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# Local steps in an international career: a Danish-style consensus conference in Austria

Franz Seifert

The article gives an account of the first Austrian nationwide Danish-style consensus conference, held in the summer of 2003, treating policy issues related to genetic data. Consensus conferences are currently widely discussed for their promise to democratize fields of technological decision-making which are both crucial to the fate of modern society and inaccessible to public involvement. Instead of evaluating the “democratic efficiency” of the deliberative exercise, the essay will contextualize the event in local, as well as international developments comprising discursive, institutional and political elements. Rather than offering definitive claims about the normative significance of the rapidly diffusing deliberative technique, the discussion of a local experience with it will arrive at ambivalent conclusions.

## 1. Introduction

The relationship between technology policy and the public is structured by two major countervailing developments. On the one hand, nations are locked into a global race for technological innovation. An economy's capacity to create and exploit high-tech innovations has come to be considered crucial for the making and preserving of the wealth of nations. Political systems of the OECD area and a growing number of emerging economies therefore came to prioritize this capacity and to instigate a variety of programs and reforms for its promotion (Larédo and Mustar, 2001).

On the other hand, new social movements occasionally might succeed in hampering, or even blocking technological modernization projects. While employing a broad spectrum of political strategies, their most potent political tool is the rallying of mass support. Making use of rare situational opportunities for attracting mass attention, drawing on moral authority and challenging the legitimacy of government and corporate interests, protesters at times may muster general approval and thus force political systems to revise or even step back from technological projects. The current halt of agricultural and food biotechnology in the European Union is but the most recent illustration of this massive veto potential wielded by the general public and its mobilizing agents respectively.

As a result, new ways are sought to cope with these “problematic publics” (Davison et al., 1997). Besides eagerly surveying public attitudes in delicate fields such as risky or

ethically dubious technologies, political systems draw on a widening repertoire of “participatory” and “deliberative” approaches for the public. The discourse accompanying these practices regularly depicts technological change as a generator of ethical ambiguity, whose responsible use requires more informed, more legitimate political approaches.<sup>1</sup> The participatory and deliberative techniques employed for this purpose take on a multitude of shapes, ranging from “round tables” with experts and interested parties to “citizen polls”, which entail more or less representative samples of “the people” (Weale, 2001). Accordingly, the factual achievements and normative evaluation of such experiments with public involvement in the policy process vary. It can be regarded as a purely technical source of scientific expertise, allowing regulators and policymakers to keep up with rapid technological change. In such cases, deliberative and participatory techniques go along with the functional-elitist conceptions of the state.

More frequently, however, participation and deliberation are associated with normatively demanding “models of democracy,” which disapprove of legalistic or technocratic state conceptions, add to and go beyond the set of constitutionally prescribed procedures of representative democracy.<sup>2</sup> Deliberation then implies the Habermasian notion of a “coercion-free discourse” antithetical to a real world of closed bureaucracies and vested interests. While participation hints at similarly idealistic, egalitarian and emphatic ideas of democracy, it implies inclusion and the enlargement of the circle of participants.

Likewise, since the “technological issues” at stake are of a complex nature and require special cognitive effort from laypeople to be properly understood and debated, a democratic rationalization of the various emerging participatory and deliberative practices needs to reflect on the normative status of the social distribution of knowledge. Again, we observe a tension between functional-elitist and egalitarian notions of knowledge. Conventional advisory committees use certain approaches under the headings of “Participatory Technology Assessment” (TA), “Technology Delphis,” and—currently in vogue—broad information campaigns promoting the “Public Understanding of Science,” coinciding with expertocratic approaches as they affirm the distinction between the cognitive haves and have-nots.<sup>3</sup> Conversely, participatory exercises such as “citizen juries” or “consensus conferences” aim at overcoming the expert/lay divide and concede to the general public the required intellectual capacity to arrive at wise decisions in technological matters.

The current debate on the political shaping of technological change gains its impetus from the tension between these normative poles. It reiterates a number of questions. Do experiments with deliberation and participation in technology policy actually signal a move from “the powers that be” to some version of “strong democracy” (Barber, 1984)? If the public is involved, who actually is involved? Do such techniques engage a representative majority or, more likely, only a minority of the public? And how real, how consequential, is this involvement? Do they ignite wider “public debates” and contribute to the formation of an informed public opinion, which might ultimately leave its mark on regulation and policy formation? Or do they pass without substantial effect and mainly help authorities to garner acceptance and present themselves as a responsibly acting government?

Far from promising unambiguous answers to these questions, the following article aims at adding to the debate by highlighting a deliberative exercise—a “consensus conference Danish-style”—recently carried out in Austria. Its intent is not to give a technical “evaluation” of this exercise based on standard criteria.<sup>4</sup> “Evaluation of the performance of public participation,” as Steve Rayner recently mentioned, “is problematic.”

It is almost exclusively self-evaluation performed by the organisers of the consultation or engagement activity or sympathetic evaluation by social scientists known to be

committed to the principles or techniques employed. Most evaluation is of single projects. There is very little systematic or comparative evaluation across multiple sites and different techniques. The focus of evaluation is almost exclusively process based, for example, looking at how closely the activity corresponded to Habermasian “ideal free speech” or how the participants behaved or said that they felt about each other. (Rayner, 2003: 167)

Rather than measuring the “performance” of the participatory event, this account will take a slightly different approach. While it portrays yet another national experience with a participatory technique, it will also focus on contextual information and regard the Austrian deliberative conference against the background of recent political developments at the national as well as international level. Its aim is not to arrive at a conclusive assessment, but to raise further questions about the normative significance of experimenting with participatory and deliberative techniques by highlighting their local occurrence, which might inspire more research in the future.

Empirical statements are based on interviews with key actors among organizers, observing journalists and advising experts, as well as the study of related documents and online searches of media reports. As regards Austria’s political culture and its recent dynamics, the analysis draws on abundant materials derived from a research project on Austria’s biotechnology policy under conditions of globalization.

Before going into the details of the Austrian experience, an outline of the Danish consensus conference model as well as its international career in recent years will be given. Then follows a draft of Austria’s political culture, as it pertains to participation and deliberation, and recent trends in the transformation of this culture.

