Network Deliberations and Policy Transfers in the Development of a European Human Genome Policy

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ABSTRACT  International relations scholars often view the EU as an international organization, while comparative politics scholars study it with methods commonly used in the study of nation-states. Increasingly, however, scholars recognize that EU governance has little in common with either an international organization or a nation-state. They argue that European governance, more than other policy development setting, features network deliberation and strong forms of policy transfer. In fact, European governance involves committees of actors who possess direct knowledge of member states’ policy experiences. Consequently, policy deliberation often revolves around member states’ policy successes and failures as well as around potential emulation. This article adds evidence to the argument that European governance differs from policy-making in nation-states and international arenas. The evidence comes from a study of the development of the Human Genome Analysis Programme in the late 1980s.

Introduction

In the 1980s, several scientists and policy-makers throughout the world realized the medical and economic potential of mapping the human genome. Mapping, it was believed, would enable better assessments of the impact of genes on diseases, as well as the adoption of preventive measures and curative treatments of these diseases (Academia Europaea 1991, Evans 1999, Van Ommen 2002). But beyond the instrumental value of genome mapping, it quickly became a symbol of something greater. Indeed, the decoding of the genome in the 1980s became something akin to the conquest of space as a symbol of humanity’s reach and its movement toward new horizons. Worried by the leading position of American researchers in the race to decode the genome, the European Community developed a policy at the end of the 1980s to allow a role for Europe in this endeavour. In this article, we are interested in the EU’s policy to encourage coordination among researchers from France, the...
United Kingdom, Germany and some other member states, where research programs in genomics had been developed already.

Our study of the development of a European policy for human genome mapping seeks to shed light on the role of deliberations on policy transfers in EU policy-making processes. Scholars insist increasingly on policy transfers as key features of European governance (Radaelli 2000, Bulmer and Padgett 2005). In this article, we ask whether transfers occupy a similar place in the policy processes of nation-states; whether the EU resembles federations, where policy diffusion is common; whether international organizations rely on transfers in a manner similar to the EU; or whether the EU is unique in its reliance on policy transfers. We argue that nation-states and international organizations tend to rely on weaker forms of policy transfers than the EU. We also argue that transfers within federal countries depend, more often than not, on a process that differs from that on which transfers rest in the EU. In other words, we argue that EU governance is unique and that policy transfers play key roles in this uniqueness.

The article begins with a discussion of prevailing views of European governance. It is followed by a presentation of policy transfer theory and testable hypotheses. In the last section, we support the hypotheses with a case study of human genome policy development in the EU.

**Governance in the European Union**

Some analysts still debate over whether the EU should be studied through the lens of international relation scholars, who view the Union as akin to an international organization, or through the lens of comparative politics scholars, who favour perspectives used to study nation-states. Moravcsik’s (1998) intergovernmental liberalism, for example, proposes a view of the EU as the instrument of member states in the pursuit of their economic interests. The EU is the site of member state governments’ power games, but also a strategic asset in their power games with their respective legislative branches and civil society. As in some international relation theories, state governments are the main actors in Moravcsik’s perspective and power variations among them are key explanations of political outcomes. Some analysts, also attached to the idea of powerful state governments, insist on their conflicting interests with European institutions (Joerges and Neyer 1997: 615). These analyses stress the role of the committee system, known as comitology, which was initially put in place by member states to look after the Commission. As Dehousse (2003: 798) puts it, comitology is “the eye and the mouth of national governments, the primary task of which was to supervise the ‘executive’ activities of the European Commission”. In other words, some studies of comitology serve to support international relations theory, which suggests that European integration leaves state sovereignty intact, at least in powerful countries.

In contrast, other analysts argue from a neo-functionalist perspective that European integration resembles a process of state formation (Sandholtz and Zysman 1989). Incapable of preventing integration, these analysts suggest, member states witness the erosion of their sovereignty to the benefit of EU institutions. This perspective considerably encouraged the involvement of comparative politics scholars in EU studies. So much so that in the 1990s, comparative perspectives
became prominent in EU studies. The development of institutions, including political parties, of a European culture and identity became major explanatory factors for political outcomes in Europe (Marks et al. 1996, Pierson 1996, Waterton and Wynne 1996, Hix 2001). With comparative politics presenting an alternative perspective to international relations on the EU, the “nature of the beast” became the object of much debate and discussion among analysts (Risse-Kappen 1996).

