
Explaining Restrictive ART Policies in Switzerland and Germany: Similar Processes – Similar Results?

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1. Introduction¹

The issue of assisted reproductive technology (ART) made its way on the political agenda in Switzerland and Germany in the early 1980s. Since then, both countries have adopted several pieces of legislation, first addressing questions related to in vitro fertilization and, more recently, regulating embryonic stem cell research. Both countries adopted very restrictive policies and strongly intervened into the field of (ART) (see Rothmayr and Serdült 2004, Rothmayr and Ramjoué 2004). As a result, doctors in both countries are not allowed to practice a considerable number of techniques permitted in other countries, such as pre-implantation diagnosis or egg donation, and researchers are not permitted to practice therapeutic cloning or embryo research. A detailed comparison of the two countries shows that the goals, instruments and implementers differ somewhat, but that the policies in both cases operate with strong prohibitions and sanctions. Hence, we could speak of a similar policy style in both countries.

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By taking the 'institution matter' hypotheses seriously, we could speculate that common institutional features might explain this similar policy style. Both countries are known for the consensual characteristics of their political system (Lijphart 1999). The institutional configuration, however, is different. Germany knows a parliamentary system (e.g. Schmidt 2003) and Switzerland combines direct democracy with a "directorial" governmental system (see e.g. Linder 1994, Kriesi 1998, Papodopoulos 2001). In addition, even though both countries systems might be characterized as functional federalism, there are important differences with respect to the power of the federated entities and their mode of participation on the federal level (e.g. Braun 2003). Despite these specific differences in institutional features, we can formulate the starting hypothesis that the consensual style of decision-making might contribute to explaining the convergence in policy content across the two countries.

However, one cannot explain policy choices by looking at institutional features alone (e.g. Scharpf 1997, Hammond and Butler 2003: 145); actor-based variables need to be taken into account as well. The policy-sector approach even goes one step further and argues, that "*... policymaking in a particular sector will exhibit strong similarities, whatever its national context.*" (Freeman 1986: 485-486) Based on Lowi's idea of "policy determines politics" we could suppose that the nature of the policy problem leads to a similar actor constellation and a similar nature of conflicts in both countries. We could, therefore, as a second and competing starting hypothesis suppose that the policy style both countries have in common is mainly the result of similarities in actor structure and the nature of conflict.

Finally, the analysis of Swiss policy-making in general reveals that - besides the pressure of European integration - the solutions adopted by the two big neighbors France and Germany are often taken into account when

discussing Swiss solutions. Even though Switzerland might occasionally be a forerunner in terms of policy innovation, other countries have often already addressed the problem, due to the rather slow process of decision-making in Switzerland, in particular if direct democratic decisions are involved, which was also the case with ART. We could therefore formulate a third hypothesis, namely that the similar policy style is the result of policy transfer mechanism (Dolowitz and Marsh 2000), i.e. that the similar Swiss policies result from "*lesson drawing*" from the neighbor to the north.

In order to discuss which of these three factors has the most explanatory power, the presentation of the two cases is organized as follows: first, we give a brief overview over the different stages of the decision-making processes in both countries since the beginning of the 1980s, then, the resulting policies of both countries are compared in order to reveal the similarities in terms of policy style. After the comparison of the policy content, we offer an explanation for the policy choices in each country. The article concludes by comparing the explanations for the two countries and addressing the three starting hypotheses.

2. The Policy-Making Processes in Switzerland and Germany: an Overview

The policy-making processes in Switzerland and Germany both involve several sequences of decision-making focusing on different issues related to assisted reproductive technologies. A first generation of policies addressed in vitro fertilization and related questions, while the second-generation focused on stem cell research. In both countries, the issue was addressed on the federal and federated level, i.e. by the *Länder* in Germany and the *Cantons* in Switzerland, and the federal constitution needed to be amended in order to transfer the power to regulate

ART to the federal level.

In Switzerland, the policy-making process for the first generation of policies began at the cantonal level. In the 1980s, ten out of 26 cantons had adopted cantonal laws and regulations.² The measures adopted by the cantons were later replaced by federal policies. The shift from the cantonal to the federal level was substantiated by a popular initiative, entitled ‘Against the abuse of biotechnology and assisted reproductive technology’ (Beobachterinitiative). If an initiative is filed with more than the 100,000 required signatures and meets other formal and legal requirements, the Federal Council (executive) is obliged to present it to Parliament and, finally, to the people. Government and Parliament can recommend the acceptance or rejection of an initiative, but can also propose a counter-proposal that addresses the issue of the initiative. The counter-proposal can take the form of a constitutional article (direct counter-proposal) or a federal law (indirect-counter proposal). If the counter-proposal lives up to the principal intention of the initiative committee, it is quite likely that the committee will withdraw the initiative and the popular vote will only be on the counter-proposal, in the case of a direct counter-proposal.³ This was in fact the case for the first popular initiative on ART and biotechnology. The Federal Council proposed a direct counter-proposal, in the form of a constitutional article on ART and biotechnology, to Parliament. As a result of the decisions taken by Parliament, the initiative was retracted and, in 1992, the Swiss citizens accepted the counter-proposal in the subsequent popular vote. On the ground of this constitutional article on ART and biotechnology, a federal

² Argovia, Basel-City, Basel-Country, Geneva, Glarus, Neuchâtel, Obwalden, St. Gallen, Ticino, and Vaud.

³ Otherwise the people have the opportunity to decide on the initiative as well as the counter-proposal. It is also possible to vote yes for both proposals.

law and two ordinances were designed during the 1990s (FmedG: SR: 814.90, VNEK: SR 814.903, FMedV: SR 814.902.2). The designing of the law was influenced by a second popular initiative, 'Initiative for Procreation respecting Human Dignity' (Initiative für menschenwürdige Fortpflanzung) sponsored by opponents of the 1992 constitutional amendment. It aimed at reversing the constitutional amendment of 1992 by fully prohibiting IVF and insemination by donor. This time, the Federal Council did not make a direct counter-proposal (Botschaft vom 26. Juli 1996), but proposed a federal law on the ground of the existing constitutional article as an indirect counter-proposal. Parliament adopted in December 1998, after a very conflictual debate, the Federal Law on Assisted Reproduction. In 2000, the people rejected the second popular initiative with a clear majority.