## **2. Danish-style consensus conference: an international career**

The “Danish-style” consensus conference is one among a number of deliberative variants committed to an emphatic model of democracy. Beyond making available more direct channels of influence on political decision-making to “the people” than those provided by the institutional repertoire of representative democracy, the Danish consensus conference aims at reversing the hierarchy between laypeople and experts.

The procedure foresees that about a dozen “ordinary citizens” engage in an informed debate on a complex, mostly technological issue with the goal of attaining a common position, which in turn, might serve as a recommendation for political decision-makers. First, the organizers select citizens randomly or according to some representative criteria. Care is taken to ensure that volunteers, while showing concern for the matter, are not politically involved in the subject in order to avoid distortions of sound debate owing to single interest interventions. Then, in preparation, the lay panel is provided with abundant information and enabled to question experts of its own choice. Participants are supposed to be in full control of the interviews as well as the final debate and to arrive at conclusions as autonomously as possible. Their concluding suggestions are publicly handed over to the authorities, whose constitutional prerogatives, however, are not affected. The conference’s recommendations remain optional and are not binding to the political decision-making process.

The term consensus conference has its origin in US technology assessment (TA) process and is still widely used for certain types of expert summits on medical issues. The understanding of the consensus conference as a citizen-based deliberative exercise, however, had emerged in the Danish political culture of the 1980s, well known for its prolific

**Table 1.** Consensus conferences in Denmark

Year	Issue
1987	Gene Technology in Industry and Agriculture
1988	The Citizen and dangerous Production
1989	Human Genome Mapping Food Irradiation
1990	Air Pollution
1991	Educational Technology
1992	Technological Animals
1993	The Future of Private Automobiles Infertility
1994	Electronic Identity Cards A Light-green Agricultural Sector Information Technology in Transportation
1995	Chemical substances in Food and the Environment Gene Therapy
1996	The Future of Fishing Future Consumption and Environment
1997	Teleworking
1999	Genetically modified Food
2000	Noise and Technology Electronic Surveillance
2001	Roadpricing
2002	Testing our Genes
2003	How do we assign Value to the Environment?

Source: <http://www.tekno.dk> (accessed June 2005).

experimentation with inclusionary, participatory practices. There, it was the influential Danish Technology Board that first employed the instrument in the mid 1980s.<sup>5</sup> The Board, which had been established in order to assess the social impacts of new technologies and to advise the Danish parliament and government, pursued an outspokenly democratic approach. It stressed the egalitarian elements of consensus conferences, which should be designed to foster public debate, break expert dominance and enhance the status of the “ordinary citizen.” The first consensus conference in that vein discussed the subject of “biotechnology in industry and agriculture.” It was held in 1987 when Denmark went through a comprehensive public debate on biotechnology.<sup>6</sup> To this day, 22 conferences have followed in Denmark (Table 1). They have treated issues as diverse as human infertility and noise pollution. The most recent one took place in 2003 and addressed the problem of determining the monetary value of environmental benefits and losses. Scheduled for November 2005 is a consensus conference on brain science.

The Danish consensus model proved successful locally. In the 1990s, institutions in a number of industrial nations experimented with the Danish model (Table 2). Typically, national TA agencies embraced the deliberative exercise. For example, the “Rathenau Instituut” in the Netherlands, the “Zentrum für Technologiefolgen-Abschätzung” in Switzerland and the “Teknologirådet” in Norway became local centers repeatedly conducting consensus conferences. So it seems that, ironically, the effort of egalitarian de-specialization spawned new breeds of specialists, that the international rise of the Danish consensus technique aiming at subordinating the esoteric knowledge of expert elites to the common sense of “ordinary laypeople” is linked to the emergence of new expert networks and academic career venues for intellectual authorities in technological egalitarianism.

**Table 2.** Consensus conferences Danish-style worldwide

Year	Country	Issue
1993	Netherlands	Genetically modified Animals
1994	United Kingdom	Plant Biotechnology
1995	Netherlands	Research in Human Genetics
1996	Netherlands	Natural Resources
	New Zealand	Plant Biotechnology
	Norway	Genetically modified Food
1997	Austria	Tropospheric Ozone
	USA	Telecommunications and Democracy
1998	France	Genetically modified Organisms
	Japan	Gene Therapy
	South Korea	Genetically modified Food
	Switzerland	Electricity
1999	Australia	Genetically modified Food
	Canada	Genetically modified Food
	Japan	Information Society
	South Korea	Cloning
	New Zealand	Biotechnological Pest Control
	Switzerland	Genetically modified Food
	United Kingdom	Radioactive Waste
2000	Israel	Traffic
	Norway	Genetically modified Food (follow-up to 1996)
	Norway	Elderly People in the Information Society
	Switzerland	Transplantation Medicine
2001	Germany	Genetic Testing
	Israel	Unemployment
	Norway	Stem Cells and Therapeutic Cloning
2002	USA	Genetically modified Food
2003	Austria	Genetic Data
	Norway	Future Heating of Norwegian Homes
	USA	Future of Food
2004	Switzerland	Research involving Human Beings
	Italy	GMO Research
2005	USA	Responsible Nanotechnologies

Source: <http://www.loka.org> and research by author.

Another accompanying feature of the international rise of the Danish consensus model is its close association with issues related to genetic engineering and biotechnology. The high incidence of consensus conferences on these issues is remarkable, as well as the fact that the international use of the Danish model for these is higher than in Denmark itself: while in Denmark about 22 percent of all consensus conferences focused on biotechnology, in the international environment the share is 58 percent (Tables 1 and 2). Furthermore, among consensus conferences on biotechnology, debates on genetically modified food stand out: in seven out of the 16 countries that had consensus conferences, those conferences were conducted on genetically modified food.

