mainly activated and campaigned for by environmental organizations and social movements all over the world. They argue that food production and consumption should be sustainable in the Brundtland report meaning of the world: producers (farmers) should manage ecosystems in such a way that future generations are not deprived of a well-functioning subsistence base to begin with, and consumers should include these concerns in their consumption practices, including fair trade. In many cases these eco-system concerns are interlinked with one or more of the other dimensions, most notably in the case of pesticide use with human health.

Most people share some of the above-mentioned dimensions of food concerns at some moments in their lives. Which of the concerns worry people most varies between different groups of consumers and different countries, while the overall level of consumer concern differs as well between different parts of the world. Instead of trying to summarize and explain the many different possible contents and specific profiles of consumer concerns in different parts of the world as a particular phenomenon in itself, it seems more promising to take a dynamic, process-oriented and contextual perspective to green consumerism in the global network society. From this perspective, the emphasis is on the interaction between emerging green consumer concerns on the one hand and developing retail strategies on green food provision on the other. This interaction process is reciprocal but not well balanced in terms of power relations. Retailers are more powerful in a functional sense than consumers when it comes to shaping green food consumption. On the other hand, consumer power has increased considerably not only as a result of a series of food crises but also because of the emergence of private-interest-based regulation of food quality and food safety (Ponte and Gibbon, 2005). If indeed it is 'up to the consumers to decide,' retailers and food producers implicitly acknowledge a need consumer interest to have to be taken seriously. Consumer demands for green products are taken into account also because they are articulated and supported by a growing number of organizations and movements which claim to act on behalf of the consumers and for that reason demand access to networks making decisions on the future provision of green food.

CLOSE ENCOUNTERS AT THE SHOPPING FLOOR

Whether or not consumers actually engage with sustainability transitions in the food sector depends on many different factors, some of which are easier to detect and analyze more than others. One interesting opportunity to study this phenomenon is the retail outlet where we can approach consumers and their shopping practices while establishing a balance between macro and micro-approaches.

First, there is the visual level concerning the more sustainable products and services on offer, that is, the ways in which these products are presented to the consumer as well as the information systems attached to them. Visual indicators are important for analyzing emerging consumer buying strategies, but in order to really gain in-depth understanding of the consumption practices implied in shopping for sustainable food in retail outlets, these visual devices are only a first step. For information, images, messages, products and services to be really accepted, bought or ‘appropriated’ by citizen-consumers, they have to be embedded in a vital and active system of trust relations which involves both providers and citizen-consumers. When applied to our object of analysis, the retail outlets, these assumptions help to ‘read from the shelves’ what kind of social relations and strategies are reflected and mirrored in the specific physical setting of the retail outlet. This notion of trust and power relations ‘being mirrored’ or ‘reflected’ in physical characteristics of the setting should not be interpreted in any mechanistic or static way. To be able to read and decipher these inscribed trust relations one needs a social theory on the ways in which relations behind the product and information flows are organized in the context of reflexive modernity. In the language of structuration theory, these trust and power relations are said to be inscribed at the very moment when people enact with the help of the physical characteristics or technologies included in the shop setting – the social practice of shopping.

When a set of valid indicators for shop-level assessments is available, they can be used not just for assessing environmental policies but also for the evaluation and construction of market-based forms of citizenship involvement in the greening of food chains. Product images and information exchange about production circumstances of certain foods provided by NGOs, public media or Internet and e-mail communication, in combination with supermarkets in-shop policies on information and communication, may influence consumer shopping practices. Micheletti (2003) refers to particular forms of engagements in terms of ‘political consumerism’ and she shows that reliable sets of environmental performance indicators on a retail level can be used for many different forms of environmental action and pressure. Power relations and conflict characteristics in the retail outlet. Supplemented the more conventional notions of economic power of food producers and consumers, political power at the shop floor and information control acquire increasing importance. Viewed from this perspective, shopping practices are directly linked to supermarket decisions on how they organize the provision of food in their stores. The main core components of our framework for the analysis of consumer practices when buying sustainable food in retail outlets are summarized in Figure 29.1.

