
The Emergence of a European Public? Some Lessons from the Conflict over Biotechnology

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Abstract

Since its commencement in the 1970s mass publics play a decisive role in the controversy over biotechnology. What is characteristic about these mass publics is their national dimension. Biotechnology-controversies unfold and pass within national publics. The phenomenon of interest here reveals itself in historical perspective. Investigating the behaviour of mass publics during three decades of conflict, in the second half of the 1990s we observe a transition from an incoherent sequence of unrelated national conflicts to a state of synchronised conflicts.

I argue that public synchronisation has to be seen in the context of current transformations of political systems and, hence, democracy. In an emerging post-national order the disentanglement of national mass publics and supra- and international political elites constitutes a normative problem. What can be learnt from the case of biotechnology is that, while there is no indication for a fusion of national publics to a common 'European' public, the synchronisation of Europe's national publics represents a functional equivalent to such a supranational public.

Globalisation, regionalisation and the immobility of national publics

The main corpus of political theory considers 'the public' essential to democratic functioning. The term is hard to pin down though. Different 'models of democracy' (Held 1996) assign to it different values. Normatively ambitious, albeit hardly realistic models trust in Habermasian deliberative publics, providing for a peaceful, consensual exchange of arguments.

'Realists', by contrast, restrict such deliberative publics to small groups under non-bargaining conditions. The more participants, they argue, the lesser the chances for meaningful communication and participation

(Sartori 1986). Realists, liberals, legalists and technocrats rather envisage the perils inherent in *mass* publics, which rather counteract deliberative ideals for the risks of populism, irrationality and usurpation of public opinion, intrinsic to these publics (Sartori 1962). Even liberals and realists who closely circumscribe the influence of the public and virtually restrict it to elections, however, cannot *drop* the term without reducing democracy to the absurd. After all, mass publics constitute the cultural, institutional and communicative entities coming next to the *demos*.

Furthermore, in recent debates on democracy and globalisation the public appears in a new light. The emergence of international environmental and trade agreements, the rise of regimes of 'global governance', European integration and other regionalisation processes indicate a *shift* of political decision-making and political elites, respectively, from national to supra- and international levels. Hence, as economic globalisation advances, politics, the making of collectively binding decisions, does not whither away, but takes different shapes and pools in layers *beyond* the nation state. Today the assessment gains currency that we are in the midst of a historical transformation from a national to a 'post-national' order (Habermas 1998; Zürn 2000), so that Robert Dahl (1994) predicts a 'third transformation of democracy': After a first transformation in antiquity when democratic city-states emerged and a second transformation that brought about the transfer of the democratic idea to the territorial state, a third transformation will have to install democracy amidst a post-national order.

What is the import of the public in such a post-national order? The second transformation of democracy already caused a deep hiatus between citizens and political elites. They dissociated and have become increasingly alienated from each other. Democratic legitimacy, however, could be restored by means of two historic inventions. First, the institutions and procedures of representative democracy; and second, the creation of linguistically homogenous mass populations concomitant with the industrial mode of production and the rise of the nation-state (Gellner 1983). The latter development essentially contributed to the ascent of second transformation democracies in endowing even highly heterogeneous mass populations with a certain sense of coherence and, even more important, a common communicative space.¹

The creation of homogenous, national mass publics was a protracted process, distinctive of modernity and extending over centuries. By contrast, the shift to a post-national order that has loomed large only for the past three decades, seems to be taking place with unprecedented rapidity, as is the emergence of a new cleavage between national publics and supra- and international elites.

Since, while political and functional elites will continue to impel the shift to supra- and international levels, we cannot expect mass publics to linguistically and culturally homogenise with equal velocity and to extend to regional and even global dimension. Instead, publics will linger at national level for the foreseeable future. The gap between the overwhelming majority of citizens and decision-makers will widen.

As a *normative* consequence of this latest decoupling of (national) citizens and (supra- and international) elites we will observe a further decrease of participatory options (already minimised in the course of the second transformation) and a loss of democratic legitimacy.

This problem becomes particularly evident regarding European integration. European integration takes place at a rapid pace in the realm of infrastructure, economy, law and politics, but culturally-linguistically Europe remains nationally circumscribed.

At the same time, in contrast to numerous other regionalisation processes, European integration derives its legitimacy as an outspokenly *democratic* process. The final shape of the emerging democratic entity may still be disputed. In any case, there is widespread consensus on one major obstacle to the democratisation of the EU: the lack of a common public and a common communicative space respectively (Greven 2000; Grundmann 1999; Schlesinger 1999).