Evidently, these proportions mirror the institutional perception of biotechnology as a public problem in many countries, or as one might also put it, the perception of the public as a problem for supportive biotechnology policies in these countries. Without suggesting a simple causality, one might contend that the international rise of the Danish consensus model—to a considerable extent—owes itself to the international rise of public controversies over biotechnology. This picture is confirmed by the fact that in most countries that held

consensus conferences on biotechnology issues, the general public was either particularly sensitive, had experienced sharp biotechnology conflicts in the past, or was presently going through such conflicts.<sup>7</sup> Equally, the climax in consensus exercises on genetically modified food in the late 1990s, when national and European authorities were under pressure from a strong movement against these foods, testifies to the strong linkage between experimenting with deliberative techniques and occurrence of public conflicts.

### 3. Austria: political culture, modernization conflicts and recent ruptures

To better gauge the Austrian experience with the Danish model, the local context first needs to be taken into account. The features of this context are a rather unreceptive cultural and institutional milieu for participatory initiatives, an occasionally powerful protest culture and, since 2000, far-reaching political ruptures.

First, political culture and mentality are a result of history, which, in the case of Austria, is one of late and interrupted democratization. Neither the Habsburg Empire with its subtle, seemingly ever-lasting rule, nor the authoritarian, Catholic “*Ständestaat*” from 1934 to 1938 or Austria’s subsequent incorporation into the Nazi German *Reich* until 1945 were particularly conducive to the development of civic virtues in Austrian political culture, least of all of progressive ideas of “participatory democracy.”

Second, in the years of the “Second Republic” from 1955 onward, the Austrian bureaucracy constituted a major obstacle to participatory experimenting. Being both highly influential and inaccessible to citizens’ demands, administrative expert elites typically prepare laws and design policies in seclusion.

Third, two major governing parties typically dominated political life, at the expense of groups at the margins of the political spectrum. For a long time, these parties were the Social Democrats (*SPÖ*) and the conservative Austrian People’s Party (*ÖVP*), governing in a “Grand Coalition.” The formation of a new coalition government of *ÖVP* and the right-wing Freedom Party (*FPÖ*) in February 2000, however, shattered the system. Though, since then, the Social Democrats’ influence in public life is being progressively dismantled, the system has not become more inclusive. Rather, the subsequent polarization of political life has brought about a hardening of government policy.

Fourth, the “social partners” classically are part and parcel of the Austrian decision-making process. The neo-corporatist arrangement, joining together corporate labor and capital, had been set up in the postwar years in order to negotiate class compromise at elite level and thus forestall open social striving of the working classes. A key element of the arrangement is its avoidance of public controversy. Decisions are intimately negotiated behind closed doors, while symbolic controversies divert public attention.<sup>8</sup> The influence of this neo-corporatist arrangement equally retreated in recent years, accelerated by the government’s reshuffling in 2000.

If party dominance and opaque decision structures are averse to public debate on common issues, policies pertaining to science and technology are even more remote from public scrutiny. One reason is that, traditionally, such policies were of minor importance for the rather retarded development of Austrian high-tech industries. Furthermore, policies supportive of science and technology, for a long time depended (and to some degree still depend) on fragmented and clientelistic structures and therefore remained hard to grasp for the public. And finally, media interest in science and technology is traditionally moderate in Austria.<sup>9</sup>

Then again, the Austrian public is far from being entirely unmoved by issues linked to science and technology. On some occasions, powerful protest movements scored veritable victories against the political establishment by mobilizing the public against technological projects (Gottweis, 2000). In the late 1970s, a civil movement of unprecedented force obstructed governmental plans to put a nuclear power plant into operation, and thus blocked any future use of nuclear power in Austria. Later, in the mid 1980s, the equally spectacular thwarting of a hydropower project led to the formation of the “Greens,” who, since then, have constituted one of the four parliamentary parties. Finally, in the late 1990s, the controversy over genetically modified food and agricultural biotechnology aroused the public ire, provoking the second largest popular initiative in Austria’s political history and forced the government to adopt highly rigorous biotechnology policies.<sup>10</sup>

These contentious episodes left their marks on Austria’s political culture. Besides the parliamentary Greens, a dense web of environmental non-governmental organizations (NGOs) has taken root, some of which in a latent alliance with the powerful popular press. Even so, the protest strand in the country’s political culture has not brought about its “participatory modernization.” Official political discourse stresses the importance of environmental protection and consumer safety and a number of environmental associations are supported and thus, to some degree, are co-opted by the state. However, there is neither an animated and autonomous public debate on trajectories of technological modernization, nor any experimenting with institutional channels conducive to such a debate (Seifert, 2003).

Finally, an appropriate account of Austria’s political landscape needs to consider recent ruptures. The importance of the change from the seemingly everlasting Grand Coalition to a conservative coalition government in early 2000 can hardly be overestimated. As one major consequence, the traditional consociational pattern of conflict resolution gave way to a rather adversarial style of political decision-making.<sup>11</sup>

This Austrian “*Wende*” also finds expression in major institutional restructurings in higher education, science and technology policy.<sup>12</sup> In an unprecedented move, the country’s research infrastructure—universities and public research institutes—was subjected to far-reaching reforms. The overall aim was to enhance international competitiveness, striving to undo the ills of fragmentation and the until now common “something-for-everybody principle” in technology policy that had obstructed policy initiatives for so long in the past. Therefore, centralized hierarchical decision structures covering all domains of state-funded applied research are being installed, while public spending is being cut in research fields deemed useless for enhancing national competitiveness, such as the arts, humanities and social sciences. Again, rather than being consensually established out of consideration for affected groups, often decisions were pushed through, often against severe protest.<sup>13</sup>

#### 4. The Austrian “*BürgerInnenkonferenz*”

In the consensus conference titled “*BürgerInnenkonferenz. Genetische Daten. Woher, Wohin, Wozu?*”<sup>14</sup> the issue under debate was the potential use and abuse of genetic data. The conference was the second of its kind in Austria, yet the first—at least according to its stated intent—of nationwide impetus.<sup>15</sup>

Sponsor of the conference was the “Austrian Council—*Rat für Forschung und Technologieentwicklung*.” In 2000, the committee, composed of eight personalities from industry and academia, had been instated by the new Austrian government to function as a central advisory body in designing and steering the current reform in science and technology policy. The highly influential commission thus represents a major element of the recent rupture.