When operationalizing this conceptual model into strategic variables, we distinguish between three basic sets. At the right-hand side of the conceptual model, we discern a set of variables and indicators referring to the environmental strategies of the main actors in the provision system. The second set of theoretical variables and items refers to the processes at the shop-floor level. Here, we make a further distinction between variables describing the physical characteristics of the green product and information flows on the one hand, and variables and items referring to the relationships of power and trust as they are reproduced in the shop-floor setting on the other. Finally, we use a set of variables describing the lifestyles and consumption patterns of the groups of consumers for green food. We try to describe their environmental performance beyond the specific food-shopping practice and we look for ways to relate the revealed preferences for green food to basic characteristics of their lifestyles and overall consumption levels, and to the involvement of global civil society actions such as consumer NGOs.

Both the physical characteristics of the retail outlet and the social relations governing the

![Figure 29.1 Retail shopping for green food: a conceptual model](image-url)
shopping practices are the result of a specific articulation of local and global forces or dynamics. The distinction introduced by Castells (1996) between the space of place and the space of flows can help to make sense analytically of these dynamics, and clarify a simplistic dualism. So, these concepts are helpful provided that one does not rely too much into an interpretation of this scheme which situates the sustainability transitions exclusively or primarily in the 'local dynamics' of the space of place, while regarding the globalization and dynamics of the space of flows as a threat and negative factor for sustainability (Oosterveer, 2005). It is, for example, an exciting dimension of sustainability transitions in the food sector where one witnesses the globalization and standardization of the nodes of production and consumption of organic foods formerly restricted to niche markets. These unorthodoxies can only be understood and properly analyzed when possibilities for environmental change at the level of the space of flows are taken into account as well and analyzed with respect to the many diverging ways of being connected to local factors and dynamics in the space of place.

In the condition to face the challenge of globalization for the social sciences and, in our case to be able to capture the complexities in the new role of retail chains, we need a new map of the local-global, which will not only encompass national specificities, but will avoid any type of dualism between the national and the global level, between the 'inside' and the 'outside' (Beck and Wänsleben, 2003). In a cosmopolitan view, the transitions to more sustainable food consumption practices are related to the regional origin of the products and their concomitant food-miles, the (global) supermarkets, (government) standardized norms for packaging, safety and environmental quality, the environmental strategies of the retail chains and the orientation of the shopping public towards seek sustainable food, people for whom local identity can engage with processing products and colleague-consumer groups and environmental NGOs worldwide, thereby performing different forms of what Beck refers to as social cosmopolitanism (Beck and Wänsleben, 2004).

**PROVISION OF SUSTAINABLE FOOD IN THE RETAIL OUTLET: SUPERMARKET STRATEGIES**

The dominant position of the retail sector in the processes of change in food provision can basically be explained by two reasons. First, retailers can substantiate their claim to be 'closest' to food consumers in many important respects by pointing to the fact that they meet on a regular, almost daily basis with major segments of mainstream food consumers (Seth and Randall, 2001). Second, the organization of food production and consumption has become a global affair, and consequently many retail chains have gained competitive advantage, resulting for example in many major countries in Europe in five major retail chains accounting for considerable shares in the overall food sales. In 1990 no retailers were included in the Fortune 50 list of the largest global companies, but in 2002 more than 50 were. By that time, Walmart had become the largest of all companies, according to the size of sales (Reynolds and Cuthbertson, 2004, pp. 1–22). This process was related to the closure of small shops and independent retailers (Dobson et al., 2002). In 2005, the top 10 global food retailers accounted for combined sales of $840 billion – 24% of the estimated $3.5 trillion global market (up from 18% in 2001). See Table 29.1.

One example of these large retail firms is the French hypermarket chain Carrefour, selling food through its super- and hyper-markets in France, but also in many other countries around the world (see Box 1).

Consequently, food quality and safety issues stretch far beyond the local or national level. While for a long time quality control rested primarily in the hands of public regulators, we witnessed a major change in the 1990s when retailers assumed a more active role in the development of food safety and management procedures, like HACCP (Hazard Analysis and Critical Control Point).

