

Let's Disagree!

Talking Ethics in Technology Controversies

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Abstract

The central concern of this contribution is the question of whether discursively stabilised disagreement among experts leads to problems of legitimacy for science in its advisory capacity or for the taking of political decisions. In considering this question, it seems initially plausible that a failure to build consensus will endanger science as an important resource and as a basis of political decision-making. In my view, this conclusion is justified in respect of such science and technology controversies which can be understood as problems of risk. Where questions such as climate change, cellular radio, or transgenic crops are concerned, debate crystallises around the question of which claims to truth can be shown to be justified, and a consensus on the disputed issue between the experts involved is seen as the ideal way of ending the conflict (cf. Weingart 2006: 162-3).

However, I want to argue in this contribution that an absence of consensus cannot be understood *in principle* as a deficit in terms of legitimization, or indeed as a general weakness of expert knowledge. On the contrary: to the extent that controversies about science and technology are understood and negotiated as problems of ethics rather than risk, disagreement becomes an indicator of quality as politics seeks to manage uncertainty.

In order to demonstrate why ethics is currently such an important factor in conflicts about science and technology, I begin (1) by presenting a short discursive history of the ebb and flow of ethics during the process of modernisation. It becomes clear (2) that many of today's conflicts about technology are being negotiated with the help of explicit reference to ethics. My main thesis (3) is that from the perspective of conflict theory, this appreciation of ethics means disagreement is being recognised and stabilised. In ethically framed value conflicts, no-one can – with good cause – expect a genuine agreement to be reached on the level of personal moral reasoning (apart from basic values such as those expressed in the universal declaration of human rights). The next section (4) shows that this cultivation of disagreement has considerable implications for the political management of controversies about technology. The empirical analysis is then centrally concerned with the question of how politics deals with expert disagreement in ethicised controversies. This analysis is confined to the case of Germany. It shows (5) that political references to ethics expertise express a recognition of disagreement which opens up legitimacy possibilities for political action. In the conclusion (6), I recapitulate the central points of the argument.

1 The ups and downs of ethics

This section deals with ethics as an expanding discourse of reflection and regulation in the sphere of science and technology and with the political implications of this development. The issue of ethics as an "ethicisation" of technology controversies is therefore explored.¹ This is the perspective from which sociology has reacted to an unexpected "renaissance of ethics" (Pruzan and Thyssen 1994). However, there is a need for a more detailed historical treatment of the view that ethics has been revalued or is undergoing a revival. The following sketch of a sociology of ethics is designed to provide this treatment. It serves to identify clearly the point at which my analysis of science and technology controversies makes its intervention in the field, and what additional contributions it makes. The ebb and flow of ethics in the process of modernisation is traced via an examination of the works of Weber, Gehlen, and Giddens.

Max Weber emphasised the significance of ethics for the development of capitalism. In his famous study of Protestantism from 1904, Weber reconstructs in painstaking detail the effects of ethical-religious motives on the developing practice of capitalist logics of action (Weber 1992). The central feature of this analysis is the ascetic-protestant conception of the call-

ing, in which work is treated as a moral test of the individual. In order to establish itself successfully, this imbuing of work with moral content required religious motives in the form of the Calvinist doctrine of predestination, according to which untiring professional work is the best way for individuals to reassure themselves that they are in a state of grace. For protestant ethics, work is no longer a necessary evil; it becomes a duty which requires a systematic method according to which life is to be lived. In the final analysis, work becomes largely a matter of working on oneself; the puritanical work ethics appears as an early form of modern "technologies of the self" (Foucault 1988). It denies the worker any respite from his drudgery and does not allow the entrepreneur to consume his wealth. One could describe this kind of ethically motivated establishing of a morality of work as the cultural conditions in which modern capitalism can develop. What makes Weber's account so striking is his description of the way in which actors become accustomed to the practices of capitalism as an unintended consequence of efforts directed towards ethical reform. Weber sees very clearly that in developed capitalism there is no longer any need for this kind of religiously-charged conception of professional work. Before long, the protestant work ethic only continues to exist in a secularised form, for example in 18th-century utilitarianism. Once capitalism has become established, it emancipates itself from its religious foundations.

Arnold Gehlen, in his classic study of Man in the age of technology (published 1957 in German language), also addressed the relationship between ethics and capitalism. Gehlen examines this question against the background of developed postwar capitalism (Fordism). He portrays modern industrial society as a form of society that systematically seals itself off from ethical questions (Gehlen 1980).

¹ According to Luhmann (1993) and others, I understand ethics basically as a way of reflecting moral issues along the differentiation between "good" and "bad". Ethics is considered to be a matter of rationality and reason in contrast to moral, which is considered to be a matter of tradition and habit. In addition, it may be fruitful to define the difference between moral and ethics with regard to the expectation of consent and dissent, respectively. In this view the rise of ethics, in short, indicates that dissent becomes predominant. I will discuss this point extensively in section 3. In a nutshell, ethicisation means that the main discursive frame in a technology controversy is ethics rather than risk, see section 2.

Gehlen's diagnosis of contemporary society can thus be read as a thesis about the loss of the function of ethics, and he argues that there are both (a) material and (b) structural reasons why this has happened.

(a) In material terms, Gehlen sees a connection between this loss of function and the institutional progress for which he uses the term "superstructure". This progress is based on scientific-technical developments, organised by the state, and supported by industry. It leads to a linear rise in the general standard of living, and there no longer seem to be any natural limits to this. Once the belief in the possibility of unlimited growth has become established, ethical imperatives that might serve to set limits ("asceticism") carry less and less conviction. Why should there be any limits to what research can be allowed to do when it is the source of the general improvement in the quality of life? Why should the individual behave ascetically when everything is available in excessive quantities?²

(b) Gehlen's second point is that ethics no longer has any role to play because the rationalisation process leads to the development of functional spheres operating according to their own laws, and these spheres are no longer significantly structured by personal relationships. Modern societies have been differentiated into a variety of spheres of action with their own logics, and for this very reason they offer no target towards which ethics could be directed. Science is an example of this.