From its very beginning, the improvement of public acceptance of science and technology figured high among the Council's priorities. In September 2002 the Council instigated a broad image campaign comprising, among others, three public relations (PR) and lobbying companies, some editorial offices of the Austrian broadcasting agency *ORF*<sup>16</sup> and various ministries and private associations engaged in the enhancement of the "Public Understanding of Science" (RFT, 2003). The awareness campaign consisted of 40 projects, among them, the creation of a trademark in science and technology, the launching of the web-based image campaign [www.innovatives-oesterreich.at](http://www.innovatives-oesterreich.at) and the establishment of "centers of communication" endowing large research corporations with know-how in public relations. The consensus conference was one among these initiatives.

The idea to run a deliberative exercise as part of the general awareness package had come up in early 2001.<sup>17</sup> "Communication Matters," one of the three PR agencies, who so far had been engaged in conventional science communications, and civil servants from the ranks of the ministerial bureaucracy brought it up and got it through the steering committee in charge of the campaign.

The PR agency was inexperienced in running consensus conferences. To better understand the deliberative technique project managers first had to enquire with local and international experts and review the literature. Actually, acquiring this expertise was among the agency's main motives for engaging in the exercise. By capitalizing on the favorable circumstances of a well funded image campaign, the new technique could be tried out at an early stage: there is an international trend towards consensus conferences, which might represent a promising model for the emerging domestic market in science communication. Acquiring firsthand know-how would provide a competitive edge should it come to the broader implementation of the model in Austria (Menasse, 2003: 68).

Conversely, the issue to be debated in the consensus conference was of minor importance. Initial ideas had revolved around problems of nuclear energy, traffic congestion or human stem cell research, but they were all discarded for being too controversial. Finally, the problems surrounding the production, use and possible abuse of genetic data were chosen as the appropriate issue to be debated.

There was no obvious reason for suggesting this choice. The large public outcry in Austria over genetic engineering had focused on different issues—biotechnology in food and agriculture—and had disappeared from the media agenda by 2000. Furthermore, with respect to genetic data no decision-making process was imminent and no debate going on.

However, the topic was "at hand." In 2001, the Austrian Council had instigated a major technology initiative: the genomics program GEN-AU.<sup>18</sup> In the wake of GEN-AU, exercises in interactive science communication focusing on genetic testing already had been carried out. The organizing association, "*dialog < > gentechnik*" (*dialogue < > genetic engineering*), had the required expert knowledge and, upon request from the organizers, proved eager to provide its expertise in the planned consensus conference.<sup>19</sup>

Considering the group's origin and *raison d'être*, its eagerness to contribute to the conference is not surprising. *dialog < > gentechnik* had come into being in the late 1990s as the direct result of the Austrian biotechnology conflict. At that time, faced with acute public hostility, Austria's biotechnological research community had set up the organization with the aim of actively fostering the public image of Austria's bioscience.<sup>20</sup>

In other cases, the organizers' quest to integrate external information sources and thus social protagonists into the project worked out as well, albeit less smoothly. When an expert from the major Austrian TA unit was invited to participate, he and the backing institution fervently refused at first. The fact that a commercial agency was conducting the procedure as

part of a broad image campaign with the ultimate purpose to advance public acceptance for science and technology did not correspond with the institution's normative understanding of a deliberative exercise.<sup>21</sup> Yet, after some discussion, the expert fitted into the arrangement.<sup>22</sup>

Finally, the TA expert, an executive of *dialog < > gentechnik*, a university professor in molecular biology, at the same time chairman of *dialog < > gentechnik*, and a university professor in the sociology of science constituted a working group responsible for designing the exercise (science.orf.at, 2003). As well as the required cognitive input, this broader inclusion of external scientists from academia helped to bestow the procedure with the air of impartiality and legitimacy.<sup>23</sup> With the working group's help, another advisory body—the scientific advisory board—was assembled. It comprised seven experts covering the fields of technology assessment, medicine, bioethics, human genetics, policy and law. These experts then proposed a larger range of experts as candidates to be questioned by the laypeople during the conference (Communication Matters, 2003: 52–7).

In order to compose a representative lay panel, invitations were sent to a random selection of 4000 people, 105 of whom submitted letters of application. From these, 12 people were finally selected according to demographic criteria.<sup>24</sup> During two workshops in April and May 2003 participants acquainted themselves with the issues at stake and consented on a catalogue of issues to be examined more closely.<sup>25</sup> These issues were genetic counseling and research, genetic screening, data protection and ethical aspects. Other subjects under discussion such as prenatal diagnosis, preimplantation genetic diagnosis and research on human stem cells were discarded for reasons of time limitation. Next, from the issue catalogue, the lay panel formulated a number of questions and chose a selection of experts from the list composed by the advisory board to whom the questions were to be addressed.

The expert hearings took place on a Friday and Saturday in late June. The Sunday thereafter was dedicated to the working out of a set of recommendations which consisted of various major points such as: the obligatory provision of psychological counseling for patients faced with a grave diagnosis, the improvement of public education on genetic data, public support for independent research, cautious regulations for mass screenings, highest standards in data protection and a lowering of the age limit for voluntary genetic testing.

On Monday, these recommendations were presented in a press conference and formally handed over to the chairman of the sponsoring Austrian Council, who, together with the organizers, declared the deliberative exercise a success worthy of further consideration (science.orf.at, 2003). Some days after, a delegation of the conference, the Council's chairman and the head of the organizing PR agency handed the recommendations over to the Chairman of Parliament who welcomed the initiative and promised to pass the conference's recommendations on to members of parliament.

Public and media attention for the event was very poor. Apart from observers with a professional interest and participants immediately involved, only interested visitors attended the press conference. Just as small was the event's resonance in the mass media, the *ORF* was the only media group to take any real interest in the conference. Highlights included a story in the *ORF* late news and a background report in an *ORF* radio program. Also, the *ORF* Internet platform for science news, involved in the broad information campaign on science and technology, covered the event with four reports and two commentaries. Much feebler was media reporting beyond the *ORF*. The private print media corporations took little notice. Online research resulted in five articles in three daily newspapers and about an equal number in more specialized journals.

