Combining neo-structural and regulation theories:
A case of social networks, collegial oligarchies and institution building

Emmanuel Lazega[1], Institut d'Etudes Politiques de Paris, CSO-CNRS
Eric Quintane, University of Los Andes, Bogota
Sandrine Casenaze, solicitor

Communication présentée au

Colloque international Recherche & Régulation
10-12 juin 2015

[1] emmanuel.lazega@sciencespo.fr

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Abstract

Business usually tries as much as it can to control the regulation of its markets. To do this, it is often able to build discretely semi-public institutions that cater to its specific needs without much public oversight. In this paper, we look at the recent creation in Europe of such an institution regulating innovation- and intellectual property-related litigation, the Unified Patent Court (UPC). We apply a multilevel neo-structural approach on this case, in which European forms of capitalism –especially German and Anglo-Saxon forms– have heterogenous and conflicting norms about what counts as true innovation and a good patent. We explain the control by business on the creation of this institution by its ability to to create a social network of institutional entrepreneurs who identify their own collegial oligarchy. This selection of institutional leaders sets the tone in the regulatory process. This helps institutional entrepreneurs explore the future alignments they will have to accept in order to create a uniform European position on patents. We explore this institutionalization processes during a « field configuring event », the so-called Venice Forum, in which institutional entrepreneurs lobbying to promote the creation of the UPC (corporate lawyers, judges specialized in patents, semi-public transnational officers, among other stakeholders) worked on forging European norms for this institution. Analyses of combined conventions and network data brings to light such usually invisible steps in the institutionnalization process. Shedding this light on regulation leads to the question of safeguards that should be created against elitism and cosy collegial oligarchies in institution building and lobbying in Europe. Discretion, if not secrecy, in the networking between institutional entrepreneurs and in the negotiations of new norms, have largely characterized the construction of Europe up to now. The cost to democratic legitimacy of these institutions remains to be measured.

Introduction

Transnational institution building as a competitive and cooperative political process is multilevel and dynamic. For the sake of simplification, we will identify at least two such levels. At one level, an organizational one, it requires the corporate mobilization and collective action of networks of private companies and industries and public institutions. At another level, a more individual one, it requires the mobilization of interpersonal networks of top civil servants and professional experts that will work on framing issues and negotiate uniform positions and normative alignments in conflicting situations between countries. Professions will also develop intermediary level structures, mainly collegial oligarchies that will lead institutional entrepreneurs by moving across levels and coordinating the dynamics and activities across levels. Collective action at two superposed levels of agency has been theorized (Breiger, 1974) and modelled (Lazega et al., 1998; Lazega and Snijders, forthcoming) by neo-structural sociologists as a special kind of network analysis with linked design between levels.

We use the case of the construction of the European Unified Patent Court (UPC) as a particularly informative case for further exploration of this institutionalization process. The main actors in this case of joint regulation are corporate lawyers and judges as institutional entrepreneurs. Corporate lawyers in particular have long played that kind of role (Sellers, 1991). In this case, they create, on behalf of their industrial clients, a social network of heterogeneous judges so as to pre-organize the future normative alignments of these judges on the norms selected as procedural base of the future institution. We look in some detail at how judges specialized in patents and brought together by corporate lawyers and the European Patent Office (EPO), a semi-public institution, to get to know each other, learn about each other's logics and create a debate about the normative and procedural choices that leads to the framing of the future European judicial institution.

This paper is thus about a complex institutionalization process that led to the establishment of a new judicial institution (in 2012) to organize a single European economic space for intellectual property, as well as to homogenize the European practices of the specialized national jurisdictions dealing with patent-related conflicts in the signatory countries. This process is orchestrated by EPO and corporate lawyers as representatives of industries with patents at the core of their business models. It is examined through a so-called "field configuring event", the Venice Forum during the first decade of the millenium, a microcosm that reflects a much wider macrocosm and accelerates the process by bringing the players together in order to create this collegial oligarchy. Their ambition is to create convergence towards a unified definition of patents and protections against competition. They however do not succeed in getting rid of substantive differences in political economies between European countries, focusing instead on procedural rules. Our neo-structural perspective helps complexify the study of the institutionalization process by focusing on its multilevel nature, with a particular attention to the often elitist and personalized nature of the process.

