Trust, responsibility and environmental policy

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Abstract

The article argues that the crisis of legitimacy of environmental policy is closely connected with its declining effectiveness and efficiency in front of the growing saliency of uncertainty. Trust and responsibility are relevant analytical dimensions for addressing this issue. Contrary to the former, the latter has been poorly explored in its applications to policy issues. To this purpose a typology is presented, which helps to understand the evolutionary logic and current weakness of environmental policy. Theoretical reflection is supported by a study on public views of food safety. Trust and responsibility confirm their relevance. Opinions about the different actors involved in the food chain and the regulatory and control systems are contradictory, while attempts to provide trust with solid grounds are confronted with attitudes of mistrust, suspicion and resignation. Overall, citizens' concerns remain largely unanswered. This indicates that institutional and corporate unresponsiveness represents a major issue, negatively affecting the social legitimation of food policy.

Keywords: legitimacy, responsibility, trust, uncertainty, environmental policy, food safety

The article aims at reflecting on some aspects of environmental policy. Starting from its declining social legitimacy I argue for the analytical importance of the concepts of trust and responsibility. Empirical insight is provided by some results of a European study on public views of food issues.

1. Legitimation crisis and environmental policy

The legitimation crisis of core institutions of late modern society is a much-debated phenomenon. According to the classic Weberian definition (1919), legitimacy refers to the belief in the 'rightness' of a command – that someone has the legal or moral right to advance it and that its addressees have the legal or moral obligation to obey. Crisis of legitimacy thus means that people's belief in the 'rightness' of institutional behaviour is weakening. Talking of institutional crisis scholars sometimes consider late modern society as a whole. Habermas (1973), for example, regards this crisis as a result of the pervasiveness of instrumental rationality, which undermines social cohesion, individual freedom and citizenship rights. Sometimes scholars refer to specific political contexts and policy areas. The notion of crisis of legitimacy is for example implied in the widespread complaint about the 'democratic deficit' of European institutions. This is described in terms of marginalisation of usual forms of political steering, emptying out of traditional means of participation, institutional 'deficiencies in representation and representativeness, accountability, transparency, and legitimacy' (Eriksen and Fossum 2000: 5). The deterioration of the relationship between citizens and institutions is often maintained to be particularly evident in the environmental field, being usually described in terms of people's declining trust in regulators', scientists' and entrepreneurs' willingness or ability to cope with the challenges posed by the exploitation of natural resources and the increasing pace of technological innovation (e.g. EC 2000a, 2000b, 2001a; Eurobarometer 1998, 2001; Pellizzoni 2001; Pellizzoni and De Marchi 2002; UK House of Lords 2000).

Why is the legitimation crisis so manifest in the environmental field? Different reasons have been advanced. Let me focus on two of them. The first one is represented by the changing relations among the actors. The food sector provides major evidence of that. As Brom (2000: 128-129) observes, 'in the emerging global market for food and other agricultural products, the distance between consumer and farm has widened. In Western society, most consumers have no direct contact with the farms where their food is produced. Nearly all food, in the city as well as in villages, is purchased in supermarkets. Food

comes from exotic countries and there is little real life experience with modern farming. […] [Moreover] farmers often consider critical questions raised by consumers about agricultural practices as typical "city-issues"'. The increasing intricacy of the food chain is an aspect particularly stressed by students following the 'systems of provision' approach (Lockie and Kitto 2000). Those who highlight this point assume that growing physical and mental distance between the actors affects their relationship. Things are made still more complicated by the recent counter-tendency towards localisation of production and consumption, i.e. towards the re-creation or maintenance of short supply chains, from face-to-face relations and direct partnerships between farmers and local consumers to spatially extended chains where the value of the place of production or the identity of the producer plays a major role (Hinrichs 2000; Marsden et al. 2000).

The other reason I would like to stress is the increasing importance of professional expertise, and the consequent centrality of policy effectiveness and efficiency. The growing role of regulatory policies fosters a tendency to delegate powers to non-majoritarian bodies, for which actual results represent 'one of the main sources of legitimation' (Majone 1999: 15). Delegation is due to various reasons, from the ability of these bodies to ensure continuity in the development and implementation of policies thanks to their freedom from electoral constraints, to the high technicization of policy issues. Those who stress this point assume that, since effectiveness and efficiency are increasingly relevant for ensuring legitimacy to policy action, a deficiency in the former – as it is often the case with environmental and technological issues – is bound to affect the latter. This involves 'command and control' regulation and also the use of economic tools, to the extent that the legitimacy of market economy is rooted in its promise of effective and efficient resource allocation (Shearer 2002).

Science plays here a major role. Looking for effectiveness and efficiency, regulation and business rely heavily on science and technology. However, the growing intertwining of science, politics and business brings into question one fundamental source of legitimacy of scientific knowledge: disinterestedness. At the same time, accidents and long term threats provide evidence of difficulties in controlling the social and environmental impact of scientific advancement and technological innovation. This brings into question another source of legitimacy of science: the promise of objective and reliable knowledge. When applied to regulation, science offers not so much conclusive facts but rather 'evidences', 'like in a court procedure or a public inquiry' (Funtowicz et al. 2000: 333). Scientists, whose advice inevitably incorporates ethical and cultural assumptions, are required to answer questions they didn't choose, within tight time constraints (Brom 2000; Nowotny 2000). The result is that 'advances in knowledge and technology are greeted with growing scepticism, even to the point of hostility' (EC 2000b: 5).

Thus, environmental policy-making is brought into question not only with reference to the normative meaning of the notion of 'rightness', but also to its cognitive meaning – as a quality related to sound factual knowledge. Indeed, the intertwining of these two dimensions is a core feature of the modern type of legitimacy, to the extent that the latter connects 'legality', i.e. the belief in the validity of a legal norm, with objective 'competence', i.e. the ability of rational control of the world (Weber 1919). However, the scope (and the related expectations) of institutional and corporate alleged ability to steer bio-physical (and social) processes has progressively broadened, making this intertwining increasingly salient. In this situation it is hardly surprising that the environment represents a field of intensive policy innovation – a 'laboratory', as Theys (2002: 213) remarks, 'where new forms of governance are constantly invented: democratic procedures; flexible forms of coordination; decentralised modes of management; the use of contracts, mediation or economic incentives; government by information and principles etc. […]. This tendency has increased significantly during the 1990s […] to such an extent that it becomes possible to speak retrospectively of a true "silent revolution" in the design and implementation of environmental policies'. However, if this 'revolution' provides major evidence of the much-debated transition from 'governing' to 'governance', its results are up to now – as the same author admits – rather disappointing with reference to both the environmental performance of advanced countries and the recovery of institutional legitimacy and social trust.

