ABSTRACT. In this paper I want to show that consumer concerns can be implemented in food chains by organizing ethical discussions of conflicting values that include them as participants. First, it is argued that there are several types of consumer concerns about food and agriculture that are multi-interpretable and often contradict each other or are at least difficult to reconcile without considerable loss. Second, these consumer concerns are inherently dynamic because they respond to difficult and complex societal and technological situations and developments. For example, because of the rising concern with global warming, carbon dioxide absorption of crops is now attracting public attention, which means that new requirements are being proposed for the environmentally friendly production of crops. Third, there are different types of consumers, and their choices between conflicting values differ accordingly. Consumers use different weighing models and various types of information in making their food choices. Changing food chains more in accordance with consumer concerns should at least take into account the multi-interpretable, dynamic, and pluralist features of consumer concerns, for example, in traceability schemes. In discussing usual approaches such as codes, stakeholder analysis, and assurance schemes, I conclude that these traditional approaches can be helpful. However, in cases of dynamic, pluralistic, and uncertain developments, maintaining some pre-existing evaluating scheme or some clear cut normative hierarchy, such as codes or assurance schemes, can be disastrous in undermining new ethical desirable initiatives. Instead of considering ethical standards and targets as fixed, which is done with codes and schemes, it is more fruitful to emphasize the structure of the processes in which ethical weighing of relevant consumer concerns get shaped. The concept of “Ethical Room for Maneuver” (ERM) is constructed to specify the ethical desirable conditions under which identification and weighing of paramount values and their dilemmas can be processed. The main aims of the ERM are making room in all the links of the food chain for regulating and implementing the relevant consumer concerns by (1) balancing and negotiating, (2) supporting information systems that are relevant and communicative for various consumer groups and (3) organizing consumer involvement in the links of the food chain. The social and political context of agriculture and food production, particularly in Europe, gives ample opportunity for implementing several types of Ethical Rooms for Maneuver. Finally, I discuss several types of Ethical Rooms for Maneuvre in the food chains that can be communicated by means of specific
traceability schemes to less involved stakeholders with the potential consequence that the stakeholders will be motivated to be more involved.

KEY WORDS: consumer concerns, ethical dilemmas, deliberative ethics, ethical traceability

1. INTRODUCTION: THE INCREASE AND DYNAMICS OF CONSUMER CONCERNS

Food production in Europe is in crisis because of ethical consumer concerns and the continuing emergence of safety and health issues, which have resulted in a steady decline of trust in the sector on the part of governments and consumers. Several alternatives to current production methods are proposed, such as more stringent government control (e.g., Dutch policy from 1982–1998) or better cooperation between farmers and technologists (e.g., Dutch policy from 1998–2006; LEI-report, 2006). Most of these alternatives have until now had only mixed success, largely due to not very well explicated ethical assumptions and to social barriers, as is well documented by Pretty (2002). First, the ethical assumptions of these alternatives focused mostly on one or two values, although farming is a mosaic of values. Second, they assumed a stable and non-dynamic view of these values. Third, the social barriers that confront directly involved stakeholders (producers, technologists, consumers) prohibit them from formulating value dilemmas and proposing new ethical-technological solutions that are alternatives to existing ones. Another barrier is that a certain moral position with respect, e.g., to animal welfare could immediately lead to policy measures that were stricter but were not flexible, and could in the long run hamper new ethical solutions. Consumers also mention barriers such as availability and the lack of trustworthy information.

In this paper I want to show how and why consumer concerns about food production can and should be incorporated into decision-making processes in food supply chains by organizing ethical discussions of conflicting values that include consumers as participants. I develop for this reason a model of deliberation, called “Ethical room for Maneuver” (ERM). The model is meant to take into account the pluralist, multi-interpretable, dynamic features of consumer concerns with respect to food production. The model is valuable because, in the first place, there are several types of consumer concerns with respect to food and agriculture, which are multi-interpretable and often contradict each other, or at least are difficult to reconcile without considerable loss, as I will show later on; many consumer concerns are inherently dynamic as they change over time.
Moreover, there are different types of consumers, and their choices between conflicting values differ accordingly. Different weighing schemes and various types of information are used for making choices. This multifaceted and dynamic nature of consumers and their concerns is what makes it so important to take these concerns deliberatively into account wherever fundamental decisions are made in the serial links of the food chain.

Subsequently, I discuss common approaches to consumer concerns, such as codes of conduct, stakeholder analysis, and assurance schemes, and I conclude that they can be helpful in addressing consumer concerns. However, in cases of dynamic, pluralistic, and uncertain developments, sticking literally to some pre-existing ethical code, evaluation scheme, or clear-cut normative hierarchy, such as codes or assurance schemes, can be disastrous in killing new, interesting, ethically desirable initiatives from inside the chain or from outside. Instead of considering ethical standards and targets as fixed, as in codes and schemes and as external to the food sector, it is more fruitful to emphasize the structure of the cooperative processes in which the ethical weighing of relevant consumer concerns takes shape and which I call “Ethical Room for Maneuver” (ERM). This concept is constructed to specify the ethically desirable conditions under which identification and weighing of paramount values and their ethical dilemmas can be processed. Finally, I discuss several types of ethical room for maneuver in food chains, which can be communicated by means of specific traceability schemes to less involved stakeholders. I will also outline the relevance of ERM for implementing ethical traceability systems. With food supply chains or food chains I mean “…the whole food industry – from farming and food production, packaging and distribution, to retail and catering” as described by the Food Standards Agency of UK.