Intellectual property is a key institution of contemporary capitalism. Current debates about intellectual property are an example of such processes. Establishing property rights has always been one of the most decisive actions of governments and one of the main source of conflicts and powers in society. Intellectual property is crucial in societies that have cornered themselves in a situation where they need technological innovation to survive. It is considered to be a key institution in knowledge based societies. Negotiating a solution to the economic dilemma of knowledge (its non rival nature in use and gratuity for better diffusion on the one hand; and the high price of the production of knowledge goods and the establishment of price mechanisms inciting actors to produce them, on the other hand, is the goal of the definition of IP, especially in the definition of patents. These definitions are historical and institutional constructions that change with technological evolution, but also with the capacity of players to steers the definition of a "good patent" in a direction that protects the interests of specific players. They thus respond to political and economic interests with legal, cultural, administrative rules and practices. These IP rights do not constitute a perfectly coherent and stable system. They bring together complex, heterogeneous and conflicting regulations. Negotiating how IP rights can be established is thus a political process.

A case of discreet social construction of a new transnational institution: a "field configuring event" in European IP

The setting in which we observe this political process is the Venice Forum (VF), a "field configuring event" dedicated by the conveners to this complex activity of institutionalization that led to the construction of this judicial institution. Europe has currently 27 jurisdictions and 27 kinds of patents decisions. The UPC was officially created in 2012 to organize a single European economic space for European patents, as well as to homogenize the European practices of the specialized jurisdictions dealing with patent-related conflicts in the signatory countries. This institutionalization process, which took more than 20 years, was driven discreetly by a heterogeneous set of players, a collegial oligarchy. This elitism is considered to be functional in the sense that, as in diplomacy, negotiation is easier when few individual actors represent in secret the countries and bodies of law that must make concessions in order to converge.

The Venice Forum was practically set up and organized as a "field configuring event" by EPLAW and EPO. EPLAW had a strong interest in helping EPO. EPO involvement provided legitimacy to the whole lobbying operation, i.e. to attract the judges to the Forum, to provide support for the public Declarations that came of out the Forum after the meetings, and to strengthen the arguments of lobbyists in the political process leading to the creation of the EPC and definition if its procedure. EPO had an interest in supporting this private initiative both to promote uniformity in Europe and to try to legitimize its own practices among the judges who often cancel EPO's patents. One VF judge said: "I spend 70% of my time cancelling patents awarded by EPO".

The main institutional and long-sighted entrepreneurs driving the process have been the in-house and corporate lawyers. Using funds raised with their clients (the large companies) and the legitimacy of EPO, they created the so-called Venice Forum and invited the judges to come to know each other and interact for a week on the Isola de San Servolo, with the view of creating a European patriotism in the area of patents, of moving towards a European Uniform position in that legal area, and of maintaining a bottom up lobbying dynamique that was meant to influence the political powers including governments, EC officials, and probably a large network of political brokers such as Members of national Parliaments. It is important to know that EPO was a co-organizer and co-funder, with EPLAW, of the Venice Forum events.

Mainly large European companies (in sectors with patents at the core of their business model, such as pharmaceutical, biotech, semi-conductors, etc.), corporate law firms representing these companies (and organized in an association called EPLAW, for European Patent Lawyers), European governments (especially their respective Ministries of Justice and Ministries of Economics), the European Patent Office (EPO, the official European office awarding European patents to companies, an institution linked to the European Community administration), and last but not least, an association of judges (called IPJA, for Intellectual Property Judges Association) coming from all over Europe and actually assembled by the EPO and by the corporate lawyers (EPLAW) in this annual event. It is also a heterogeneous set of judges in the sense that the structure of their career differs in various European countries and legal cultures. The intellectual activity of the judges is not simply aligned on that of the institutional model and constraints of their respective countries. The multilevel character of the structure allows for flexibility at that individual level. Yet there is usually a dominant view that characterizes each national field in broad traits. Judges understand the good patent in different ways. Their conception of the good patent in terms of goals and scope varies. These variations still hold today. During this event, lawyers and judges got to know each other, gave conferences, organized mock trials and dreamed up the future institution and its procedure.