2. Uncertainty, trust and responsibility

What are the causes of scientific-technical ineffectiveness and inefficiency? Modern science boasts a history of astonishing achievements. So, what is going wrong? A serious candidate for explanation of current problems is uncertainty. In the last years there have been several attempts to conceptualise it

(Boudourides 2003). A distinction emerges between 'normal' and 'radical' forms of uncertainty; between situations of risk, where the possible damages and their probabilities are known, and situations where probabilities are unknown or the decision takers are confronted e.g. with ignorance ('unknown unknowns' or 'don't know what we don't know' and how relevant it is for our decisions), indeterminacy (issue conditions and causal chains open, outcomes dependent on how intermediate actors behave), complexity (open behavioural systems and multiplex, often non linear processes) (Funtowicz and Ravetz 1993; Wynne 2001). Many environmental issues, from GMOs to climate change, are characterised by the latter types of uncertainty. In the debate on governance the relevance of uncertainty is actually recognised, being understood mainly as complexity (Lebessis and Paterson 1999; Kooiman 2002; Schmitter 2002; Pellizzoni 2003a).

The contradiction between increase in knowledge and increase in ignorance, indeterminacy, unpredictability, can thus be only apparent. The concept of risk emerges in relation to specific modern conceptions of knowledge and agency: a mechanistic and manipulative approach to nature (and humans themselves) and a view of the individual subject as autonomous, free and rational. As Luhmann (1991) remarks, we can talk of risk only when the occurrence of an event is linked to a decision; otherwise we should talk of danger. Thus, as we attempt to extend our control of nature (and society), we transform dangers into risks. And the more we take risks, the more uncertainty shifts from shadow to saliency. For example, thanks to scientific-technical advancement food production is able to satisfy more and more human needs and desires. However, this does not imply that producing and consuming food are less risky than before. On the contrary, such activities are riskier for the very reason that they entail more decisions. Innovation introduces new sources of uncertainty, because it opens up new spaces for decision. Before the era of gene manipulation, genes could be a source of danger, but not of risk. Though this view may look quite sophisticated, an appreciation of the implications of human attempts to control nature and society in an increasingly pervasive way is by no means out of reach of 'ordinary' people (Grove-White et al. 1997; Pellizzoni 2001; Pellizzoni and De Marchi 2002).

The growing saliency of uncertainty helps to understand why the issue of trust has taken a major role as regards the environment, science and technology. Trusting means taking risks (Lagerspetz 1998). More precisely, trust consists of expectations with positive influence on the social actor, formulated under conditions of uncertainty (Mutti 1994). It reduces the range of conceivable alternatives of action due to the contingency of social relations (I don't know your intentions, you don't know mine, I know that you don't know them etc.). According to Mayer et al. (1995), there are three major antecedents of trust: perceived ability (expertise, experience, training and education, success etc.), benevolence (altruism, loyalty, sincerity, empathy etc.) and integrity (adhesion to principles, consistency of past behaviour, congruence between words and actions etc.). Empirical evidence shows that the ability, benevolence and integrity of regulators, controllers, expert bodies and business actors, are actually regarded with suspicion (Eurobarometer 1998, 2001; Grove-White et al. 1997; Irwin et al. 1999; Pellizzoni and De Marchi 2002).

At the interpersonal level, fiduciary expectations involve cognitive and emotional aspects. They are linked to norms and values as well, particularly to role playing (Sztompka 1999). I can trust the local health corporation's ability and willingness to check the potability of the water I drink even if I never saw at work and assessed the training, equipment and motivations of its lab technicians. My belief in its competence and good will is based on a normative commitment to the health corporation as an institution. Normative beliefs are an important element of what Giddens (1990) calls 'systems trust', i.e. trust in expert systems (e.g. airplane transport) and symbolic tokens (e.g. money), another element being a factual belief by which we recognise that although we cannot actually evaluate their reliability we cannot but rely on them[1]. To describe this kind of trust, Giddens often uses the word 'confidence'. This is often equated to trust, maybe a kind of 'firm trust' (Misztal 1996). The difference between trust and confidence is however clarified by Luhmann (1988). According to him, we can talk of trust when we believe we can affect the evolution of a situation; we must talk of confidence when we believe we basically cannot affect the events, i.e. we are in a strongly compelling situation, with few or no possibilities to exit. In the first case we consider alternatives, in the second case we do not. This distinction is obviously linked to that between risk and danger. It can also be connected with the different possible levels of uncertainty characterising fiduciary relations. The lesser the alternatives, the higher the uncertainty we are bound to accept before withdrawing (if possible) or reacting in another

[1] As Sperber (1982) has remarked we can talk of factual belief when a subject regards something as a fact; we can talk of normative (or, in Sperber's terms, 'representational') belief when a subject regards something as a representation, i.e. she is aware of the normative content (moral, political or else) of her own belief.

negative way. An attitude of confidence, rather than trust, in many cases thus implies that a high level of uncertainty is inherent in the situation one is confronted with.

Whilst the concept of trust has been extensively explored in relation to the environment, science and technology, the same cannot be said of responsibility. In the debate on governance, for example, the notion of responsibility is widely applied but mainly taken for granted, with hardly any attempt to clarify it (Glasbergen 1999; EC 2000a; 2000b; 2001a; Kooiman 2002). However, I think it deserves a careful investigation. I briefly expand on this subject.

As I have argued elsewhere (Pellizzoni 2004), there are two basic meanings of responsibility. One is imputability, i.e. the possibility to trace back an action to an agent as its causal factor (Weber 1919; Jonas, 1979; Ricoeur 1995), causality being usually understood as free will, choice, ability to influence events, rather than necessity or determinism (Hart 1968). The other is answerability or accountability. Responsibility in this sense relates to justifying one's own conduct in front of a judge (Schwartlaender 1982), to the duty and capability to answer the question: 'Why did you do it?' (Lucas 1993). This perspective replaces the search for causes with the search for reasons, i.e. explanations of the motives lying behind one's behaviour and emphasises the presence of moral or legal rules specifying rights and obligations. Moreover, responsibility can be imputed before or after a certain situation has actually materialised. I can say: 'The local health corporation is responsible for the potability of the water I drink' before any unfortunate event has occurred. But I can also say: 'The local health corporation was responsible for the water I was drinking', after having suffered from dysentery. Similarly, justification of behaviour can either appeal to 'pull factors' i.e. the actors' goals, or to 'push factors' i.e. those lying behind the actor. Schutz (1967) talks of 'in order to motives' and 'because motives'. Thus I can say that a person stole the food I left on a table in order to eat it (pull factor), but because of his condition of poverty (push factor).