2. THREE TYPES OF CONSUMER CONCERNS

European food consumers have concerns that differentiate according to at least three levels, which result in three types of concern (Korthals, 2004; Beekman, 2004). Consumers have substantive concerns about certain ethically questionable structural traits of the food chain, such as lack of animal welfare. Second, they complain about the lack of trustworthy information, or even one-sided or distorted information, and lack of objectivity. Third, they complain about lack of involvement with the food chain and an increasing gap between the food chain and consumers, which treats them as complete outsiders (procedural concerns).

The most common substantive consumer concerns that are mentioned are about seven ethical issues: safety of the food (e.g., the use of hormones and
antibiotics in animal feed); quality of the food, healthiness of the food; issues of animal welfare (with criteria such as the five freedoms, the transportation of animals, slaughtering procedures, and import/export of animals and animal products; quality of the landscape; environmental effects of food production; and fair treatment of farmers (i.e., good working conditions in both the developed and the developing world). These values are subject to lots of detailed specifications, depending on the circumstances (Donagan, 1993; Korthals, 2004). All these values can be specified in innumerable items, and the concrete tasks and contexts involved are also innumerable. For example, animal welfare can mean intact horns, no lesions and injuries, good feet and limb conditions, etc. Good working conditions can mean that men and women get equal pay, that men and women have access to childcare, etc.

The second set of concerns covers the reliability of the information given, and also the relevance of the information in contributing to balanced ethical decisions about food choices by both consumers and producers. This set of concerns covers pluralism: the information should not/cannot necessarily be neutral, but at least it should take into account differences among consumers, e.g., that consumers with a preference for organic meat products look for different information about the food chain and want different advice than consumers with other preferences.

The third type of consumer concerns covers the widespread consumer feeling of alienation from the food chains. This third concern is motivation for many to try to bridge the gap between producers and consumers. Some consumers simply take this gap for granted and don’t worry about it, but others find it troubling and try to find out where their food comes from, very often with disappointing results, because they do not get a satisfying answer to their query or can not get any information at all. Issues of involvement and participation are connected with these concerns.

3. MULTI-INTERPRETABLE, CONFLICTING ("DILEMMATIC") AND DYNAMIC CHARACTER OF CONSUMER CONCERNS AND THE NECESSITY OF DELIBERATIONS ABOUT THEM

With respect to all these concerns, it should be borne in mind that they are differently interpreted, often in conflict with each other and very dynamic, in response to a constantly changing world. The multi-interpretable character of the concerns is due to the fact that consumers differ with respect to their ethical orientations, attitudes, and purchasing behavior. There are different types of consumers, and their choice between conflicting values differs accordingly (Rozin et al., 1999; Lang and Heasman, 2006). Different
weighing models and types of information are used for making choices. The same applies to producers: their value orientations and attitudes differ enormously across Europe. Attempts to re-establish trust should at least take into account the pluralism of consumers vis-à-vis their different ethical orientations, viewpoints, and ways of balancing their preferred values.

Second, the concerns very often bring about ethical dilemmas with respect to shopping and consuming foodstuffs, which are well known to the more conscientious consumer/citizen. For example, the demands to protect the environment and to safeguard human health can lead to conflicts with the demands for higher standards of animal welfare. Environmental and health requirements by and for human beings can imply, after all, that animals will have less free space to move around and their output (manure) should be heavily controlled (Wagemans et al., 2003; Stegeman et al., 2003). One of the five demands proposed by the British Royal Society for the Prevention of Cruelty to Animals – and adopted in 2001 by the Dutch government committee for the restructuring of the agricultural sector – states that animals must be able to move around according to their normal behavioral pattern. For many farm animals, being locked up in a confined space without fresh air means a limitation of this freedom. There are many cases where the demands of the environment and of public health are at odds with the demands of animal welfare. Another example of a dilemma is that consumers on the one hand want to sustain fair trade, by buying fair trade food products from developing countries, and on the other hand are confronted with the fact that many farmers in developing countries cannot live up to the hygiene standards required by developed countries, thereby possibly imposing risks on the buyers or nearly unbearable financial burdens on the farmers.

One could react to these dilemmas by arguing that dilemmas are based in deep-seated emotions and desires, with which humans have to cope anyway. Williams (1994) is arguing this when he states that the many dilemmas that involve, in particular, friends and relatives are not ethical dilemmas at all, and they can’t be or even shouldn’t be discussed, because our essential commitments are at stake – his point is that one should (and does) care about relatives first. He argues that these dilemmas stand for essentially non-cognitive conflicts, and the only way to deal with them is to educate people about their emotions. However, not all ethical dilemmas are conflicts between desires (or involve friends or relatives).

Many dilemmas do not resist a solution through communication and reasoning, because they are conflicts between beliefs; this makes it meaningful to discuss them and to look for reasonable solutions. These solutions sometimes have unwelcome and even tragic results (in the sense that a loss is felt if one side loses; Foot, 2002). Ethical reasoning is, therefore, very
important, in the sense of sharing arguments and being criticized by communication partners; it means learning to live with different arguments and beliefs and in the end making use of arguments you might never have invented on your own. This type of “communicative reasoning” can make a difference. Communicative reasoning does not prevent you from having to accept losses, and does not exempt you from guilt or feelings of moral loss. Suppose I choose a local farmer’s meat products, although I know that she, for some good reason, cuts the beaks of her chickens, and that more animal-friendly chicken products can be bought 100 km away. In this case I contribute to some moral losses, but also to some moral benefits, but in my view I am not to be blamed for the losses.

