
Biotechnology Policy Convergence in Continental Europe? Political Institutions, Problem Framing and Learning

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Biotechnology policy has been an issue of German and European policy studies since the early 1990s. Starting with a book that complained about “unpolitical” processes and regulations (Gill 1991), a lot of young researchers selected the area for their PhD-theses then. These students have established study groups and presented their results in several edited volumes (Martinsen 1997; Simonis/Martinsen/Saretzki 2000; Edler/Kuhlmann/Behrens 2003).

The pioneers of biotechnology policy research were driven by two forces: An idealistic one and a research-oriented one. Firstly, some of them were associated with the anti-genetic-engineering-movement or even actively participated in NGOs that fought certain developments within industry and science (f.e. Gill 1991). Secondly, researchers wanted to use the field of genetic engineering policy to adopt, prove and develop theoretical frameworks of policy analysis (f.e. Gottweis 1998).

In the meantime, the first approach has become less important. There are hardly radical skeptics of gene

technology in the policy analysis community any more – a development that reflects the policy change in this field. The place of skeptics has been taken by governance research. Like in other areas, questions of soft governance, participation and multi-level problem solving have become important in biotechnology research (f.e. Abels 2002; Dolata 2004). Nevertheless biotechnology still is not a “normal” field of policy analysis. Biotechnology policy is framed within different areas shaping both the political process and the debates of policy analysts: environment (f.e. Bandelow 1997), research and innovation (f.e. Behrens 2000; Kaiser/Prange 2004), employment (f.e. Menrad 2005) trade (f.e. Schenek 1995; Fink 2003: 4, 13), agriculture and food (f.e. Rippe 2000), ethics (f.e. van den Daele 2005) or gender (f.e. Rothmayr 2003). Some researchers classify the field as social regulative policy that differs from all four types of Theodore Lowi’s classification (Lowi 1972: 300). Nevertheless the classification as social regulative policy is controversial: While it is broadly undisputed that biotechnology neither fits into distributive, constituent nor redistributive policy, some problems can be classified as regulative policies. Nonetheless regulative policy does not fit for assisted reproductive technology (ART), because it is not necessarily related to commerce and trade.

Biotechnology policy can be used to test the scope of widely accepted theories of policy research, because it shows particularities like the importance of scientific knowledge and societal norms. All contributions of this special issue start with theses developed in other fields. The first two articles pick up the recent debate about convergence and transnational policy transfer (cf. Holzinger/Knill 2005; Bandelow 2007). Both contributions use a comparative case study approach to analyze processes and the policy outcome in two European countries, respectively.

Christine Rothmayr proves theoretical expectations about policy convergence in Switzerland and Germany in the field of ART. Both countries have developed very restrictive styles that strongly limit the autonomy of the medical community. Nevertheless Rothmayr questions conventional theoretical explanations for the similar policy results. Even though one should expect lesson drawing between the two neighboring states with a common culture and language, Rothmayr rules out transnational policy transfer as an explanation for the similar results. She also does not find any indication for both countries' regulations having been the result of similar pressure by international competition and supra-national norms. In contrast, the article shows that the similar policies result from similar actor constellations. Public mobilization was important to help opponents of ART succeeding in the political struggle. The actual regulations have been compromises even though both countries have large public majorities being skeptical about ART. In both countries several veto players prevent the majorities of overruling minorities completely. The results of the consensus characteristics of both democracies are quite similar, even though the specific institutional configurations of the German parliamentary system differ completely from the Swiss directorial governmental system.

Nathalie Schiffino and Frédéric Varone also start with theoretical expectations about policy convergence in two countries. Like Rothmayr, they picked two neighboring countries that share cultural values and language. By comparing the ART policies of France and Belgium their results differ from Rothmayrs observations: Belgium and French policies prove to differ strongly in the political treatment of biomedical research. On the one hand, Belgium has developed an open system of ART care mainly relying on physicians' self-regulation. France, on the other hand, disposes of restrictive regulations. So even

the similar framing of the problem in both countries did not lead to similar regulations. On the contrary, the opposite political systems prove to be very important. The French majoritarian system enables interventionist policies whereas in Belgium, federalism and several veto players led to non decisions. Schiffino and Varone do not only refer to institutional variables. They also show that party politics and policy networks influenced the policy outcome.

Both comparative analyses of ART policies present some similar results even if they differ in respect to their observations of convergence or divergence. In both cases political institutions on the national level still shaped policy processes and the policy outcome. Both studies did not present any evidence for cross national policy transfer. However, the lack of transnational lesson drawing should not be confused with the exclusion of policy learning in the field of biotechnology.

Erich Griebler and Bernhard Hadolt argue that there is some evidence for policy-oriented learning in ART and abortion policies. The contribution uses the Advocacy Coalition Framework (ACF), developed by Paul Sabatier and Hank Jenkins-Smith to present some starting hypotheses. The hypotheses of the ACF do not make us expect learning in the selected fields. ART and abortion policies lack accepted quantitative data and indications of success, and they belong to a social world that is supposed to be rather resistant towards learning. The paper then analyzes policy processes and results of ART and abortion policies in Austria. In contrast with the hypotheses of the ACF, Griebler and Hadolt find policy change to a considerable degree in both cases. The change resulted from a combination of external events and learning. It started with external events (in the definition of the ACF) like new parliamentary majorities, the rise of women's movement and changes of the public opinion. Nevertheless,

policy learning was involved in the changes, too. Especially the ART case presents evidence that changes have been caused by the expertise of experts. In the Austrian case of ART policy, even international examples were important for policy changes. Therefore Austria differs from Germany, Switzerland, France and Belgium.