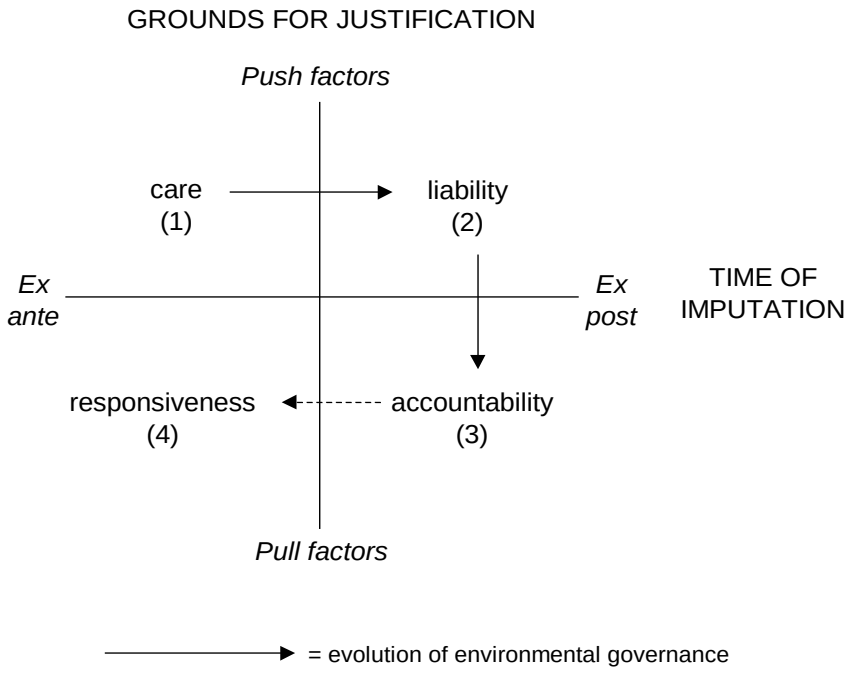

Figure 1 - Responsibility: a typology

Source: Pellizzoni (2004)

In this way four ideal types of responsibility can be singled out (Figure 1). When attribution of responsibility is anticipatory and refers to push factors I use the term *care*. For example, a mother can be considered responsible of what happens to her child to the extent that she has the moral and legal

obligation and the practical ability to take care of him. When attribution of responsibility pertains to already happened events and refers to push factors I use the term *liability*. Since a mother should take care of her child, she is liable for her child's malnutrition unless she proves her inability to provide him with food, for example because she is reduced to indigence. When attribution of responsibility pertains to already happened events and refers to pull factors I use the term *accountability*. A woman wants high quality food for her child. She needs money, works a lot and time spent with her child decreases. The child grows in good physical health but develops psychological problems. Deciding whether these problems are a consequence of the child's weakened relationship with his mother is a matter of because-motives. Deciding whether the mother's choice was right or wrong is, on the contrary, a matter of in-order-to motives. It depends on how the expected benefits and foreseeable risks of her behaviour are weighed up. When attribution of responsibility is anticipatory and refers to pull factors I use the term *responsiveness*. A town council that decides to rebuild a still efficient swimming pool, while with the same money it could build a long-awaited cycling track, proves unresponsive to citizen concern for the air pollution in the village and can be considered at least morally responsible for its further worsening. Responsiveness thus consists of a receptive attitude to the other's concerns, without any pretence to know them in advance or to wait for ex-post evaluation and adjustment of a self-established course of action.

This typology sheds some light on the transformation of environmental policy (Pellizzoni 2004). According to the welfare model dominant in the 1950s and 1960s, the state has to take care of its fellow citizens, and does it. Accidents and long term threats are initially treated as contingent troubles and malfunctions to be 'technically fixed'. Growing evidence of structural problems lying behind them entails a weakening of this approach, with consequent rethinking and strengthening of legal liability, as testified in the 1970s and 1980s by the flourishing of 'command-and-control' regulations and international agreements. The emergence of governance in the 1990s corresponds to the crisis of sure-footed institutional command, control and sanctioning, as a result of the growing saliency of uncertainty, as ignorance, indeterminacy, complexity. The idea of a loose handling of interactions between interdependent actors, allegedly provided with the best knowledge of the state of the affairs in their own field, but whose competence and good will cannot be taken for granted, brings to the forefront the dimension of accountability. Think of EMAS, Ecolabel and many other forms of voluntary schemes, negotiated policy-making, self-regulation and free adhesion to rules of conduct (EC 1996, 1997; Mol et al. 2000). Juridical obligation applies here in a voluntary, self-binding way to situations so variable that they could neither be defined beforehand nor controlled point by point, but only justified and accounted for[2].

Responsiveness, on the contrary, seems to remain a rather neglected dimension of responsibility. Elsewhere (Pellizzoni 2004) I have argued that such neglect is a major reason for the debatable results of new governance arrangements and enduring public scepticism about the handling of environmental issues. In fact, on paper at least, responsive policy approaches seem particularly suitable for dealing with increasingly uncertain and controversial issues (Pellizzoni 2003b). The drawbacks of unresponsive approaches are, in any case, manifest. Downplaying under-represented concerns typically produces negative externalities, while inattention to local knowledge or the practical conditions of implementation of a technology or a policy measure may entail serious trouble (Irwin, 1995; Wynne 1996; Yearley 2000). However, in spite of widespread appeals to information, consultation, participation or corporate social responsibility[3], there is still little room for responsive approaches in current regulatory frameworks. Think for example of the so-called 'development risks'. Technology innovators and implementers are released from liability for environmental or health damages caused by products and activities that did not appear harmful according to existing scientific and technical knowledge (EC 1999; 2002). The rationale is basically that the costs of unpredictable risks of innovation cannot be borne by the innovator, because they can exceed any budgetary preventive measure and because innovation provides benefits to the whole society. However, in this way technology development remains a matter of private choice, irrespective of its public consequences. The time lag between technology implementation and evidence of its harmful consequences equates scientific ignorance with exoneration,

[2] Drawing on Porter and Welsh Brown (1991), O'Brien and Penna (1997) argue that three key features help to explain the evolution of European environmental regulation: the states' capacity to exert a veto over regulatory instruments and frameworks; the ability of economic interests to influence regulatory choices; the ineffectiveness of traditional power structures and the consequent fragmentation of roles and responsibilities in the policy implementation process. These dynamics seem rather consistent with my own account, which stresses that the combination and balance of these three factors has changed over time.