## 5. Discussion

It is difficult to conclusively assess the political impact of the *BürgerInnenkonferenz*. Rapid technological change drives decision-making in Austria as elsewhere, rendering future debates unforeseeable. Yet, given the virtual absence of current debates on issues related to genetic data, such an influence on regulation or policymaking is improbable.

As all evidence demonstrates, political decision-makers never took notice of the event. While the citizens' recommendations had been passed to parliament with much fanfare, the issue was never discussed or even mentioned in parliamentary deliberations.<sup>26</sup> Nor were administrative policymakers ever systematically confronted with the results of the deliberative exercise.<sup>27</sup> Furthermore, at that time, there were virtually no legislative projects upon which the consensus conference could have had any effect.<sup>28</sup> Neither the Austrian Data Protection Act nor the Electronic Data Transmission Act, which regulate aspects of genetic data protection and therefore might be considered candidates for political influence, were being amended at the time of the exercise. The same holds true for the Austrian Act on Genetic Engineering.<sup>29</sup> Imminent at the time of the conference was the amendment of the Act on Reproductive Medicine. In this case, however, debates which might have had an impact on the process, like a debate on human stem cell research, were excluded from the panel's agenda, either in the conceptual stage or in the course of the panel's deliberations. Such definitional exclusions were warranted with time pressure or—outspokenly—with the topic's controversial nature. The avoidance of contentious matters was among the organizers' goals, whose major interest was to successfully stage an innovative device of scientific communication.

If there was no relevant political effect, one might search for effects the consensus technique had on the wider public. As is standard with deliberative exercises, the quest for a "broad public debate" was among the stated motives. From a normative perspective, such indirect effects may indeed be considered crucial: common sense assessments carried out by a handful of selected citizens hardly represent "the people" of a given polity, nor do they necessarily supersede technical expertise routinely invested in the policy process. Moreover, since outside of Denmark, consensus conferences are run as mere procedural experiments, their legal legitimacy with respect to the flow of authoritatively binding decisions is unclear, which leaves them usually with the status of an advisory committee, among others, delivering their recommendations on a non-binding basis. All this might lead us to consider the actual results of a consensus conference as less important than its various effects such as, for instance, the triggering of media debates or the demonstration of the very possibility of the "technological citizen."<sup>30</sup> Likewise, it is these side effects on the larger public from which we might realistically expect any substantial influence on the political decision-making process.

The fact that no such side effects occurred in the Austrian case does not come as a surprise for anyone acquainted with Austrian media discourse on science and technology. While organizers were eager to publicize the event, "scientific" matters rarely attract public attention. Moreover, since there was no perceptible political significance, newspaper editors didn't have any incentive to report on it, notwithstanding the PR agency's professional efforts to spread the word. At any rate, the virtual absence of media resonance reinforces the impression of the event's general pettiness. Did the deliberative exercise have substantial political effects? Did it trigger a larger public debate? The answer to these initial questions is most probably negative.<sup>31</sup>

Yet, the Austrian experience raises interesting questions. One might reflect on the Austrian case in the context of a broader international development, in the course of which

political systems adopt deliberative techniques in potentially contentious modernization fields. Comparative aspects arising from such a perspective ask for local conditions furthering, impeding or modifying the normative objectives of this practice. More specifically, one might ask whether the non-controversial nature of the issue had any impact on the process. It appears that the lack of a public controversy was among the factors providing the ground for the harmonious course of the citizens' deliberations and the ease by which they attained consensus. If one considers the Austrian controversy over agri-food biotechnology in the 1990s—which generated one of the fiercest technological controversies ever in this country and which did not leave any scope for compromise in virtually hundreds of public round tables taking place at that time—this is not a trivial achievement. But there seems to be a price that is paid for harmony, at least if one takes the example described above, an example of an event with no political impacts of significance and irrelevant in the media.

If that is the case, one might wonder, why run the deliberative exercise at all? Publicly, the event remained hardly visible, politically a non-event. But perhaps it is precisely these qualities that make the issue eligible for examination. In fact, a number of observers concluded that issues were selected precisely *because* they were not on the public agenda, debates mediated in ways *excluding* contentious matters. The proximate reasons for this cautious approach might be sought in the organizers' stated aim of primarily "trying out" a communication technique in vogue. Co-opted actors might have had their respective motivations, ranging from taking part in an academic exercise to promoting the traditional view of a "Public Understanding of Science," while the funding body understood it as part of an awareness package for the advancement of science and technology. At any rate, it was desirable for the consensus conference to become a "success," with success being defined as accomplishing a state-of-the-art consensus conference with some presentable "consensus" as output. The normative reason of somehow improving democracy by instigating an acclaimed, new form of participatory device could function as an overarching narrative for all participants and the public alike while the fact that democracy implies both consensus *and* contention could be disregarded for the moment.

Furthermore, one might ask how much of the outcome was the result of the design of the consensus conference itself and how much was due to Austria's sociopolitical context. As has been pointed out, Austria has no great tradition of experimentation with citizen participation; neither do its rather conservative political culture, bureaucratic paternalism, party dominance, and traditional consociationalism provide receptive conditions for inclusionary, deliberative initiatives. In this regard, it stands in stark contrast to Denmark, with its "historically rooted predilection for integrative processes" (Whiteside, 2003: 155). This difference alone would not preclude a deliberative evolution in Austrian science and technology policy—sociopolitical contexts might change—but current ruptures were not favorable to the emergence of such a tendency either. On the contrary, the Austrian *Wende* rather intensified adversarial politics and, in the fields of science and technology, diminished existing forms of deliberation and participation by instating more centralized and hierarchical decision structures.

If one accepts the premise that public (or media) interest increases with the potential political consequence of an event—an assertion which, at least in the negative, is supported by the Austrian case—a consensus conference would need to have some political weight to attract attention and catalyze broader public debates. This, however, would require political decision-makers to allow for its outcomes to be unpredictable and to have real consequences or, in other words, for a sharing of power. Nothing in current developments hints at such a willingness.