Third, consumer concerns change over time, in response to very different and complex events like technological and social developments. For example, it only recently became clear to many consumers that the distance food travels is a considerable concern, which is at odds, probably even inconsistent with, the choice in favor of, e.g., organic or fair trade food (Pretty et al., 2005). Global sourcing of ingredients by large enterprises, be it organic or not organic (i.e., buying products in certain product sectors abroad on the basis of specific requirements; Barrientos and Dolan, 2006), is also a recent phenomenon and consumers are becoming aware of some new ethical aspects connected with this development. This recent concern is added to the ones already mentioned, and can significantly transform them. In a recent article on identifying and ranking attributes that determine sustainability in Dutch dairy farming, the authors propose to differentiate this concern into at least 36 attributes: “only one attribute was selected for economic and internal social sustainability: profitability and working conditions, respectively. The list for external social sustainability contained 19 attributes and the list for ecological sustainability contained 15 attributes” (Calker et al., 2005). Although the authors do not specify the exact character of these attributes, it should be clear that all these attributes change over time, as does their relative weight vis-à-vis each other. An example of a recent change is the issue of possible greenhouse gas mitigation by crops, which again could be transformed into a new concern for citizen consumers in favor of carbon sequestration (Lemus and Lal, 2005). Indeed, when the public becomes more aware of the risks of global warming, be it triggered by alarmist movies like The Day After Tomorrow (by Roland Emmerich, 2004), or seriously informed by the Intergovernmental Panel on Climate Change, then the urge for increasing carbon sequestration in crops may well become a consumer concern. The dynamic character of consumer concerns is something to be reckoned with in a serious and structural way.
4. TWO NON-COMMUNICATIVE APPROACHES OF CONSUMER CONCERNS

The multi-interpretable, conflicting, and dynamic character of consumer concerns has until now been only partly addressed by at least two main ethical and social approaches. The first is called “principalism” and consists mainly of the application of a mix of deontological and utilitarian approaches to food consumption and production. According to the deontological approach in ethics, in cases of ethical uncertainty, one should look for principles, rights, and duties. According to the utilitarian approach, the consequences of an action chosen are decisive: if they are ultimately negative for the “greatest happiness of the greatest number” one should refrain from the action. An example of a principalist framework is the ethical matrix of Mepham (1996), which starts out from the standard *opus* in the field of medical ethics by Beauchamp and Childress (1994). In this approach, four principles are formulated to resolve the ethical problems of nutrition. The first principle is that of respect for autonomy: respect for the right of choice, which also entails the right to information. The second is that of justice: a fair division of advantages and disadvantages, and of risks. The third principle focuses on non-damage: not inflicting damage on human beings and nature. The fourth relates to doing well: contributing to the well-being of human beings and nature, also by avoiding damage. Mepham (1996) applies these ethical principles via a matrix to food production processes, distinguishing therein a number of participants: consumers, various types of producers, a targeted organism (like animals or crops), and nature in its totality. He also combines the principles of doing well and non-damage into the principle of respect for well-being. Even future living beings may be included in the totality. Mepham shows that, applying these principles, the artificial injection of hormones in livestock meat should be banned, and that genetic modification of crops should be rejected, but insists upon the neutrality of the matrix. The targeted user of the matrix is the individual person, who solves an ethical problem entirely on his or her own.

This principalist approach (be it mainly utilitarian or deontological or a mix of these two perspectives) has significant shortcomings (Korthals, 2004). In the first place, the principles are ambivalent: they are compulsory in nature, while they are also ideals that we should aim for but can never achieve. Autonomy is something that we should respect, but it also stands for a desired terminus (an ideal or value) that we can never reach; we can therefore act more or less autonomously. The same applies for respect for well-being and its complementary components, doing well and non-damage: it is an ideal that we will seldom achieve. The principle of doing well is even more questionable, because it is hardly possible to do well on a universal
basis, since human preferences and characters differ so greatly. Non-damage can be more properly called a principle, since it can entail abstaining from any particular action. The second shortcoming is that, in concrete situations, Mepham’s principles are often in mutual conflict (similar to the consumer concerns!). They do not tell us what priority each should have, so they ultimately do not help us to resolve dilemmas. In the end, the principles only operate heuristically in selecting the really worthwhile ethical issues, rather than as absolute commandments. They help us to look at aspects of specific situations and direct our attention to specific characteristics. But they do not cover the entire sphere of meaningful and fruitful ethical concepts. The ethical issues in nutrition are so complex that the various principles are always at odds with each other or inconsistent.

A second approach to tackle the multi-interpretable, conflicting, and dynamic character of consumers’ concerns includes the perspectives of “Stakeholder Analysis” and “Value Chain.” These more economic and sociological perspectives start with an analysis of the main parties involved in a company or a production chain. They try to draw up an inventory of their main economic interests, and persuade stakeholders that it is to their advantage to take these interests into account (Simmons and Lovegrove, 2005). An advantage is that some stakeholder analyses are issue oriented, for example with respect to natural resource management in developing countries, and they formulate practical guidelines for making management more participatory and effective (Grimble and Man-kwun, 1995). Some, moreover, recognize environmental concerns, and try to make clear that it is both economically advantageous and ethically acceptable that companies take these into account (Payne and Raiborn, 2001). However, although they are in favor of educating consumers, they want them to be involved only in buying or not buying: “Consumers ultimately control the failures or successes of businesses and their products. For example, consumer boycotts were the primary reason for the banning of chlorofluorocarbons in aerosol cans [...]”. Alternatively, when first introduced, ‘The Body Shop’ products rapidly became consumer ‘must have’ items because they sported the “no animal testing’ label” (Payne and Raiborn, 2001, p. 9). These approaches do not allow for symmetrical communication or the cooperative deliberation involving consumers on ethical dilemmas. It is, therefore, time to look for an alternative that really takes these features of consumer concerns into account.