The German policy-making process began with the elaboration of the Embryo Protection Law (EschG). Since 1985 the "Berufsordnung" (professional code) of the "Bundesärztekammer" (German Medical Association) regulated ART in Germany (Bundesärztekammer 1985, 1988, 1998). When the medical profession adopted their guidelines, a joint expert group of the Federal Ministry of Justice and the Federal Ministry of Research and Technology, the Benda-Commission, published the first proposition for regulating ART (Benda-Report 1985: 1, 49-51). This report led to a first proposition of the Ministry of Justice for discussing the adoption of an Embryo Protection Law in 1986 (Bundesminister der Justiz 1986). While the government was elaborating a first draft for the EschG, the *Länder* did not remain inactive. Given that the *Länder* are important players in health care provision and the supervision of the medical profession, several *Länder* started to elaborate propositions for state laws from 1985 onwards, namely Bavaria and Rhineland-Palatine, where the Christian-Democrats were in power. However, these bills were never adopted (Abschlussbericht Bund-Länder-

Arbeitsgruppe 1988). At the same time the *Länder* became active in the Bundesrat (upper chamber). At the initiative of Baden-Württemberg and Bavaria, and after being discussed in various committees, the Bundesrat decided that the *Länder* together with the Bund needed to elaborate a comprehensive concept for legislation in the field (BR-Drs. 210/86). This decision led to the institution of a common working group of the Federal government and the states (Bund-Länder Arbeitsgruppe). Shortly after the publication of the Bund-Länder working group's report (Abschlussbericht Bund-Länder-Arbeitsgruppe 1988), the ministry of justice elaborated a second proposition for an Embryo Protection Law (Bundesminister der Justiz 1988). Its content corresponded to the bill introduced to Parliament in 1989. Given its clear majority in the Bundestag, the governmental coalition passed the bill with no difficulties against the votes of the opposition. In contrast to the Swiss case, the German constitution was only amended after the adoption of the EschG, in 1994. The necessary qualified majority of 2/3 in both chambers could only be reached after the issue was off the political agenda. The EschG, therefore, is formulated in terms of criminal law, which is of federal matter.

In both countries, assisted reproductive technologies were again on the political agenda at the beginning of the new Millennium. In Switzerland, as a result of technological progress and because the existing policies only incompletely addressed the question of embryo research, by the end of May 2002, the federal government sent a proposal for a law on embryo research into the pre-parliamentary consultation procedure (EDI 2002a, 2002b; Botschaft vom 20.11.2002). It was transformed during parliamentary debate into a Federal Law on Stem Cell Research (StFG, Stammzellenforschungsgesetz, SR 810.31) that allowed for embryonic stem cell research and the derivation of stem cells from left over embryos in Switzerland. A referendum was launched against the Law

on Stem Cell Research, the people, however, accepted the stem cell act in 2004 with a clear majority (66.4%). Similarly, in Germany, a new round of political debate starting out at the end of the 1990s led to the Law on Stem Cell Research (StZG, Stammzellgesetz), adopted in 2002. The Bundestag itself took the decisive decision to put the issue on the political agenda again by instituting an Enquetekommission 'Recht und Ethik der modernen Medizin' (Inquiry Commission on Law and Ethics in Modern Medicine, Plenarprotokoll 14/96, 24 March 2000) in March 2000. Based on the commission's report on stem cell research, different groups of representatives cutting across party lines sponsored propositions on how to regulate the issue (BT-Drs. 14/8101, 14/8102, 14/8103). The proposition to allow for importing stem cell lines under strict conditions won after two rounds of voting (Plenarprotokoll 14/214: 21239-61).

3. The Restrictive Style of Swiss and German ART Policies

The legal sources of ART policies differ across the two countries. In *Switzerland*, ART is governed by federal law, while in *Germany*, a combination of federal law and regulations by the medical professional code defines the policy. The content of the policies is, however, very similar across the two countries as the following analysis reveals.

In *Switzerland* and in *Germany* one of the main *goals* of the adopted legal measures is to protect human dignity. The Swiss design also aims at securing the well being of the child in general, to protect the personality and the family and also wants to prevent the abuse of ART, stem cells and embryos. The German policies not only aim at respecting human dignity, but also at protecting the right to life and the embryo.

In order to meet these goals, both countries strongly limit the autonomy of the medical community by prohibiting a number of techniques, namely egg and embryo donation, pre-implantation diagnostics, cryopreservation of embryos,⁴ surrogate motherhood, genetic engineering on gametes, germ cells and embryos, cloning and chimera and hybrid building. The transfer of more than three embryos to a woman is prohibited and the creation of an embryo for any other purpose than for transferring it to the woman is equally prohibited. In both countries, the policies define in detail under what conditions and how doctors are allowed to practice techniques that are not fully prohibited through licensing requirements, controls, reporting duties and the definition of medical indications as well as of how certain techniques have to be practiced. These detailed regulations also specify who has access to ART. The design clearly limits access in terms of marital status and sexual orientation. In *Germany*, the eligibility is clearly limited to married and, on a case-by-case basis, to stable unmarried couples. In *Switzerland* stable heterosexual couples are generally admitted, but only married couples have access to certain techniques.

The one *substantial difference* between the two countries concerns embryo research and embryonic stem cell research. Swiss policies towards research are more liberal than German policies. The *German* Law on Stem Cell Research (StZG) generally prohibits the import of stem cells and then formulates under what exceptions a research project might still use imported stem cells. The use of leftover embryos for embryonic stem cell research remains prohibited. In *Switzerland*, to the contrary, deriving stem cells from left over embryos as well as research on how to improve such methods with left over embryos are permitted by the Federal Law on Stem Cell Research

⁴The cryopreservation of impregnated eggs is permitted.

(StFG).

In both countries, the main *target groups* are medical practitioners, private and public health care providers alike. In Switzerland, the main *implementers* for the Assisted Reproductive Act are the cantons. Their leeway is very limited, as the federal law and the ordinances predefine the details of implementation.⁵ The main implementers in Germany are the Länder Medical Chambers and the Ministry of Public Health. The *Länder* are indirectly involved in implementing the design through approving the professional code of the Länder Medical Chamber specifying professional guidelines on ART. Swiss and German policies for stem cell research are implemented on the federal level.

⁵ The Federal Data Protection Commission, the Federal Office of Civil Law Affairs and the Federal Office of Statistics are also involved in the implementation.