[3] According to the EC (2001b: 6), 'being socially responsible means not only fulfilling legal expectations, but also going beyond compliance and investing "more" into human capital, the environment and the relations with stakeholders'.

while a public discussion on where the threshold between private and public matters has to be placed remains badly underdeveloped.

Voluntary regulation raises similar problems, to the extent that it entails a self-referential, self-validating definition of goals and evaluation of results. Critics highlight various problems. External auditors may be tempted to accommodate the business they certify (Andrews 1998). Verification typically focuses on management systems rather than actual outcomes (Kimerling 2001). If not legally binding, standards are likely to be followed only to the extent that they can be reconciled with the firms' goals and there is no guarantee they represent the best practice (Andrews 1998). The actual cost and environmental effectiveness of voluntary regimes is unproven (Harrison 1999; EEA 1997; EC 1997; Rennings et al. 1997). Commitments to corporate social responsibility easily turn out in little more than labels of environmental and social 'correctness' (Hughes and Wilkinson 2001; Kimerling 2001). Again, the autonomy of economic and technical choices seems taken for granted, with 'outside' concerns considered only as they can be accommodated to the former. The practical relevance of the increase in the answerability of institutional and corporate decisions is inevitably affected. One may provide more answers, but not necessarily to those questions which are felt to be most relevant and urgent. For example, as regards food safety, there is some evidence that the current focus on labelling neglects people's perceived inability to express their feelings and opinions about current trends in food production and risk evaluation and management (Grove-White et al. 1997; Pellizzoni 2001; Pellizzoni and De Marchi 2002).

So far I have dealt with trust and responsibility as independent notions. However they are intimately connected, as we can see by looking at the concept of authority. According to Weber (1919), legitimacy turns power into authority. Authority means the acknowledged right to ask and obtain compliance. However authority also entails responsibility towards subordinate subjects: to be responsible one must have authority (Lucas 1993). On the one side the right to take decisions makes the decision-maker imputable for their consequences. On the other side relations of authority imply to some extent the suspension of judgement (Warren 1996). When I comply with an authoritative requirement, I usually don't ask for justifications. As Parsons (1977) remarks, in this case persuasion depends not so much on information and reasons, but on influence. Influent persons are not compelled to justify themselves. We acknowledge them the authority to advance a sound advice or request. They *are* authorities. Trust plays here a major role. Trust mediates the shift from persuasion to influence just like that from goods to money (La Valle 1992). If we feel they have to justify their request or advice, then those persons are no longer (or at least are less) influent on us. Their authority is brought into question and our trust in their competence, good will and integrity is declining.

Thus, if authority is connected with responsibility and trust, trust is linked to responsibility. Actually, when we delegate a task we consider our trustee as responsible to us. However, while trust entails responsibility, the opposite is not true. Distrust and untrustworthiness do not necessarily prevent from moral or legal responsibility, particularly when agency – i.e. the perceived possibility to choose and influence the course of the events – is low. For example, I can positively distrust the local health corporation, whose decisions affect my health with very few possibilities for me to influence them; still I shall consider it responsible to me. If possible, I shall appeal to a legal liability rule and ask for a detailed account of its choices and behaviour. In other words, when trust, authoritativeness and agency are low the request of guarantees and justifications is likely to increase. As we have seen, this is actually what can be observed in the transformation of environmental policy. On the contrary, to the extent that it entails trust and responsibility, authority may act as a compensating factor for a reduced agency, curbing the call for justifications and guarantees. A restriction in our diet is likely to be received with some discomfort but not necessarily with scepticism or suspicion, if we regard the nutritionist who prescribes it as an authoritative subject, i.e. a competent, trustworthy and responsible person.

3. Some results from an empirical study on the food sector

In my opinion a reasoned application of the concept of responsibility may represent a valuable tool for the study of environmental policies – their rationale, aims, results and public evaluation – though its analytical dimensions and its relation with trust, authority and agency need further investigation. Some

insight is offered by a European study on the antecedents of trust in information sources and risk management along the food chain and the mechanisms that determine the social diffusion of trust[4].

One task of this project is to explore the social and cultural dimensions of trust with reference to food risks and food safety. To this purpose two series of focus groups (FGs) have been carried out. As it is well known, the FG technique prevents from drawing statistical inferences from the results obtained. However, FGs allow a broad and deep understanding of people's views, opinions, concerns, ways of reasoning (Krueger 1994; Barbour and Kitzinger 1999; Morgan 1997). They provide an opportunity to explore dimensions which may not surface so clearly in survey research.

Four FGs of about eight persons were carried out between July and September 2003 in each participant country, namely France, Germany, Italy, the Netherlands and the UK[5]. In September 2004 a second round of FGs was carried out. In the first round discussions addressed topics ranging from food choices, consumption habits and consumer information to food scares and food safety regulations and controls. The second round addressed again these issues but was mainly devoted to explore the dynamics of behaviour and the weight of different sources of information during food scares.

Group selection criteria for the first round of FGs were designed in order to collect persons who look at food purchase and consumption from different viewpoints. Four categories of consumers were singled out. The first ('Pleasure' groups) was composed of quality food shop customers, or 'slow food' associates, i.e. people for whom food represents an important aspect of their lives. The second ('Concern' groups) was composed of persons who consider food in its social, ethical and environmental implications; they were chosen mainly among fair trade shop customers. The third ('Care' groups) included persons being responsible for the well-being of people dependent on them (e.g. small children, disable or elderly people), so that their choice should be particularly attentive to nutritional, health and safety aspects. The fourth category ('Survival/Indifference' groups) included hard discount customers, i.e. persons whose choices are likely to be mainly driven by economic considerations, out of financial constraints, scarce attention to nutrition, health and safety, or perhaps belief that food is basically the same everywhere[6].

Discussions were recorded, transcribed and analysed[7]. Here I present some findings, mainly focusing on the first round of Italian FGs. Some cross-country comparative remarks will be provided as well, while I shall deal only marginally with the results of the second round of FGs.