² The only sphere in which Gehlen sees ethics as having any role to play is in cultural and intellectual circles where individuals are looking for ways to surpass themselves by means of voluntary asceticism. Indeed, the formulation of ethical demands as demands on the self is the criterion Gehlen uses to identify elites. In this respect, the loss of function he attributes to ethics is an indicator of cultural decline in the sense of the loss of individuality ("Vermassung").

Gehlen argues that research in the natural sciences cannot be ethically regulated because its experimental epistemological logic leads to an automatism: relevant research questions are formulated on the basis of scientific progress (what is already known), not by the researcher (as a moral subject). This also applies in principle to the economy, politics, and the law. Weber's suspicion that advanced capitalism no longer needs ethics is thus given a more radical twist by Gehlen. As far as the goals of governance and regulation are concerned ethics is not just superfluous, but inadmissible as a matter of principle.

Anthony Giddens has coined the concept of life politics, and uses it to put forward the thesis that ethics has been rediscovered during the process of reflexive modernisation (Giddens 1991: 209-31). In today's conditions, a new type of politics is emerging to replace the traditional politics aligned with predefined class interests and ideals of emancipation. The new politics, argues Giddens, is shaped by the fundamental question of the good life (for all). This life politics is strictly individual, and is based on ethical-moral rather than theoretical-ideological reflection. Giddens sees the environmental movement, and especially the women's movement, as forerunners of this kind of ethicised politics. It is true that the political demands put forward by these movements are not determined by a specific ethical programme. However, the specifically ethical aspect of this life politics arises from the politicisation of spheres that are normally considered to have more to do with values than with interests. Decisions about reproduction are the best example of this. This sphere can serve as a typical example of an area in which questions which are no longer subject to traditional routines have been opened up to individual decisions (about values) in the course of modernisation. Giddens' concept of life politics may be rather

vague, and it has weaknesses as a way of drawing distinctions. Nevertheless, there is no doubt about the value of his insight that ethics is becoming more significant as a major point of reference for political action in a period in which the problems of class and interests generated by industrial society are becoming less important and processes of individualisation and the retreat of the state are becoming more prominent.

Nikolas Rose has put forward the concept of *ethopolitics*, and in doing so has suggested a more precise way of grasping this aspect of political change (Rose 2001). For Rose, *ethopolitics* is a modernised or democratised form of *biopolitics*, in which *biopolitical* optimisation is realised not through state commands and control by experts but rather via a kind of individual self-optimisation which employs a variety of technologies of the self. One way in which this asserts itself is via a radically modernised and individualised discourse of risk. Unlike eugenics and ideas of racial hygiene, which treated certain stigmatised groups as dangers to the fitness of the population, modern genetics identifies the individual as the potential bearer of risks. This also means, though, that individuals who are aware of their own genetic risk factors are required to take precautions in managing their lives. Instead of (compulsory) state measures to improve the biological quality of the population, the individual is now expected to be constantly making an effort to shape his/her genetic "fate" by means of checks and precautionary measures. In this way, what could be described as a puritan ethics of the body becomes established, a certain "asceticism" of *biopolitical* behaviour, the goal of which is to regulate the body in an optimal way. This does not necessarily mean taking part in competitive sport, far from it; it does, though, mean controlled enjoyment which takes specific risk factors into

consideration.³ *Ethopolitics* therefore describes a subjectification of *biopolitics*, at the centre of which is a bodily ethics aligned with medical-genetic discourses of risk. This concept is similar to Giddens'; the main form taken by ethics is an individual one, i.e. it manifests itself as an individual regime of checks and regulation.

My short excursion to the sociology of ethics has revealed that – in spite of all differences regarding their historical background and their theoretical perspective – the authors referred to have one major point in common: they all are interested in ethics as a way of shaping life-world practices, as a form of informing and (self-)controlling social action. However, the significance of ethics today is by no means limited to forms of individual *biopolitics*. Focusing on ethics as being relevant for the individual is no longer sufficient. Already Giddens stated that ethical and moral categories have become politically relevant. Today, they are part of many governance discourses, in particular those where technology conflict management is of importance.

As Jürgen Mittelstraß observed at the beginning of the 1990s, it is impossible to overlook the general trend towards ethics (Mittelstraß 1992: 195). This means that ethics has now become a major criterion of reflection and legitimisation in many different spheres of society. Let us take, for example, the economy. Nico Stehr (2007) has recently spoken of a "moralisation of the markets". Even though this should not be taken too literally, one can hardly deny that there has been a certain ethicising of individual decisions about what to buy or that businesses are basing their strategies on this development (see Moorstedt 2007). Supermarkets advertise the fact that they sell "fair trade" bananas, and banks set up

³ This is precisely the context in which the problem perceptions that have in recent years been discussed in connection with the concept of obesity become relevant.

ethical investment funds. Ethical categories are just as relevant in politics. The enemy-image rhetoric of the likes of George W. Bush ("the axis of evil", "rogue states") provides tangible evidence of what one could describe as a moralisation of politics: the construction of political opposition no longer takes place along the coordinates of left/right or above/below, but rather, as has been emphasised by the political scientist Chantal Mouffe (2005), in the ethical-moral categories of "good" and "evil".

If one also takes into account the establishment and professionalisation of special fields of applied ethics such as sport ethics, environmental ethics, and media ethics, it becomes clear that ethics has now filtered into almost all spheres of society. Ethics is no longer just an academic discipline and part of the scholarly world; it has developed well beyond these narrow limits. We now come across ethics in places where no-one would have thought of looking for it a short while ago. FIFA, the governing body of world football, has an ethics commission since 2006. Against this background, one could argue that we are not simply observing a renaissance of ethics, but are witnessing both an institutional differentiation and a debordering of discourses about ethics.