Corporate lawyers and patent judges as institutional entrepreneurs

Corporate lawyers and patent judges represent important stakeholders in the institutionalization of a closed normative space for IP business. They are prototypical actors with inconsistent forms of status (Lazega, 2001). They are both civil servants and private lobbyists for the

judges ; both officiers of justice and private attorneys for the lawyers. Shepherding private networks of judges to build public judicial institutions: The case of the Venice Forum and the judges' political activity is consistent with the new roles of judges, as seen by Garapon (2003): these judges represent a form of private self-regulation that is building a public international order. The normativity that they promote is a set of standards that construct a semi-autonomous field. As coined by Jettinghof (2001), the patent law experts appear to have a low profile in the high politics of this story, but to be very present in its 'low politics', inside the machine rooms of (national and transnational) working groups, expert panels and conferences who want to play the political game discreetly, indirectly. They frame the game in Euro-patriotic terms, even if they do not have any public political legitimacy to do so. Their alliance, however, creates a very strong and efficient dynamique of institutional entrepreneurship.

The historical perspective provided by Jettinghoff's (2001) work shows that Germany, the Netherlands and the United Kingdom are dominant at the VF because it was the brainstorming machine room of supporters of EPLA, to which they invited a series of more peripheral judges to get to know them and to argue with them if they were not supportive of the EPLA/EPO track. Thus, participation of judges in the Venice Forum is motivated by several objectives. Our perspective relies on the fact that the judges participating in the 2009 Venice Forum know that the political process has been stepped up. They are aware of the Second Venice Resolution voted upon the previous year by their colleagues, some of whom participate in 2009 as well. Many are thus in Venice not only to get to know each other well, but also to better identify the nature of the future EPC in the making as well as the concessions that they might have to make in order to adapt to this new reality. Our purpose is to show that the VF is there to help judges align voluntarily upon the emerging conventions, i.e. classifications and norms, upon which they will have to align willy nilly later on.

Our exploratory survey was not able to include all the players in this large and complex multilevel system. We were only able to observe once (in 2009) one aspect of this bottom up/top down institutionalization process taking place at the Venice Forum. The data provides insights into the ways in which judges as judicial entrepreneurs defend the regulatory interests of their country and their profession in this institutionalization process. Fieldwork to reconstitute the network that is created by these relations was carried out in Venice in October 2009. We took advantage of the existence of this annual meeting in Venice in order to carry out our interviews. We submitted this survey to all participating judges at the European Judges Forum (San Servolo Conference, 30-31 October 2009). At the beginning of our fieldwork, we did not know if individual patent judges would be prepared to answer our network questions. We received a relatively open attitude in general, once the judges knew that the interviewers were academics. The survey received a 100% participation rate.

For judges motivated to participate, The core of the network and personalized elite around which the VF is constructed, this event is part of a multilevel context, a personal and collective learning process itself also part of a broader political process involving expectations by several stakeholders. The conditions under which these judges participate in this event are different. They all either champion new norms or test their possible adhesion to new norms. These actors know that it is not likely that a substantive and political consensus will emerge in Venice around the definition of what a good patent is. The purpose is to start with the goal of creating *procedural* norms and the adhesion of European judges for these norms. For the members of the elite of judges, the job is to circulate the procedural norms that they are used to rely upon and that they want to champion. Mock trials are meant to stage the use of such norms, discuss them, compare them to other norms, and try to reach consensus on how to use them. In fact the core judges are mediators between their national interests and the other judges and their job is to circulate the norms. The more central they are in the VF network, the more successful they are in that respect. Open and direct political discourse is not allowed because judges as a principle are used to defend their independence in that area; but the same ideas are framed in discourse on convergence between legal cultures and bodies of law.

The VF is thus about enrolling and mobilizing a whole population of judges around a core of already committed judges, recognizing them individually as representatives of their countries, creating ties between them, i.e. building a personalized network of European judges who know each other well, providing them with both epistemic leadership and the opportunity to meet, talk and rub shoulders with these leaders, and thus to construct the adhesion of the less committed judges. This social exchange

provides the semi-peripheral and peripheral judges with a chance to be listened to and a chance to feel that they co-constructed the procedural norms coming out of these events as guidelines for the future Patent Court. Actors who contribute to construction of norms are much more likely to enforce these norms than actors who are simply subjected to them.

Data and variables

We use three kinds of data collected at the VF. Normative choices, social networks data, and information about the judges' expectations for a future Uniform European position (if any); two control variables were added to contextualize the institutionalization process from a macro-sociological perspective.