In order to attract consumer attention, supermarkets refer to different storylines from within the general frame of sustainable food consumption. Also, combinations of different storylines are developed, like the combination of the 'naturalness' and the 'safe food' storyline. The political importance of this specific combination can be illustrated by considering some of the transformations that are taking place in the area of food marketing. In the 1980s, a new perspective on consumer research split the academic marketing field into two coexisting perspectives. The conventional perspective assumes a positivist approach, employing quantitative research and forecasting. The newly emerging non-conventional perspective adopts a non-positivist methodology, employing also ethnographic and qualitative methods in dialog with sociology and anthropology. This cultural perspective where consumers are not considered as rational (economic) actors. This approach emphasizes the social significance process as a confluence of practices at different levels and within specific social contexts. The constellation of meaning and practices characterizing subcultures of consumption and styles of food consumption are not based on socio-economic circumstances exclusively or primarily, since even members of one subculture can belong to several economic groups (Thurow and Trotter, 2002).

An empirical example of these non-positivist trends in marketing research is provided by the work of the Hartman Group in the USA (Hartman Group, 2000; http://www.hartman-group.com, 2003). In studies of this Group on organic food consumption, it was found that – with an annual growth of 15 to 20 per cent – organic food products are becoming part of mainstream food consumption practices in the 'USA,' while no longer being restricted to just 'market niches.' In this new generation of marketing research, the stages of organic food consumption are explored in a qualitative way, working from the periphery to the center of the market, attempting to establish a comprehensive characterization of organic consumer lifestyles, consumer behaviors, distribution channels and information sources. These reports contextualize the organic food consumer as being

**Table 29.1 Top 10 global food retailers**

<table>
<thead>
<tr>
<th>Company</th>
<th>2004 revenues (US$ millions)</th>
<th>Percentage share (grocery retail)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Walmart** (USA)</td>
<td>287,089</td>
<td>8</td>
</tr>
<tr>
<td>2. Carrefour (France)</td>
<td>59,119</td>
<td>2</td>
</tr>
<tr>
<td>3. Metro AG (Germany)</td>
<td>76,942</td>
<td>2</td>
</tr>
<tr>
<td>4. Ahold (Netherlands)</td>
<td>70,439</td>
<td>2</td>
</tr>
<tr>
<td>5. Tesco (UK)</td>
<td>65,175</td>
<td>2</td>
</tr>
<tr>
<td>6. Kroger (USA)</td>
<td>56,924</td>
<td>2</td>
</tr>
<tr>
<td>7. Gusto (UK)</td>
<td>52,932</td>
<td>2</td>
</tr>
<tr>
<td>8. Ermalk Enterprises</td>
<td>51,800</td>
<td>1</td>
</tr>
<tr>
<td>9. Albertson (USA)</td>
<td>39,857</td>
<td>1</td>
</tr>
<tr>
<td>10. Ahold (Germany)</td>
<td>39,100</td>
<td>1</td>
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</tbody>
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**Walmart does not report grocery sales separately from total revenues. Market research firm, Retail Forward, estimates that Walmart sold $109 billion in groceries in 2004.**
part of cultural changes where they are becoming more concerned with quality of life and health, and thereby transforming consumption practices (Harry, 2004). This phenomenon has also been the focus of a study about the Wellness Lifestyle Shopper, "Messieurs les Journeys of Wellness Consumers" (http://www.hartman-group.com, 2000). This study states that consumers, as well as their paths to achieve wellness, and complex social entities that they have to consider an enormous diversity in products appealing to health entering the market. Data showed that the American population spend around 66 billion per year on healthy products, a significantly growing market (http://www.hartman-group.com, April 2003). People's concerns with health and the nutritional quality of food were mentioned by 66 per cent of the organic consumers interviewed in this research. Concerns about pesticide risks was the reason given by 38 per cent, food safety by 30 per cent, while only 26 per cent mentioned environmental reasons, contradicting the belief that organic food consumers are essentially environmentally conscious citizens. Instead of understanding consumers as being informed solely by economic and scientific arguments, these consultancy reports recognize that changes in the cultural sphere impact the way in which people consume products and services and deal with related experiences and information.