2 Framing technology controversies

We also encounter ethics on the broad terrain of technology controversies. Today, many conflicts about technology are conducted with explicit reference to ethics and morality, rather than exclusively or primarily in terms of risk – as was the case for many of the discussions and debates about large-scale technologies from the 1960s onwards. In the recent past, controversies about the development of science and technology have become increasingly "ethicised" (Lindsey et al. 2001). In particular, ethics has become the main criterion of reflection,

justification, and legitimation in controversies about biomedicine. In other words: ethics provides the dominant frame. However, "framing" has for some time now been a conceptually unspecific and overused term; there is therefore a need to be rather more precise when using it (see Dahinden 2006). I use the term "frames" to mean powerful organisational principles of interaction. The function of frames is to create a shared discursive basis on which conflicts can be conducted. The concept of frames therefore belongs to a level above that of the concrete arguments, objectives, and narratives that appear in the discussions themselves. In this sense, frames are principles which provide criteria of relevance and structures of orientation; they establish the relevant perspective that guide the discussion and determine the fundamental rules of the discourse to be conducted. At the level of concrete evaluation, frames do not anticipate any particular outcome.

This last point needs to be stressed, because frames are often associated with concrete, opposed positions in the political debate being conducted.⁴ This conception fails to take account of Georg Simmel's insight that conflicts need shared criteria of relevance if they are to be conducted at all (Simmel 1958). Without shared frames, there is indifference rather than disagreement. In the development of controversies, therefore, it is the shared frames that are crucial rather than just the normative differences – and one could perhaps even say that the shared frames are much more important.

⁴ This is particularly noticeable in political science, as you can see for example in the influential study of Schön and Rein (1994). This strongly normative component in the concept of the frame has been precisely formulated in Entman's (1993) definition of frame functions: frames define problems in a certain specific way, establish causal relations, anticipate evaluations, and provide guidance for action.

Only when we consider the question from this perspective are we able to appreciate the latent power effects of frames. On the one hand, frames direct and structure our habits of seeing, thinking, and acting; on the other hand, they determine controversies to the extent that adversaries must refer in a constructive way to established frames. If and when one frame becomes dominant, powerful rules for the organisation of conflict communication establish themselves. In the case of controversies about biomedicine, this means that politicians and researchers who are in favour of stem cell research cannot simply put forward economic arguments; they always need to offer an additional ethical argument. Advancing therapeutic promises has become very popular as a way of doing this (Rubin 2008). In the present context, then, ethicising means that questions relating to science and technology policy are understood as questions of ethics; the discourse of ethics, in the sense of its categories and concepts, is recognised as a legitimate form in which conflicts can be conducted and as the basis of conflict regulation.

The ethics frame refers to the fundamental distinction of "morally good" and "bad". Categories of (economic) usefulness and (scientific) truth, respectively, are not irrelevant in ethicised controversies but do not play an important role. However, one could argue that "moral frame" was a better term for describing the current controversies about science and technology. Why talk about ethics when, at best, the academic discipline of ethics provides the keywords for the public debates only? To give an answer, we should bear in mind that the term ethics as used here does not necessarily indicate elaborated philosophical approaches; rather, ethics is understood as a way of reflecting moral issues (but not necessarily according to disciplinary standards). Furthermore, the notion of moral does not correspond to

the way how current technology controversies are negotiated. Moral is closely connected to the ideals of unambiguousness and truth as well as to the expectation of consent. "Moralised" controversies are associated with outrage, emotions and (often militant) protest; they are close to "wars on truth" and provide little space for compromises for politics. Ethicisation, instead, indicates that expectations of disagreement get predominant. Ethicised controversies, in principle, are open to building temporary compromises, to deliberation and participation of the many. This fundamental change becomes obvious when regarding the governance of technology conflicts, as I will show in section 4.

The ethics frame contains many possible framings of addressing issues in ethical terms, i.e. sub-frames. In discussions on research involving embryos, e.g. the frame of the "moral status" has been dominant within the ethics frame. Respect for autonomy, human dignity or beneficence are other sub-frames which are effective in current debates (though often in popularised versions of the original philosophical formulations).

It is not inevitable that science and technology controversies will take the form of ethical debates. Let us take, for example, agricultural biotechnology. In the debate about genetically modified crops, the argument is not about what is morally permissible but about what we know and do not know. The central question is: how great is the risk arising from an intervention in nature? What ecological dangers and dangers to human health result from the attempt to use genetic engineering to make plants resistant to pests? Agri-biotechnology is treated in the first instance as a problem of risk rather than ethics. The arguments here revolve around claims about security and assessments of risk, not views about the value of life.

The cases of agri-biotechnology and nanotechnology indicate that questions of risk are still salient, and this is so in ethicised controversies as well. Examples are the risk of egg donation for purposes of assisted reproduction or of biomedical research in general. However, in ethicised controversies such questions are negotiated within the broader context of what is deemed morally good or bad. That is, biomedicine, above all, is treated in the first instance as a problem of ethics.

Of course, criticism of agri-biotechnology involves not only alternative calculations of risk but also quite different attitudes to values, for example an alternative understanding of nature (Gill 2003). But the dominant expert discourse was and is still framed predominantly as a conflict about knowledge. The participatory technology assessment relating to herbicide resistance which was organised by the Social Science Research Centre Berlin in the 1990s was a good example of this (van den Daele et al. 1996). Conflicting truth claims were at the heart of the exchanges between experts and counter-experts in this instance, and normative principles were not at issue (van den Daele 2001: 10). There were similar exchanges over claims to be in possession of the truth in the case of nuclear energy. This conflict was (and is still) shaped by the assumption that decisions about the reliability of assumptions of causality and predictions concerning danger can (and must) be taken on the basis of scientific expertise and the use of scientific method. These controversies about risk therefore revolve around the quality of knowledge.

3 The legitimacy of irresolvable disagreement

If ethics has become the main way of framing technology controversies, what are the implications for governance? In my view, the rise of ethics indicates that there has been a change

in legitimacy of disagreement. When conflicts are ethicised, the status of disagreement changes in a fundamental way: dissent is now – in principle – considered legitimate, and, above all, it is considered legitimate in a permanent form. The political function of the ethics frame is thus to be found in the way it stabilises and legitimises irresolvable disagreement. And of course, the reverse also applies: the status of disagreement is also constitutive of the stabilisation of a specific conflict frame – if the status of this value changes, so does the frame. In this respect, ethics as a conflict frame can be understood as an expression of the legitimacy of irresolvable dissent. Returning again to the case of risk controversies makes this clear.