Patent related normative choices framing the future institution

European countries have different judicial cultures, which allows for forum shopping by MNCs who favour the country that interprets substantive patent law in a way favourable to their interests[2]. In order to measure a possible outcome of this learning process, we look at whether or not there is consensus among these judges with respect to controversial issues concerning patents: the substantive definition of what a good patent is; the procedural norms for the future EPC: assessment of inventive step, determination of scope of protection, and involvement of technical experts.

Substantive rule in the application of patent law

The judges were asked about their personal and substantive views on patents, in particular whether they are exceptions to the freedom of copying which means that the validity of patents and the scope of protection are to be critically assessed; or whether they are rewards to the contribution of the inventor and therefore their validity is to be subject to a mild assessment and the scope of protection is to be broad. The results were that, on the one hand, 45.5% of the polled judges believed patents to be exceptions to the freedom of copying. 27.3% of the judges thought that patents are rewards to the contribution of the inventor. However a few judges express the opinion that the second part of the statement, "mild assessment of the validity of the patent and broad scope of protection" is not necessarily a consequence of the first part of the statement, and thus has to be balanced. This divide led 21.2% of the judges to take a position "in between", a position often labelled "The European Compromise", i.e. to assert that they apply one rule or the other depending on cases, on the patents: "Decisions are made on the merits of the case and whether they demand a strict or wider interpretation of the innovation".

Because there is not much agreement among the Venice Forum judges about the substantive definition of a good patent, VF judges look for consensus with respect to the selection of procedural norms to handle patent-related litigation.

Inventive step

The EPO has provided guidelines for European patent judges in order to assess the inventive step for a creation to be patented: the problem and solution approach. The survey shows a large consensus regarding this method as 75.8% of the polled judges apply it. Many thus consider that the very general aspect of the problem and solution approach makes it a good tool for harmonizing the approaches to patents between European countries and reaching some uniformity in the assessment of patents, especially since European countries are very different. They can interpret it from the perspective of their own culture and legal system. For example in France, which does not have judges specialized in intellectual property, it offers good guidance: "On essaie en tout cas. On n'a pas de membres techniciens. Je n'ai fait que l'Ecole Nationale de la Magistrature, pas Polytechnique". Some judges have pointed out weaknesses in this approach and therefore do not systematically apply it, preferring for example to use experts. This approach only takes into account written documentation, whereas other judges also want to take into account the "normal knowledge of the skilled-in-the-art-person". In addition, more than 90% of the judges consider that decisions of foreign courts in relation

[2] See for example the case of the "Italian Torpedo" (Franzosi, 1997).

to the same patent they are dealing with are relevant. Only 66% refer in their decisions to decisions of foreign courts –a high figure considering that this is not allowed in several countries, including France

Scope of protection

Patents vary with respect to the scope of protection against competition that they award entrepreneurs. With respect to the determination of the scope of protection provided by the patent and with respect to the role of the applicant's statements during the grant procedure before the EPO, judges can put an emphasis either on such past statements or on the description of the patent by the patent lawyer. As in the case of inventive step, similar levels of consensus and heterogeneity can be found among the judges. According to our survey, 63.6% of the judges agreed that the applicant's statements during the grant procedure before the EPO play a role in the determination of the scope of protection, and 65.4% of them agreed that the applicant's statements could only lead to the limitation of the scope of protection, i.e. that such statements "can only play a role if they are in the interest of the alleged infringer". For 30.3% of the interviewed judges the applicant's statements during the grant procedure before the EPO do not play any role in the determination of the scope of protection. A British judge argued that "to establish the scope of protection you need a skilled-in-the-art-person, not the statements of a patent lawyer". Thus, even if there is a majority of the judges who consider that the applicant's statements play a role in the determination of the scope of protection, many downplay the importance of this issue and consider it to be only procedural in the sense that careful examination of the actual role of these statements has to be undertaken to follow procedural law (when presented to them, when is favourable to the infringer).

Involvement of technical experts

The reason for the use of the experts by a majority of judges seems to be, in their discourse, largely explained by their training background, more specifically by their lack of knowledge in science and technology. According to the survey, 60.6% of the polled judges said that they used independent technical experts when assessing inventive step. However, only 48.5% said that they used independent technical experts when assessing scope of protection. Although parties almost always have the opportunity to comment on the reports of the experts, the use of experts is thus quite controversial. Some judges are very critical and see in the use of experts the danger of transferring their role and responsibility in the decision making process to the experts. As pointed out by a German judge, "the danger in asking the experts to give their opinion is to, in effect, ask them to make the decision; however the judges must make such a decision. Hence it is important *what* you ask to experts." Thus the use of independent technical experts to report on the *inventive step* is controversial –and even more controversial for reports on *scope of protection* (which is more often considered "up to the court itself").