5. DELIBERATION THROUGH ETHICAL ROOM FOR MANEUVER: THE MODEL

The principalist and the stakeholder analysis/value chain approaches have advantages and disadvantages in addressing the multi-interpretable,
conflicting, and dynamic character of consumer concerns. The disadvantage of the first is the exclusive focus on the individual and on fixed principles; the advantage of the second is the collective orientation, although it excludes important stakeholders (such as consumers). The advantage of the first is its heuristic value in identifying ethical values and dilemmas, an identification the second is not able to perform. To take into account these advantages and to tackle the special character of consumer concerns with respect to the food chain, I constructed the model of “Ethical Room of Maneuver.” With this model I want to cover the multi interpretable, conflicting, and dynamic character of consumer (and producer) concerns by appealing to the social process and structure in which stakeholders cope with ethical dilemmas, and also take into account the problems of applying ethical norms in the food chain in order to address these concerns. The model rejuvenates the well established idea that a “free space” for deliberation and inquiry can produce solutions to “hot” or pressing ethical issues. This “free space” should be sited at the relevant links of the food chain as and when a burning issue arises, but is not conceived as a kind of window-dressing to disguise the neglect of ethical issues. The “room for maneuver” allows one to take all ethical points of view and perspectives into consideration and to balance them, but not to get rid of the ethics; therefore there would be a rather strict ethical and social regulation of the “room.” The idea is that if consumer concerns do indeed have these special features, and more general substantive norms can’t be simply and straightforwardly applied, then one can circumscribe the requirements that make the fair deliberations on these dilemmas ethically acceptable.

The ERM has both a substantive aspect, because it requires that all participants or their representatives involved in ethical issues should be included in addressing those issues, and a procedural aspect, because it requires that participants should be free to examine the opinions and beliefs of others and to learn over time. The ERM describes a learning process over time and doesn’t allow for the entrenchment of economic or social interests. The model intentionally wants to counteract the barriers and fears that restrict the ethical capacities of stakeholders and that obstruct ethically acceptable ways of solving continuously emerging value dilemmas. It covers forms of communication and deliberation that take into account continuously changing social, normative, and technological situations for farming and food production. All forms of communication should be admitted on two conditions: “First, any communication that involves coercion or the threat of coercion should be excluded. Second, any communication that cannot connect the particular to the general should be excluded.” (Dryzek, 2000, p. 68). Using this model, participants do not react from a fixed and stable normative framework, but in a transparent and ethically acceptable way, coping with dilemmas communicatively by first identifying them and then finding out
what solutions are acceptable or desirable. The model is aiming at enhancing ethical learning process and not meant as a decision making tool, or a tool to level power differences. It can have these effects, but that is not its main aim.

In accordance with a scheme that is often successfully used for process analysis, we can distinguish the process of ERM between input, throughput, and output (according to Schrapf, 1999, they cover criteria of legitimacy and trust). The triad involves first, the input of the deliberation requires objective and relevant agenda setting. Second, the throughput requires equity and fair representation, which implies that all stakeholders and not only experts are included and that they can present their beliefs and perspectives on an ethical issue. Finally, the output should be evaluated according to efficacy and efficiency. This evaluation phase includes also the amendment and revision of procedural norms used if necessary. Efficacy implies that the outcome should land in decision making rooms of companies, of governments, or of both and makes a difference.

A provisional list of aims of Ethical Room for Maneuver should be the following:

1) The mobilization of personal and collective inputs on relevant ethical issues;
2) The pooling of relevant ethical issues, and of required information;
3) The specification of interpretations of norms and values (“beliefs”) with respect to the analyzed ethical issues;
4) Arguing for and against special beliefs, applications, and interpretations;
5) The construction of outcomes of dilemmas, be it compromises, or consensual solutions.

The long term outcome of ERM is:

1) Because of the continuing learning process, the generation of rationally motivated trust in the outcome;
2) The continuing construction of trust can determine policy oriented discussions, e.g., political decision making, and their outcomes.

The aim of ERM is not directly to produce policy decisions, but to identify relevant ethical issues, to interpret these and to put forward solutions to them in a cooperative deliberation, so that these solutions can have a function in managerial or political decision making.

6. ETHICAL ROOM FOR MANEUVER: BENEFITS AND RISKS

ERM can have strong benefits because it can make life easier in coping with the balance of substantial, informational, and procedural concerns with
respect to food production. One advantage is, that, in principle, it acknowledges the mosaic and pluralism of ethical concerns and values that are at stake in food production. Substantial, informational, and procedural concerns can be fully addressed, because there are no ethical principles a priori to be observed. One-dimensional solutions, concentrating exclusively on animal welfare or environmental sustainability will be directly assessed as one-sided. Due to the emphasis on the interwovenness of these concerns, participants will have to go into the details of ethical problems in a certain link of the food chain, and therefore non-intentionally, become more involved; in this way ERM contributes to bridging the alienation between producers and consumers. Beginnings of food fears or even food scares can be overcome because the participants have to be informed in an as objective way as possible about health risks and prevention measures and can discuss the best possible outcomes.