Table 1: Content of the policy design in the ART-field

	Legal norms	Goals
Switzerland	<ul style="list-style-type: none"> • Constitutional article 119a 1992 • Federal Law on Assisted Reproduction 1998 (FmedG) • Ordinances 1998 (VNEK, FMedV) • Federal Law on Stem Cell Research 2004 (StFG) • Ordinance on Stem Cell Research 2005 (VStFG) • Ordinances on Insurance Coverage 	<ul style="list-style-type: none"> • Securing the well being of the child in general • Protecting human dignity, the personality and the family • Prevent the abuse of ART, of embryos and embryonic stem cells
Germany	<ul style="list-style-type: none"> • Law on Embryo Protection 1990 (EschG) • Law on Stem Cell Research 2002 (StzG) • Professional Code (latest edition 1998) • Act on Adoption arrangements (changed in 1989) • Social Code, 5th book (since 1990) • National Committee of Physicians and Sickness Funds: admitted treatments for mandatory health insurance funds 	<ul style="list-style-type: none"> • Protecting the embryo • Protect human dignity and the right to live • Granting freedom of research

Table 1, continued

	Implementers	Instruments
Switzerland	<ul style="list-style-type: none"> • Cantons • Federal Office of Public Health • Federal Data Protection Commission • Federal Office of Civil Law Affairs • Federal Office of Statistics 	<ul style="list-style-type: none"> • Prohibitions • Licensing and authorization • Reporting and documentation • Information and counseling • Regulation • Quality Standards • Inspections and Controls Sanctions
Germany	<ul style="list-style-type: none"> • Zentrale Ethikkommission für Stammzellenforschung (Ethic commission for stem cell research) • Robert Koch Institute (RKI) • Länder Medical Chambers • Länder (through approving professional code) 	<ul style="list-style-type: none"> • Prohibitions (criminal provisions) • Authorization • Reporting and documentation • Information and counseling • Regulations • Quality standards • Sanctions

	Target Groups	Beneficiaries
Switzerland	<ul style="list-style-type: none"> • Anyone • Physicians • Researchers • Hospitals • Health Insurance Funds 	<ul style="list-style-type: none"> • Patients
Germany	<ul style="list-style-type: none"> • Anyone • Physicians • Researchers • Hospitals • Sickness Funds 	<ul style="list-style-type: none"> • Patients

4. Explaining the Restrictive Swiss Policies

The explanation of the Swiss design looks separately at the constitutional article and the Federal Law on Assisted Reproduction, on the one hand, and the Law on Stem Cell Research, on the other hand. In order to understand the content of the constitutional article and the Federal Law on Assisted Reproduction, four explanations are presented: the impact of court decisions, the effect of direct democracy in combination with party politics, the limited influence of medical and research interests, and the missing lesson-drawing and lack of international competition.

4.1 Court impact and policy convergence on the cantonal level

The policy-making process started out at the cantonal level due to Swiss federalism. The cantons play a major role in formulating and implementing health policies and they are important health care providers: they are in charge of cantonal and regional hospitals, and they are notably in charge of university hospitals. As an important player in health care policies, as well as being a provider directly confronted, early on, with the questions provoked by the new techniques, some of the cantons did not want to wait for federal legislation and chose, rather, to adopt their own laws and regulations.

The design of cantonal laws and regulations varied strongly. Three cantons, Glarus (1988), St. Gallen (1988) and Basel-City (1991), prohibited almost all-available ART, including full prohibitions of IVF and gamete donation. The cantonal laws of St. Gallen and Basel-City were challenged in the Swiss Federal Supreme Court, which was the court of first and final appeal in the case of an abstract review of a cantonal law. The Court ruled on the first case, the canton of St. Gallen in 1989, (BGE 115 Ia

234, 15 March 1989) before the federal government published its message concerning the 'Beobachterinitiative' and before the parliamentary debate took place. The Court ruled that general prohibitions of certain techniques in cantonal laws were unconstitutional and questioned the practice of the anonymity of donors (BGE 115 Ia 244). This decision, together with a later, similar decision on the laws of Basel City in 1993, led to *policy convergence* at the cantonal level by ruling out extremely restrictive solutions. It thereby clearly influenced the starting conditions on the cantonal level for the debate on the federal level. Furthermore, the arguments of the Federal Supreme Court found a strong resonance with the actors on the federal level. In particular, the opponents of total prohibitions referred to the Court's opinion that general prohibitions violate the right to personal freedom. (Rothmayr 1999, 2001)

4.2 Party Politics and the Mechanism of the Popular Initiative

The designing process was influenced by two initiatives, the 'Beobachter' initiative, and the 'Initiative for Procreation respecting Human Dignity' (Initiative für menschenwürdige Fortpflanzung). The first initiative led to the adoption of the constitutional article, and the second initiative fell into the phase of elaborating the Human Reproductive Act. The analysis of party politics in parliament with respect to the two initiatives reveals considerable parallels.

With respect to the 'Beobachter' initiative the Federal Council formulated a direct counter-proposal that did not contain any of the concrete prohibition and restrictions proposed by the initiative. Public discussions and laws adopted in some of the cantons pointed, however, towards public opinion being in favor of clear restrictions. Hence, by anticipating preferences of the voters and taking into account the mobilizing potential of the interests behind

the initiative, Parliament decided to include the goals and prohibitions proposed by the initiative in a direct counter-proposal and at the same time to expand them. Parliament was clearly concerned that if it stayed with the counter proposal of the Federal Council, citizens would prefer the initiative to the counter-proposal.

Only a very small minority in Parliament, mainly from the Liberal Party, argued that the state should not intervene at all. The Radical Party and a number of members from the Social Democrats, the Christian-Democrats and the People's Party - all four represented in government and having together a large majority in Parliament - wanted certain restrictions, but without total prohibition of basic techniques.⁶ Opinions within the Social Democrats, the Christian-Democrats and the People's Party, however, were divided and total prohibitions were also supported or considered by members of these three parties. Furthermore, some small centre and left parties, such as the Protestant Party, the Greens and Feminists, supported total prohibition. In short, the vast majority wanted to set clear limits to ART and there was considerable support for total prohibition from both sides of the political spectrum, although based on different beliefs, Christian-religious beliefs, on the one hand, and a skeptical attitude towards technical progress and science on society in general (Amtliches Bulletin SR: 1990: 477-93; 1991: 250-457, 615; NR: 1991: 556-67, 588-636, 1288,1408).

In order to build a viable majority, a design needed to be found that satisfied the concerns of those members of Parliament, in particular of the governmental parties, who were considering total prohibition if the constitutional

⁶ Distribution of seats for the governmental parties 1987/1991/1995 in the National Council (200) and the Council of States (46): Radicals (FDP): 51/44/45 and 14/18/17, Christian-Democrats (CVP): 42/36/34 and 19/16/16, Social-Democrats (SPS) 41/41/54 and 5/3/5, the People's Party (SVP) 25/25/25 and 4/4/5.

article turned out to be too permissive. Such a majority would not only serve to pass a constitutional article that did not include total prohibitions of IVF and gamete donation, but it would also allow for broad support by the political elite in order to enhance the chances of the counter-proposal being accepted in the popular vote. The choices of Parliament led in fact to the retraction of the initiative, and resulted in the acceptance of the counter-proposal with a majority of 73,8 per cent 'yes' to 26,2% per cent opposed in the popular vote of 17 May 1992.