In sum there is a heterogeneous use, among Venice Forum IP judges, of judicial discretion in balancing 'patent as exception' and 'patent as reward'. A high level of consensus exists on several procedural issues (assessment of inventive step, problem-and-solution approach, relevance of foreign decisions), but strong differences remain: there is great diversity with respect, for example, to narrow versus broad scope of protection against competition. A real risk exists that differences among the practices of these judges could lead to diverging decisions. This diversity leads to the question of whether learning across borders leads to uniform positions among judges and to the role of opinion leaders in this harmonization.

Social network variables

In addition to asking the judges about their criteria in controversial issues regarding the construction of a harmonized procedure for the European Patent Court, we used sociometric questions to reconstitute networks of interactions among these judges with respect to learning about each other practices. We find that there is a hierarchy among various forms of network learning across borders. Three networks were measured among IP European judges at the Venice Forum: 'personal discussion network', a 'reading other judges' work' network and an 'explicit reference to other judges' decisions' network. Reconstitution and analysis of these networks shows that the discussion network is denser than the reading network, which is denser than the explicit reference network. There is much more activity in direct personal discussion with colleagues across borders (for

example at events such as the Venice Forum), than with actual reading of their work (decisions and articles); there is quite little explicit reference to other foreign judges' decisions in these judges' own decisions. In other words, at this stage, learning across borders occurs more through discussion than through reading, and more through reading than through explicit reference to work of other judges (which is not allowed in some countries).

Some countries are more active in the learning process among this set of judges: Dutch, UK, German, Italian and French judges are the most active in the personal discussion network and in the reading network. UK, German and Dutch judges are the most active in the explicit reference network. Dutch, UK and German judges display the highest activity in all three networks (reading, discussion and explicit reference). Italian and French judges also display high activity in the reading and discussion networks, but not in the explicit reference network. Note that explicit reference to work of other judges is not permitted in some countries (for example France).

Uniform "network"

VF was meant and designed by EPO and EPLAW to become the instrument of creation of these agreements based on discussion, mock trials and identification of epistemic leaders who would personally represent and personify these agreements on procedure. During the interviews all the judges accepted to share their perception of who among themselves was personifying the future Uniform European position with respect to procedural rules, if they believed that any Uniform position would emerge over time. Nominating the judges who were closest to a future EU uniform position was equivalent, in these judges' mind, to electing these opinio leaders to become the first sitting judges at the future European Court, if not the members of the future Court of Appeal under the control of which judges at the European Court would operate.

Indeed we asked the judges to identify, among their peers, those whom they perceived as being closest to a future EU uniform position, i.e. as reflecting in their discourse the future European norm with respect to the controversial issues listed above. Identifying the most central judges in this "network" shows that the Venice Forum judges perceived among themselves at least six judges, from five different countries, as colleagues whose positions on controversial issues are likely to reflect the future EU Uniform position. In this network, these judges are Dutch, German, British, Italian and Swiss. Some of them are already central in the social networks mapped above. Others have different ideas with respect to 'harmonization' of positions in Europe, stressing 'circulation' instead of convergence, even if this leads to diverging decisions. Thus, in 2009, convergence towards consensus on the EU uniform position in this network still remained uncertain. We infer from this structure that learning through networks across borders does not necessarily, by itself, lead to convergence of perspectives and uniform positions among IP judges in Europe. As a consequence, our analysis provides some understanding of the process of the social construction of a common frame of reference among them but cannot yet predict the future European norm which will come out of this process.

Control variables

Country

Sixteen European countries are represented in this population of VF judges.

Types of capitalism

Countries are clustered into blocks that each represents a different type of capitalism (i.e. German, Anglo-saxon, and all the others, as explained in the Appendix. We refer to the classification of types of capitalism identified by Amable (2003; see also Amable et al., 1997) in three kinds of capitalism: mainly the European continental capitalism (characterizing CH, NL, IR, BE, NO, DE, F, AT) with Germany, and in part the NL, as its leaders on this terrain of patent law –although the NL could also be considered in part as a representative of social democratic capitalism (characterizing DK, FI, SE); and the liberal market capitalism represented by the UK. Mediterranean or Southern capitalism includes GR, IT, Port, ES who also happen to be countries without strong IP specialization in their judiciary.