Beside these debates and discussions around the erosion of state sovereignty were empirical studies, often pertaining to given policy sectors, which frequently revealed patterns of governance dissimilar to those of international organizations as much as to nation-states. Pioneering articles making such assertions are those of Beate Kohler-Koch (1996) and John Peterson (1997), both suggesting that the European Union had to invent its own governance processes. Not as vulnerable to state governments as international organizations, yet deprived of a bureaucratic capacity comparable to that of nation-states, the EU would develop policies in a more horizontal, open and fragmented style (Kohler-Koch 1996, Peterson 1997; see also Héritier 1999, Skogstad 2003). In other words, the European Union, more than nation-states and international organizations, would develop policies in diverse sectoral policy networks. That is not to say that policy networks do not play a role in nation-states or in the international arena. However, these studies depict networks in the EU as more open to non-state actors, flatter and operating differently. EU scholars often refer to this latter perspective as the governance perspective (Börzel 1998, Pollack 2005: 36).

The distinction between the international relations and the governance perspectives becomes clear when one compares the role each ascribes to comitology (Pollack 2003). Less tied to power struggles between the supranational Commission and the intergovernmental Council of Ministers, the governance perspective insists on the limited expertise of the Commission and of the Council of Ministers in a context where the competences of the EU do not cease growing (Schäfer 2000). In comparison to administrative organizations in member states, the Commission is indeed a small bureaucracy. In turn, the size of the Commission shapes its capacity and its autonomy in the development of policies. In the face of the increasing complexity of modern policies, in particular on subjects like the human genome, the Commission may thus find it beneficial to draw up close links with national administrations, but also with national centers of expertise, which are not always under the direct authority of governments. In this context, the Commission sought to develop networks to assist in the development of its policies. New comitology committees were thus created, without a control function, to encourage the formation of such networks (Peterson 1995). In other words, the network perspective depicts comitology not as a control instrument, but as one to foster cooperation between the Commission, the Council, national administrations and experts in the complex process of European Union governance (Demmke et al. 1996, Schäfer 1996, van Schendelen 1996, Wessels 1998, Egeberg et al. 2003).

In a study of EU food policy, Jeorges and Neyer (1997) note that European committees encourage deliberative supranationalism. Deliberative supranationalism has two interrelated features. First, it has a productive capacity, as understood by Scharpf (1997). Scharpf (1997) distinguishes between two policy-making dynamics: distributive bargaining and problem-solving. The former involves zero-sum
distributive games among participants while the latter produces solutions that transcend participants’ narrow interests. In contrast to distributive bargain, problem-solving can produce solutions that none of the participants could have imagined and implemented alone. Thus, in deliberative supranationalism, committee members take advantage of collective action in view of producing innovative solutions. Second, participants in deliberative supranationalism change their mind during policy processes. Actors should be capable of admitting that the solution to which they were most attached at first would not be as productive for the community as the unforeseen alternative, emerging out of the deliberation with other actors. In short, in a deliberative process, actors’ preferences will often converge toward a solution that everyone will come to view as desirable for the community.

Increasingly, comparative politics and international relations scholars recognize the importance of networks and of deliberation and integrate these concepts in their perspective on EU governance (Jupille et al. 2003). What remains unclear, however, is the extent to which European network deliberation is distinct from network deliberation, which also occurs in nation-states and international arenas. We argue that the concept of policy transfer is helpful to capture the distinctiveness of EU network deliberation.

Transfers in EU Deliberation

In several sectors, the responsibility for EU policy development is delegated by the Commission to a committee. Unlike committees with similar responsibilities in nation-states, EU committees are comprised of individuals who come from a variety of European countries, with considerable experience with relevant policies. Committee discussions, therefore, frequently begin with an exchange of knowledge among participants about the policy experiences of their respective country. And deliberations often focus on the success and failure of the various experiences and the lessons that can be drawn from these experiences. A policy transfer is the likely result of such a deliberation. Dolowitz and Marsh (2000: 5) define a policy transfer as a “process by which knowledge about policies, administrative arrangements, institutions and ideas in one political system (past or present) is used in the development of policies, administrative arrangements, institutions and ideas in another political system”. Various distinctions have also been proposed among transfers. When a policy is transferred into another political system without alteration, Bulmer and Padgett (2005: 106) speak of “emulation or copying”. They argue that it is “the strongest form of transfer”. In contrast, when a political system is only a source of inspiration for a policy decision drawing heavily on domestic norms, Bulmer and Padgett (2005: 106) speak of “influence”.