Needless to say, experts engaged in risk controversies can and do also disagree with each other. In these cases, though, the expectation of consensus remains stable as a counterfactual ideal. One can see this in the dispute about transgenic crops, a controversy that is still on-going (Hampel/Torgersen 2010). The European Union permitted the cultivation of the genetically modified maize varieties MON810 and T25, but the EU's directive 2001/18/EC made it possible for member states to register scientific objections and on this basis to ban the cultivation of these varieties.⁵ In other words, the possibility of a policy based on counter-expertise is opened up; because the latent consensus ideal retains its force, arguments put forward by a different expert can always postpone a final decision. If in risk controversies the expectation that a consen-

⁵ France, Greece, Austria, and Hungary rejected the EU legislation and passed their own laws prohibiting the cultivation of these crops. The EU tried repeatedly to get these national laws repealed, but was never able to obtain the necessary two-thirds majority in the Council of Ministers. In 2008, pressure from the EU forced Austria to lift its ban on the import of transgenic crops, but the ban on their cultivation remained in force (Abbott 2009).

sus will be reached does not persist, the strategy of the counter-expertise would have no chance to succeed; and the dispute would not be conducted with such tenacity and without any real prospect that a scientific solution will be found. Thus, the belief in consensus turns out to be a counterfactual assumption.

This means that in risk controversies, disagreement can only be considered a temporary anomaly which can be corrected by means of greater objectivity. Disagreement is only legitimate when it is temporary, i.e. when it takes the form of a mistake. Scientists are committed to logical-analytical procedures (e.g. experiments, modelling) which they believe will, if employed correctly, lead to answers that cannot be challenged. As Collingridge pointed out some time ago (1981: 189), risk conflicts are, like "normal" scientific debates, essentially debates about truth; consequently, the ideals of unambiguity and consensus guide action, even if these ideals will always remain out of reach. This ideal provides politics with specific options, as one can see in the case of agri-biotechnology: more wide-ranging research is financed, additional disciplines are taken into account, and in sum the process of scientification is advancing. All this can legitimise a political strategy of postponing a final decision. The postponement sends a signal: we need to carry on gathering knowledge until we can take a decision that is genuinely knowledge-based. This became clear recently in the case of the prolonged EU's moratorium on permission to cultivate genetically modified crops. By way of contrast, it is hard to imagine a moratorium on disputed questions of bioethics – not because there is objectively greater pressure to address this problem and so to take decisions, but because the expectations are different.

To avoid misunderstandings: in parallelising risk and (scientific) knowledge conflicts I refer to the mainstream discourse in which risk is taken as an

objective and calculable fact. This is what sociologists would call the technocratic term of risk. In contrast, they keep stressing that risk is implicitly value-laden and socially constructed. In fact, in the above-mentioned risk controversies the normative aspect usually does not come to the fore and if so, we can assume that ethicising is going on. Take for example the precautionary principle as established by the EU, which can be understood as a policy element indicating the transition from a risk to an ethics frame.

In ethicised technology conflicts, the ideals of unambiguity and consensus are abandoned. Ethicised problems cannot be solved by calling on expert knowledge, since it is perfectly evident that the experts are no more in agreement on ethical questions than is society as a whole. Ethicisation implies the societal expectation that expert knowledge, formalised procedures, and so on will not be able to provide the basis for an unambiguous and clearly preferable solution to a given problem. And there is absolutely no doubt about this. In this frame, there is no longer even the counterfactual ideal of a decision that will be seen by all concerned as the best option. Of course, ethical conflicts also involve disputes about the plausibility of individual points of view. The predominance of dissent within ethicised controversies, as already mentioned, does not mean that disputes are abandoned. In fact, the opponents keep debating, and these debates are necessary to draw the boundaries, to determine the canon of legitimate arguments, and in doing so to establish a well-ordered range of acceptable positions. Out of these debates politically inspired compromises may arise that sometimes lead to a shared recommendation of an ethics council. In other words, despite of irreconcilable positions a shared view on practical problems may be arrived at. Nevertheless, the quality of consent is different. Unlike discussions about interests or risks, participants ac-

knowledge rather than simply take note of fundamental disagreement on the level of values. This means that although there will be lively exchanges about ethical questions in expert bodies (such as national ethics councils), no-one expects these efforts to lead to a value-based consensus. In contrast, in the case of a risk controversy participants have to agree on a shared perception of the significance of a risk involved.

The decisive point here is not the fact that different people give different answers to the same question (i.e. disagreement as such); the more important element is the specific form in which expertise is institutionalised, which always already expresses the attribution of a certain validity status to disagreement. The experts working on questions of risk live and work, in principle, in accordance with the classic-modern ideal of the scholarly search for truth. The expert council, on the other hand, which is made up of people from different disciplinary backgrounds and with different world-views, expresses the consciousness of relativity that is an integral part of ethics. The political task of these councils cannot therefore be anything more than the coordination of disagreement; they cannot overcome disagreement.

Against this background, the rise and expansion of ethics ("ethicisation") can be read as the expression of a change in expectations of what science can do. Science is a major resource for reflection and justification in many spheres of society, but today it cannot lay claim to any monopoly on rationality (for early evidence of this, see Bonß/Hartmann 1985). This ambivalence may be a precondition of the way in which disagreement among experts no longer emerges inadvertently via studies and expert reports that come to different conclusions (in the case of risk), but can be publicly presented in a coordinated way (ethics). From this perspective, ethics would be a medium in which the contradiction between ad-

vancing scientification and generalised scepticism about science can be presented and negotiated, even if it cannot be resolved. In fact, in ethicised technology conflicts the significance of knowledge is not a matter of dispute (as a basis for normative positions); at the same time, the opinion of each individual counts as an opinion.