The National Grocers Association (NGA) of the USA has recently established the organic market to be the fastest growing sector of food products in the supermarkets. Also, the NGA relates this development to the growing importance consumers attach to well-being and health. At a conference on organic food consumption in the USA in 2003 the NGA concluded:

"As the fastest growing category in the food industry today and public concern about health and wellness expected to continue, no retailer can safely ignore this increasingly important facet of the industry. The $5 billion organic market is growing at a rate of five times faster than the growth rate of the overall food industry and doubling in size every 33 years since 1990. By 2003, the market for organic products is estimated to be over $13 billion."

On the basis of a research among 146 representatives of supermarket chains, the NGA underlined the importance of organic or natural foods for supermarkets and offered a number of recommendations for interested supermarkets (see Box 2).

It may seem simple, but it is not as easy as simply adding a few new product lines to the store shelves or setting up a "natural foods" section inside the store. To draw this business and meet the needs of these customers, retailers need to become as knowledgeable about natural and organic foods as the people they hope to sell to. This segment of consumers knows more, and asks more, and the retailer who will enjoy the long-term benefits of these natural sales will be the one who can answer their questions. Your natural section will be most successful, and most profitable, if you follow a few basic guidelines to cater to the natural products customer.

First, when conceptualizing your natural section, work with a knowledgeable natural products' distributor who can assist you with product selection, competitive pricing, promotional strategies and merchandising. Working in partnership with a distributor who understands this industry will help you build a solid foundation for your own natural products' section. Second, realize the importance of product information and education for this new customer group. Natural products' magazines, like Natural Foods Magazine, food and health books, and "health food" reformulations in supermarkets, are of vital importance to the success of your store. Third, assign a natural section's manager who is knowledgeable about the products, knows how they differ from conventional brands, can answer customers' questions, and is committed to your customers' natural products' education. Most of all, associates and customers must be encouraged to take time to learn what is available and to discover the uniqueness of natural foods. Knowledge of and enthusiasm for these products, perhaps more than anything else, will be the deciding factors in the success of your store's natural products' section.

Source: Jonathan M. Saltzberg, Natural Foods: A Natural Profit Opportunity (National Grocer Magazine)

**Box 2 Recommendations for supermarkets initiating the sales of organic and natural foods**

In order to supply their retail outlets with sufficient quantities of green food in response to the increasing demand, supermarkets have to organize systematically their provisioning, pushing the growth of organic food production. In 2001, the total sales of formally certified organic food products in Brazil reached US$200 million in 2003 and is estimated to be around US$250 to 300 millions for 2004 (Global Rural, November 2002; Cordemoy, 2002, in Cordemoy, 2002). The entrance of large supermarket chains such as Wal-Mart into this sector will challenge the argument that organic food is elitist.

By way of comparison, let us now consider the situation in a less industrialized country like Brazil. The Brazilian Supermarket Association confirmed the presence of a trend comparable with the one in the supermarkets in Europe and USA, where interest in the broad category of healthy food (including organic products) is growing fast. This (food) sector knows that consumers want good health and longevity. Supermarkets can meet this demand by including certified natural products, organic and functional food, as well as "diet" and "light" products and, what is very important, by giving consumers information on what they are buying. Ultimately your store can "sell" health! Provider strategies in sustainable food are related to systems of relationships with suppliers (e.g. organic farmers), marketing strategies (involving one or more of the identified dimensions of sustainable food) and with the positioning of these products within the shop. Surprising is the observed variety in supermarket strategies in this regard. For example, French retail groups that publish a sustainable development report (Carrefour and Auchan) regard quality, environmental responsibility and social and environmental sustainability in the area of food products. Leather and Lilienthal claim fragmented display of information about products and services. As an example, French retailer (Leclerc) and integrated farming (Intermarkho) as sustainable food products. This variability in company strategies deserves further elaboration.