While the political system becomes supranational, there is virtually no indication of an emerging European communicative space embracing the 'ordinary citizen'. Even if there are indications for the formation of European deliberative expert-publics transcending the nation-state, (Eriksen & Fossum 2000; Joerges 2001) these publics are entrenched in technical, administrative systems and break down to a mosaic of specialised debates. They deliberate in the lingua franca English and technical terminology on highly specialised subjects, and are inaccessible for the

ordinary citizen. At the same time, European mass publics are and continue to be nationally fragmented.

The long-term conflict over biotechnology as a model-case

The conflict over biotechnology is well suited to shed light on the role of the public in the midst of an emerging post-national order. Starting in the early 1970s the conflict stretches over the past three decades, the period of the dramatic acceleration of the third transformation. Here it will serve as a model-case illustrating the democratic dilemma outlined above but also recent developments that might indicate their denouement.

The major dilemma illustrated by the conflict concerns the decoupling of supra- and international layers of decision-making and national mass publics. On the one hand, in the course of these thirty years we can observe the successive *shift* of biotechnology regulation and policy-making from the national to the supra- and international level. On the other hand, during the same three decades *national* mass publics in the industrialised world went through several *independent* issue-attention cycles (Downs 1972) as regards biotechnology, which, in turn, had important repercussions on *national* political systems.²

The *shift* from the national to the supra- and international level is characterised by several main stages of *internationalisation and institutionalisation*, which roughly correspond with decades. In the 1970s national regulatory regimes already were internationally connected through *informal international expert-networks*, which were, for instance, engaged in transferring the NIH safety guidelines into national regulation and regulatory practice.

In the 1980s, however, a formal international *organisation*, the OECD, already figured prominently in standardising safety regulations for the deliberate release of GMOs (OECD 1986). Somewhat later in the same decade the *European Community* proactively passed directives on deliberate releases and laboratory safety disposing Member States to adapt their respective legislation to the supranational framework (Cantley 1995, 518–526).

In the 1990s a major shift of decision-making to the *international level* took place within the fabric of two institutional sets: the UN and the WTO. With the world summit in Rio in 1992, the subsequent Convention on Biological Diversity (CBD) and the initiative for a Convention on Biological Safety (CBS) biotechnology regulations, as far as they concern environmental aspects, climbed a further plateau of international decision-making. With the establishment of the WTO in 1995 biotechnology regulations touching upon trade issues moved to the international level. The corresponding directives concern intellectual property rights under TRIPs (Trade Related Issues on Intellectual Property Rights), standard setting under TBT (Technical Barriers on Trade) and international traffic with dangerous organisms and organic substances under SPS (Sanitary and Phytosanitary Measures) (Schomberg 2000). Finally, the conflict over the labelling of genetically modified food between the European Union and the USA, erupting towards the end of the 1990s, conferred a decisive status to the FAO/WHO Codex Alimentarius Commission.

While biotechnology policy and regulation mirror the shift to a post-national order, seemingly contradictorily, the history of the biotechnology controversy also illustrates the salience of national publics. Since, what we observe in the long course of the conflict is *not* the appearance of new mass publics, transcending the nation-state as did political decision-making.³ Instead, mass publics remain nationally grounded. What is looming in the long run, however, is the *synchronisation* of these national mass publics. To explain what that means we will have to take a look at the long-term evolution of the international conflict on biotechnology.

Asynchronous publics: international conflict until the mid-1990s

In retrospect it becomes evident, that public controversies on genetic engineering from the early 1970s until the middle of the 1990s took place *independently* of each other. A short review of public controversies until the mid-1990s corroborates this claim.

The first public controversy developed in the USA in the mid-1970s (Bud 1993, 179–80; Krinsky 1982; Seifert 2003, 49–56). Concomitant with a discussion on federal legislation in Congress and Senate in 1976 and 1977, for the first time intensive media reporting set in and the first issue-attention cycle reached its climax (Baark & Jamison 1990; Kavar 1989). In 1978 the idea of special legislation was given up, the intensity of media reporting decreased and semantically switched from the formerly dominant theme of ‘biohazards’ to ‘economic prospect’. The US-American cycle came to an end towards the end of the 1970s.

While the USA underwent their issue-attention cycle European publics remained virtually silent (Seifert 2003, 57–59). Only a minor and local controversy erupted in France due to a planned risk laboratory (Bonneuil 2000). A somewhat more intense debate arose in Sweden (Fjæstad et al. 1998, 134–6).

The fact, however, that Europe hardly saw any public controversy in the 1970s does not imply a *unity* of the European publics. Already at that time polls yielded the characteristic juxtaposition of distinct national patterns of perception to be repeatedly confirmed by Eurobarometer surveys more than ten years later. Hence countries already differed profoundly in public perception at that time, without the unfolding of any public controversies. A first comparative opinion poll on biotechnology (Table 1) provides the evidence (EC 1977).