Radaelli (2000) has noted that policy transfers are common in the EU because they serve to legitimize policy choices in the context of a particularly acute legitimacy deficit. Bulmer and Padgett (2005) disagree. Transfers, they argue, vary extensively within the EU, with the strongest forms of transfers occurring where institutions are strongest and therefore where legitimacy deficits are weakest. The case study presented below should shed light on this disagreement. In fact, the genomic area at the end of the 1980s was weakly institutionalized at the EU level. Clearly, EU interventions in this area had a potential to suffer from legitimacy deficits. Therefore,
Radaelli (2000) would expect officials to draw on a strong form of transfers to boost legitimacy, while Bulmer and Padgett (2005) would argue that the low level of institutionalization allows only weak transfers. We return to this controversy in the conclusion of the article. The main goal of the article, however, is to assess the extent to which transfers occurring in the development of EU policy are distinct from transfers occurring elsewhere.

To meet this goal, it will be useful to introduce additional analytical distinctions among transfers. First, transfers can occur from one country to another. In this case, country A uses country B as an exemplar. Second, a transfer can occur from a country to an international organization. Stone (2004) argues that a transfer from one country to another will often transit by an international organization. When this occurs, the international organization’s personnel gathers knowledge about the policy of country A and diffuses it. Despite the personnel’s best efforts, however, the knowledge can stay within the international organization for some time before been noticed by another country’s policy-makers, if ever. Third, transfers can occur within the limits of a federal country. In federal countries, policies may be transferred vertically, between the levels of government, or horizontally, between sub-federal governments. Federal arrangements, it has been argued, are particularly conducive to the diffusion of policy (McRoberts 1993, Pierson 1995).

Policy transfers within the European Union, we argue, are closer to transfers occurring within federations than they are from those occurring between countries, transiting through international organizations or not. In the case of a transfer from one country to another, actors from the exemplar country are not ongoing participants in the development of the policy of the borrowing country. Again, a particular feature of EU policy development is that it involves people with direct relevant experiences with problems and policy in various countries. Borrowing international organizations might, occasionally, involve people with relevant experience in the exemplar country. However, the personnel of international organizations, whether they come from the exemplar country or not, should be primarily preoccupied by their ideas’ potential to be undertaken voluntarily in several other countries. Thus, the resulting transfers should be closer to influence than to emulation because influence leaves more discretion to borrowing countries than emulation. In contrast, policy-makers in the EU, just as in member states, are preoccupied primarily by the resolution of any policy problems arising and they possess the authority to act upon them (Bulmer and Padgett 2005: 107–109). In EU transfer processes, the expectation is that participants will share the policy knowledge arising from the concrete experience of their respective country.

All federations, however, are not alike, several of them functioning in a manner that has little in common with the EU. Indeed, most federations are known as jurisdictional federations. A jurisdictional federation is one which divides competencies between a federal government and federated governments (Montpetit et al. 2005). In Canada, a jurisdictional federation, the federal government is responsible, among other things, for defence, while provincial governments are responsible for education. Such a clear division of competencies offers a poor description of the EU’s relationship with member states. In the EU, divisions of competencies are not possible since member states’ policy-makers are involved in the development of all supranational policies through the Council of Ministers. In some
respects the EU is closer to a functional federation, of which only two examples exist: Germany and Switzerland. In a functional federation, the federal government is responsible for policy formulation in most jurisdictional areas, while federated governments are responsible for policy implementation. In Germany, as in the EU, federated governments play a role in policy formulation, thanks to their representation in the Bundesrat.

The processes whereby policies are transferred in jurisdictional and functional federations are different. Several economists and political scientists argue that intergovernmental relations in jurisdictional federations are characterized by competition. To the extent the federal government encourages policies that promote citizens’ mobility within the country, federated governments emulate popular policies to avoid losing population or investments (Montpetit 2002, Volden 2006). In contrast, such a competition is largely absent from functional federations. Indeed, the harmonization of policies across federated governments in functional federations occur through joint policy development involving federal and sub-federal participants (Scharpf 1988).