After presenting these different results of empirical research on provider strategies in the field of sustainable food provision, it becomes clear that this interesting perspective demands further elaboration. Based on our conceptual framework and the review of empirical trends in retail policies worldwide, we think the following variables to be of crucial importance for (research into) future supermarket strategies:

**Box 3 Green food provisioning in Brazilian supermarkets**

In the Brazilian Supermarket Association sales, in the domestic market are done through supermarkets, 26 per cent through fairs and 16 per cent in specialized stores. In 2001, in addition, there is also a large quantity of "informally certified" or non-certified organic production, especially in the southern states of Rio Grande, Paraná and São Paulo. The estimated number of organic products is around 14,000, and among them small-sized family farms are responsible for up to 80 per cent of the production (Banco de São Paulo, 1991/2002). Greater São Paulo represents half of the national consumption of organic and is also the main pole of production. The annual growth of organic production is calculated as being between 30 and 50 per cent. An important part is production for export (soybeans, coffee, juices, sugars, nuts, oils, banana, guaranã etc.). What is around 70 per cent of the total certified volume (there are 12 national and about 9 international certifying agencies active in the country) is domestic, generated in 2001 US$ 130 million (Trade, 28/05/2002). But the sector is also growing in the domestic market, which has been the most important until now. In 2001, around 45 per cent of the organic food sales in the domestic market are done through supermarkets, 26 per cent through fairs and 16 per cent in specialized stores. Most of the products are spices, teas, coffee, fertilizers, vegetables and fruits, but a number of vegetables and small family units are processed, such as mate, tea, jams, oil, breakfast cereals, and dairy products. Fresh vegetables are presented in different forms thereby allowing the producer to increase the value. Provisioning supermarkets with organic food from farmers or farmers' associations takes different forms but two stand out as most important. The first strategy is to enter into direct contracts with organic supermarkets. The second one is to rely on intermediaries (more adapted by national and international chains, e.g. in the cities of Rio de Janeiro and São Paulo). The first strategy allows a more diversified offer of products, higher quality, more space of exhibition and less difference in price between conventional and organic products than the second one does.
BUYING SUSTAINABLE FOOD: CONSUMER STRATEGIES

Making sense of consumers shopping for sustainable food in supermarkets cannot only be done through reference to economic variables and attitude-behavior relations. Attention to other issues is required for understanding consumer strategies for buying sustainable food, such as concerns about environment, food safety and health, the importance of lifestyle changes and the changes in consumer trust in food. In particular, the issues of lifestyle and trust will be further elaborated.

Life in modern-day societies is characterized by an increasing plurality of different lifestyles and this diversity is also reflected in the varying consumer choices and marketing strategies in the food sector (Slater, 1997; Gidens, 1991, Ward, 1994 and Beck et al. 1994) point at the plurality in lifestyles and consider reflexivity related to consumption practices as a key element for understanding this variety. Consumer reflexivity becomes particularly visible in the significance attached to health and body well-being in the face of competing expert systems.

Searching for health and buying sustainable food can be part of different lifestyles. Even within the clearly identifiable sector of organic food, a marked diversity among German and Thai middle-class consumers (Wertheim, 2005) indicated that for the broader category of biological or sustainable food this variety may even be larger. In modern society diversity does not stop at the front door of the household, but within the context of the household food habits may be different, exposing different lifestyles between people that are in close social relationship. To explain this cultural fragmentation of our dietary preferences (Richardson, 2004) points at the increased individualization of culinary preferences (especially among pre-teen children) and the growing presence of dietary restrictions (due to food sensitivities, allergies and forms of vegetarianism). Cultural forces beyond the household are increasingly present in fragmenting any dietary patterns existing within it.

As in other countries, in Brazil concerns about health and lifestyle play a role in selecting vegetables next to their aesthetic appearance and flavor. Thus, consuming sustainable food can be occasional and only one among several other health-oriented practices. Guillon and Waltham (2003) identified this trend as the "green trip" way of consuming sustainable food. Since the beginning of the 1990s, this trend seems to be present in individuals' decisions towards self-promotion (e.g. the identification this trend as the "green trip" way of consuming sustainable food. Since the beginning of the 1990s, this trend seems to be present in individuals' decisions towards self-promotion (e.g. the identification this trend as the "green trip" way of consuming sustainable food.

In general, trust is an essential element of consumer strategies with regard to sustainable food. The presence of risk associated with food (pesticide residues, bird flu, BSE, etc.) that may endanger human health in combination with the necessary dependence on experts to provide information about their occurrence and danger, necessitates some form of trust relation to be developed and sustained.