This is not to say, that Austrian policy of technological modernization is usurped by party politics, opaque bureaucracies and corporate interests, nor that it is entirely unresponsive to public demands. A case in point illustrating the contrary is the Austrian movement against agro-alimentary biotechnology. While this movement pervades many EU countries, its Austrian manifestation is clearly among the most vigorous, comparable to those in Denmark, France, Italy or Greece. It was, to give some measure, powerful enough to deter any genetically modified organism (GMO) release into the environment and to push authorities to set up complex legislation designed to preclude commercial releases of GMOs for years to come. This compliance with public demands is not to be underestimated as it impinges upon significant corporate interests and puts government at risk of colliding with more permissive EU legislation. The victory of this movement, however, is not due to exercises in public deliberation but to the exertion of public pressure.

Once more, we face the dilemma of “problematic publics” which—in order to have some political impact—become entangled in the game of power and prove resistant to any attempt of their being deliberatively “domesticated.” From a Habermasian viewpoint, this state of affairs seems deplorable, and to some, the Danish model, having set out on its astonishing international career, appears as a promising approach to resolve the dilemma. From this experience in Austria demonstrating another application of the deliberative practice, one might arrive at more ambivalent conclusions.

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### Notes

- 1 For the gulf between a rhetoric of openness, increasingly popular among policymakers, and the institutional reforms required for its realization see Levidow and Marris (2001).
- 2 For a comprehensive outline of democracy’s diversity see Held (1996), for demanding models of democracy, Cohen and Rogers (1995) and Fishkin (1991).
- 3 A notable example for an expert-based variant of participatory TA was set by Wolfgang van den Daele et al.’s discursive arrangement treating the contested environmental and health risks of transgenic herbicide-resistant crops. Representatives of corporate promoters and civil society opponents of agricultural biotechnology engaged in a controlled “ideal discourse” on the risks of genetically modified food crops. Since they were provided with all scientific expertise necessary to warrant their argumentation the procedure ultimately resulted in the creation of an interdisciplinary library on the contested issue. Expertise thus antagonistically assembled ultimately proved useful to regulatory elites (Van den Daele et al., 1997). An account of a “Technology Delphi” is given by Grabner et al. (2002). The same anthology also contains various accounts of types of participatory TA which promote laypeople’s rather than expert deliberations. In fact, “consensus conferences” to be discussed shortly can also be understood as forms of participatory TA. For an article epitomizing the early, elitist discourse on the “Public Understanding of Science” see Durant et al. (1989).
- 4 In recent years, an academic discussion on the formal evaluation of consensus conferences has unfolded. For an early assessment of a Dutch consensus conference see Mayer et al. (1995). Joss (1998) assesses the deliberative procedure in its Danish place of origin. The first holding of a Danish-style consensus conference in the United States is analyzed in Guston (1999). For a recent German consensus conference see Zimmer (2002), for Australia see Mohr (2002). For a first comparative framework see Mayer and Geurts (1998). Further suggestions for a more formalized assessment were put forward in Rowe and Frewer (2000) and Rowe et al. (2004). For pioneering comparative work see Einsiedel et al. (2001).
- 5 The “*Teknologi-Rådet*,” established in 1985 (<http://www.tekno.dk>). It is worthwhile noting that the consensus conference is only one within a wider repertoire of deliberative procedures employed and in part developed by the Technology Board, consisting of citizens’ and parliamentary hearings, development spaces, future panels, future search and voting conferences, perspective and scenario workshops, and policy role plays. Among these

the consensus conference and the scenario workshop are genuine developments of the Technology Board (Andersen and Jaeger, 1999).

6 Of which Jesper Lassen noted:

What is characteristic about the Danish development is that besides the rather traditional assessment of the new biotechnologies by experts, an important part of the policy has been to stimulate a public assessment taking place among the citizens, at debate meetings, at consensus conferences or in the media. The . . . public assessment has perhaps more worked 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)

7 A case in point is the French controversy over biotechnology in the course of which the first consensus conference in France, the “*conférence citoyenne*,” was held in summer 1998. What is remarkable about the event is the outstanding media attention and political salience it gained, mainly due to the importance of government discourse allocated to it while going through a profound policy change: “the people” was to be “inscribed” into the emerging “policy-narrative” (Gottweis, 1988). Equally remarkable is that, in spite of the public dramatization of the *conférence*, critique could not be placated. In fact, the full blown French anti-biotechnology mobilization, connected with field trial vandalism and the vocal farmers’ group “*Confédération Paysanne*” only came into existence about a year *after* the event (Joly and Marris, 2003; Joly et al., 2003). For a discussion of the consensus conference and subsequent deliberative events in the context of French political culture see Whiteside (2003). Instructive regarding the appearance of and semiotic strategies adopted by the *Confédération Paysanne* are Heller (2002) and Martin (2005).

8

Symbolic politics means that—by way of invocations, promises and assurances—the public is given the impression its interests are effectively taken care of. In Austria, the theatrical pathos of an ostensible controversy always goes along with consociational decision-making. Austrian functionaries often practice harmony internally while pretending disagreement on the surface. (Gerlich, 1997: 508, original German)

9 Hence, already in the late 1980s and 1990s decision-makers in the reluctantly emerging field of science and technology policy repeatedly came up with demands for an enhancement of public awareness.

10 The popular initiative is—beside the referendum and the public opinion poll—one of three instruments of direct democracy provided by the Austrian constitution and after having been held 31 times in the postwar republic it is the one most frequently applied. Its function is to oblige parliament to address a legislative initiative, provided the initiative rallies at least 100 000 signatures. As parliament decides and popular initiatives frequently are being exploited by the opposition its claims quite often remain without concrete consequences. Nevertheless, the level of citizens’ support mobilized clearly points the way for government who would hardly get away with ignoring a successful initiative’s demands. The claims advanced in the popular initiative against biotechnology—no GMO releases on Austrian ground, no GM food and no patents on life—mirror the general thrust of the popular movement driven by ecological, agricultural and religious NGOs as well as the highly influential Austrian yellow press. It is important to note, however, that the movement’s framing of the issue as well as its political effect is restricted to agro-alimentary biotechnology and hardly alludes to other contentious matters related to modern biotechnology such as eugenics or privacy.