Joint policy-making in Germany and Switzerland, however, is likely to differ slightly from joint policy-making in the EU. Mature functional federations, Germany and Switzerland have federal governments with extended experience in policy development in several sectors. In contrast, the institutions of the European Union are still developing their policy competencies, exploring areas of jurisdiction under the responsibility of member states. Therefore, the sharing of member states’ policy experiences is particularly important in the EU’s joint policy-making processes. In contrast, federated governments in functional federations are more likely to contribute knowledge narrowly focused on administrative capacities. Again, in functional federations, sub-federal governments are primarily responsible for policy implementation. Logically, then, functional federations should not encourage transfers to the same extent as the EU, despite their structural similarity.

Table 1 identifies differences in transfer processes and objects along the different types of transfers just discussed. In terms of process, we distinguish between two possibilities: market and networks. We use the concept of market as an analogy, more than to suggest that there is a real market for transfers. The concept of market simply conveys the idea that a transfer can occur without any involvement from people who have a direct experience with the transferred policy. Citizens’ demand for the policy of government A obliges governments B, C and D to emulate government

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<td>Network</td>
<td>From one country to an international organization</td>
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Table 1. Four predictions regarding transfers
A, without any pressure or involvement of the latter. Governments B, C and D simply fear losing citizens, just as firms fear losing customers when competitors provide higher quality products at a better price. Therefore, they adjust their policies automatically to satisfy citizens’ demands. In contrast, transfers through networks involve joint decisions or, analogically, cartels. Policy harmonization around an exemplar can be decided jointly by the concerned governments. Again, transfers in functional federations and in the EU proceed by networks rather than markets.

Transfers within federations are likely to be closer to emulation than to influence, the former representing the strongest form of transfer and the latter the weakest (Bulmer and Padgett 2005). First, in a jurisdictional federation, citizens’ demand for a transfer should involve a specific benefit supplied through a specific policy to the residents of the exemplar federated unit. Anything short of the same benefit, and thus the same policy, should disappoint citizens’ demand. Second, emulation within a single country, where sub-federal governments face relatively similar problems, is easier to achieve than between two different countries. Stone (2004) argues that programs or structures are seldom transposed directly from one country to another. The idea behind programs and structures travels better internationally because it can be adapted to different contexts. In other words, influence should be the most common form of transfers between countries.

Bulmer and Padgett (2005) argue that the strength of transfers within the EU varies according to the authority of supranational institutions in various sectors. Without denying this possibility, we argue that transfers within the EU tend to be closer in strength to those observed within federations than to those between non-EU countries. At least before recent enlargement, policy problems within the EU were sufficiently similar to warrant emulation.

Transfer processes and strength, which differentiate the EU from international arena and federations, are summarized in Table 1. A convincing test of these hypothesized differences would require comparisons between the EU, a number of countries and international organizations. We cannot provide such comparisons. However, the case study presented in the next section, which pertains only to the EU, resonates largely with these hypotheses. It is based on a series of confidential interviews, frequently quoted, with key actors involved in the development of the European genome policy.

The Background of the European Human Genome Policy

In 1988, the EU released a proposal entitled Predictive Medicine: Human Genome Analysis (Official Journal of the Commission 1988). The document suggested putting a stop to fragmented research efforts, if not competition, among European genomic researchers. Europe, the document claimed, should seek to become a unified player in the international endeavour to decode the human genome (Official Journal of the Commission 1988). In the 1980s, EU interventions in the fields of genetics and biomedicine rested on a weak legal basis (Salter and Jones 2002). Articles of the Treaty of the European Community authorized interventions only in related fields, including public health, research and domestic markets. The Single European Act of 1987, however, encouraged the Commission’s involvement in research integration and development, as steps towards a single European economy. In fact,
strengthening scientific and technical research was intended as a means to improve Europe’s international competitiveness. The Maastricht Treaty (1993) further affirmed the role of the EU in the field of research and technology (Hérif 1999).