Trust in the food system as abstract system refers both to the products and technologies and applied and the people at work in (global) food systems. Consumers need to trust the health and safety of the food they consume, the information provided about the production process involved, and the people producing and retailing the food. As a personal relationship with the producer of the food is not possible in supermarkets, consumer trust in sustainable food bought at retail outlets has some specific characteristics. The relationship between consumer and staff is not necessarily superficial, so consumers' trust in sustainable food products is generally based on the (environmental) image of the company (and its obligation to uphold its image) and on the active (visible through labels) presence of independent controlling agencies supervising certifications and other indicators of good environmental performance. This trust is nevertheless precarious and in case of acute problems consumers are inclined (temporarily) look for additional external and independent sources of information to orient themselves in order to make the right choices, for example, the choices for sustainable food.

This short discussion of consumer concerns, trust and lifestyles is based on the preliminary results of an ongoing empirical research worldwide in the field of consumer strategies in buying sustainable food. It points at the importance of further elaboration of transnational, consumer research. This research, for example, we have again tried to identify a number of variables and factors we think to be important:

- Dimensions of consumer concerns as contained in specific lifestyles. Different (combinations of) story lines can be connected with different lifestyle characteristics also outside the consumption domain of food.
- Product information strategies. What information is asked for by consumers and which formats of information provision (in the shop, on the shelves and on the products) fit best to the lifestyles of consumers.
- Social relations of anxiety and trust: the preferences of consumers for specific company information strategies and the extent of trust building and maintaining a meaningful trust relationship.
- (Premium) prices for green products: willingness to pay, although not isolated from concrete price, piling and eating practices, for cultural lifestyle characteristics and always in relation to other food products.
The shopping floor constitutes the locale where supermarket chains and consumers interact in the shopping for sustainable food transactions. The shopping floor proves very important in the success of green food products. The way different sustainable food products are positioned in the shop setting proves very important in the success of such products. For example, when sustainable foods are offered more space in the supermarket shelves they seem to be popular and therefore consumers will buy more.

The availability of products – number and diversity of products and departments in the retail store. A shopping trip is perceived as being successful if it includes a broad range of products and departments that are not only purchased, but also browsed. This is particularly true for consumers who are interested in green products.

The location and presentation of green products – products’ location on the shelf (vertical as well as horizontal). The location and presentation of green products on the shelf is important because it can influence consumer behavior. For example, products that are placed at eye level are more likely to be noticed by consumers than products that are placed higher or lower on the shelf.

Trust enhancing strategies in everyday shopping for sustainable products, both from the side of providers and from the side of consumers (in situ information strategies; communication devices; potential for mutual feedback and control).

Motivation, training and qualifications of the workers at the selling point, resulting in passive or proactive strategies for confronting the consumer with sustainable food.

The framing of the price setting: the position of sustainable food in comparison with other food products in terms of relative prices but also in terms of image, etc.

Shopping connected special actions and devices (eco-saving systems; eco-bonus cards, etc.) for the promotion of sustainable food.

Again the list is indicative instead of exhaustive and is meant to contribute to the development of a future research agenda that takes as its starting point the practice of shopping at the retail outlet as a relevant case of a consumption junction.

CONCLUSION

Viewed from a global perspective, green food consumerism is on the increase, although its development can be explained in various ways. With the help of a theoretical framework and its operationalization into three specific categories of factors and variables, we are able to identify the heterogeneous paths that lead to increased sustainability. With the help of the research outlined as suggested, it is possible to investigate different forms of 'fuss' and 'misfits' between retailer strategies on the one hand and consumer strategies on the other. Guided by our typology of four dimensions of sustainability, we were able to reconstruct some different ways of framing sustainable food consumption in different settings in different parts of the world. When Brazilians are 'going organic' to improve their lifestyles and well-being through the consumption of food that suits the image of a sporting, healthy, and modern lifestyle, we see a wide variety of retailers and consumers' concerns as well. Most likely, however, these concerns are not framed in terms of pager 4 of 4

Table 4 The importance of supermarket shelf space for sustainable food consumption

Experimental research provided evidence for the observation that not only the price of a product but also its characteristics determines consumer interest and also that the context in which the supermarket plays an important role as well. While testing consumer reactions to the presentation of sustainable food in supermarkets, researchers ascertained that consumers are sensitive to the way a product is offered. When a product is presented in a supermarket in such a way that it gives the impression of being popular and of good quality, consumers are more interested in buying this product. For example, when sustainable foods are offered more space in the supermarket shelves they seem to be popular and therefore consumers will buy more.