Table 1. Public perception of biotechnology within the EC Member States in 1977 (countries ranked according to their medium degree of appreciation)

Country	Genetic research is perceived as			
	Important (%)	Without particular significance (%)	Unacceptable risks (%)	Don't know (%)
Italy	49	19	22	10
Ireland	41	20	22	17
Belgium	38	20	22	20

Country	Genetic research is perceived as			
	Important (%)	Without particular significance (%)	Unacceptable risks (%)	Don't know (%)
Luxembourg	37	31	18	14
Netherlands	36	17	41	6
Entire EC	33	19	35	13
Great Britain	32	21	36	11
France	29	22	37	12
Western Germany	22	16	45	17
Denmark	13	10	61	16

Source: Cantley 1995

Differences in survey profiles notwithstanding, European mass publics largely ignored the topic during the 1970s and early 1980s. This changed only in the middle of the decade (Seifert 2003, 86–110). At a time when the US controversy already had vanished, the major European controversies involving mass publics commenced, first in Denmark and Germany, later in Switzerland and the Netherlands (Bonfadelli et al. 1998, 146–149; Midden et al. 1998, 104).

In *Denmark* public controversy followed parliamentary deliberations and the subsequent passage of a law on genetic engineering in June 1986 (Baark & Jamison 1990; Jelsøe et al. 1998). The subsequent Danish development took a very characteristic course. A kind of ‘public assessment (took) place among the citizens, at debate meetings, at consensus conferences or in the media (working) [...] as a way to secure a peaceful introduction of the new biotechnologies, rather than as a tool to shape the technologies in accordance with the results of the public assessment’ (Lassen 1999, 82; see also Jamison 1999). With the end of the decade after ample and broad public deliberations media attention faded away, the cycle came to an end.

In *Germany*, by contrast, official deliberative efforts rather triggered than appeased public controversy (Gill 1991; Landström 1993). In 1986

controversial media reporting in Germany set in when the parliamentary enquiry commission released its report and the parliamentary Greens ostentatiously withheld their recognition. The German cycle that was thus prompted climaxed during the debates preceding the German 'gene law' in 1989. The passing of the law in May 1990 marks the end of the cycle. Though groups of organised adversaries of biotechnology have remained active to the present day media discourse dropped dramatically after legislation and changed to a rather optimistic tone⁴ (Hampel et al. 1998, 67).

The four big conflicts in Europe in the 1980s show several parallels. Denmark, Switzerland and Germany, for instance, shared a particular semantic definition of the political problem of biotechnology. In each of these countries debates were initiated by foregoing debates on reproductive technology (Bonfadelli et al. 1998; Gill 1991, 107; Jelsøe et al. 1998). The network of civic adversaries in Switzerland was equally heterogeneous and internally structured as in Germany. In Germany and in Switzerland particular 'trigger events' also initiated broad controversy: in Germany the report of the enquiry commission, in Switzerland a fire in a Sandoz chemical plant in Basel.⁵

Conspicuously the Swiss conflict took place in the German-speaking region of Switzerland. Despite this fact, however, and despite the strong parallels between the German and Swiss conflict the latter does *not* represent an 'import' from the German debate, as one might conclude. Both conflicts followed their proper dynamic depending on contingent events, the respective constellations of actors and the peculiarities of political cultures and systems. Thus, the German influence did not suffice to arouse a similar conflict in neighbouring Austria, a country otherwise dominated by Germany in numerous respects. Efforts in the 1980s and early 1990s to introduce the German debate to Austria failed repeatedly (Seifert 2003, 119–121).

Thus, although there is evidence for structural similarities and common principles determining the conflict dynamics, national conflicts have a life of their own. Neither is there a way to *predict* onset and progression of a conflict. Potential trigger events, for instance, may but do not *have* to have an effect. First deliberate releases of GMOs into the environment are typical trigger events, which, however, might some-

times pass unnoticed by the general public. For example, after the downturn of the German cycle in 1990 the first GMO release took place but did not arouse intense media interest. The same holds true for France and Great Britain, where the commencement of GMO releases in the late 1980s went virtually unnoticed by the broad public.

The latter examples again signal the autonomy of national controversies. Although adversaries of biotechnology, particularly the German NGO GeN (Gen-ethisches Netzwerk), started to *extend* their networks beyond national frontiers already in the 1980s and the supranational level of the EC already gained in pertinence national mass publics behaved independently.

Nevertheless, the first half of the 1990s saw a general decline in the conflict intensity in the countries cited. Again, this does not mean that European publics have assimilated or formed a unified whole. When the Eurobarometer mass surveys on biotechnology commenced in the early 1990s (Durant et al. 1998; EC 1993; Gaskell & Bauer 2001; Marlier 1992, 1993) they showed European publics in the main retaining their particular appearance. Only media attention and political controversy decreased considerably in intensity, so that observers might have gained the impression that in Europe the era of conflict was over and that finally, undisturbed by the resistance of some scattered national publics, the integrating European Union would draw level with the USA.