Prepared under the direction of Pierre Larvor, an expert from the Institut national de recherche agronomique (France), Predictive Medicine set broad objectives for a human genome research program focused exclusively on predicting genetic diseases. The scientific objectives of the proposed program were the mapping of the human genome, the constitution of an ordered library of human DNA, the improvement of genetic technologies, the training of highly qualified personnel, and the creation of a common database (Official Journal of the Commission 1988). Contrary to the wishes of the Commission to quickly develop a program in view of meeting these objectives, it was necessary to wait two years before the Human Genome Analysis Programme (HGAP) obtained the support of the Council of Ministers.

Policy development thus took place between 1988 and 1990. It began with the appointment of an ad hoc working group, known as the HGAP committee (Coordination Advisory Committee – CGC Medical and Health Research 1988). The role of the working group was primarily to translate Predictive Medicine into a program, whereby European researchers could coordinate their efforts over genome mapping (Predictive Medicine Working Party 1988). Typical of EU policy processes, the European Commission invited national genomics experts, recommended by their respective member states, to participate in the committee. Peter L. Pearson, a university professor from the Netherlands, was appointed president. The committee, however, did not have a formal authority structure, common in formal political institutions. Instead, committee decisions were made following deliberations aimed at finding consensus. The participants shared a motivation to improve the European contribution to scientific advances in human genomics. In other words, the committee formed a network of individuals with distinct expertise and organizational affiliations. Network participants also came from different member states. Scientific motivations held the network together.

At the first meeting of the HGAP committee, members proposed to operate in study groups, organized along the various objectives of the program. Five groups were thus formed and each HGAP committee participant was assigned to a study group in accordance with their expertise. One of the five study groups was thus responsible for the mapping of the human genome. Our empirical investigation focuses, for the most part, on the work of this latter group. The mapping study group was composed of genomic experts from England, France, Ireland, Italy, Belgium and Germany. Thanks to participants’ shared scientific expertise, the mapping study group was even more cohesive than the entire network of participants in the HGAP committee.

After several meetings, the mapping study group recommended the creation of Eurogem. Eurogem was a structure of coordination, which involved key resource centers, a network of research laboratories located in several member states, a mode of communication and integrated databases (Study Group 1 – Human Genetic Maps 1988). Resource centers were to have the responsibility for the collection, preparation and distribution of DNA probes, of samples for the linkage studies and of cells for mapping. Two resource centers were identified: the Centre d’étude du polymorphisme humain (CEPH, France) and the Imperial Cancer Research Fund
Laboratories (London). Communication among laboratories and databases were the responsibility of the European Consortium on Linkage for Genetic Disease (EUROCLID), which ultimately was to produce a gene chart.

**Deliberations over Transfers**

Efforts to map the human genome elsewhere in the world, particularly through the Human Genome Project in the United States, played a key role in convincing EU officials to develop HGAP. In the mid 1980s, prominent European scientists feared American competition in genomics. Witnessing discussions on the development of the Human Genome Project, they believed that their research would rapidly become irrelevant if they could not obtain some form of policy support. Frustrated with their national governments, some of them began stressing the importance of improving research cooperation at the European level, hence their demand to the Commission for a Europe-wide program. In other words, the idea behind HGAP originated from a transfer from the United States. It proceeded through a market-like mechanism, as Americans were not directly involved in the transfer, although European researchers who pressured the European Commission maintained relationships with American researchers. Some were in fact involved in discussions on the Human Genome Project. In addition, the transfer was in the form of influence rather than emulation and therefore could be adapted to the European context.

On the HGAP committee, the consensus over the specifics of the European program was not achieved right at the start. There was some dissension, particularly on the German side. Indeed, for historical reasons, the German representatives were more or less ill at ease with the program and its predictive vision, which could be associated with eugenics by opponents. The German population did not wish for such a project (Abels 1998). Caught between a rock and a hard place, the German scientists thus voluntarily selected to concentrate on the data-processing aspects of the program.

The Germans wanted to get involved in that kind of research but, at the same time, they faced public opposition. (interview extract, May 2004, Berlin)

The Commission those days present what they called predictive medicine and this caused a lot of problems, because number one, we thought it was premature and number two, it had a strong eugenic component in it. And you probably know that in Germany the discussion about eugenics is a very sensitive one. (interview extract, May 2004, Berlin)

Hesitations were overcome by the integration of ethical, legal and social dimensions of genetics within the program. The funding of these dimensions sent a strong message that HGAP did not have any eugenic goals, seeking first and foremost a better understanding of hereditary mechanisms and their roles in some diseases.