11 Several factors account for the change: coalescing with the right-wing *FPÖ* constituted the breaking of a taboo and triggered an unparalleled protest wave. The Social Democrats’ loss of power after three decades of government entailed bitter reshufflings in public service, and, finally, the far-reaching conservative reform programme had to be carried through against stiff opposition. After re-elections in 2002 which resulted in a clear confirmation of the People’s Party and an equally clear defeat of the *FPÖ*, the *ÖVP–FPÖ* government was reinstated. The remarkable electoral victory of the *ÖVP* rendered subsequent oppositional critique difficult and the intensity of public controversy somewhat decreased. Nevertheless, the seemingly harmonious days of the Grand Coalition and consociationalism were gone for good.

12 The term “*Wende*,” if used in a sociopolitical context, designates an epochal change or turn of events. The German “*Wende*,” for instance, stands for the demise of the German Democratic Republic (East Germany) in 1989.

13 Protests, however, never prompted public debate about educational, science and technology policy as such. They remained confined to those directly affected by reforms, principally in academia, who, as specialized groups, were often seen as privileged and did not succeed in raising public compassion or advancing persuasive issue-definitions.

14 “Citizens’ conference: Genetic data—wherefrom, whereto, wherefore?”

- 15 The first consensus conference dealt with tropospheric ozone and took place in 1997 in Vienna. Suffering from resource scarcity it neither produced satisfying results nor influenced policy to an extent worth noting (Grabner et al., 2002: 62–6).
- 16 *Österreichischer Rundfunk*.
- 17 Interview with organizers, 3 March 2004, on file with the author.
- 18 For “GENome research in AUstria” (<http://www.gen-au.at/>). Modeled after the German Human Genome Project (<http://www.dhgp.de/>) and endowed with a three-year budget of €31 612 million, this, so far, is the biggest Austrian technology program ever and aims at enhancing Austria’s competitiveness in the international high-tech field. It is worth mentioning that, in spite of its importance in terms of financial support, GEN-AU never provoked any major controversy from the Austrian public.
- 19 Interview with organizers, 3 March 2004, on file with the author.
- 20 Equally, the PR agency in charge of the virtual platform ([www.innovatives-oesterreich.at](http://www.innovatives-oesterreich.at)) had been engaged in the preceding biotechnology conflict, working to restore the public image of industry whose popularity had been tremendously reduced in the controversy. Conversely, *dialog <> gentechnik* had consistently refused industry’s support in order to avoid being construed as self-interested (Seifert, 2002: 194–5, 205).
- 21 Some observers raised similar critiques (Riegler and Knoll, 2002).
- 22 The Austrian Council later commissioned the TA institution to carry out the the conference’s evaluation.
- 23 Nonetheless, internal tensions never completely evaporated (interview with journalist, 26 April 2004, on file with the author).
- 24 Among the 105 applicants there was a clear surplus of retirees and housewives and a respective lack of candidates in the younger and economically active population, which had to be corrected in the further selection procedure in order to fit demographic criteria. This disproportion could be taken as an indication for a rather low attractiveness of the topic which might also explain the generally low return rate.
- 25 One participant left the group after the first sessions for personal reasons.
- 26 As shown by an online inquiry in parliamentary protocols for the keyword “*BürgerInnenkonferenz*” which results in only two hits: the first document notes the ceremonial handing over of the recommendations of the consensus conference to the Chairman of Parliament, the second is a statement of accounts which lists the consensus conference as an element of the PR campaign instigated by the Austrian Council.
- 27 Interview with administration, 2 June 2005, on file with the author.
- 28 Interview with constitutional lawyer, 13 June 2005, on file with the author.
- 29 The law had been amended the year before in order to transpose the EU directive on the contained use of genetically modified micro-organisms (98/81/EC) into national law, and it was amended again in 2004 to adapt to the amended EU directive on the deliberate release into the environment of GMOs (2001/18/EC). Neither of these amendments had any reference whatsoever to questions related to genetic data.
- 30 Only in this sense, the—often quoted—“finding” that citizens proved capable of absorbing specialized knowledge and formulating reasonable policy recommendations can be considered a criterion for the exercise’s success. The fact that laypeople who are motivated to learn and provided with the required means are able to become as competent decision-makers as “the real” experts borders on banality. Besides, it is a principal assumption underlying the very possibility of democracy.
- 31 Thus an—albeit preliminary—finding which, at least, does not contradict Steve Rayner’s more general verdict: “There have been almost no credible outcome-based evaluations that have established that a public participation technique has led to a technically or socially sound outcome that otherwise would not have been reached” (Rayner, 2003: 167).

## References

- Andersen, I. and Jaeger, B. (1999) “Scenario Workshops and Consensus Conferences: Towards More Democratic Decision-Making,” *Science and Public Policy* 26(5): 331–40.
- Barber, B. (1984) *Strong Democracy: Participatory Politics for a New Age*. Berkeley: University of California Press.
- Cohen, J. and Rogers, J. (1995) *Associations and Democracy*. London: Verso.
- Communication Matters (ed.) (2003) *BürgerInnenkonferenz: Genetische Daten Woher, Wohin, Wozu?* Wien: Communication Matters.
- Davison, A., Barnes, I. and Schibeci, R. (1997) “Problematic Publics: A Critical Review of Surveys of Public Attitudes to Biotechnology,” *Science Technology & Human Values* 22(3): 317–48.
- Durant, J., Evans, G.A. and Thomas, G.P. (1989) “The Public Understanding of Science,” *Nature* 340: 11–14.
- Einsiedel, E.F., Erling, J. and Breck, T. (2001) “Publics at the Technology Table: the Consensus Conference in Denmark, Canada and Australia,” *Public Understanding of Science* 10(1): 83–98.