4 Ethicisation and technology governance

If ethics is now the main semantics of governance, what are the consequences for technology governance? This question can be opened up to reveal the expectation that the generalised obligation to refer in a constructive way to ethics makes a difference for technology governance. In this section, I use empirical material to show that this suspicion is justified. This material indicates that ethicisation is associated with changes in expectations which affect both politics and science in its advisory capacity.

4.1 Proceduralisation and participation

Bioethical questions have to be settled against the background of a stable pluralism of values in society. For this reason, the quality of the procedures employed in decisionmaking is crucial; discourse, as an open-ended process, is seen as the basis of a rational management of disagreement. In order for political decisions to remain valid for a reasonable period of time, all the competing groups must feel that they have been heard and their positions recognised, since it is in any case impossible for the substance of the solution adopted to convince everyone (and everyone knows this in advance). Conflicts about values cannot be solved by science. In conflicts where the main dispute is over the correct assessment of risk, one can hope that one day the right experiment will be developed and this will make it possible to test the different claims made to have provided the correct explanation, so that unsat-

isfactory disagreements can be overcome. Where ethical questions are concerned, though, disagreement is endemic. This explains the greater value attached to procedures as a source of legitimation.

In the context of bioethical value conflicts, we can therefore observe almost desperate attempts to get the silent or uninterested public to participate in this discourse.⁶ So-called citizens' conferences, experiments with the involvement of laypersons such as we are now seeing more frequently in the sphere of biomedicine (Abels/Bora 2004), are procedures which are supposed to bring members of the silent majority into the discourse. This is something different from a method designed to canalise an explicitly formulated political demand to be allowed to participate. Lay participation typically materialises in the form of a laboratory experiment at present (Bogner 2010). That is, lay participation as currently organized by professional participation experts under controlled conditions rarely is linked to public controversies, to the pursuit of political participation or to individual concerns.

Bioethical controversies take place in the features sections of the newspapers, in discussions conducted between intellectuals, and at conferences, but not on the barricades. These controversies tend to start in discussions between experts rather than in criticism voiced by groups in civil society which then attracts public attention. Two examples of this are the debate about stem cell research, which was set off by the research proposal Oliver Brüstle submitted to the German Research Foundation (DFG) in 2001, and the German euthanasia de-

bate, which started with Peter Singer's book *Practical Ethics*. When groups from civil society become involved, they do not do so as pressure groups; they are bodies organising a public discourse which is consciously seen as open-ended. One recalls, for example, the "1000 questions" project launched by the "Aktion Mensch" organisation (Klein et al. 2009).

4.2 The subjectification of political rationality

It seems to be the case that it is difficult for bioethical questions to be transformed into traditional questions related to party-political interests. Bioethical questions occupy a position beyond left and right on the political spectrum. This became clear once again in the spring of 2008 during the debates that took place in the German Bundestag about the liberalisation of the law on stem cell research. On this question, Christian-Social pro-life MPs joined forces with Green feminists to argue against liberalisation, and Christian-Social MPs in favour of this research entered into an informal alliance with some Social Democrats to argue in favour of liberalisation. Every party was split on the issue. Incidentally, we can observe political parties dealing with this problem of order in an active way where questions of ethics are concerned.

In the context of the strain this puts on the political order, one can observe a subjectification of the rationality of political decisionmaking: when important decisions have to be taken, political action is shifted into the sphere of individual decisions about values. In debates about embryo research, in particular, it has repeatedly been emphasised that MPs or governments have to make "personal" evaluations, or to "take a decision as a matter of conscience". Subjectivity and authenticity, not party discipline or rational arguments put forward by experts, provide the justification for a political vote. A good example of a politician

⁶ In bioethical value conflicts, we thus see the largely indifferent pluralism which Vilhelm Aubert (1961: 31-32) describes as one course that can be taken by the conflict; the other possibility is that it takes an aggressive form.

expressing this view (though there are many similar ones that could be referred to) can be found in an interview given by Herta Däubler-Gmelin, the former Minister of Justice, to the *Frankfurter Allgemeine Zeitung*:

"The basic questions about the place of the individual in biomedicine, and this does not happen very often, are genuine matters of conscience on which every MP has to make up his or her own mind, without any instructions from the parliamentary fraction." (Bahnen et al. 2002)

In Germany, the 2002 debates about the German stem cell research law, in which MPs spoke and voted on their own behalf without needing to follow party discipline, are still considered to be one of the Bundestag's finest hours. By way of contrast, anyone who is reluctant to treat parliamentary votes on legislation of relevance to bioethics as occasions when MPs can decide according to their conscience is likely to be the target of fierce criticism – both from the opposition and from their own side. The British Prime Minister, Gordon Brown, experienced this in the negotiations on the new British embryo research law. At first, Brown categorically rejected demands that members of the government should be free to vote according to their conscience, arguing that this was a piece of legislation of fundamental importance for research policy. After a series of public protests, he was forced to allow a free vote without party discipline on at least some parts of the legislation (BBC News, 25.03.2008).

4.3 Changing forms of expertise

In the complicated sphere of biomedical research and the application of the resulting technologies, politicians have no alternative but to inform themselves about the issues at stake. After all, there is a grave danger of legitimization deficits in hierarchical and politically centralised knowledge and decision procedures. In the case of stabilised disagreement, the quality of the collective development of an informed opinion is now more dependent than

before on the quality of the knowledge that contributes to this process (Willke 2005: 48). In relation to current technology controversies, it is not really the experiments in participation described above that have become politically relevant; the more significant development is the role being played by new forms of expert-based policy advice, forms which involve a constructive reference to ethics in their own understanding of themselves, the political tasks they are asked to perform, and the names given to these bodies. They can thus be seen as ethics-frame-specific forms of expertise.⁷