Trust

As said, the issue of trust is central to the study and has been extensively explored. Actually trust turns out to play a major role in the ways the participants in the FGs address the various issues related to food, and food safety in particular, which is understood both in nutritional and health terms. Trust affects food choices, to the extent that they depend on such factors as the credibility of producers or sellers or the origin of food, the latter often turning out as a stereotypical indicator of quality (e.g. quality oil by definition comes from some areas, or good pasta comes from Italy), in a context of limited awareness of the intricacies of the food chain.

[4] The study is identified by the acronym TRUST. Its full title is 'Food risk communication and consumers' trust in the food supply chain'. It is supported by the European Commission, Quality of Life Programme, Key Action 1 - Food, Nutrition, and Health (contract no. QLK1-CT-2002-02343). Started in Spring 2003, the study will finish in late 2005. It covers five countries and involves eight research teams. Project coordinator is Prof. Donato Romano (Dipartimento di Economia Agraria e delle Risorse Territoriali, University of Florence). More information can be found at the project website: www.trust.unifi.it. I am the sole responsible for the contents of the present article and the opinions expressed do not necessarily reflect those of others, in particular the European Commission's.

[5] The research partner in charge of this task is ISIG (Institute of International Sociology of Gorizia). ISIG also dealt with the FGs carried out in Italy and the cross-country comparison of results. Team coordinator is Prof. Bruna De Marchi.

[6] Selection criteria for the second round were modified according to both the results of the first round (see below) and the specific purposes of new discussions. The four groups of each country were composed by combining two variables: age (up to 30 vs. over 50), according to the hypothesis that views of and reactions to food scares may be affected by personal experience and memory of past events, and preferential use of media-sourced vs. interpersonal information during a food scare (to this purpose a filtering question was administered to potential participants).

[7] The methodology adopted was straightforward for FG technique. Analysis considered both what members in each group said and group discussions as a whole (Morgan 1997: 58-63). The participants' statements were taken as units of analysis and taxonomies or typologies (Bruschi 1999: 149 ff.) – of opinions, feelings, meanings, declared behaviours etc. – were built with reference to the different topics addressed (either suggested by the facilitators or spontaneously raised by group members). Detailed national and cross-country reports can be found at the project's website: www.trust.unifi.it.

Moreover, fiduciary investments seem rather ambivalent. For example, labels are considered very important as information sources. However, many participants say they make little use of them, because too detailed and technical. Above all, they are often judged reticent, incomplete, untrustworthy, hiding what one would really need to know. Conversely, advertising is considered unreliable but at the same time useful as a basic means for obtaining information. Similarly, media coverage of food safety issues is described as sensationalist and erratic, but their ability to raise public attention is also stressed.

There is a good deal of ambivalence also in the FG participants' views of regulations and controls. Increase in regulation, for example as regards labeling, is positively evaluated. However, there is also a widespread feeling of institutional ineffectiveness and untrustworthiness. The EU is a major case in point. European regulations are praised to the extent that they strengthen safety measures, particularly on some sanitary aspects (production and processing conditions and rules for food preservation). However, several criticisms are raised as well, particularly as regards the formalism, trifle or fussiness of EU's norms. They often miss the point, participants say, focusing on standardisation of production or regulation of details, to the detriment of taste, flavour, naturalness, tradition, local or niche products. Moreover, they suspect that rules are so made that they systematically favour industry, with safety and quality regarded as priorities by regulators only to the extent that they can be made to fit in industrial and commercial priorities. The example of 'cocoa-free' chocolate is frequently mentioned. As regards controls, the feeling is widespread that a complete safety is unattainable[8] and that they have been improved in recent years. However, they are also felt as insufficient and unreliable, particularly at European and international level. The problem is, if there are more regulations and controls, there is also a growing number of potential sources of problems which regulators and controllers are unable or unwilling to address, depending on technological innovation and the increasing industrialisation of production and globalisation of trade. Overall, whether and to what extent food safety has improved in recent years remains quite controversial.

Group discussions highlight the relevance of interpersonal trust. Close acquaintance, personal relationship with shopkeepers and suppliers is important. However, their competence and good will cannot ensure quality and safety, to the extent that they do not have actual control over the origin and content of food. Small shop is not necessarily equal to better food, because the typical small dealer suffers from the constraints of market competition, being able to offer products often worse in quality and safety than those of the supermarkets. Also purchasing directly from farmers or in the local markets does not always represent a guarantee, since also local producers are subject to the constraints of the industrialisation of agriculture (e.g. they buy their seeds from big corporations).

The limits of interpersonal trust highlight the relevance of systems trust. Labels and information are considered trustworthy to the extent that rules are effective and consistently enforced. Dealers are considered trustworthy if they seem able to control their supply chain, either because of their direct acquaintance with suppliers or because they enjoy a strong market position ('big' business or 'niche' dealership). Systems trust, however, results from different considerations: that competition and regulations entail in the long run 'slyness' represents poor value for money; that local markets and short supply chains ensure better quality and possibility of control from the part of the dealer and the consumer; that the 'philosophy' and the rules of the organic food and fair trade chains are reliable. Also the negative sides of systems trust, i.e. expressions of systems distrust, focus on different matters: that organic food is unreliable or offers an opportunity of excessive profit; that regulators and controllers cannot ensure food safety in front of an increasing intensification of global trade; that public authorities are influenced by vested interests; and so on.

The way trust plays a role in the evaluation of food scares is rather interesting. Scares are not obsessively present in the participants' reflections about food. Moreover, few participants maintain the BSE crisis is the major responsible of the decline of people's trust in the authorities and the food business, or say they have changed their behaviour as a consequence of that[9]. The basic argument is that BSE or 'dioxin-chicken' by themselves are not crucial because there are several other issues of which

[8] This result contradicts a widespread wisdom but is consistent with previous research. See e.g. Grove-White et al. (1997); Pellizzoni (2001); De Marchi and Pellizzoni (2002).