ERM represents, moreover, a strong strategy of one aspect of the democratization of food production, the ethical aspect, and in so far contributes to restoring trust between producers, regulators and consumers and to increasing the legitimacy of ethical decision making. The results of ERM can fuel the larger policy debate among regulators on how much to invest in food safety measures and how much in other measures, e.g., stimulating local production.

ERM stimulates ethical companies to include consumers in their policies and regularly to discuss with them their ethical policies. Social Responsible Companies can connect their internal ethical policies with external, ethical responsible policies. For companies, ERM implies that internally they have to listen to the voice of the cooperative and deliberative handling of consumer concerns. Ethics doesn’t come from outside, in the form of guidelines or compelling schemes, but is internalized.

An additional advantage of the implementation of ERMs in the relevant links of the food chain could be in engaging consumers more in the food chain; it gives companies the opportunity for user-centered innovation. As is already the case in the software business, user-centered innovation pays out twice over, for both firms and end users (Hippel, 2005). Why not with respect to food production? More and more people are willing to spend time improving the quality and processing of food. Hippel (2005) gives ample examples that innovation in software moves from the laboratory to the kitchen by the introduction of toolkits and platforms or platform products for users. In accordance to the concept of co-production, ethical and technological learning processes can go hand in hand thanks to ERM in user-centered innovation.

One important advantage of ERM is that it enables full compliance with the rather strict rules on consultation that, according to the EU General
Food Law, articles 7, 8, and 9 (EU, 2002), should be organized with consumers on technological innovations in the food chain.

As a matter of fact, there are also drawbacks. One of the main disadvantages can be that the institutionalization can become a financial burden due to the required information streams, arrangements, and time-investments. Who will pay for this? In one way or another, companies will be confronted with ethical consumers, so it is better for them to be pro-active and organize in advance deliberations in the food chain. For governments, the same policy is recommendable. This implies that private and public organizations should establish a kind of foundation that can arrange these deliberations and should contribute to the evaluation of their functioning.

A second disadvantage could be that voluntary participation is not to be expected from all stakeholders. However, in particular, social responsible companies will respond positively to the challenge to constantly engage themselves in ethical issues. In particular, for them I constructed this model, for companies that declare profit making as the final and absolute goal, only legal measures can have influence on their ethical policies. But for many companies, profit making is not the absolute rule, and it is plausible that they will participate in ERM schemes. Even firms that comply with the rules of ERM still have an interest in profit as a driving force; this should, however, not be seen as a constraint but as a challenge to ERM to act as efficiently as possible.

A third problem is connected with the fact that ERM indeed requires time. In times of crisis or emergency, ERM contributes probably not to the decisive short term solution, because ERM doesn’t produce instant opinions and fast decisions. However, food scares are strongly determined by ethical opinions, beliefs, perceptions, and motivations (Ferrieres, 2005), and ERM can facilitate finding out what potential event is really a serious risk and what not.

Moreover, not all contexts are favorable for introducing ERM. In situations of strong power differences of where involvement of consumer and others is hard to arrange, the potentialities of ERM to tackle ethical issues are diminished. In situations of extreme power differences, e.g., in dictatorial countries, power conflicts mostly do override ethical concerns (Faysse, 2006), and they will overrule ethical discussions as well.

The issue of the selection of participants requires a careful approach because involving all participants is quite impossible and therefore a selection has to be made. Methods of representation, like elections, rotation, and appointing trustees, however, are used in other contexts and can be tried here as well (Pitkin, 1967). Moreover, it is important that representatives are enabled to communicate with the people they represent. Below I will discuss the several possibilities of including stakeholders, depending on the type of ERM.
The model of ERM has strong links with the idea of co-production developed in Science and Technology Studies. Callon and Latour (1992) originally introduced the concept of co-production as co-production of nature and society in science and technology. Jasanoff (2004) has since coined the term co-production in a more general sense, by transcending the context of science and replacing science with knowledge: “co-production is the simultaneous production of knowledge and social order.” She makes it clear that producing technologies means addressing and resolving problems of nature and problems of society. Technologies embody natural and social concepts and strategies, which implies that they differ according to choices people make about how to live with technologies. ERM is a procedure whereby innovations in the field of food production are linked to ethical norm seeking and these strategies are made explicit, evaluated, alternatives are proposed and changed if necessary. It is meant in the words of Beck’s *Risk Society* (1992) as the “unbinding of politics” by “exploring new forms of direct consultation” (p. 231).

Another link is with the deliberative democracy approach, developed by Barber, 1984; Bohman and Rehg, 1997; Dryzek, 2000; Habermas, 1996. Common to them is the strong emphasis on democratic procedures of inclusion, argumentation, and equity that are better able to identify and solve complex problems than hierarchical centralized regulation. Governance and sub-politics are keywords for new cooperative networks between citizens, civil servants, NGO’s, etc. (Gastil and Levine, 2005). Originally, the deliberative approach (Habermas) favored argumentation procedures (of debates and decision making) that are strictly universal, restricting reasons to the one everyone can agree with, which implies that emotional and historical circumstances can not be uplifted in the allowed type of reasoning. ERM however is more inspired by the pragmatist approach (Bohman and Rehg, 1997; Keulartz et al., 2004) that emphasizes the enquiring and experimental meaning of deliberation, taking into account not only universal reasons but also cultural and symbolic argumentation strategies, value systems, and differences (Benhabib, 1996).