In recent years, we have seen interdisciplinary expert bodies being set up in a number of western democracies under the designation "National Bioethics Council" (Fuchs 2005). In Austria, a council of this type was set up and attached to the Federal Chancellery in 2001; in Switzerland, the Federal Council established a National Ethics Council in the same year; and in Germany, the then Chancellor Gerhard Schröder also set up an National Ethics Council in 2001. Additionally, from 2000 to 2005 there were two Commissions of the German Bundestag in existence (called "Study Commission on Law and Ethics in Modern Medicine") which consisted of 13 members of the Bundestag and 13 experts. At the outset there was tension between these two different types of ethics commissions. At the end of 2007, the National Ethics Council was given a legal basis and renamed the German Ethics Council. A common feature of these bodies

⁷ In accordance with this understanding of the field, the German Federal Environment Agency (UBA), the Robert Koch Institute, and the Central Commission for Biological Safety are among the bodies producing risk-frame-specific expertise. Technology Assessment (TA) is also an institutional consequence of risk conflicts; it bears witness to the fact that in early risk conflicts, knowledge that was of better quality, or more relevant to the problem at hand (interdisciplinarity), was seen as the best way of solving conflicts.

is the broad range of different disciplines and worldviews represented among their members.

Needless to say, calling on expert knowledge is a traditional instrument to which politicians turn when they need to justify and legitimise decisions. However, what is happening now does not just have to do with questions of knowledge; as we have seen, questions of values are now involved. The new element is the explicit labelling of expertise as "expertise about values". In addition, this expertise must be negotiated within a heterogeneous team. After all, in the national ethics councils Catholics and atheists, geneticists and representatives of disabled people's organisations, and representatives of all sorts of different positions are sitting down together around the table. What we have here is a case of institutionalised counter-expertise (whatever one's own position may be, someone who takes the opposite view will always be present in the plenum), and there is hardly any way one individual can claim to be in possession of authoritative knowledge. The ethics experts are seen as people who can convey points of view and ways in which issues can be interpreted, and this is also how they see themselves (Bogner et al. 2008). The logical consequence is that ethics councils do not really see themselves as political actors; their main function, as they see it, is the preparation and systematisation of knowledge. In some unusual cases, these expert bodies do not provide politicians with any policy recommendations at all (even diverging ones); the US President's Council on Bioethics, for example, restricted its conclusions on stem cell research and cloning to a differentiated systematic treatment of ethical positions, and did not go on to derive any recommendations for political action from this analysis. And even the ethics councils that do draw up policy options, for example those in German-speaking countries, are inter-

nally split – at least with regard to the "big" bioethical issues such as stem cell research or genetic testing. So they usually produce coordinated disagreement in the form of between two and four divergent recommendations.

The next question is: if expertise delivers a bundle of contending opinions, with arguments to back them up, rather than consensus, what are the consequences for political action? How do politicians deal with expert dissent?

5 How politics deals with disagreement among experts

We can only analyse the way politicians deal with disagreement among experts by looking at what politicians say when they refer explicitly to ethics expertise. For methodological reasons, it is almost impossible to measure anything like the actual "impact" of expertise on the political system. There is hardly any way of telling how the German Chancellor reacts when she reads the latest statement of the German Ethics Council. We can, though, analyse the form taken by politicians' references to ethics expertise. If we proceed in this manner, we have a sounder empirical basis on which to address the question of the actual latent functions of ethics expertise for politics.

The following microscopy of political utilisation of ethics expertise is limited in substance to the biomedical issues that have attracted public attention (stem cell research, cloning, preimplantation genetic diagnosis [PGD]), and the covers the 2000-2008 period. The relevant advisory bodies are, as mentioned above, the National Ethics Council and the German Bundestag's Study Commission on Law and Ethics in Modern Medicine. The documents consulted were: press releases issued by members of the German Bundestag;⁸ important parliamentary

⁸ Press releases issued by all party fractions represented in the Bundestag were identi-

debates on the topics identified;⁹ and also, though without any claim to exhaustive coverage, speeches delivered by and interviews with leading functionaries of the executive branch of government.¹⁰ This material was then analysed in accordance with the Grounded Theory approach (Glaser and Strauss 1967) modified by recent works of Meuser and Nagel (2005),

fied via press offices, party archives, and the MPs' home pages for the period from the beginning of 2000 to the end of August 2007. This search produced 272 relevant documents. 53 documents connected in some way with the work of the two bodies, and these were the main documents used for the analysis.

⁹ The following nine parliamentary debates from the 2001–2008 period were selected: five debates on stem cell research (30.01.2002, 25.04.2002, 2.12.2004, 14.02.2008, and 11.04.2008), all of which were related to the struggle over the law on this subject; two debates on cloning (20.02.2003 and 16.10.2003), which took place in the context of attempts to ban cloning via the United Nations; and two debates on PGD (14.12.2001 and 17.03.2005), both of which took place because the FDP had introduced draft legislation on the issue. These nine plenary debates lasted in total for 15 hours, and 176 speeches were delivered. The written record, in the form of the Bundestag's stenographic transcript, is approximately 250 pages long in total. In these 250 pages there are 24 references to documents produced by the ethics councils.

¹⁰ This material was identified by using the home pages of the ministries and the LexisNexis data bank. 10 relevant speeches were found, including speeches delivered by Chancellor Schröder on the occasions of the setting up and reconstitution of the National Ethics Council (8.6.2001 and 23.6.2005), to the "atatech" scientific conference (30.9.2003), and to the Fraunhofer Society (22.10.2003); the speech delivered by the Minister of Justice, Brigitte Zypries, to a forum organised by the Humboldt University (Berlin) (29.10.2003); and other speeches by the Minister for Research, Edelgard Bulmahn, and the Minister of Health, Ulla Schmidt. I also examined 9 relevant interviews with these leading politicians published in national newspapers and magazines (*Frankfurter Allgemeine Zeitung*, *Die Zeit*, *Süddeutsche Zeitung*, *Frankfurter Rundschau*, *Tagesspiegel*, *Der Spiegel*).

with the goal of drawing up a list of types of political reference to expertise (on this point, see Kelle/Kluge 1999). I have explained my way of constructing types, and set out in detail the findings of my investigation, elsewhere (Bogner 2011). In the present context, the main point of interest is what these references reveal about how politicians deal with disagreement among experts.