Only one Member State was experiencing a public controversy in the middle of the decade: and this was Austria. Quite unexpectedly and years after the German conflict, a first GMO release escalated into a full-blown scandal in spring 1996, due to hesitant administrators and a rashly acting biotechnology company. All at once, the Austrian issue-attention cycle climaxed and hereafter media attention and political controversy remained at maximum level for more than a year. In April 1997 a popular initiative against biotechnology resulted in a clear No vote. At that time observers, aware of the fact that the conflict had waned years ago in many other European publics, considered the Austrian controversy a somewhat backward latecomer. Austria appeared as a laggard making up for years of public indifference with a considerable period of delay (Grabner & Torgersen 1998; Seifert 2003, 167–190).

The synchronisation of European publics in the mid-1990s

In retrospect, however, the laggard becomes a vanguard. It appears that Austria lagged so far behind that after a few years it actually turned out to be ahead of European trends. Since from 1997 on, a majority of European publics went through similar controversies, which reached their peaks in 1998 and 1999 (Seifert 2003, 221–227). Small countries or insignificant countries from the perspective of European biotechnology policy, such as Ireland, Greece and Italy as well as leading nations like France and Great Britain saw an upsurge of broadly based public controversies which brought about considerable changes in national policies. But also in such already ‘experienced’ countries as Denmark or the Netherlands public conflicts resumed.⁶

Surprisingly, in Germany, the ‘Mecca’ of organised criticism of biotechnology in the 1980s, no remake of the old controversy took place (Hampel et al. 2001, 192, 202). Yet, the majority of Europe’s conflicts and the most intensive among them occurred in publics which never had been critical of the subject before.

In France, except for a minor public debate in the 1970s, the topic had been virtually ignored for almost two decades, so that the country could rise to Europe’s leading power in industrial and agricultural biotechnology without suffering any interference from critical civil society (Boy et al. 1998). The turnaround came in 1997.

In the United Kingdom the tone has been somewhat more critical right from the start without, however, ever escalating to a broad public controversy (Bauer et al. 1998). In 1998 this changed dramatically.

In smaller or secondary countries like Greece or Italy the topic has been virtually absent, except for some exclusive expert-cycles. The portrait opinion research in drawing of these countries was persistently marked by a relative lack of awareness, low ‘textbook knowledge’ and ‘naive’ support and their media in effect ignored the topic. All this changed in 1997 (Allansdottir, Pammolli & Bagnara 1998; Marouda-Chatjouli, Stathopoulo & Sakellaris 1998).

In contrast to all earlier conflicts from 1997 onwards several European mass publics took up the topic more or less *simultaneously*, inducing major policy changes in Austria, France, Great Britain, Greece, Ireland, Italy and Luxembourg. The fact that all over Europe public pressure built up at the same time crucially contributed to the tightening of European policy on labelling GM food and GMO releases. In summer 1999, for instance, the authorisation process for GMO releases virtually came to an end when five countries—France, Greece, Denmark, Italy and Luxembourg—declared a moratorium until the amendment of the EU Directive on Deliberate Releases was finalised.⁷ The blockade was effective and lasts—beyond the amendment—until the present day, (begin 2003) so that today only some 15 GMOs are authorised for agricultural use.

The diversity of political cultures notwithstanding, again there is evidence for *common regularities* governing the various public controversies. Media analysis of the Eurobarometer (Bauer et al. 2001, 48–51) demonstrates an explosive increase in media activity on biotechnology by 1997 in most parts of Europe. In almost *synchronous* fashion the same actor constellations appeared and in various European countries similar themes suffused the public arena (Hilgartner & Bosk 1988).

The first media episode semantically connected to biotechnology in public discourse, which led to an instant and synchronous reaction of *all* European publics, was triggered by the news on the cloned sheep *Dolly* on February 24, 1997. The dominant theme of the *Dolly* episode, the moral anxiety that one day human beings would also be cloned, caused enormous reverberations in all European publics and due to the international dimension of the discourse, international moral authorities like the Vatican, top-class ethics committees, or Bill Clinton among other prominent politicians became vocal (Seifert 1998). While in some countries that had so far been indifferent to the topic, like Greece and Italy, *Dolly* was the first encounter of a national mass public with biotechnology (Allansdottir et al. 2001, 216–217) the episode raised critical attention and brought biotechnology into moral disrepute all over Europe.