The integration of ethical, legal and social dimensions into the HGAP illustrates the productive capacity of deliberations. Thanks to their history, Germans are particularly sensitive to the danger of eugenics. Therefore, their presence oriented the
deliberation toward this issue, which led to an important improvement of the program. Moreover, the production of an acceptable program motivated German representatives far more than the redistribution of funding engendered by the integration of ethical, legal and social dimensions. In fact, the redistribution did not particularly benefit Germany and therefore officials of the German government blamed their delegated national experts for not looking sufficiently after the country’s interests.

Committee members also insisted on the importance of a starting point that would rally everyone. Thus, members agreed that the program had to be anchored in existing European experiences. Therefore, transfers quickly became the object of deliberations. As an interviewee stated:

The role of the committee was to work out a program which best corresponded to, on the one hand, the knowledge which existed at the time, because it is not worthwhile to launch out in wild imaginings or other things, but to consider as clearly as possible the use of new knowledge obtained thanks to the pooling of the knowledge of everyone. (interview extract, May 2004, Berlin)

Committee members insisted on a program capable of yielding results rapidly. They believed that showing a first concrete European contribution to genomics research would be the best way to encourage the construction of an integrated research program. And to obtain results quickly, they believed it essential to build on the expertise of reputed existing genomics centers.

France’s Centre d’étude du polymorphisme humain quickly became the focus of the deliberations. Daniel Cohen, CEPH’s director, was on the committee and therefore he was able to bring direct knowledge of the center’s experience to the table. To understand the role of Cohen, it will be useful to present a brief history of the CEPH. In 1981, Helene Anavi offered Jean Dausset her collection of art valued at 50 million francs. It was thanks to this patronage that Professor Dausset, a 1980 Nobel Prize laureate for medicine and physiology, created the CEPH in 1984. The mandate of the CEPH is the location of a genetic basis for “compatibility in blood transfusions” (Rabinow 2000: 14). Daniel Cohen, then a student of Dausset, proposed going beyond the research of blood compatibility and marked a radical turn towards the complete mapping of the human genome via the center’s blood bank of 40 families, which gave great access to genetic markers. Thanks to this bank, charts of human chromosomes were periodically generated by the CEPH. The history of French human genetics must also include the French Muscular Dystrophy Association (AFM), directed by Bernard Barataud and the Téléthon. Created in 1987, the Téléthon was very successful, piling up 185m francs the first year, and 250m francs on average in the five years which followed. Barataud wanted to advance knowledge relevant to muscular dystrophy and with the funds generated by the Téléthon he became an influential actor in genomic research (Rabinow 2000). In 1988, Baradaud agreed to a financial contribution by the MFA to the CEPH project of mapping the human genome. In the French policy-making circles, the CEPH came to be considered as forming the basis of the French genomic model.

Cohen did not have to pressure any member of HGAP’s mapping study group for them to acknowledge CEPH’s expertise in genomics and agree that it could provide
solid foundations for a European program. As members explained and documents confirm:

The idea was to try to determine our needs, the approaches to be followed, and to accentuate collaborations. The goal was to have a “central resource”, for example the CEPH, at the beginning, which was clearly a center that would receive support because it could centralize all kinds of information, all kinds of test results from various centers . . . It was clear that certain programs or certain activities in England or France were on the right track and deserved to be supported. At that time, it was clear that the CEPH was the model, that one was to start from there. (interview extract, April 2004, Brussels)

The decision to build on the existing CEPH operation was essentially a pragmatic one. (Predictive Medicine Working Party 1988: 4)

We have the chance to have great scientists like Cohen and Weissenbach in Europe. The country [France] didn’t have any recognition problem; French researchers were internationally famous within the molecular genetic community. Europe’s policy could only reflect this “état de fait”. (interview extract, June 2004, Strasbourg)

In comparison to other countries, we have an impressive infrastructure with the CEPH, and its widely recognized work. (interview extract, May 2004, Paris)