In the framework of the empirical analysis, one notices that references by politicians to ethics expertise are first and foremost formal in nature, and also that they serve to express recognition and acknowledgment of disagreement among experts.¹¹ This means that most of the time, MPs and leading functionaries do not comment on specific, substantive aspects of the experts' views, but welcome in very general terms the range of views as an enrichment of political debate. They do not say anything about either the essential content or the majority and minority positions revealed. Individual ethical arguments put forward and points of view taken within the bodies are not acknowledged, and neither are any of the concrete positions adopted or recommendations for action (even though these may coincide with the politician's own position). What is acknowledged is the differentiated nature and variety of the experts' arguments, which are expressed in an agreement to disagree that is explained and is set out in such a way that it can easily be followed by the reader. It seems clear that the sub-

¹¹ This section gives an outline of the most interesting and dominant types of political references to ethics expertise. Apart from formal references there are other types which, in fact, focus on the specific contents of ethics expertise in different respects. There are references using expertise in a selective manner to consolidate already existing political aims ("instrumental reference"). Another less frequent type employs – at least rhetorically – certain arguments from the expertise ("analytical reference").

stance of the matter is seen as less important than the fact that the findings have been published. Accordingly, the statements taken in their entirety are welcomed as important bases for political decisionmaking. A good example of this can be found in the following quotation from Andrea Fischer, the former Minister of Health. Fischer was known to be critical of embryo research, but she commented positively on the relatively contrary findings on the subject of the National Ethics Council and the Commission of Enquiry:

"The two votes by the Study Commission and the Ethics Council will enrich our parliamentary discussions. In January, parliament must come to a decision and pass legislation to regulate these matters." (Andrea Fischer, B90/Grüne, Press release 2.12.2001)

It is sometimes emphasised that because the reports produced by these advisory bodies are so well structured and succeed in clarifying the concepts involved, they furnish a good basis for the important decisions that have to be taken. In the present context, though, the main point to be made concerns the political interpretation of disagreement among experts. And what one notices here is that this disagreement is not criticised because it means an absence of agreement, but rather read as the expression of a genuine discourse between the experts which provides an authentic reflection of the range of views existing in society. When the reports are read in this way, they are seen as proof that democracy is functioning well and, in the end, as enriching politics. Disagreement among experts becomes a guarantee of the credibility of the body involved and of the political system that has turned to these experts for their advice. One can see these aspects very clearly expressed in a speech delivered by Chancellor Gerhard Schröder at the beginning of the National Ethics Council's public session on 23 September 2004:

"I have not seen any disadvantage in the fact that different positions exist within the

Ethics Council and also emerge in public, in other words that here [...], unlike in parliament, where we have to vote, it is more a matter of making clear what issues are at stake, and also making it clear that the different approaches one can see in society are also, naturally enough, present in the National Ethics Council. I regard this as a positive aspect of the matter and not, contrary to claims I have sometimes heard, a sign of a failure to take the necessary decisions [...] And, incidentally, you have rendered a great service by showing that it was quite wrong to suppose, as some observers did, that the members of the Ethics Council were invited to participate in order to produce the results the government wanted. I think you have refuted this claim, which is sometimes made, in a very impressive way." (Gerhard Schröder, speech to the National Ethics Council 23.09.2004)¹²

What this means is that in the political discourse, the main goal is not to elaborate one's own position on the basis of the experts' vote, as a way of bolstering one's own view within the political spectrum by making it appear superior to all other opinions. The "essence", the specific content of the position taken by the experts, is not predominantly important;¹³ much more important seems to be its "existence", the fact that now, on the basis of an informed disagreement between experts, politicians can act – indeed, that they must. One can see this being expressed in the following passage, in which an MP uses the statements on prenatal diagnosis issued by the two councils as an opportunity to call for a political decision:

"We can now read the comprehensive final report on this topic (PGD, A.B.) produced by the Commission of Enquiry from the last parliamentary term, and we also have the statement issued by the National Ethics Council. The arguments for and against

¹² http://www.ethikrat.org/dateien/pdf/Wortprotokoll_2004-09-23.pdf

¹³ However, the content may be of a certain interest to the public, as one of the anonymous reviewers noted. In fact, the public (as a third player in this game) could check whether politicians just ignore the content or come to a decision that can be legitimised with regard to the ethical recommendations.

have been carefully examined. This means that the preparatory work needed for a decision has been completed. Now, each one of us must have the courage to vote on the issue." (Detlev Parr, FDP, Bundestag debate 20.02.2003, Prot. 15/28, p. 2143)

Here too, disagreement among experts is interpreted as something that enriches the political debate, but also – and significantly – as something that says to politicians, in no uncertain terms, that they must now take a decision. Attention is drawn to the fact that the opinions of experts who disagree with one another have been presented, and the ethical stalemate is interpreted as the starting signal for a decision politicians must take on their own – which makes it genuinely political. This means that when formal reference is made to ethics expertise, a credible moment for a political decision has quietly arrived. Political decisions are necessary and legitimate once the experts have spoken, and – because there is no consensus – they have spoken without pressurising politicians to act in any particular way.