However, the major mobilisation in Europe, at that time not yet obvious, should be directed against *agroalimentary* biotechnology. The ori-

gins of these developments date back to early 1996 when the BSE crisis already captured the entirety of European national publics. Its mismanagement by the European Commission caused widespread—again synchronously extending—mistrust in food safety and national and supranational food authorities. BSE has not been the first food scare in Europe. Food crises—salmonella, nitrite in groundwater, hormones in meat, food conservation by radiation etc.—had spread already in the late 1980s. These controversies, however, typically occupied *national* publics. BSE, by contrast, for economic, logistic, legal and political reasons became the first food scare of clearly *European* dimensions.

In the wake of this pan-European crisis of trust in autumn 1996 US imports of genetically modified but non-labelled soy and maize arrived in European harbours, which meant that, since soy and maize are major ingredients of a variety of foodstuffs, soon non-labelled genetically modified food products would appear on the shelves of European retailers, without being identifiable for the consumer. While the EU already had authorised Monsanto's 'RoundUp Soya Bean', which arrived in October 1996, a herbicide-resistant maize brand of Ciba Geigy (later Novartis) arriving in December 1996 has not even been authorised. Furthermore, each food component remained excluded from the imminent Novel Food Directive, so that foods containing them also prospectively would not be labelled.

Under these conditions the mobilisation of European publics, rallied in a well-prepared, co-ordinated campaign by various national subsidiaries of Greenpeace, was not a difficult task. The story of the US company Monsanto forcing its potentially dangerous products upon Europeans resonated strongly in European media discourse. An activist of Greenpeace confirms: 'There was massive media interest, which rendered it facile to utilise these communication canals and transmit the information. The argumentation was that here the first new product arrives in Europe. Nobody has been asked. It is not labelled. It is blended with other foodstuffs. And this is just not acceptable' (Interview Greenpeace Austria, Vienna 19.5.1998).

In the course of the mobilisation similar actor constellations again became vocal against agroalimentary biotechnology in all public arenas:

critical NGOs, occasionally also prominent single individuals. In Ireland and Greece where first deliberate releases of GMOs in early 1997 became triggers of a critical debate, the small group Genetic Concern and a branch office of Greenpeace respectively figured crucially (Sakellaris & Chatjouli 2001, 204–5).

In France the environmental NGO Ecoropa, the smallholders association Confédération Paysanne and the charismatic activist José Bové dominated the controversy (Libération 30.6.2000). Public opinion was particularly negative toward agro-alimentary biotechnology. The derogatory neologism ‘malbouffe’, synonym for genetically modified food, presumably of US origin, became popular. An image campaign of Monsanto in summer 1998 came to nothing and 2001 was declared the year against GMOs (Sinai 2001).

In Great Britain The Prince of Wales, among other prominent persons, repeatedly voiced his dislike of agro-industrial biotechnology, and in 1997 the NGOs Friends of the Earth, Gene Watch and the organic farmers organisation Soil Association formed an alliance. The big media controversy climaxed in summer 1998, when food expert Arpad Pusztai alleged to have scientific evidence for the health risks from genetically modified food in a televised interview. As a result Pusztai was fired immediately. In February 1999 an international group of sympathetic scientists declared their solidarity with Pusztai in a memorandum. The announcement of the declaration in the Guardian on February 12, 1999 made the controversy burst. The yellow press occupied the public arena and thriving on the feeling of insecurity after the BSE crisis, took an unequivocal stand against ‘Frankenstein food’ (Gaskell et al. 2001).

In those countries that experienced a mobilisation after trigger events (Dolly, food scares, first GMO releases) the initially small circle of actors expanded rapidly in the run of the subsequent explosion of media attention and actors forged *analogous alliances*. Typical for the conflict and rather new in the history of new social movements was the typical alliance between critical NGOs, retailer chains, organic farmers and smallholders respectively.

NGOs functioned as a kind of sanitary police screening for GM ‘contamination’ in food and feed products, manoeuvring retailers into a

precarious position where they could at any moment fall victim to a food scare with devastating effects on consumer confidence. Coping with this situation, retailers pushed for complete labelling and made endeavours to establish 'pure', 'GM-free' product lines. Early 2000 British Tesco declared a ban on products from GMO trial fields from its assortment (London Times 7.1.2000). Meanwhile its French counterpart Carrefour declared it would assure GM-free soy from Brazil for poultry and fish products (AgriOnline 22.2.2000). An equal reaction from the food industry followed. Mid-1999 Unilever and Nestlé declared they would take GM products from the market and the big French producer Eridania Béghin-Say launched a GM-free product line.

The pursuit for alternatives to disdained, unlabelled GM food ubiquitously resulted in organic farming being identified as a source of truly 'pure' food. Environmental NGOs supported this idea since organic agriculture fits into their models of sustainability. At the same time, retailers offered 'pure' brands of organic origin for the sake of consumer confidence. In order to stabilise the narrative of 'pure', 'natural' versus 'modified', 'manipulated' food and establish a functioning market for organic food, environmental NGOs, consumers and farmers associations, retailer chains, food industry engaged in 'boundary work' in several places (Gieryn 1983). They, for instance, participated in the legal definition of GM-free food (e.g. acceptable 'GM contamination levels') in national at supranational political arenas and, with the support of regional governments in Austria, Italy and France, declared 'GM-free zones'.