Source: Doganovs et al. (2005)

When several labels are available for one category of products, these can correspond to different levels of quality and therefore with different prices. Retailers use food labels as general signals of quality according to their perceptions of consumers' needs and preferences (e.g., consumers may choose organic food labels for different kinds of meat). In most cases, labels represent a higher quality and are thus displayed on higher shelves, thus more expensive, but this is not the case in certain stores, where either the display is vertical or where the higher quality has become common and widely purchased. In France, the notion of 'quality' seems to create coherence between the retailer's and consumers' concerns for sustainable food. In the store this 'quality' is materialized into the mix of 'terror' (regional product) and sustainability labels. Consumers are familiar with some labels, such as 'natural product,' which are associated with organic products, whereas the display of hydroponic vegetables in organic stands, with signs, clearly separating organics from hydroponics, etc. Only certain regional supermarkets have special, refrigerated stands, with signs, clearly separating organics from conventional vegetables. In these supermarkets, the demand for healthy foods is contributing significantly to the growth of organic food consumption and production, contradicting the negative force as such as consumer's concern for safety on retailers to provide a hierarchy of food (quality) choices structured according to our first dimension in particular. Guivant (2003) talks about an 'ego-trip' – instead of an eco-trip – discourse as being specifically relevant for the Brazilian case.

In this ego-trip discourse on the greening of food production and consumption, it is not about the actual food being consumed, but about the social and psychological benefits that the consumer may feel from consuming green food. This is often referred to as the 'greenwash' effect, where consumers are attracted to green products not because they are actually sustainable, but because they are perceived as such.
an ego-trip discourse of the kind found in Brazil. Nevertheless, adherence to safe and health food standards in both parts of the world could very well turn out to be quite comparable with respect to the ways in which consumers respond to strategies by retailers who use the provisioning of green food to create new markets. What puts the Asian consumers and retailers in a different position is their Brazilian or European counterparts, it is the lower level of the overall provision of green food in their societies. In all regions, however, at least some food is sold and bought under the heading of green or sustainable food.

International trends situate supermarkets as central stakeholders in the expansion of organic food consumption, notwithstanding the conflicts that farmers may have about the conditions of supplying sustainable food, as well as with consumers about the framing of sustainability and about the price. According to what has been observed in recent research, worldwide most supermarkets have approached the organic food sector as part of a wider strategy aimed at appealing to those consumers interested in green consumption, including four types of motivations mentioned in this chapter: inclusion of organic foods (Guivant 2003) into the conventional market and especially on supermarket shelves is not always welcomed as a desirable development by the organic agriculture movement. Their concerns and criticisms are related to the resulting demand for large-scale production, commercialization in supermarkets, consumption restricted to higher income classes due to high prices, etc. An alternative response would be to hold on to small-scale organic food production and consumption distributed through local markets. However, according to the arguments presented in this chapter, a significant growth of the sustainable food market depends on the inclusion of such products in supermarkets. Among the most important challenges in this respect are the negotiations taking place between producers and the retail sector, and the framing of sustainability in and through shopping practices at the consumption junction of supermarkets. As the quantity and quality of sustainable products on offer increase and consumption is stimulated along with changes in lifestyle patterns, the dynamics of sustainable production may be strengthened, breaking away from the negative prejudices coming from the organic agriculture movement and opening up more alternatives for green-food production and consumption. Accepting the presence of other strategies in the provisioning of sustainable food, next to and as an alternative to the traditional channels of organic food supply, makes it possible to study the strengths and weaknesses of the different options. This chapter has identified some of the key indicators for organizing such empirical studies, as well as formulated a wider conceptual framework to guide this research.

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