If we look at this the other way round, the symbolic aspect of expert knowledge means that it is not acceptable to anticipate the views of the experts politically. If political initiatives are taken before the ethics experts' consultations have been concluded and their findings made public, a negative view of this will be taken in political circles. One example of such an initiative was the draft legislation designed to regulate PGD introduced by the FDP at the end of 2001, before either the Study Commission or the National Ethics Council had concluded their consultations on the subject. Across the political spectrum, from the CDU/CSU to the Greens, the verdict was that this was an illegitimate anticipation of politics – even though the ethical arguments were already well known at that stage.¹⁴

In a number of ways, therefore, disagreement among experts turns out to be not a weakness but rather a distinguishing feature of the quality of ethical advice. For one thing, disagreement among experts, which is the rule rather than the exception in ethicised discourses, is a sign of the authenticity of ethical expert discourse. Experts participating in disputes about biomedicine are no different from the rest of society – they are unable to agree. In this respect, the ethics councils can be seen as a gauge of the societal and political acceptability of disagreement: they exist because permanent dissent is considered to be legitimate in principle. The way ethics councils negotiate controversial issues is only comprehensible against the background of a generalised expectation of disagreement. Another indication of the quality of this disagreement is the fact that this is not a case of disagreement for disagreement's sake, but the outcome of a long process of internal efforts to draw up a structured position. This well-ordered disagreement is an expression of civilised methods of communication, and can therefore be read as a general indication of the civilising effects of ethical deliberation. This accounts for the hope that ethics councils may prove to be model laboratories for socially acceptable ways of dealing with value conflicts. The third element is the way in which this reference to the range of views held by experts underlines the autonomy of political action. Disagreement among experts makes it abundantly clear, once again, that politicians are free to choose any of the options made available to them within the frame of ethics expertise. Disagreement among experts thus represents a (limited) range of well-founded options, and so pro-

¹⁴ The PGD procedure has been technically possible since 1990, though it was only in

2000 that a broader discussion emerged in Germany following a relatively liberal statement on the subject issued by the *Bundesärztekammer*, the professional organisation of German doctors (see also Kollek 2000).

vides a frame for legitimate political decisionmaking. Disagreement simultaneously makes it symbolically clear that the time for a genuinely political decision has now arrived.

6 Conclusion

This chapter has argued that the ethicisation of technology controversies presents clearly identifiable opportunities for the legitimisation of political action. This ethicisation is one expression of a wave of ethics which, as Niklas Luhmann (1990: 10-17) once observed ironically, has appeared with considerable regularity at the end of every century ever since the invention of printing. We are currently confronted with controversies within biomedicine which are being conducted in ethical terms and concepts. I have argued that this ethicisation indicates that there has been a change in the significance of disagreement: where questions of value are concerned irresolvable, permanent disagreement is considered legitimate, but this is not the case for questions of risk. The analysis showed, via an examination of the revaluation of participatory procedures and the subjectification of the rationality of political decisions, that this is of considerable significance for the governance of technology controversies. It also showed that there has been a change in the form of expertise: in the context of its political organisation, ethics expertise is becoming a product that must be negotiated between representatives of different disciplines and worldviews.

To avoid misunderstandings: Ethicisation refers to the fact that presently, the keywords, concepts or distinctions provided by the ethical discourse are of predominant importance for the negotiation of technology controversies. That is, it is not ethics as an academic discipline; rather it is ethics in a popularised (some philosophers would say: degenerated) version, which becomes influential for the framing of the

public debate.¹⁵ One could argue that such a notion of ethicisation blurs the boundaries between ethicisation and moralisation, but I have stressed that this difference is clearly indicated by the predominance of dissent and consent, respectively. Furthermore, there is a complex interdependency of ethicisation and the predominance of dissent. Talking ethics in technology controversies renders dissent legitimate. But that's only one face of the coin. From a sociological point of view it is just as well the other way round. Only if dissenters acknowledge dissent to be legitimate they can lead an ethically framed discourse on technology. Taking this argument a step further, from a social theoretical standpoint the ethicisation of technology controversies can be taken as an indication for the revaluation of heterogeneity, divergence and disagreement in modern societies, i.e. for an increasing need to deal with a balanced disorder instead of the futile strive to establish a strong order (Willke 2003). Thus, we can understand the phenomenon of ethicisation as an indicator that pluralistic societies start to take pluralism seriously.

The empirical analysis of this contribution focused on the question of the political utilisation of expert knowledge, i.e. how politics deals with disagreement among experts. In the end, the question that is of interest to a sociologist is whether and in what form the change in the legitimacy of disagreement (which has only been set out here in theoretical terms) affects the level at which ethical questions are negotiated politically. By means of an examination of a range of different materials (parliamentary debates, press releases, speeches, interviews) the analysis showed that political references to ethics expertise are dominated by a form which quite clearly

¹⁵ Not even in ethics councils academic ethics play a major role, as I have shown elsewhere (Bogner 2009).

expresses a recognition and appreciation of disagreement between experts – at least in Germany (for a comparison with Austria see Bogner 2007). Votes split along many different axes are read as an authentic reflection of a pluralism that actually exists in society. It is not individual ethical positions, but the range of opinions as such that is welcomed as an enrichment of politics. It is seen to be extremely important that the experts' votes should be made available to political decisionmakers, but the precise content of these positions is not particularly important. In this sense, disagreement between experts is understood as the prelude to a fundamental political debate in which one of the main ways of generating legitimation is via the quality of the procedure (relaxation of party discipline, decisions made according to the individual's conscience). In this connection, the significance attached to ethics expertise is primarily symbolic: it establishes the legitimate frame of political action, and the moment of its publication marks a credible point at which a decision has to be taken. Deliberations about the ethical point at issue have shown that there is no point hoping for consensual solutions, so the disagreement among the experts represents a decree to the effect that a political decision must now be taken. There is no way in which disagreement among experts determines the political decision, but it is constitutive of the political sphere's claim to be acting autonomously.

Unlike in controversies about risk, in this situation normative insecurity and a failure to reach consensus should not be seen as endangering the role of science as a major resource and basis for decision-making. On the contrary, political action seems to be possible precisely on this basis of a discursively stabilised disagreement. To overstate the case slightly: disagreement among experts is not the problem for politics, it is the solution. Politicians can act

thanks to the disagreement among experts, not in spite of it. This does not just mean that irresolvable disagreement forces politicians to find compromises. It means more than this – that political action can use a positive reference to this very disagreement among experts in order to legitimise itself. It is the political acknowledgment of disagreement itself that renders politics as a process of parliamentary decision-making visible once again. This acknowledgment thus becomes a stabilising element which serves to mark the dividing line between expertise and politics.

7 References

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