Finally, by specifying the conditions and the structure of ERM and co-production, opportunistic strategies can be prevented that reduce the meaning of ERM to mere window-dressing. By creating arrangements that compel the participants to comply with strict procedural rules, one can prevent “free riders” from taking advantage that no strict substantial rules are in force. This is also an advantages of ERM *vis-à-vis* many current essentially substantial codes because they are not appropriate for tackling such a dynamic sector as the food sector and leave “niches” for free riders to operate.
7. TYPES OF ETHICAL ROOM FOR MANEUVER

Several types of Ethical Room for Maneuver can take shape in, respectively, the small-scale, national and international oriented types of food chains or networks. Alternatively, one can also distinguish types of ERM according to urgent, short-term or long-term political issues.

First, one type of Ethical Room for Maneuver can be implemented in food chains that predominantly use craftsman-like skills and small-scale organizations. In this type of food chain, Ethical Rooms for Maneuver are partly already institutionalized; if not, they can be organized on a local or provincial basis because of their consumer-driven production base and the preferences of their consumers to keep distances as small as possible. An example of this type could be the one described by Carnes and Karsten (2003) in their article on the diverse community networks for sustainable food systems that are covered by the Pennsylvania Association for Sustainable Agriculture (PASA). Community or urban farming often allows for easy communication between producers and consumers on ethical issues.

Second, food chains that are large scale and/or national and make use of intensive processes (such as the UK wheat-flour-bread chain, Lindy et al., 2006) require Ethical Rooms for Maneuver that consist of representatives of the various consumer concerns, such as animal protection movements, environmental organizations, and others. It is most fruitful to place these ERMs at the interface between the main links of the chain, where processing and standardizing starts and where the relevant consumer concerns (animal welfare, human health, and environment) and producer concerns (profit, labor) are put in the balance. An example, given by Marsden et al. (2000), is Llyn Beef Cooperative Producers in Wales, which connects non-farmers with farmers and suppliers and in this way stimulates urban–rural communication (and development; compare Pretty, 2002).

Third, in the case of export-driven food chains (such as the Greek olive oil chain, see UNCTAD, 2007, or the Danish Pork chain, Hamann, 2006) ethical rooms for Maneuver should be run by representatives of various international organizations, such as NGOs and consumers’ organizations. With respect to the Greek olive oil chain, one of the main consumer concerns is the authenticity of the oil. Because it seems to be impossible to produce enough genuine virgin pressed (or “cold-pressed”) olive oil, with an oleic acidity of <1%, there is a strong urge to mix it with refined oil (Visser, 1986). If done properly, the taste losses are not that large; however, the consumer should be informed about it. The ERM should start with a list of provisional ethical problems and on the basis of this list formulate a list of coproducers and stakeholders (the input phase). So, with olive oil, we have the issues of authenticity, environmental sustainability, and fair treatment of
farmers. The coproducers (i.e., the producers directly involved in the chain) and the stakeholders concerned with these issues should start their debate with these issues, taking into account the deficits of their own, mostly one-sided interests’ positions (throughput phase). The next step should be to start with discussing ethical dilemmas, and then to look for and to construct new ethical and technological networks and arrangements and to assess them. In this phase, the response of stakeholders in other links of the chain will be considered, with the aim of increasing the success of the ERM. In the output phase, the outcome can then make a difference in policy decision making of managers and can be communicated in ethical traceability schemes to not-involved consumers. The whole process should have an iterative character. (Table 1)

In all cases, the ERM in the chain should communicate their decisions to the broader public, by means of ethical traceability schemes (see below). These ethical schemes can then be taken into account by wider circles of other, less involved consumers, who may then be motivated to become either less or more involved.

Urgent political issues, like the resolution of a political crisis or food scares have a component of ethical belief and ethical dilemmas and can, therefore, be accompanied as well by an ERM process. Indeed, governments or associations of involved companies could organize deliberations on the emergent food scare. Mass media and spokespersons of organizations can play here an important role.

However, ERM in particular is apt to tackle long term continuous ethical issues, like animal welfare and its relationships with the other concerns. In this case, inclusion of representatives of all involved and others, agenda setting and affectivity of outcome must be guaranteed. Dryzek (2000, p. 101) reminds us of the function of the Global Forum that accompanied the 1992 United Nations Conference on Environment and Development. In the food sector, ERM could be introduced sector wide for certain all pervasive and long term problems, like the handling of zoönose, or the housing of pigs and cattle.

Finally, a lot of research has to be done with respect to detailing applications of ERM and to evaluate ERM: What competency and behavior does it require of the different partners? How exactly can ERM be linked to ethical traceability and consumers’ informed food choice in the various food chains and networks? What are the long run effects of ERM on the ethical climate in companies? These are a few of the questions that need further research.

The results of ERM deliberations can be communicated to less involved stakeholders by means of schemes that trace the ethical deliberations, with the possible consequence that those less involved will be motivated to be
Table 1. Ethical issues of olive oil production.

| Ethical issues of olive oil production | Authenticity | Sustainability | Fair treatment |
|----------------------------------------|--------------|----------------|----------------|
| 1. Coproducers and stakeholders (inc. consumers) (input) | Processing links, also growers | Processing links (also growers) | The whole chain |
| 2. Dilemmas (throughput) | Authentic production versus sustainable and fair production | Sustainable production versus authentic production | Fair treatment versus sustainable and authentic production |
| 3. Arrangements to cope with dilemmas | New technologies and social networks | Idem | Idem |
| 4. Management (output) | New mosaic of values | Idem | Idem |
| 5. Communication (output) | Local farmers, and consumers not involved in the process | Idem | Idem |
more involved. Tracing and reporting the ethical deliberations in the food chain can be called a scheme of Ethical Traceability. It implies that reports on the ERM give information to the final users on the main features of the deliberation processes and of their results that gave rise to the final agreements on the steering of the production process in the particular link of the chain (Coff et al., forthcoming).