As a result of these discursive, political, economic processes a common semantic demarcation gained currency. Media and political discourse but also public opinion as portrayed by surveys gave rise to the moral contrast between negative 'green' and positive 'red' biotechnology (Bauer et al. 2001, 48–51). While scientific progress in medicine was praised as useful and valuable, industrial biotechnology in agricultural and food production was denounced as threatening, waste and serving solely industrial interests.

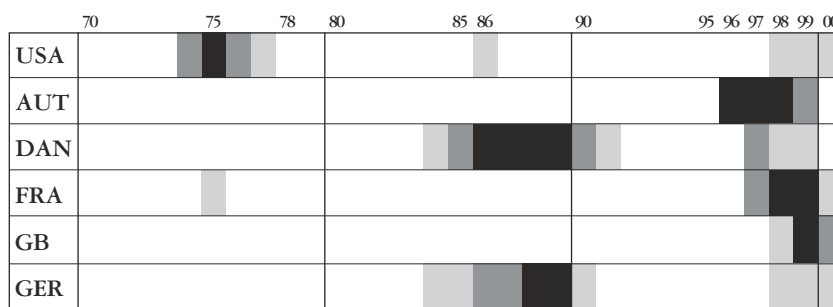
In spite of these common trends and structural similarities across Europe it is still misleading to speak about *the* European public. Still national publics showed a rather autonomous behaviour. Trigger events,

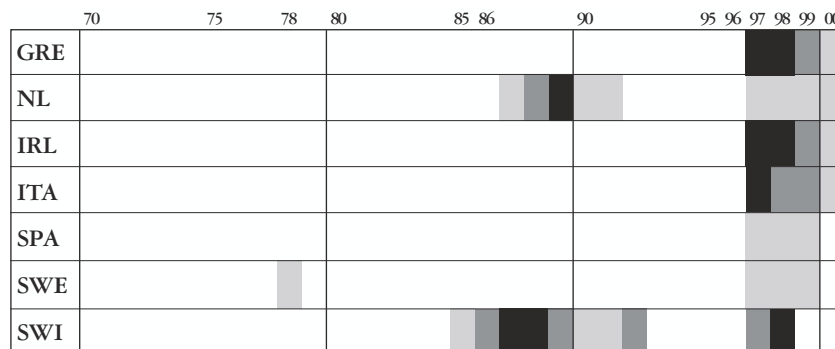
for instance, be they of local dimension, like first GMO releases, or—like Dolly—of international scope, always take hold of *national* ensembles of mass media, actors and symbolic codes.

Thus, the *internal* evolution of various public mobilisations against biotechnology varies in many ways. Media climaxes, for instance, often depend on internal contingencies like decision processes and political events: the Austrian popular initiative in spring 1997, for instance, the Swiss referendum one year later, or the French *débat publique* in summer 1998. Another source of media attention are local events. The first GMO releases in Austria (1996), Greece and Ireland (1997) illustrate that, but also scandals like the affair around Arpad Pusztai in Great Britain in February 1999.

Looking at the larger historical picture the synchronisation of European publics in the middle of the 1990s becomes evident. Figure 1 charts issue-attention cycles in several countries along a time-axis over a period of about three decades. Three different shades of grey give an impression about the estimated intensity of the conflicts. A national conflict can be indicated by light grey if, for instance, it has been rather regional in character (like the controversies surrounding risk laboratories in France and Sweden in the 1970s, or the first GMO release in the USA 1986) or of low intensity in the up- or downswing phases of an issue-attention cycle. Dark grey fields result from highs of media attention and political controversy during these years.

Figure 1. The long-term evolution of the international biotechnology conflict





Estimates are non-quantitative inferences aiming solely at giving a broad historical picture. However, they are more than purely educated guesses since they are based on an extensive research of the available literature containing a number of quantitative studies on the evolution of public opinion, biotechnology policy and media content. For Europe I refer to the various national contributions in Durant et al. (1998) and Gaskell & Bauer (2001), for the USA to Kowar (1989), Krinsky (1982), Ten Eyck, Thompson & Priest (2001).

The diagram evinces the almost synchronous onset of numerous European biotechnology debates. Austria is a forerunner, where the upswing of the issue-attention cycle was experienced by chance already in 1996 due to the public miscarriage of the first GMO release. Yet, except for Germany and Great Britain, where public attention rose with some delay, public controversies started in 1997 in the clear majority of countries. Some countries experienced a sudden upswing, such as Greece and Ireland where first GMO releases became trigger events or Italy, where the international media event Dolly brought about the turnaround. In other important countries like France and Great Britain controversies began rather slowly and reached a climax in 1998 or 1999 respectively.