[9] Additional insight into this matter is provided by the second round of FGs. The reported prevailing reaction to food scares is a temporary change of behaviour (interruption or reduction of consumption of the 'hazardous' food). Durable changes also take some relevance, either in terms of enhancement of some existing trend (e.g. persons already inclined to reduce the use of meat becoming fully vegetarians) or of change in shopping preferences (e.g. a turn from supermarkets to shops). A minority of participants, mostly young males, maintain they did not change their behaviour at all, either because they regarded their consumption styles as protective enough or, on the contrary, because they felt no change would actually improve their safety ('when news spread it is already too late', 'there is no really safe food', etc.).

people are unaware or which come to public attention for a short period suddenly disappearing afterwards, from the quality of mineral water or oil to the drawbacks of plastic packages. That food scares foster an improvement of controls is an assertion sceptically considered by some participants, for whom this may be true only temporarily, before business-as-usual prevails again. Other participants are also sceptical about the actual reasons why certain scares develop. There is always someone who gains from them. The suspicion is thus that food scares are to some extent 'steered'. Food scares are therefore perceived as only episodes, not necessarily worse than other less hyped ones, within a landscape of accidents and 'side effects' of technology that determine an overall prevailing sensation of confusion and suspicion. The alleged solution of the BSE and other major problems seems thus unlikely to determine by itself a recovery of trust in institutions and business actors.

Discussions highlight also the participants' disenchanted and reasoned position about the issue of GMOs. A widespread persuasion is that people are eating genetically modified food for years without being aware of that. The alleged advantages of GM crops in terms of their ability to answer the problem of hunger in developing countries are generally regarded in a highly sceptical way, the main reason for their introduction being considered their enhanced profitability and the economic benefits deriving from patents. Also the maintained improvement of consumer choice is criticised, its actual reduction being generally regarded as more likely. Moreover, there is a strong belief that the actual impact of GMOs on the environment and human health will be clear only in ten or fifteen years time. Concern for the ecological effects of GMOs is higher than for their effects on health, with particular reference to biodiversity. Many participants stress the possible loss of control of GMOs in the open environment, with unpredictable consequences[10].

If interpersonal and above all systems trust play a major role in the FG participants' views of food issues, some of their arguments seem closer to Luhmann's concept of confidence. Many believe that, independently from their efforts to buy in an informed, reasoned way, ultimately they 'have to trust', they 'cannot but trust': because they are unable to directly control almost anything; because they usually don't know how much their counterparts know and control (this is a sort of double or 'square' uncertainty); because they don't know if and to what extent the regulatory and control systems work effectively against deceptions and threats to health; because one eventually has to buy something to eat and therefore worrying too much about food safety is ultimately nonsensical. Whether or not such expressions of confidence are distinguishable from an attitude of hope can be a matter of discussion. They confirm, however, the way in which uncertainty impinges upon fiduciary relations. A particular outcome of this situation emerges in the words of some participants, who stress their self-confidence, their reliance on their own experience for ensuring safe and quality choices. This is a sort of 'solipsist' position, coming from a withdrawal from trust relations and the belief that if consumers keep some agency, it is at the level of applied, practical skill – their acquired capacity to empirically judge the quality of a product from a number of elements: aspect, taste, flavour, established relationship with a dealer, satisfaction with a brand.

Responsibility, agency, and authority

Group discussions addressed also the issue of responsibility for the quality and safety of food. For a start, attributions of responsibility involve all the different 'counterparts' of consumers. There is no neat differentiation between who *should* be responsible for food safety and who *would* be considered responsible in case of problems. Government and other public authorities, farmers, manufactures and dealers (supermarkets and shopkeepers): all of them are indicated as responsible for food quality and safety. There is thus attention to both the two main types of consumers' counterparts: the institutional and the market ones. The responsibility of public actors is strongly emphasised. As regards the private ones, the existence of a direct link with consumers seems to play a role in the attribution of responsibility. This is obvious in the case of the local farmer or shopkeeper. However this happens also with big retailers and industrial producers. As we have seen, the credibility of a brand or a commercial firm is emphasised as a relevant criterion of choice. Acquaintance with brand or firm thus seems to take the place of personal relationship, with systems trust taking some connotations of interpersonal trust.

[10] Most of these points – the belief in the hidden presence of GMOs in food, the predominance of economic interests behind their introduction, the deep scientific uncertainty surrounding gene technologies – are consistent with previous research. On the contrary, the prevalence of arguments focused on the environmental effects of GMOs, rather than the health ones, marks a difference from other studies (Grove-White et al. 1997; Pellizzoni and De Marchi 2002).

The widespread idea of a personal responsibility of the economic actor seems to contradict the also widespread view that the market is driven by its own, impersonal logic. Discussions however show that, for most participants, market dynamics do not eliminate individual responsibilities, but rather make them blurred, difficult to ascribe. While some say that, if problems with safety would emerge, they would consider as primarily responsible the subject from which they purchased the food, i.e. their direct counterpart, others stress that the intricacy of the food chain may often prevent from a clear identification of who is responsible of what. The idea of a shared responsibility is advanced as a possible solution. However, a widespread judgement is that the lack of certainty of punishment weakens the effectiveness of the regulatory system.

As theoretically argued, trust, responsibility, agency and authority turn out to be closely connected. Two contrasting positions emerge about agency. According to the first one, in recent years agency has been improved, thanks to the increase in information and variety of products. Moreover, through their choice consumers have a great power, being able to influence the market. Thus, if consumers choose low quality food this is much their own fault, with low education and scarce attention to labels and other sources of information indicated as the main reasons. According to the other position, the improvement of consumers' agency is misleading. Their choice is actually affected by factors which have little to do with safety or quality, from financial to time constraints: organic or high quality food is a luxury for many, while an informed, reasoned choice is time consuming. The very diversification of products and information sources may have confusing, disorienting effects, and is often only apparent: many products with different names are just the same everywhere.

In other words if, as most participants remark, the driving force of the food sector is the market, this force may act either to the benefit or the detriment of consumers, as a source of problems and as a means for addressing them. It acts to the benefit of consumers to the extent that their choice 'handles' the production and retailing system and to the extent that market competition and industrialisation of production foster a greater variety of food and an overall improvement of some aspects of quality and safety, e.g. preservation. The market logic acts to the detriment of consumers to the extent that it promotes, also through corporate pressures on regulators, a standardisation of products and a loss of some qualities ('naturalness', taste, specificity of local traditions etc.). If, as most participants believe, public awareness is growing of the health and nutritional relevance of food, entailing increased vigilance on the part of consumers, such vigilance may thus be hampered by the kaleidoscope of products and information with which they are confronted. Moreover, some participants remark, consumer should not become experts. The safety and quality of food should be ensured by producers, experts, regulators and controllers. To what extent are they up to their duties and to people's expectations? The overall result of these considerations is a widespread sense of anxiety and frustration, with contrasting feelings as regards consumer agency.