As a reaction to the new constitutional article, those interests that considered the adopted frame to be too permissive launched a second popular initiative. The second popular initiative aimed at reversing the constitutional article and asked for total prohibitions of IVF and gamete donation in the federal constitution. As a result of this second initiative, the debate on whether to fully prohibit these techniques continued during the designing process for the federal law. The proponents of the second initiative opposed the broad majority who had supported the constitutional article. Within the supporters of the constitutional article, however, opinions were divided with respect to how restrictive the future law should be formulated. The main conflicts focused concerned the prohibition of egg donation and pre-implantation diagnostics. The Radical Party strongly advocated permitting pre-implantation diagnosis and egg donation, while parts of the Christian-Democrats, the Social Democrats and the People's Party wanted these techniques to be prohibited. Small parties from the left and the right supported the latter. Instead of the typical Centre-Right or Centre-Left coalition (Kriesi 2001), the decision-making process was, therefore, dominated by a rather unusual Left-Centre-Right coalition not including the Radical Party. This actor constellation largely corresponds to the one described above for the constitutional amendment. It gave way to a majority in Parliament supporting the prohibition of egg

donation and pre-implantation diagnostics. The attempt to reverse the proposed prohibition on egg donation and pre-implantation diagnostics during the parliamentary debate failed. The strong position of the Radical Party in the upper chamber, the Council of States, combined with the fact that the opinion in the other parties were partly divided, led to a more liberal position of the Council of States. With a tiny majority, the Council of States rejected the prohibition of egg donation and pre-implantation diagnostics. The National Council accepted the prohibitions proposed by the Federal Council, presuming that by not adopting these prohibitions they would risk strengthening support for the initiative. During the reconciliation procedure between the two chambers, the Council of States gave in to the more restrictive solution of the National Council. This is probably due to the fragile majority for a more liberal solution in the Council of States.

The law could not take force before the popular initiative was voted on, as it was meant to be an indirect counter-proposal to the initiative. The vote took place in March 2000 and the initiative was clearly defeated with a majority of 71.9 per cent of the voters.

4.3 Interest group participation in federal policy-making and the limited influence of medical associations

Beginning in 1981 the Swiss Academy of Medical Sciences (SAMW) issued standards for self-regulating the practice of ART in Switzerland (SAMW 1981, 1985 and 1990). The policy preferences of the medical community at the time of discussing the constitutional amendment were not that fundamentally different from the majority of other political actors. The picture for designing the Federal Law on Assisted Reproduction is rather different. Medical associations were against prohibiting egg donation and pre-implantation diagnostics. They also did not wish that the

civil identity of the donor be revealed to a child conceived by sperm donation. However, they did not succeed in realizing their preferences.

According to the results of the reputational and the documentary analysis, the policy-designing process was an open one, giving access to interests that strongly voiced other policy preferences. We find various interest groups with a feminist and ecological background that have a critical attitude towards biotechnology and reproduction technologies. In addition, several organizations with a religious conservative background participated, and finally organizations representing the disabled also did not share the views of organizations and associations from the medical profession. Furthermore, organizations of the medical profession did not enjoy privileged access to the policy-making process. This might also have to do with the fact that the Department of Justice had the lead in formulating the law, and not the Federal Office of Public Health. Finally, the patients were not strongly organized and not very visible. Patient organizations participated only marginally in the policy-making process (at one hearing of a preparing commission) and therefore hardly supported the medical profession in its quest for allowing egg donation and pre-implantation diagnostics.

Given this actor constellation, it is not very surprising that the medical interest did not succeed in framing the issue of ART into a question of offering medical help for childless couples. The framing of the 'Beobachter' initiative in terms of 'protection against abuse' dominated the policy-making process. The 'Beobachter' is a well known consumer protection magazine from the German speaking part of Switzerland, which addresses not only consumer issues in the strict sense, but raises problems and issues in Swiss society and politics in general from a critical angle. In reaction to developments in biotechnology and ART in the human field, the magazine started a popular initiative entitled

‘Against the abuse of biotechnology and assisted reproductive technology’ in order to put the issue onto the federal agenda and to force the Federal government to take action. The manner in which the initiative framed the issue turned out to be very influential throughout the designing process.

4.4 Missing lesson-drawing and lack of international competition

International competition did not push Switzerland towards the adoption of less restrictive laws. There are also no clear indications of lesson-drawing from other countries that had already adopted legislation in the field of ART. Policies adopted by other countries were, however, taken into consideration in a general manner. There are references at least to the following countries: Germany, Sweden, the Netherlands, Great Britain, Austria, Denmark, France, Norway and Italy. Reports of the Council of Europe and other documents elaborated on the supra-national level were also strongly taken into account. The policies adopted by other countries mainly served to position the designing solutions discussed in Switzerland within the European and international context. Among the different countries listed, it seems that the German embryo protection law and the German discussion, and also the French design and discussion played a more prominent role. The final design clearly leans to the more restrictive German policies than the more permissive French ones. Media analysis and opinion polls indicate a considerable cultural difference between the German-speaking part of Switzerland, and the French- and Italian-speaking parts: Swiss-Germans were clearly more critical towards ART and biotechnology (Bonfadelli et al. 1998: 154, Bonfadelli et al. 2001, Maeder 1992). In addition, both popular initiatives and the referendum were launched in the German speaking part of Switzerland. It is, however, not possible to definitely evaluate and compare the possible influence of

the policies adopted by other countries, or the relevance of discussions and reports on the international, the European or EU-level on the Swiss design, compared to other influential factors.

4.5 The Federal Law on Stem Cell Research: closing existing legal gaps in favor of research interests

The Federal Law on ART does not comprehensively address the question of embryo research because the task of formulating legal measures with respect to embryo research was attributed to another legislative project on human subject research (Studiengruppe Forschung am Menschen 1995) under the lead of the Department for Home Affairs within the Federal Offices of Public Health. Given the pressure due to technological progress in stem cell research, the Federal Council decided to first elaborate a separate Law on Embryo Research, which would later be integrated into the law on human subject research. Parliament, however, preferred to address first the question of embryonic stem cell research and to postpone once more the question of embryo research, instead turning the project into a Law on Stem Cell Research instead, which the Swiss people accepted in November 2004. (Amtl. Bulletin SR 2003 165-190, 998-999, 1035; NR 2001 1347-1357, 1363-1397, 1751)

The Stem Cell Research Act remains overall within the strict frame defined by earlier legislation. The existing gap with respect to embryonic stem cell research was closed in favor of the interests of the research community to allow for stem cell research in Switzerland on left over embryos. Research and medical interest were successful in realizing their goal to allow stem cell research in Switzerland because of a more favorable actor constellation. The Office of Public Health in the Department of Home Affairs, which had through the whole designing process always defended a comparably more research friendly approach, were in charge of elaborating

the draft. Despite the successful launching of a referendum, the mobilization of target groups as well as beneficiaries in comparison to earlier phases of the designing process was limited. Furthermore, the Swiss National Science Foundation made pressure to adopt legislation quickly by financing a research project at the University of Geneva using imported embryonic stem cell lines even before the Federal Council presented a draft for a future law. International research competition also contributed to allowing stem cell research. Switzerland has a strong record in medical research and furthermore a powerful pharmaceutical industry, which on other occasions had successfully campaigned in favor of red biotechnology (i.e. medical applications). The referendum was launched by anti-abortion and anti-biotech interest groups (Vereinigung "Ja zum Leben", Verein Schweizerische Hilfe für Mutter und Kind, Basler Appell gegen Gentechnologie). Given that the Law on Stem Cell Research continues the restrictive policies accepted by the Swiss people in 1992 and 2001 and that it was adopted with a clear majority of the members of the governmental parties, it was no surprise that the law was accepted in a popular referendum (2004).