It can be disputed to which extent the different results of the case studies have actually been provoked by different policies, and in what way they also reflect the respective theoretical perspective and method of the researchers. Nevertheless, the opposing results of the studies presented in this volume reflect the controversies that still remain in the relatively new field of biotechnology policy studies. The final contribution to this volume aims at considering the different perspectives by suggesting an interpretative view on biotechnology policy.

Like Griebler and Hadolt, Bandelow refers to the ACF in order to explain long-term policy change. The paper analyzes the example of European and German horizontal regulations for contained uses and deliberate releases of Genetically Modified Organisms (GMOs). Bandelow observes long-term trends that can only be understood by taking policy-oriented learning into account. Nevertheless, the change of individual belief systems resulting from new information has been an exception. Individual actors normally do not change the core goals of their coalitions. Despite this confinement, coalitions as collective actors are likely to change their goals on the long run: New information causes belief system changes of new actors and thereby enables policy change after a decade or more. In genetic engineering policy several forms of information have caused learning: scientific experiences, economic, sociological and ethical information, and experiences with applications of genetic engineering in medicine and farming. Policy-oriented learning has thereby

led to a liberalization of contained use of GMOs. However, the regulatory framework in the field of deliberate releases differs from this finding. Therefore, it still is difficult to name agreed-upon results of biotechnology policy research.

Undisputed findings explaining the biotechnology policy process and outcome in all fields and countries are neither possible nor desired. Biotechnology policy will remain a highly controversial field. Studying this area will contribute to the democratic process and help to understand the varieties of political debates in modern democracies.

References

- Abels, Gabriele, 2002: Experts, Citizens, and Eurocrats – Towards a policy shift in the Governance of Biopolitics in the EU. European Integration online Papers (EIoP) 6/19. Online available at: <http://eiop.or.at/eiop/texte/2002-019a.htm>
- Bandelow, Nils C. 1997: Ausweitung politischer Strategien im Mehrebenensystem, in: Martinsen, Renate (ed.): Politik und Biotechnologie. Baden-Baden: Nomos, 153-168.
- Bandelow, Nils C., 2007: Health Policy: Obstacles to Policy Convergence in Britain and Germany, in: German Politics 16/1, 150-163.
- Behrens, Maria, 2000: Nationale Innovationssysteme im Gentechnikkonflikt. Ein Vergleich zwischen Deutschland, Großbritannien und den Niederlanden, in: Barben, Daniel/Abels, Gabriele (eds.): Biotechnologie – Globalisierung – Demokratie: politische Gestaltung transnationaler Technikentwicklung. Berlin: sigma, 205-227.

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- Daele, Wolfgang van den (ed.) 2005: Biopolitics. Special issue of *Leviathan* 23. Wiesbaden: Westdeutscher Verlag.
- Dolata, Ulrich, 2004: Erosion oder Transformation? Neujustierungen der nationalen Technologie- und Innovationspolitik, in: *Technikfolgenabschätzung* 13/1, 143-151.
- Edler, Jakob/Kuhlmann, Stefan/Behrens, Maria (eds.), 2003: *Changing Governance of Research and Technology Policy. The European Research Area*. Cheltenham, UK/Northampton, MA: Edward Elgar.
- Fink, Simon, 2003: Politikwissenschaft und Biotechnologie – ein Überblick über die konzeptionelle Landschaft. Paper presented at the Workshop of the Graduiertenkollegs Märkte und Sozialräume in Europa, Otto-Friedrich-Universität Bamberg, 16th-18th October 2003. Online available at: http://web.uni-bamberg.de/sowi/mse/download/fink-politikwissenschaft_und_biotechnologie.pdf
- Gill, Bernhard 1991: *Gentechnik ohne Politik*. Frankfurt a. M./New York: Campus.
- Gottweis, Herbert, 1998: *Governing Molecules. The Discursive Politics of Genetic Engineering in Europe and the United States*. Cambridge, MA: MIT.
- Holzinger, Katharina/Christoph Knill, 2005: Causes and Conditions of Cross-National Policy Convergence, in: *Journal of European Public Policy*, 12/5, 775-796.
- Kaiser, Robert/Prange, Heiko, 2004: The Reconfiguration of National Innovation Systems – the example of

- German Biotechnology, in: *Research Policy* 33/3, 395-408.
- Lowi, Theodore, 1972: Four Systems of Policy, Politics, and Choice, in: *Public Administration Review* 32/4, 298-310.
- Martinsen, Renate (ed.), 1997: *Politik und Biotechnologie*. Baden-Baden: Nomos.
- Menrad, Klaus, 2005: Future Employment in Biotechnology in Germany until 2010, in: *Journal of Commercial Biotechnology* 12, 29-39.
- Rippe, Klaus Peter, 2000: Novel Foods and Consumer Rights. Concerning Food Policy in a Liberal State, in: *Journal of Agricultural and Environmental Ethics* 12/1, 71-80.
- Rothmayr, Christine, 2003: Politikformulierung in der Fortpflanzungstechnologie: Partizipation und Einfluss feministischer Gruppierungen im internationalen Vergleich, in: *Österreichische Zeitschrift für Politikwissenschaft* 32/2, 189-200.
- Scheneck, Thomas, 1995: *Das Gentechnikrecht der Europäischen Gemeinschaft. Gemeinschaftliche Biotechnologienpolitik und Gentechnikregulierung*. Berlin: Duncker & Humblot.
- Simonis, Georg/Martinsen, Renate/Saretzki, Thomas (eds.), 2000: *Politik und Technik. Analysen zum Verhältnis von technologischem, politischem und staatlichem Wandel am Anfang des 21. Jahrhunderts*. Special issue of *Politische Vierteljahresschrift* 31. Opladen: Westdeutscher Verlag.