Underlying causes: trans-national structures, actors and communication flows

What are the reasons for this approximately synchronous order of European controversies? One cause lies in the simultaneousness with which problems emerged in various publics. The shipments of soy and maize arrived at the same time in European harbours and the common market. Thus, various European publics faced the same problem—unlabelled GM food—at the same time.

But also one principal precondition for the mobilisation against GM food, the BSE crisis in spring 1996, was pan-European in scope. The same holds for most subsequent food scares: the dioxin scandal in early summer 1999, the debates on 'hormone beef' from the US, antibiotics in animal breeding, salmonella and the later cycles of the BSE crisis. Equally, the search for an alternative to industrial, potentially hazardous food, for 'pure' food from organic agriculture intensified across many European publics.

Simultaneousness and structural and semantic similitude of public controversies, however, do not hint at the *fusion* of various national publics. Rather they are due to their subjection to *common structural* (i.e. political, legal, economic, logistic) *conditions*. Regulations of biotechnology, as regards GM labelling, deliberate releases of GMOs and intellectual property rights, are determined at EU level (which again is interdependent with the international level, as for instance the WTO). While national governments still constitute the focus of public attention, ultimately these supranational provisions are binding. 'Deficiencies' of supranational legislation like 'grey zones' or 'gaps' in labelling regimes or persistent uncertainties in risk assessment of GMO releases, therefore, have their potential repercussions in all EU Member States.

Apart from structural connectivity, however, there is another factor accounting for the synchronous and socially and semantically analogous mobilisation of European publics. The example of the first common European mobilisation wave in the wake of the arrival of unlabelled soy and maize in Europe in autumn 1996 also illustrates the *supranationalisation of critical actors* and thus eminent *public voices*. Greenpeace International

organised its campaign (already in summer 1996, in anticipation of the ensuing sensitive situation) on a *European scale* (Interview Greenpeace Austria, Vienna 19.5.1998). Later on the rapidly condensing network of activists coordinated its actions across the whole European area, so that the organising segments of the movement were constantly informed about developments in other countries.

From 1999 on internationally co-ordinated NGOs even attempted to transfer the European mobilisation to the US public. Even though the food scandal on Aventis' Starlink maize did not grow into a full-blown mobilisation of the US public the attempt was successful at least to a certain degree. The orthodox view that US consumers and the US public acquiesce to industrial biotechnology had to be revised by survey researchers (Hornig-Priest 2000, Ten Eyck, Thompson & Priest 2001) and the US political system, particularly the FDA, initiated a tentative amendment of labelling regulations.

On the one hand, issue-attention cycles have a life of their own. Public arenas, opening when a cycle enters the boom phase, are usually dominated by certain voices but they are not *steered* by any single group of actors. On the other hand, without overestimating the influence of NGOs as agents of media controversy, they undeniably play a crucial role in semantically shaping public conflicts. By drawing moral contrasts, associating and separating semantic elements and narrating broadly echoing stories, such civil society actors typically attempt to shape public opinion and thus participate in the definition of political problems and influence political decision making. This also applies to the European mobilisation against agro-alimentary biotechnology, where, for instance, internationally co-ordinated NGOs figured centrally in establishing the contrast between pure organic food and GM food, in furthering the negative image of biotechnology industries or in pushing for precaution in GMO releases in various national publics.

Finally, apart from structural and discursive underlying causes we have to take contemporary global media dynamics into account. The conflict delivers several examples for European or international *short-term synchronisation episodes*. The cloned sheep Dolly, which filled international headlines for more than a week in February 1997, is such an example.

Also the affair around Arpad Pusztai in February 1999 (bringing about the media climax in Great Britain) ensured media attention across Europe. The international media hypes on the completed Human Genome Project in summer 2000 and the international ethical debate on stem cell research are semantically rather loosely associated.

There is no reason to assume that such *short-term episodes* would be confined to biotechnology issues. Empirically similar occurrences in Europe took place during the BSE crisis, the debate on the Euro or the Kosovo conflict (Grundmann, Smith & Wright 2000). Of course, the most spectacular media event in recent years, which created the rare case of a global public in real time was the terrorist attack on the World Trade Centre on September 11, 2001.

Conclusion

What conclusions can be drawn for the reflection on democracy from the synchronous eruption of biotechnology controversies in Europe? As I have already stated at the outset we have reason to assume that democratic political systems are currently undergoing a historical transformation from a national to a post-national order in the course of which significant processes of decision-making progressively shift from national to supra- and international levels. The normative postulation suggesting itself is directed at the democratisation of this process, a third transformation of democracy.