5. Explaining the Restrictive German Policies

The explanations proceed in two steps, first focusing on the elaboration of the Embryo Protection Law, and then discussing the adoption of the Law on Stem Cell Research, because the explanatory factors for the two are different. The following discussion of the Embryo Protection Law evokes four explanations for the restrictive content: the constitutionalization of the debate, party politics, the mobilization of the Left and the bottom up pressure of the *Länder*.

5.1 Constitutionalization of the debate

The framing of ART policies in terms of embryo protection is the first factor that we consider for the final, restrictive design. The German Constitutional Court is a potentially influential actor offering a venue to the opposition to counteract decisions of the governmental majority (Landfried 1991). In 1975 the Federal Constitutional Court declared the abortion law to be unconstitutional and stated that the constitutional protection of human dignity (Art. 1 GG) and the right to life (Recht auf Leben, Art. 2 GG) apply to the embryo after implantation (Wilde 2001: 183-5). The State accordingly recognized the obligation to protect the embryo. This jurisprudence on the protection of the embryo strongly contributed to framing ART in terms of embryo protection. The importance of jurisprudence was reinforced by the fact that the opponents of the decriminalization and liberalization of abortion in 1975, the Christian-Democrats, were now in government. Overall, the debate around the EschG must be interpreted as judicialized politics (Stone Sweet 2000).

The framing of ART as a constitutional question of embryo protection attributed an important position to the Department of Justice, who took the lead in elaborating the EschG. It also gave a strong position to legal experts during the whole debate. From a constitutional point of view, the question was whether the same protection that applied to the embryo after implantation also applies to the embryo in vitro. The legal opinion that dominated the debate was that the human dignity clause of the basic law applied to the embryo from the moment of fertilization of an ovum (Kuhlmann 2000: 78-9) and the finally adopted EschG effectively extended the protection to the embryo in vitro. This prevailing interpretation of constitutional protection of human dignity and human life contributed, together with other factors, to adopting a very restrictive act.

Not surprisingly, the constitutional debate was also a very important point of reference in the recent stem cell research debate. Even though the Stem Cell Act allows for embryonic stem cell research with imported stem cell lines, the interpretation that the human dignity clause and right to life clause of the Basic Law also apply to the embryo in vitro, underlying the EschG, continued to influence the Stem Cell Act. We could, therefore, speak of path dependency with respect to the strict protection of the embryo.

5.2 Party politics: restrictive preferences of the government and the opposition

The EschG was elaborated and adopted under a coalition government of Christian-Democrats (CDU/CSU) and Liberals (FDP). The governmental coalition controlled a majority in both chambers throughout the designing process, except for the Bundesrat in 1990 (Sturm 2001: 169), where the opposition had an absolute majority. The government parties promoted restrictive policies, but did not want to fully prohibit these new techniques. The government aimed at protecting the values of the constitution in particular human dignity and the well being of the child (BT-Drs. 11/1856 and 11/5460). The government coalition advocated a strong protection of the embryo and thereby continued the policy of the Christian-Democrats towards abortion. In comparison to the abortion debate, the Christian-Democrats were facing an opposition asking for more restrictions in a field, the 'protection of unborn life', where they traditionally had occupied a more conservative position than the left.

The position of the left was motivated by various factors: one very important factor was certainly the experience of World War II and the importance of anti-fascism for the self-understanding of the left. ART was understood as opening up the door for eugenic uses, which needed to be counter-acted by a total prohibition or at least

the prohibition of any selection mechanism. The critical attitude of the left was also based on skeptical attitudes towards research and science in general, due in fact to the role that the medical profession had played during WW II. Finally, feminist arguments and policy beliefs with respect to population policy and the relation between the First and Third World played a strong role among the Greens.

The Greens proposed a total prohibition of IVF and of any type of embryo research; they estimated that the governmental draft to be insufficient to prevent the dangers and misuse of ART (BT-Drs. 11/8179). Compared to the Greens, the position of the Social Democrats was less radical, but still asked for more restrictions than the government proposed without fully prohibiting IVF (BT-Drs. 11/5710, 11/8191 und 11/8192).⁷ From a party politics point of view, the policies advocated by the Greens might have been relevant for the Social Democrats. Since 1983 the Greens were represented in the Bundestag with and enlarged their representation to forty-two of 497 seats or 8.3 per cent of the votes in 1987, mostly at the expense of the Social Democrats (Jeffrey 1999: 109-12). The newly emerged competition for votes between the two left parties made it more difficult for the minority within the Social Democrats to advocate more permissive policies in order to make their voice heard and may also have contributed to the Social Democrats' advocacy of very restrictive policies.

This constellation of government and opposition parties led to an already rather restrictive first draft of the Embryo Protection Law and also contributed to pushing the governmental proposition into a more restrictive direction.

⁷ They promoted total prohibitions of cryopreservation of embryos, gender selection and the use of donor sperm.

5.3 Mobilization of the New Left and the public pressure for restrictive policies

During the pre-parliamentary phase, social movements from the left together with other interest groups, namely the churches, successfully mobilized the public. During the pre-parliamentary phase the opposition, or more precisely, the 'New Left' successfully influenced government propositions by mobilizing the public during the debate that emerged in the second half of the 1980s. The 1980s in Germany were characterized by strong social movements, in particular environmental and feminist movements, but also anti-nuclear and peace movements, motivated by a rather strong distrust against the political and scientific elite (Hampel et al. 1998: 71, Hampel et al. 2001). The green and feminist critics started to mobilize against ART from 1985 on (Betta 1995: 115), by organizing a convention about 'Women against Genetic Engineering and Reproduction Medicine.' A second convention about biomedicine followed in 1988. Early on the feminist and green critics thereby linked reproductive medicine and biotechnology in general. Furthermore, there were also other extra-parliamentary actors that advocated restrictive policies, such as the churches. The Protestant and the Catholic churches were against using IVF, and wanted, if IVF should be allowed at all, strict measures to be taken (Evangelische Kirche Deutschlands und Deutsche Bischofskonferenz 1989). The mobilization of public opinion by the left, and to a lesser extent also the position of the churches, influenced the governmental proposition into a restrictive direction.