Agency is clearly connected with trust in its different specifications. The expressions of confidence hinted above entail a lower sense of agency than those of systems and, of course, interpersonal trust, with self-confidence placed somewhere in between. Agency is also linked to authority. Their interplay is particularly evident in the arguments reported a few lines above, according to which either people can and should increase their competence and vigilance, or this effort is pointless – if 'market mechanisms' prevail – or needless – if regulatory and control institutions work properly. In other words, a broadened consumer agency may counterbalance, at least to some extent, institutional and corporate unreliability. On the contrary, if agency is narrowing, institutional performance – be it that of regulators and controllers, or of the market – becomes crucial. Both lines of reasoning emphasise the link between agency and authority.

If trust is connected with agency, and agency with authority, authority is connected with trust. Actually, the 'government' or 'the State' (or similar expressions) are generally, and with particular strength, indicated as untrustworthy. Government should ensure the pursuit of the common good and the protection of the less powerful actors, from the individual consumer to the small shopkeeper or farmer. To the extent that such role is brought into doubt, trust falls down. The negative side of systems trust emerges also from those arguments in which the issue of regulations and controls takes a minor relevance. If there is not very much to say about regulators and controllers, this means they are not prominent in one's own reflections on food safety. They are 'out there', but what they do and how they do it is mostly unknown and of little practical relevance. The connection between trust and authority is evident also in sceptical or distrustful judgements of retailers and shopkeepers, or the media: each of this subjects is untrustworthy to the extent that it does not live up to its duties and people's expectations, i.e. to its authoritative role.

What precedes highlights also the link between trust, authority and responsibility. The more a subject is regarded as playing and authoritative role, the more it is charged with responsibility, and the more trust takes relevance. Moreover, as argued, attribution of responsibility seems actually independent from the positive or negative sign of trust investments. In fact, as we have seen, public authorities are strongly indicated as untrustworthy but at the same time responsible for the quality and safety of food – more than dealers, and even more than food industry.

Responsibility is also linked to agency. This is particularly evident it the significant role some participants ascribe to consumer self-responsibility. One the one side, as already seen, consumers are considered as responsible for the directions taken by the food market. On the other side, they are regarded as responsible for their own safety, because the market allows and requires them to make 'good' choices, according to healthy lifestyles. Consumer responsibility obviously involves a demand of and search for information. In other words, the more consumers are felt to be responsible for themselves, for their choices and the related risks, the more it makes sense to spend time and effort in collecting information. On the contrary, when consumer agency is felt to be low, as apparent in other participants' comments, efforts in gathering information look senseless: what's the point if you don't know what really happens in the production process and have to buy anyway basically similar products?

To sum up, responsibility for the safety of food is attributed to the public authorities and the different actors present in the food chain. Some findings, such as the role ascribed to governments or dealers, are hardly surprising and consistent with other research. More interesting is the relevance taken by consumer responsibility[11]. According to some participants, the 'others' are not the sole responsible for food safety: consumers can and should look after themselves. This active role corresponds to a high sense of agency, which also implies that food scares are downplayed in their relevance: a careful and 'sound' consumer behaviour protects from major hazards. On the contrary, when sense of agency is low personal responsibility is played down by the perceived overwhelming power of economic interests and institutional regulation and control, and no reliable self-protection is perceived to exist against food hazards.

Finally, what precedes shows that when talking of responsibility FG participants understand it primarily in terms of moral or legal liability. However, attention to accountability-based policy arrangements emerges from a number of considerations, for example about the relevance and doubtful reliability of labels or regulatory regimes such as the organic food one. At the same time, predominant sceptical views of regulators and controllers highlight that the idea of a 'caring' state finds little support. Group discussions predictably did not raise the issue of responsiveness as such. However responsiveness, or the lack of it, is a theme clearly underlying many of the participants' comments and reflections, from the doubtful usefulness and likely reticence of labels to the inability of even friendly and honest shopkeepers to ensure the safety and quality of food, to the widespread feeling of ultimately being 'lost', 'held hostage', 'left alone' with one's own concerns, uncertainties and anxieties.

Remarks on cross-national and cross-group comparisons

The sections above describe the Italian findings. However, the overall picture is basically the same, since the comparison with the other countries' results highlights only minor differences. I hint of some of them. Though knowledge of the control systems is generally weak, both at national and European level, in the Netherlands and UK there is a higher awareness of who is in charge of national food safety. National standards and controls are generally regarded as more reliable than 'foreign' ones. However in some countries considerations are more critical than elsewhere. In Italy specific considerations are advanced about the better enforcement of regulations to be expected in other European countries, while in France a perception emerges of the weakness of sanitary controls, due to financial and personnel limitations. Contrary to elsewhere, in the British FGs the BSE crisis is often described as playing a prominent role in the decline of trust in the government. And while the BSE is mentioned everywhere, other scares, e.g. Chernobyl, are cited only in some countries. There is also some difference in the role played by ethical considerations about GMOs, with expressions such as 'playing god' being used only in France and the idea that GMOs are 'against nature' not emerging in the German and Italian discussions.

The relevance of ethically or environmentally concerned information is emphasised in some countries (Netherlands and UK) and the same applies to some sources of information such as the

[11] For example, some recent Dutch studies highlight that people regards producers, dealers, government and farmers as responsible to different extents for food safety, while consumer responsibility is ranked very low (Bock and Wiersum 2003).

Internet (UK), while distrust in the independence and reliability of information is stronger in France, Italy and UK. There are some differences also with reference to the addressees of trust or mistrust. In the Netherlands and UK trust in independent bodies takes more relevance, thus being also in more evident contrast with the general mistrust in governments common to all countries. In France and Germany consumer organisations are more consistently indicated as trustworthy actors. Moreover, in some countries scientist and experts emerge in a more marked way as addressees of trust investments, either positive or negative, and consequently of responsibility. In the Netherlands there is a mostly positive evaluation of them, while in France and UK the decline of trust involves more explicitly also scientists, universities and research institutions, to the extent that they are believed to be influenced by those economic interests which provide them with funds. Finally, the 'active consumer' argument seems to be endorsed more prominently in Germany and the Netherlands, whereas confusion, scepticism, diffidence and fatalism find stronger expression in France, Italy and UK.