In fact, it was Cohen who somewhat reluctantly agreed to participate in the study group, initially fearing that a European program would contribute to spreading out resources rather than concentrating them on the most capable centers of expertise, especially the CEPH. Thanks to deliberations, however, Cohen came to change his views on the matter. Besides a map of the human genome, the Commission was motivated by the creation of more cohesion among European researchers. The Commission’s goal was to help European researchers forming a group capable of participating as one in the genomic competition, led by the United States. Worried about France’s long-term capacity in genomic research, Cohen came to accept the argument that pooling together European genomic expertise would be in the interest of France and of the CEPH in particular. As an interviewee stated, “he agreed that genome mapping should not be left entirely in the hands of Americans”. A European program, so he believed, could help him develop new research collaborations useful for the attainment of CEPH’s objectives, even though it might also encourage a dispersion of resources. As another interviewee explained, “Cohen presented his views to the group more than he received from the European program, even if at the end it integrated the French vision” (interview extract). In fact, the CEPH ended up receiving less than 5 per cent of the funds channelled through the European Human Genome Analysis Programme, nevertheless inspired by the CEPH.

The CEPH was not the only source of inspiration for the members of the committee. An experience in Belgium also inspired them. This is significant as Belgium is much weaker than France in genomic research. In 1986, André Goffeau from the Université catholique de Louvain, detached to the European Commission
since the early 1980s, was asked to implement an idea, first described as eccentric, but supported by significant researchers. The fundamental idea was the creation of a program to decode the yeast genome, which would rely on a network of a considerable number of associated laboratories working in a coordinated way, sharing their results and exchanging information. As Goffeau and some of his collaborators explained in an interview:

The relevance of the yeast program was related to the fact that we needed a working method for the HGAP. For the yeast program, I had this idea of making a large number of small laboratories work together toward sequencing. This method appeared appropriate for the HGAP as well (interview extract, June 2004, Strasbourg).

Goffeau and his collaborators spent four years thinking about ways to make independent laboratories work together and his efforts proved successful. In fact, by 1990, Goffeau had created a functional network of laboratories working toward the goal of sequencing the yeast genome. Several researchers considered this network quite an achievement. If such a structure was possible for the yeast genome, HGAP committee members saw no reason why it would not work for the human genome. As some of them stated:

We took as our example the sequencing of the yeast genome which was coordinated by Belgium, an example of an organization which had created a whole network of researchers who worked together. (interview extract, May 2004, Paris)

On yeast it was similar. We realized that when the sequencing data were opened, the consortium which worked on it experienced a significant advantage. (interview extract, June 2004, Strasbourg)

The collaboration existed in the yeast program. They developed and came out with an exchange of ideas; if you give me the material, etc. It was new, then. That was something that they shared on a European scale, with the yeast genome and afterwards with the human genome. (interview extract, May 2004, Paris)

A deliberation, we argued, has a productive function, over and above a distributive function. In the case of the European human genome program, the productive focus of the deliberation was obvious. Participants first and foremost wanted to provide researchers with the means to contribute to the production of a map of the human genome. Some side products however also worked as motivational forces: the creation of a cohesive European group of genomic researchers, the development of a research agenda on the ethics of genomic research, the formation of new research collaborations, and the construction of an organizational structure enabling the coordination of genomic research laboratories spread out across Europe. A deliberation also implies openness on the part of participants to each other’s ideas. Mutual persuasion should help participants agreeing on policy directions. Although participants from the various member states quickly agreed that the European program should build on the French CEPH, Cohen, the center’s director, was not
immediately convinced of the usefulness of a European program. Deliberation helped him come to the view that it was in French researchers’ long-term interest to be part of an effort to pool European genomic expertise.

More Emulation than Influence

As should already be obvious, the HGAP committee deliberations immediately centered on existing experiences. Having primary knowledge of existing experiences in several member states, committee members naturally discussed what the European policy could borrow from these experiences. In this last section, we turn to the specificity of the deliberations about transfers. We earlier hypothesized that EU policy processes, comitology in particular, are favourable to policy transfers because they involve networks of individuals with direct knowledge of member states’ policy experience. We also suggested that EU policies are not merely influenced by member states’ experiences; the EU frequently emulates member states. We provided already some evidence supporting these predictions; now we insist on emulation more specifically.