The analysis of the position of the different parties and interest groups clearly shows that, with the exception of the organizations representing medical and research interests, all relevant actors advocated restrictive to very restrictive policies. This actor constellation made it difficult for research and medical interests to form a coalition with

influential partners in order to successfully influence the final result even though they participated in several commissions and consultation procedures in the pre-parliamentary stage.

Taking position for researchers, the Deutsche Forschungsgemeinschaft (German Research Council) and also the Max-Planck-Gesellschaft defended the freedom of science (*Freiheit der Wissenschaft*) written in the constitution. They clearly voiced the opinion that self-regulation was sufficient that any federal law must not prevent scientific development in the field and that embryo research up to the 14th day should be permitted under certain conditions (Deutsche Forschungsgemeinschaft 1987). Under pressure from public opinion, the German Research Council and the Max-Planck-Gesellschaft, however, had to declare a moratorium on embryo research in 1988 (Betta 1995: 102). The Bundesärztekammer (German Medical Association) proposition for embryo research went in a similar direction, by elaborating guidelines on embryo research that allowed for research under certain conditions up to the 14th day of development, if the ethics committee of the medical chamber of the Land or the university approves the project; the creation of embryos only for research purposes was declared inadmissible by the 1988 binding self-regulation on ART. The binding self-regulation on ART, adopted very early in the designing process, was overall rather conservative, setting clear limits to the application of ART. In other words, the medical profession did at no stage promote permissive policies, and early on set clear limits to its own practice. Despite the rather strict self-limitation and the voluntary embryo research moratorium, the DFG and the Federal Medical Chamber did not succeed in realising their policy preferences; the finally adopted EschG turned out to be considerably more restrictive than they had wished.

5.4 Bottom up pressure by the *Länder*

The *Länder* are important players in the health care sector because they implement policies and also possess legislative powers. While the federal level formulates the largest part of the legal framework, the Public Health Offices on the *Länder* level play an important role in promoting and providing health care (including hospital sector), supervising and organizing the medical profession and the local and regional health insurance funds (Wassener 2002). Accordingly, the issue of ART very directly concerned them. In principle, it would have been possible for the *Länder* to adopt their own laws. As long as the Basic Law does not attribute legislative power in a specific matter to the Federal level, and that was not the case before 1994, the *Länder* have the right to take measures. German federalism, however, corresponds rather to the idea of a ‘unitary federal state’: co-operation between *Länder* and *Bund*, and co-operation amongst *Länder* has the goal of establishing equal legal, economic and general living conditions nationwide (Benz 1999: 136). Competition between the *Länder* is therefore discouraged and the *Länder* did not unilaterally act on the issue of ART, even though some of them elaborated drafts.

The *Länder* however made pressure for the adoption of federal policies. One venue of co-operation between the federal and *Länder* level in policy formulation is the institution of common working groups. The report of the common working group (Bund-Länder Arbeitsgruppe) clearly proposed more restrictions than the first governmental draft from 1986, and it also clearly favored a more comprehensive legislation. The working group proposed either the adoption of a more comprehensive law on the federal level, which would have needed a change in the Basic Law in order to attribute the respective power to the Federal level, or the combined adoption of federal and *Länder* legislation, using the existing competencies at the

Federal level, in particular criminal law. The finally adopted EschG met in terms of restrictiveness the propositions of the working group, but the *Länder* were not successful in realizing their policy goal of a more comprehensive regulation for different reasons.

Only in 1994, or four years after the adoption of the EschG, the German constitution was effectively changed to give the federal level priority in legislating on ART. There were obviously differences in policy preferences among the *Länder* with respect to specific questions. These differences, together with the opposition in the Bundestag asking for even more restrictions, seem to have reduced the chance of changing the constitution considerably at this point in time, as a change in the Basic Law requires a qualified 2/3 majority in both chambers. The substantial ART policies first had to be decided and the issue to be off the political agenda in order to open up the possibility of winning sufficient support to change the constitution.

5.5 Federal Law on Stem Cell Research: new actor constellation, international competition and the heritage of the past

The EschG had established a strong protection of the embryo from its very early stages including any totipotent cell. The derivation of stem cells in Germany would have demanded a change of the existing legal framework, yet, the question of whether stem cell lines could and should be imported from abroad had not been addressed by the policy design so far.

The broad consensus in favor of setting strong limits on research in order to protect the embryo based on different beliefs also persisted in the stem cell debate. The change in government, in particular the active role Chancellor Schröder took in promoting freedom of research, together with the fact that the issue of stem cell research divided opinions within parties, allowed the

research interests to prevent a full de facto prohibition of embryonic stem cell research in Germany and to be fully excluded from international competition. The proponents of generally more permissive policies with respect to embryo research did not, however, succeed in changing the existing policy design, but the existing legal gap was closed in favour of their point of view.

The actor constellation was clearly different from what we observed during the design process for the EschG, and the strategies adopted and the institutional rules evoked also differed considerably. In contrast to the EschG the Stem Cell Act was not introduced by the government, but initiated by the Bundestag based on the report of the 'Enquetekommission 'Recht und Ethik in der modernen Medizin'.⁸ The idea for instituting a commission on these issues was already fixed in the 1998 coalition agreement (Koalitionsvertrag) between the SPD and Bündnis 90/Grüne. However, the realization was a difficult process within the SPD, because it was a group of critics of these new biomedical developments within the SPD that promoted the idea against the modernization faction to which also the Chancellor himself belonged (cf. Abels forthcoming). Finally, the motion for instituting the commission was supported by fractions of the government parties, the SPD and the Bündnis 90/Grüne, as well as by the major opposition party the CDU/CSU fraction and the FDP (Plenarprotokoll 14/96, 24 March 2000). The reasons for instituting were twofold: given the fast developments in biotechnology and medicine and the basic ethical questions that these developments raised (Enquete-Kommission 2001), the parties wanted to initiate deliberation on whether the existing legislation adequately protected human dignity

⁸ An Enquetekommission has the mission of preparing legislation on complex issues by assessing the current state of the art in terms of factual knowledge, but also with respect to opinions about possible solutions, and to formulate possible measures, which might be considered for state intervention.

and health while still opening up possibilities for future medical progress. Because the issue did not divide parliament along party lines and the parties themselves were divided over possible solutions taking the initiative had advantages. The institution of the Commission allowed the search for a broad compromise and also to counter-act the policy-preferences of the Chancellor who was in favor of more permissive research policies.

The Enquetekommission presented its intermediary report on stem cell research, which was only one of the issues it dealt with, in November 2001 (BT-Drs. 14/7546). This intermediary report on stem cell research reveals a consensus on how to interpret the legal framework as defined by the EschG. The commission explained that the current law does not prohibit the import of pluripotent stem cells for research purposes. In contrast, harvesting stem cells, or any other research activity that would imply the destruction of the embryo or any totipotent cell, was prohibited by the EschG. However, opinions were divided on what measures to take in order to close this legal gap or address the issue of harvesting stem cells in Germany by changing the EschG. The majority of the members voted for prohibiting the import of stem cells and the commission presented two alternatives for regulating the stem cell research question: either prohibiting the import of pluripotent cells or admitting it under tight measures of control (BT-Drs. 14/7546).