One of the most interesting results of this study, in my opinion, is that in Italy as well as in the other countries between-group differences are of minor relevance, with no clear trend being detectable. Examples of such differences are the following. 'Care' and 'Concern' group members are to some extent more interested than others in collecting and assessing information. Particularly in Italy and the Netherlands, the 'active consumer' argument is endorsed to a lesser extent in some groups ('Care' and 'Indifference' in Italy; 'Indifference' and 'Concern' in the Netherlands). Some predictable discrepancy regards the meaning of food and the ranking of the criteria of choice. Participants in the 'Pleasure' groups tend to downplay the functional meaning of food and to highlight its cultural value, its taste, or its significance as an indicator of success at social level; the value of 'naturalness' is more markedly stressed by participants in the 'Concern' and 'Care' groups; considerations of price are more relevant for participants in the 'Indifference' groups. However, similarities are largely predominant also in this case. It is striking, for example, that members of the 'Indifference' groups are quite close to the others in their considerations about the relevance of taste, freshness, quality and safety of food. Sometimes they seem even more concerned than many participants in the other groups.

In other words, in each country between-group discrepancies do not as a whole override within-group ones. This is remarkable also because to some extent contradicts those studies which, on the contrary, stress the relevance of institutional and cultural differences on fiduciary relations in the food sector (e.g. Sassatelli and Scott 2001). Participants in all FGs describe food safety issues by turning to fairly similar topics (from food variety to information, from safety controls to the intricacy of the food chain), though such topics are used to develop different interpretations. What makes the difference is the outcome of reasoning, rather than which aspects are considered, but food consumption styles and national contexts are not provided with any clear connection with the conflicting perspectives on food safety and trust.

This result may be interpreted in three different ways. The first is that it simply reflects the actual situation. Conflict and contradiction are found just because people are confused. The second is that, contrary to the hypothesis which drove group formation, FG participants' views are not linked at all with food consumption styles. The third is that there is a linkage, but an indirect one, with other dimensions acting as intervening variables. Group discussions provide some support to the latter interpretation. For example, discussions in each country show that most participants in the 'Indifference' groups do not choose hard discounts because they do not mind of food quality and safety, but because their assessment of the issue drives them to particular conclusions. This is conveyed e.g by statements about the unjustified cost or doubtful quality of organic food, or the debatable relevance of labels and brands in terms of safety, with hard discounts and upmarket shops and supermarkets basically offering the same food. Such statements are not exclusive of the participants in the 'Indifference' groups, however the latter stress them more decidedly. This suggests that approaches to food choices depend on how the 'goods' and 'bads' of the situation – i.e. different, sometimes opposed, considerations – are weighed up, rather than the selection of some specific set of aspects (price, taste, 'naturalness', controls etc.).

What types of intervening variables one should look at? Available data only allow to speculate on that. The relevance of socio-demographic ones (age, gender etc.) is certainly better explored by other research techniques, though in the second round of FGs age did not prove a really discriminant aspect. One should perhaps consider the participants' broader framework of attitudes, values, factual and normative beliefs, and opinions. According to this perspective, orientations on food safety, trust and responsibility do not form in isolation from a background of views on related matters, such as the pros and cons of science and technology, the reliability of public authorities, the role of the EU, the

usefulness of one's own network of relations. This broader framework would thus mediate between the (basically shared) 'furniture' present in each one's picture of the situation about food safety and the different positioning and combination of such 'furniture', i.e. the different interpretative outcomes highlighted by group discussions and reflected in consumption styles.

Conclusion

In this article I have suggested that the legitimation crisis of environmental policy is closely connected with its declining effectiveness and efficiency in front of the growing saliency of uncertainty. I have also argued for the analytical relevance of the notions of trust and responsibility. Contrary to the former, the latter has been poorly explored in its possible applications to policy issues. To this purpose I have proposed a typology, which might prove useful for the study of national or sectoral policy-making, implementation, and public evaluation. I have also elaborated on the connection between trust and responsibility, with authority and agency turning out to be closely related to both of them.

Theoretical reflection suggests that the recovery of institutional legitimacy and social trust is not independent from the improvement of institutional and corporate responsiveness. The combination of the widening import of the environmental and health effects of public and private decisions with the growing number of citizens provided with 'the basic equipment for reading and thinking independently when issues affect them' (Ravetz 2001: 6) – in a context, as the one represented by food scares, of manifest institutional and corporate unreliability – is likely to enhance the perceived unacceptability of authorities' and firms' unresponsiveness to people's questions and concerns. This is not simply a matter of democracy. Responsive approaches are arguably better equipped from a cognitive viewpoint for dealing with increasingly controversial, complex issues.

The last sections provide some empirical support to the preceding discussion. The reported study was not specifically designed to look for a confirmation of the theoretical framework. On the contrary, the latter is to some extent the result of an effort to build a coherent interpretation of the empirical findings. To the extent that the results described can be taken as exemplary of a broader public opinion, trust and responsibility, in their different specifications and together with authority and agency, seem to be relevant and interconnected dimensions.

As regards the specific issue dealt with in the study – food risks and food safety – the overall impression is of a multifaceted or plainly blurred situation. This appears by looking at the contradictory opinions about the roles – either positive or negative, active or passive – of individual consumers, public authorities and the different actors of the food chain, as well as about the goods and bads of the regulatory and control systems and the market mechanisms. Attempts to provide trust with solid grounds, either interpersonal or systems, are confronted with a retreat to mere confidence or hope, and positive views of some objects of trust, such as labels, are contradicted by attitudes of generalised mistrust, suspicion and resignation. Liability is regarded as very difficult to charge, and accountability to evaluate, because of the intricacy of the food chain and the weaknesses of the regulatory and control systems. Food scares, however, do not seem the main sources of anxiety and distrust, nor do they seem to have significantly modified consumer behaviour, which basically depends on the assessment of structural factors affecting the food sector and the sense of agency developed by each individual person.

The basic sensation resulting from many considerations is that no subject or institutional setting really addresses the FG participants' preoccupations and concerns – a situation which is hardly beneficial to the social legitimacy of food policies. As a consequence, individuals seem to 'wander' in search of someone or something to trust, being ultimately driven by their own idiosyncrasies, which – as I have suggested – might be referred to their broader attitudes, beliefs and opinions. In any event, the recovery of public trust is likely to be more difficult and slow – and less dependent on the improvement of risk communication – than it is often assumed.

This situation, I think, is effectively grasped by the notion of responsiveness, the relevance of which is evident, for example, in the widespread view of labels as important but ultimately unable to restore social trust, to the extent that they do not answer fundamental questions about how one can buy food consistent with one's own expectations of safety, taste, quality, fairness, respect of environmental and cultural considerations. Responsibility, and above all responsiveness, thus deserve further investigation.

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