8. ERM AND ETHICAL TRACEABILITY

Ethical Room for Maneuver should not be permanently located everywhere in food chains and networks, but only be placed in those food chains and links where ethical issues hurt most. By incorporating this device in traceability schemes, traceability could gain an interesting twist for both producers and consumers. Recently, traceability schemes have been established in food chains and networks both in Europe and in the USA (USDA, 2004; Food Strategy Division and Food Standards Agency, 2002; GS1, 2006). With recent consumer concerns such as animal welfare, the use of genetically modified ingredients and BSE, the need to trace and authenticate the contents of food products has never been more urgent for governments and management (Lees, 2003). Traceability schemes normally stop before the information streams reach the consumer (CIES, 2005). Keeping the information restricted to the food chain and not allowing consumers any access increases the gap (of non-transparency) between producers and consumers.

However, traceability could not only be used as a purely administrative tool or as a mere safety system, for it can be related to highly contested and sensitive issues such as animal welfare, fair trade, traditions and beliefs, environmental protection, and sustainability. It could rather represent an instrument for the establishment of effective and responsive policies and institutions based on involvement via informed food choices by citizens/consumers.

Traceability needs to be restructured in a way that reconciles informed consumer choice and consumer sovereignty (Korthals, 2001). The features of ERM allow traceability schemes to be implemented and to become ethical traceability schemes (Coff et al., forthcoming). Ethical Traceability schemes without ERM can guarantee that the links in the chain comply with certain ethical standards that are fixed somewhere else; however, it cannot cope with the dilemmatic, dynamic, and multifaceted situations described earlier.

Traceability takes a different shape depending on the interests, values, and features of the sector. ERM calls for the cooperative deliberation of ethically conscious consumers, technologists, and producers and their differing ethical opinions. A complex interplay between end users and
producers in the chain is necessary. Food chains are probably able to cope with pluralism and with the concept of Ethical Room of Maneuver (ERM), which means that it is not necessary to stick zealously and totally to ethical rules, but that ethical considerations have to be balanced and negotiated with co-producers and stakeholders, and that it can be proved to third parties that these considerations have taken place. Because of this procedural feature of ERM, any implementation of ERM has to comply with certain non-negotiable standards.

Ethical traceability through ERM can be the following:

a) Assist ethical consumers in making their food choices on the market according to their own ethical beliefs, by making clear that ERM has been consciously implemented;

b) Increase the ethical responsibility of consumers, because they see that it pays off;

c) Increase the share of ethical products on the markets;

d) Assist producers in tackling ethical problems in an acceptable way by cooperative deliberation.

9. ERM AND THE CURRENT ETHICAL FOOD POLICIES IN EUROPE

What are the prospects for institutionalization of ERM? I will here restrict my self to consider Europe, because Europe, being a patchwork of many food styles and cultures, is already difficult enough. It requires a whole new article to discuss the applications of ERM on other continents, or the use of ERM as a global model. Anyhow, the pluriformist character of Europe is one of the reasons that a principalist approach is not always the adequate approach.

Current food policies in Europe are meant to address the broadening gap between producers and consumers and consumers’ widespread distrust of modernist, industrial food policies. Several surveys show that ethical consumers range from only incidentally interested to very much involved; however, their ethical preferences are not provided for (Special Eurobarometer, 2005). From a recent representative survey organized by the Motivation, it turns out that only 10% of consumers are oriented towards convenience in food; furthermore, three groups – each about 10% of the consumers – subscribe to non-materialist, postmodern hedonist, postmaterialist, and cosmopolitan values and give animal welfare, environment, and landscape management an integral role in their life style (Motivation, 2007). These last groups, in particular, are not targeted by food chains and
networks through their products and very often are not targeted by their marketing strategies (e.g., advertisements). This segmentation is done according to the TNS-Nipo model (see Hessing-Couvret and Reuling, 2002). The Special Eurobarometer on “Attitudes of consumers towards the welfare of farmed animals” showed that 44% of the Europeans think that the welfare of pigs is bad or very bad (Special Eurobarometer, 2005, p. 10, 18) and a majority of European Union citizens (55%) have the opinion that animal welfare/protection does not receive enough importance in the agricultural policy of their countries.

The only professor of Food Policy in Europe, Tim Lang (City University of London), reports that at least 29% of European consumers boycotted a product in 2003 (Lang and Heasman, 2004, p. 155). Barrientos and Dolan (2006) argue that “companies are increasingly under pressure to enhance the position of small producers and workers in their supply chain” (p. 1) and they continue, “many consumers who are capitalizing on the supermarket economy through faster, cheaper and more convenient food have become more concerned about the social conditions under which their food is produced and distributed.” (p. 3). Barrientos and Dolan also register the remarkable growth of sustainable and other types of labels: “Between 2002 and 2003, fair trade labeled sales registered remarkable growth, increasing by 42.3% internationally” (p. 9).