The Chancellor was clearly in favor of a liberalization of the existing restrictive policies (Die Woche 20.12.2000, FAZ 3.5.2001) and tried to mobilize the 'modernization part' within his own party. He clearly supported the policy preferences of the research organizations, the DFG, who had in fact launched a priority program on stem cell research in 2000, but suspended its decision to fund embryonic stem cell research until after the Bundestag decision. In contrast to the EschG, international competition as well as decisions made by

other countries seemed to have strengthened the position of the research interests in connection with stem cell research. Furthermore, the decision of the Chancellor to concentrate on stem cell research instead of supporting a total revision as initiated by the former Green minister of health, further emphasized the freedom of research issue. Shortly after the institution of the Enquetekommission, which must be understood as a venue or instrument for the Parliament to strengthen its position in the debate (cf. Abels forthcoming), Chancellor Schröder created the Nationaler Ethikrat, which belongs to the Kanzleramt (National Ethic Commission attached to the Chancellor's Office), which also addressed the issue of stem cell research. The National Ethic Commission must rather be considered as an expert arena whose composition was decided by the Kanzleramt. A majority of the National Ethic Commission was in favor of a temporary import of the stem cells. The National Ethics Council announced its position only shortly after the publication of the intermediary report in November 2001 (Nationaler Ethikrat 2001).

Parliament, however, did not follow the Chancellors view, but struck a compromise between the actors wanting to prohibit the import of stem cell lines and the promoters of more permissive research policies in general, by not revising the existing protection of the embryo, but allowing the import of stem cell lines that met certain conditions. While the stem-cell question is regulated, other controversial issues, such as pre-implantation diagnostics are still on the political agenda.

6. Conclusion: Comparing the Swiss and German Policy-Making Processes

In the introduction, we suggested that similarities in actor constellation might explain the parallel restrictive outcomes in the two countries. The analysis of the actor

networks reveals strong parallels in terms of actor mobilization and the policies they advocated, namely the strategies of medical interests (target groups), interest group mobilization in general, the position of political parties and the policies advocated by the administrative units in charge (see Table 2).

In Germany and Switzerland we found a broad mobilization of interest groups and the networks were clearly not dominated by the medical interest groups. While policy-making in Germany usually corresponds to the model of sectoral corporatism, this does not apply to ART (see Epp 2003: 141ff.). The dominant position of the Ministry of Justice for elaborating the EschG certainly had an impact on how the issue was approached by emphasizing constitutional arguments and contributing to the judicialization of the debate. Also in the case of Switzerland, the corporatist mechanisms in health care politics were not relevant, because as in Germany, the Department of Justice was in charge of elaborating the main piece of legislation. The lead of the Department of Justice contributed to framing the ART issue in terms of protecting the personality.

Table 2: Actor based explanations

Actor	Target groups: physicians, researchers	Interest groups; beneficiaries
Switzerland	Self-regulation early on in the decision-making process prohibiting a number of controversial techniques; adopted policies turn out more restrictive	mobilization of interest groups critical towards ART, but mobilization of patients very limited no mobilization of patients
Germany	Self-regulation early in the designing process through binding professional law; adopted policies turn out to be more restrictive	strong mobilization of left and feminist interest groups, religious groups no mobilization of patients

Actor	Political Parties	Administrative Agencies
Switzerland	Coalition of parties from the left and right based on different beliefs; among governmental parties only Radicals for more liberal solution	Diverging opinions within government and across Departments with respect to research; Department of Justice in charge, advocating restrictive solution Stem Cell Research: Department of Interior Affairs and Office of Public Health in charge defending research interests
Germany	Christian Democrats want restrictive policy, left opposition even more restrictive policies	Ministries as important actors, in particular Ministry of Justice, advocating restrictive solution also Ministry of Research and "Chancellor democracy" relevant for stem cell debate, defending research interests

Another factor in common is the rather conservative position of the medical community as the main target group. The early self-regulation in both countries did, however, not translate into a moderate state intervention (see Rothmayr 2003). Federal policies in both cases turned out to be considerably more restrictive than those advocated by the medical community. Overall we could in

both cases rather speak of an issue network (Marsh and Rhodes 1992: 251) than a policy community. In both countries, the interest groups that mobilized, were critical of ART and wanted to set strict limits. The medical interests also did not succeed to realize their policy goals of a moderate state intervention, because of the overall restrictive position of the majority of political parties, government and opposition parties alike. We find strong parallels across the two countries in the position of the political parties. The left pushed for restrictive to very restrictive solutions and the Christian-Democrats in both countries also advocated for very restrictive design. In fact, in both countries, the analysis, revealed a consensus building among political parties from the left and the right for overall strict policies. With respect to stem cell research opinions within parties were more divided. Namely in both countries, the Social Democrats were divided over the question of stem cell research.

The findings with respect to the actor constellation support the idea of policy determining politics, in particular, if we also take into account the framing of the ART issue in both countries. In both countries, ART was part of a larger discussion about the negative impact of technological progress in biotechnologies on society, resulting from the mobilization of left and green interest against biotechnology.

Table 3: Institutional Explanations

Polity dimension	Federalism: Multi-level governance
Switzerland	Of relevance for bottom up pressure of cantons
Germany	Multi-level governance in health care relevant for bottom up pressure of Länder for regulation

Polity dimensions	Judicial policy-making
Switzerland	Convergence of cantonal norms induced; impact on policy-making on federal level: limiting restriction
Germany	Constitutionalization of the debate: judicialized politics because of former decisions on abortion and power of abstract control of the Bundesverfassungsgericht

Polity dimensions	Style of decision-making
Switzerland	multiple arenas involved, overall consensual: search for viable compromise, influenced also by direct democratic institutions
Germany	multiple arenas, long pre-parliamentary phase with consultation and search for compromise

Each of the two countries offers different possibilities to political actors to influence the policy making process. In both countries, multiple arenas were mobilized by different actors. With respect to the German Embryo Protection Law and the Swiss Law on Assisted Reproduction the pre-parliamentary stages were particularly important. In Switzerland, the mechanism of the popular initiative and the comparable consensual style of policy-making resulting from different institutional and cultural factors (e.g. Linder 1994, Papadopoulos 2001)

explain why the policy-designing process was characterized by a search for a viable compromise during pre-parliamentary and parliamentary stages, and also why none of the influential interest coalitions and political parties succeeded in fully imposing their preferences. The basic consensus for strict regulation finally achieved in Germany, is equally due to the comparably rather consensual style of policy-making. In Lijphart's classification Germany is clearly leaning towards the consensual side on the executive-party dimension of his classification (Lijphart 1999: 248).