One of the key principles of HGAP is to focus resources on the mapping of the human genome, leaving aside genome sequencing. While mapping is the construction of an inventory of genes, sequencing involves determining the order in which genes appear in the genome. Mapping is about the discovery of new genes, while sequencing goes a step further, providing more details about the role of genes in living organisms. In the 1980s, very little had been done worldwide on sequencing. Therefore, few researchers believed in a European contribution to genome sequencing. As illustrated by some interview excerpts presented above, the members of the HGAP committee rapidly agreed that it would not be wise to concentrate efforts on new areas of genomics, including sequencing. Instead, they chose to build on capacities, solidly anchored in Europe. The CEPH had a good reputation for its work on genome mapping and Cohen’s participation on the HGAP committee brought direct knowledge of the center’s experience to bear. In other words, the HGAP emulated the French genomic model, with its focus on genome mapping.

The second transfer also corresponds to emulation. In this case, the European program emulated an organizational structure for the research undertaking. As explained above, the network structure of the yeast genome program was adopted by the HGAP. While the presence of Cohen on the HGAP committee helped in reaching the decision to focus the European policy on mapping, the network effect was not as direct in the case of the transfer stemming from the yeast genome program. To our knowledge, none of the members of the HGAP committee were involved directly with the yeast genome program. However, the adoption of the structure of the yeast genome program certainly can still be attributed to a network effect. Goffeau worked for the Commission in the 1980s and although he had left before the development of the HGAP, he maintained good relations with the staff of the Commission. Maintaining relations was indeed relatively easy, as he pursued his career in Belgium, at the Université catholique de Louvain. Moreover, the participant from Belgium on the mapping study group, also a scientist in genomics, knew Goffeau and was in contact with him. The Belgium participant knew the yeast program well. Therefore, the mapping study group received precise information about the coordination structure behind the yeast program and borrowed all of its details. The HGAP method whereby different laboratories could work in network, including means of communications and
data integration, was emulated from the yeast program. This latter program was more than a mere source of inspiration for the EU.

The case study of the development of a European human genome program just presented is consistent with our description of European governance. The Commission delegated policy development to a committee of experts, who possessed direct knowledge of relevant experiences in member states. Deliberations among these experts centered on these experiences and decisions were made to emulate those believed to be most successful. It is unlikely that policy development in a nation-state or an international arena would have proceeded in a similar manner, although we have no evidence to back this latter suggestion.

**Conclusion**

International relations scholars often depict the European Union as little more than an international organization, which poses no threat to the sovereignty of nation-states. These scholars will often stress comitology committees in the governance of the EU and their role in safeguarding the policy capacity of member states. In contrast, some scholars will insist on a movement toward more and more integration, bringing solid institutions and a common identity to Europe. Meanwhile, a number of scholars moved away from this debate, insisting that the EU evolves into a unique governance structure. This article is an additional contribution to understanding the uniqueness of European governance.

The article argues that the structure of EU governance, especially its committee system that brings together participants in policy development from various member states, is conducive to policy transfers. Moreover, the transfers occurring in the EU are emulations of member states’ experiences rather than mere influence, encountered frequently in conventional national and international policy development settings. We illustrated the argument with a detailed case study of the development of a European policy to support human genome mapping at the end of the 1980s. Additional case studies, comparisons between European and other arenas of policy development in particular, would be useful to further verify the hypotheses summarized in Table 1.

Interestingly enough, the area of genomics was weakly institutionalized at the European level at the end of the 1980s. Consequently, Bulmer and Padogett (2005), who stress the role of institutions in transfer processes, would have predicted a weak form of transfer. However, we observed significant emulation, the strongest form of transfer. Therefore, our observations are consistent with Radaelli’s (2000) perspective, which insists on the role of persuasion, occurring in network-like horizontal structures. In the case of the European genome mapping policy, decisions were not imposed by anyone in a position of authority. Participants simply persuaded each other that it would be wise for Europe to emulate two successful experiences, one from France and one from Belgium.

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Note

1. The European Community is now designated as the European Union. We use EU in the rest of the article.

References


Coordination Advisory Committee – CGC Medical and Health Research, 1988, Extract of the draft report of the CGC Medical and Health research relating to the joint meeting of CREST and the CGC (held on June 17).