The European Union is alone among all the various processes bringing about the post-national order with the declared and official intention of evolving into a supranational democracy. Which, however, suffers from a major drawback: the inexistence of a European public. Sure, there is a multitude of European publics and deliberative publics might even exist at the supranational level, but these publics are reserved for tiny minorities of specialists. By contrast, those inclusive mass publics, which are historically linked to the various liberal democracies constituting the European Union are national publics.

I have tried to show that in the long-term conflict over biotechnology these national publics function as basic units of the controversy. Not only

do national publics systematically vary in their appreciation of biotechnology as decades of successive comparative surveys demonstrate. First and foremost, national publics constitute discrete communication communities with their individual horizon or relevance, their historically evolved systems of semantic references, their own prominent voices and vested interests.

Trigger events, to give an example of this extensive autonomy, always work at the national level. This is obviously true for a standard trigger: the first release of a GMO on local ground. But it is also true for international media events like Dolly. After all, Dolly being reported in the whole world prompted media attention only in particular European countries, in Italy and Greece. Even national trigger events which arouse media interest in other countries, like the case of Arpad Pusztai do not have a quarter the impact elsewhere.

Thus, on the one hand, the relative autonomy of European mass publics, as illustrated by the conflict over biotechnology, fits into the general assessment of a European Union aiming at establishing supranational democracy, while lacking a common public space.

On the other hand, in the broad picture we observe the transition from an incoherent sequence of unrelated national publics and political systems respectively to a state of synchronised political publics in the late 1990s. Since these mass publics can synchronise and simultaneously build up political pressure they might force dramatic turnarounds even upon supranational political systems.

Although there is a number of similarities, ranging from structural mechanisms underlying the dynamics of a public arena to the outcome of semantic struggles in the late 1990s and in spite of common underlying conditions provoking this synchronisation, there is no indication of a dissolution of national publics and their replacement by a common European public. The major mass publics of liberal democracy are and, as is highly plausible to assume, for reasons of culture and language will remain national publics.

Yet, synchronised national publics can at least be considered functional equivalents to the normative desideratum of a supranational (or even international) public. They are capable of producing analogous problem definitions and of exerting equally directed political pressures. For

obvious reasons such a synchronous course of events represents a much more powerful manifestation of some unorthodox representation of the 'public will' than the incoherent and temporally dispersed course of issue-attention cycles in various countries we observed during the 1980s. From a realistic perspective and considering the widening gap between (national) publics (supra- and international) elites, such a development can be tentatively welcomed. Regarding the underlying causes of the phenomenon, structural connectivity—trans-national speakers and global media dynamics—we can expect future synchronisation episodes. To some degree these episodes might constitute an element of a possible democracy after its third transformation.

Notes

- ¹ By contrast, societies marked by deep ethnic or religious cleavages were, and still are, at a disadvantage in the development of democratic institutions. Typically, they fall back on specific institutional arrangements deviating from classic, unflawed forms of representative democracy and diminishing certain elements of democracy (Lijphart 1984).
- ² The notion of cycle entails certain temporal patterns of public conflicts. They go through phases of rise, climax, downturn and fading. In the run of these cycles the mass media report exhaustively on biotechnology, the broad public becomes aware of the subject and, in one way or the other, political systems react to public pressure. Since these cycles closely coincide with media discourse, and since, as a matter of empirical fact, media discourse was and essentially still is nationally bounded and nationally orientated, issue-attention-cycles can be expected to take place at national level.
- ³ International expert networks constituting important sub-political decision layers from the very beginning are not equivalent to mass publics.
- ⁴ The downturn of the issue-attention-cycle had immediate repercussions on Germany's supranational policy. Though 'public opinion', as portrayed by opinion surveys, remained virtually unaltered after 1990 (Hampel et al. 1998, 68–69; 2001, 199–202) the waning of the media controversy allowed policy to change. While during the 1980s the country had taken an outstandingly restrictive stance on biotechnology and actively influenced EC policy and EC regulation, from the early 1990s onwards Germany's biotech policy reversed to the opposite. Germany became a driving force behind European liberalization.

- ⁵ Such a trigger event also prompted a lesser conflict in the USA in the 1980s. The first release of a GMO, the microorganism 'ice minus' in 1986, met with ardent local and federal opposition and received countrywide media attention, without, however, initiating a second issue-attention-cycle (Krimsky 1991, 113–132).
- ⁶ Also Switzerland experienced a broad public controversy around the national referendum on biotechnology in 1998. Since, however, initiatives for the plebiscite date back to 1993, the Swiss controversy must be considered rather outside the general European dynamics (Bonfadelli et al. 2001, 282–283).
- ⁷ Later on Austria and Belgium joined the blockade group.

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