For the issue of stem cell research the parliamentary arena was of comparably greater importance. In Germany, the Bundestag considerably strengthened its position in the debate by instituting an Enquetekommission and the parliamentary arena was the dominant one in elaborating the Stem Cell Law. There is an additional institutional characteristic that was of relevance, and that is the German "Chancellor Democracy" (Niclauss 1999: 37). With respect to the stem cell debate, the Chancellor also took the initiative by publicly taking a liberal position on embryonic stem cell research and by establishing the National Ethics Council in order to counteract the initiative of parliament. He did not succeed in realizing his policy goal of not just allowing the importation of embryonic stem cells, but to allow the derivation of embryonic stem cells within Germany. This "power-play" illustrates well the German system of separation of powers as well as the multiple points of veto or access embedded in the German political system, enhancing the search for a viable consensus.

Federalism is another mechanism to take into account in order to explain the final outcome. The German type of cooperative federalism influenced the decision-making processes. There was no competition between the Federal level and the *Länder* or between the *Länder* but rather cooperation in order to adopt national norms. The *Länder* made pressure to adopt national regulation and

supported giving the federal level priority in legislation (in 1994). In Switzerland, competencies with respect to health care and the more competitive character of federalism led to the cantons adopting competing norms. The cantons were, however, for several reasons overall in favour of a national solution, certain problems posed by ART, e.g. questions of civil law, were not in their power. Furthermore, the small size of Switzerland and the concentration of high tech medicine at hospitals in a few cantons - i.e. patients can not necessarily be treated in their home canton - made individual cantonal solutions undesirable. In both countries, the federated entities remain key players for implementing ART policies in general, while the implementation of stem cell policies belongs to the federal level.

Courts played an important role in both cases, despite the considerable differences in the power and configuration of judicial institutions in the two countries. In Switzerland, the bottom-up policy-making process allowed for the intervention of the Swiss Federal Supreme Court into too restrictive cantonal policies inducing a certain convergence of policy content on the cantonal level before the first major decisions were taken on the federal level. Its decisions prevented even more restrictive policies. In Germany, the powerful position of the Bundesverfassungsgericht, the German Constitutional Court is an explanatory factor. Constitutional courts do not only influence decision-making through their decisions, but also by mechanism of anticipation by the political actors (judicialization of politics, see Stone Sweet 2000). This is particularly true in Germany, where the Bundesverfassungsgericht enjoys an exceptionally strong position compared to constitutional courts in other European countries, sometimes taking up the role of a “quasi-legislator”. It is a common political strategy of the opposition to threaten the government to “go to Karlsruhe”, where the Bundesverfassungsgericht is located. In the case

of ART, the former decisions of the German Constitutional Court on abortion contributed to the constitutionalization of the debate and the strong focus on embryo protection.

This brief summary of the institutional explanations reveals that despite the differences in how the specific institutions work in each countries, they "aggregated" the preferences in a similar way: from the demands for total prohibitions of all ART by critical interest groups, on the one hand, and the more moderate state intervention advocated by the medical and research interests, restrictive policies resulted as a viable compromise, satisfying a majority of the powerful actors.

Finally, the introduction suggested that the mechanism of lesson-drawing between the two countries might be of relevance. In addition to the question of lesson drawing, international competition and supra-national norms might also be of relevance for explaining the convergence in policy-style of the two countries.

In neither country could we observe top-down harmonization. Supranational regulations were so far not at all an influential factor. International research competition contributed to strengthening the position of research interests in the embryonic stem cell research debate and contributed indirectly to leaving the door open for this type of research in both countries. Yet, for other aspects of ART, globalization has not been an important issue due to the fact that the ART market in both countries has largely remained national markets. As proposed in the introduction, an additional factor to discuss is the question of lesson-drawing. In the ART field, in both cases there is no indication of an actual policy transfer from other countries. The circumstance that no other European country fully prohibits IVF was one among many other arguments used against a total prohibition. In short, legalization on the international level, international competition and lesson-

drawing are overall so far not very powerful variables to explain why both countries chose restrictive policies.

Table 4: Contextual Explanations

Explanations	Top down harmonization?	Market competition?
Switzerland	No top down harmonization; Bioethics Convention signed	Relevant for Stem Cell question: international research competition
Germany	No top down harmonization, Bioethics Convention was neither signed nor ratified	Relevant for Stem Cell question: international research competition

Explanations	Lesson-drawing?	Policy-inheritance?
Switzerland	From cantonal to federal level some lesson-drawing; no lesson-drawing from Germany or other countries	Yes, from ART to Stem Cell Research
Germany	No obvious lesson-drawing	Yes, from ART to Stem Cell Research

Finally, the analysis of the different sequences of the policy-making processes revealed for both countries that policy inheritance matters (Rose and Davies 1993). The solutions for embryonic stem cell research remained overall within the restrictive framework of prior legislation on ART. The differences between the two countries with respect to embryonic stem cell research, i.e. that Germany does only allow for importing, while in Switzerland the use of left over embryos for derivating stem cells is permitted, are due to two factors: through the constitutionalization of the debate, the German legislation more strongly protects

the embryo, but in Switzerland, the question of embryo research has been transferred from the Federal Law on ART to a later legislative project on human subject research. In the meantime, the issue of stem cell research was regulated without comprehensively addressing the question of embryo research in general.

On the grounds of this comparison we might formulate the following overall conclusion. In order to explain the convergence in policy-style in both countries we have to turn to a combination of factors with respect to actor mobilization (network variables) and the overall rather consensual decision-making style partly due to the combination of institutional features of the two countries. There are, first of all, strong parallels with respect to the network variables, i.e. public mobilization and the general framing of the two issues. In fact, if we compare the network variables with the institutional variables and the globalization/multi-level governance variables, the two countries reveal the least differences with respect to this feature of the policy-making process. The initial coupling of various biomedical and biotechnological applications under the label of gene technology led to broad mobilization of critical interests groups in both countries and the major parties in both countries also advocated restrictive policies. In both cases, the positions of the governmental parties were not allowing to form a sufficiently strong majority to push legislation into a considerably more liberal direction. It was, however, in both cases possible to find a sufficiently strong majority for rejecting solutions that would have been even more restrictive than the norms currently in place. Institutional opportunity structures differ between in the two countries with respect to federalism, court intervention and direct democracy, nevertheless, in both countries the rather consensual style of policy making led overall to a similar compromise between extremely restrictive and moderately restrictive positions. Finally, the context variables seem the

least useful for explaining the common policy-style. Supranational norms, international competition and lesson-drawing are so far of limited importance for explaining the restrictive design in both cases.

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