Not only consumers but also governmental and business circles have become conscious of the fact that agriculture and food production needs to be more ethical. In a recent speech, EU – commissioner Mariann Fischler Boel stated that “The core of the 2003 reforms is a new type of support payment to farmers, which is no longer linked to production. […] In order to receive this money, farmers do not have to farm a given product. Instead, they must meet high standards of environmentally friendly land management, animal welfare and public health. […] Obviously, this is a very strong incentive for more ‘ethical’ farming.” (Conference on Ethical Traceability, September 20, 2006, Brussels). The member states of the EU are implementing new policies that explicitly talk about ethical acceptability (Hervieu and Hanse, 2002; Veissier et al., forthcoming). The Dutch government, for example, thinks that a lowest level has been reached in communication between producers and consumers; the government implements measures to bridge the gap between the two and to involve consumers in the food chains and networks (LNV, 2003).

Several producers are seriously interested in ethical food production, but they complain that they are not really informed on the desires and preferences and concerns of consumers and are in danger of assessing consumer preference differently than consumers do themselves or are in danger of
systematically underestimating them (LEI-report, 2006). Some have found interesting methods (Mintel, 2007).

In this social and economic climate, Ethical Rooms for Maneuver could have an interesting function. They ensure that the voices of consumers are heard; they function as the eyes and ears of producers in the chain, and vice versa. They can also communicate the ethical deliberations towards the large consumer community. Moreover, ERMs can function as platforms in which trade unions, NGOs and various stakeholders can establish, verify, and monitor codes (Barrientos and Dolan, 2006, p. 182).

10. PROSPECTS FOR IMPLEMENTING ERM IN FOOD CHAINS

Given the structural deficits in European food policies (and probably in food policies of the Western world in general, see Busch, 2000), the prospects for ethical strategies to improve the quality of food production and food consumption are positive. In particular, the prospects for the strategy developed here, Ethical Room for Maneuver, can have considerable impact. “Ethical Rooms for Maneuver” should not be located in all food chains and networks, but should only be placed in those food chains and links where ethical issues need the most support.

From both a governmental and a managerial point of view, there is quite a bit to be gained from implementing ERM. Although producers probably will have several difficulties with potential negative information that could harm the factory or the farm, such as disease levels, they will also gain several advantages. As Trienekens and Hvolby (2001) in several papers have outlined, the demand drive is now recognized as an important feature of modern food chains; it requires networking and evolving partnerships in the food chain. Total and close integration of the different links on the chain leads to fixed and less responsive food chains; however, networking the various ERMs could be a good alternative. Trienekens argues that “Developing partnerships in the perspective of cooperative action seem to be relevant for food supply chains. Motives for this are, for example, the development of competitive power, the need for quality, the safety and sustainability of food produce and the flexibility to react quickly to changing markets. Several forms of risk can be reduced this way such as the risk of fluctuating prices, the risk of quantity/quality features (e.g., transport of pork, scheduling of pork finishing capacity with slaughterhouse and meat products processing capacity), and the risk of food safety and hygiene.” Again, because of the special features of consumer concerns, it is better to develop partnerships where ethically conscientious consumers are included;
these partnerships can guarantee that ethical issues are discussed and decided upon.

Ethical consumers are not primarily looking for fraud or adulteration of food but for the way of producing goods that satisfies their ethical concerns, which are various but also differently interpreted and valued (pluralism). Consumers not only value things differently from one another but also appreciate food production differently; some of them are more oriented towards animal welfare while, some of them more interested in fair trade. In connection with the recent rise of traceability schemes for safety of food, it would be a very interesting idea to widen the schemes of traceability towards more ethical criteria such as these consumer concerns. However, the often ambivalent, flexible, dilemmatic, and dynamic character of these concerns can raise some doubts about the possibility of implementing them in the food chains in a satisfactory way. Schemes of ethical traceability (ET) should, therefore, not strictly comply with the consumer concerns per se but with structural rules (e.g., the inclusion and access to relevant information) that guarantee that sufficient attention has been given to them. The model of Ethical Room for Maneuver (ERM) can give some help to companies that try to take into account consumer concerns and that try to meet the demands of consumers.

CONCLUSION

Europe is constantly challenged by crises in the food production chains. One of the main factors is the growing number of concerned consumers. How to cope fruitfully with these ethical challenges of the food chain? In this paper, first three types of consumer concerns, i.e., substantive, information, and procedural concerns are described. A lot of these concerns are conflicting (dilemmatic) and dynamic in character, which means that it is very difficult a priori to determine their full range of attributes and their weight in a final decision. Their ambivalent, flexible, dilemmatic, and dynamic character seems to be an obstacle for traditional principalist or stakeholder approaches. The model of Ethical Room for Maneuver (ERM) organizes deliberation on ethical issues in the food chains and can give some help here for both consumers and producers. With this model, socially and ethically acceptable criteria can be developed that make it clear that sufficient attention is being paid to these concerns. Local, national, and international oriented food chains require different types of ERM. For companies, ERM implies that internally they have to listen to the voice of the cooperative and deliberative handling of consumer concerns. Ethics doesn’t come from outside, in the form of guidelines or compelling schemes but is internalized.
However, these rooms cannot be installed in all contexts: in stable and consensual contexts it seems much more apt to use established forms of ethical traceability such as certifying and labeling. Another requirement of ERM is that the ethical decisions are taken seriously and implemented in other parts of the supply chain. So they are not a license to do what one wants, a kind of “anything goes” arrangement. Moreover, ET through types of ERM requires special types of communication with consumers not involved in the ERM. In connection with the recent rise of traceability schemes for safety and authenticity of food, it would be a very interesting idea to widen the traceability schemes to include ethical issues, as expressed in consumer concerns. It is argued that due to the multi-faceted, dynamic, and pluralist character of consumer concerns, Ethical Traceability (ET) schemes should take into account not strict standards, but primarily the fact that sufficient attention has been paid to the relevant concerns.

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