- Fishkin, J. (1991) *Democracy and Deliberation: New Directions for Democratic Reform*. New Haven, CT: Yale University Press.
- Gerlich, P. (1997) "Politische Kultur der Subsysteme," in H. Dachs, P. Gerlich, H. Gottweis, F. Horner, V. Lauber and W. Müller (eds) *Handbuch des politischen Systems Österreichs*, pp. 506–13. Wien: Manz.
- Gottweis, H. (1988) *Governing Molecules*. Cambridge, MA: MIT Press.
- Gottweis, H. (2000) "Politische Mobilisierung, BürgerInnenbewegungen und Ansätze zur Ausbildung neuer Organisationsformen von Politik in Österreich," *Informationen zur politischen Bildung* 17: 60–7.
- Grabner, P., Peissl, W. and Torgerson, H. (2002) "Austria: Methodological Innovations from a Latecomer," in S. Joss and S. Bellucci (eds) *Participatory Technology Assessment*, pp. 61–74. London: University of Westminster Press.
- Guston, D.H. (1999) "Evaluating the first U.S. Consensus Conference: the Impact of the Citizens' Panel on Telecommunications and the Future of Democracy," *Science, Technology & Human Values* 24(4): 451–82.
- Held, D. (1996) *Models of Democracy*. Cambridge: Polity Press.
- Heller, C. (2002) "From Scientific Risk to *paysan savoir-faire*: Peasant Expertise in the French and Global Debate over GM Crops," *Science as Culture* 11(1): 5–37.
- Joly, P.-B. and Marris, C. (2003) "La participation contre la mobilisation? Une analyse comparée du débat sur les OGM en France et au Royaume-Uni," *Revue Internationale de Politique Comparée* 10(2): 195–206.
- Joly, P.-B., Marris, C. and Hermitte, M.-A. (2003) "À la recherche d'une 'démocratie technique'—Enseignements de la conférence citoyenne sur les OGM en France," *Natures Science Société* 11: 3–15.
- Joss, S. (1998) "Danish Consensus Conferences as a Model of Participatory Technology Assessment: an Impact Study of Consensus Conferences on Danish Parliament and Danish Public Debate," *Science and Public Policy* 25(1): 2–22.
- Larédo, P. and Mustar, P. (eds) (2001) *Research and Innovation Policies in the New Global Economy*. Cheltenham: Edward Elgar.
- Lassen, J. (1999) "Changing Modes of Biotechnology Assessment in Denmark," in R. Miettinen (ed.) *Biotechnology and Public Understanding of Science*, pp. 82–90. Helsinki: Academy of Finland.
- Levidow, L. and Marris, C. (2001) "Science and Governance in Europe: Lessons from the Case of Agricultural Biotechnology," *Science and Public Policy* 28(5): 345–60.
- Martin, J.-P. (2005) "La Confédération paysanne et José Bové, des actions médiatiques au service d'un projet?," *Ruralia*, January [online]. Available: <http://ruralia.revues.org/document142.html>.
- Mayer, I. and Geurts, J. (1998) "Consensus Conferences as Participatory Policy Analysis: A Methodological Contribution to the Social Management of Technology," in P. Wheale, R. Schomberg and P. Glasner (eds) *The Social Management of Genetic Engineering*, pp. 279–301. Aldershot: Ashgate.
- Mayer, I., De Vries, J. and Geurts, J. (1995) "An Evaluation of the Effects of Participation in a Consensus Conference," in S. Joss and J. Durant (eds) *Public Participation in Science: the Role of Consensus Conferences in Europe*, pp. 109–24. London: Science Museum.
- Menasse, P. (2003) "Warum eine PR-Agentur eine BürgerInnenkonferenz organisiert," in Communication Matters (ed.) *BürgerInnenkonferenz: Genetische Daten Woher, Wohin, Wozu?*, p. 68. Wien: Communication Matters.
- Mohr, A. (2002) "Of Being Seen to do the Right Thing: Provisional Findings from the First Australian Consensus Conference on Gene Technology in the Food Chain," *Science and Public Policy* 29(1): 2–12.
- Rayner, S. (2003) "Democracy in the Age of Assessment: Reflections on the Roles of Expertise and Democracy in Public-sector Decision Making," *Science and Public Policy* 30(3): 163–70.
- RFT (Rat für Forschung und Technologieentwicklung) (2003) *Tätigkeitsbericht*. Wien: RFT.
- Riegler, J. and Knoll, E.M. (2002) "Kultur liegt in der Natur des Menschen!," September [online]. Available: <http://science.orf.at/science/gingrich/58685>.
- Rowe, G. and Frewer, L.J. (2000) "Public Participation Methods: A Framework for Evaluation," *Science, Technology & Human Values* 25(1): 3–29.
- Rowe, G., Marsh, R. and Frewer, L.J. (2004) "Evaluation of a Deliberative Conference," *Science, Technology & Human Values* 29(1): 88–121.
- science.orf.at (2003) "Forderungen der BürgerInnenkonferenz liegen vor," June online. Available: <http://science.orf.at/science/news/79025>.
- Seifert, F. (2002) *Gentechnik – Öffentlichkeit – Demokratie: Der österreichische Gentechnik-Konflikt im internationalen Kontext*. München: Profil.
- Seifert, F. (2003) "Demokratiethoretische Überlegungen zum österreichischen Gentechnik-Konflikt," *SWS-Rundschau* 43: 106–28.
- Van den Daele, W., Pühler, A. and Sukopp, H. (1997) *Transgenic Herbicide-Resistant Crops: A Participatory Technology Assessment*. Berlin: WZB.



- Weale, A. (2001) "Science Advice, Democratic Responsiveness and Public Policy," *Science and Public Policy* 28(6): 413–21.
- Whiteside, K.H. (2003) "French Regulatory Republicanism and the Risks of Genetically Engineered Crops," *French Politics* 1: 153–74.
- Zimmer, R. (2002) "Begleitende Evaluation der Bürgerkonferenz 'Streitfall Gendiagnostik,'" Fraunhofer Institut für Systemtechnik und Innovationsforschung, Karlsruhe [online]. Available: <http://www.isi.fhg.de/bt/projekte/buergerkonf>.

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