Understanding future alignments in the selection of a collegial oligarchy

VF judges disagree on the substance of what is a good patent. This shows in the variations in responses to the question on the rule that they apply in patent-related litigation. There is however, beyond substantive disagreements, a considerable agreement between them on several procedural rules that should be used and that stem from the rules already used by EPO. There are some disagreements though. For example the selection of technical experts is a thorny issue in patent-related litigation because judges are usually not scientists or engineers and technical issues can be very complex. In addition, legal traditions differ with respect to how experts are allowed to be brought into the trial and exercise their influence. In the common law, strictly adversarial system, it is up to the parties to seek the support of experts, not up to the judges to involve them experts. In the civil law tradition, experts can be involved by the judges themselves.

The Uniform network provides information about how the judges position themselves and others with respect to a future possible uniform European doctrine on patent issues. The aim of this analysis is to understand what drives a judge to nominate another judge as representative of a Uniform European position on such issues. This Uniform network is a highly centralized one with a core / periphery structure. We identified the core of this network, *i.e.* the most cited judges based on the number of citations above the 90th percentile in this network.

Firstly, based on normative homophily and the absence of broad consensus about what a good patent represents (i.e., patents as exceptions or as rewards), judges may select an oligarchy of institutional leaders who follow similar standard procedures in the process of applying patent law. In the same spirit, judges may also select others affiliated to the same type of capitalism because they implicitly share the same conception of patent law. Secondly, a judge who discusses with another judge, reads his or her work, or makes explicit reference to his or her decisions may be more likely to nominate him or her as representative of a future Uniform European position. Thirdly, these nominations may be more social in nature and follow status signals or informal groups that transcend legal conceptions and geographic borders.

Table 1 tests the effects of sharing the same procedural norms, of social network interactions, and of sharing substantive norms on the selection of institutional leaders in the uniform network.

First, the model shows that sharing the same procedural norms does not count for these judges as a basis for nominating a colleague as an institutional leader in the uniform network. Controlling for the (significant) tendency to select another judge coming from a country with the same kind of capitalism as a representative of a uniform European position, choosing the same procedural norms is generally not a predictor of selection of institutional leader. The only borderline exception is the use of a technical expert to report on the scope of protection of a patent. Notably, sharing the same conception of the rule of law that underlies a patent does not drive the selection of another judge as a representative of a uniform European position. Normative homophily is not a basis for selecting institutional leaders.

Second, selecting a colleague as an exchange partner in two of the social networks being constructed at the VF is strongly correlated with being selected as an institutional leader. Nominating another judge as a discussion partner or making explicit reference to the work of this judge are significant predictors of the selection of this other judge as a representative of a Uniform European position. Social interactions with colleagues and familiarity with their work facilitate their selection as institutional leaders –which excludes French judges from this leadership. However, just reading their work is not enough.

Third, the effect of ‘Type of capitalism’ is also positive and significant. Judges are indeed more likely to select colleagues from a country with the same model of capitalism as a representative of the future Uniform European position. There are coalitions by blocs of countries that have an effect on the selection of specific judges as representatives of the future Uniform European position with respect to patents. These blocks are not homogeneous with respect to their definitions of a “good patent”, which indicates that, in this complex multilevel system, these coalitions of individuals can be more social than ideological.

Table 1: Effect of sharing the same procedural norms, of social network interactions and of sharing substantive norms on selection of institutional leaders in the Uniform network

effects	estimates	stderr	t-ratio
arc	-7.561453	1.06198	0.04522*
reciprocity	-0.128970	0.48718	0.01603
AinS(2.00)	-0.747065	0.44033	0.04023
AoutS(2.00)	**1.160529**	**0.48235**	**0.05298***
AT-T(2.00)	**0.571890**	**0.27681**	**0.05068***
AT-C(2.00)	-0.227379	0.12967	-0.01472
AT-U(2.00)	0.324759	0.25277	0.00084
A2P-T(2.00)	-0.028461	0.04378	0.03045
A2P-U(2.00)	0.067469	0.08484	0.02428
discindegree_receiver	0.093552	0.06037	0.03211
readindegree_receiver	0.003985	0.10402	0.02341
explicitindegree_receiver	0.020721	0.09862	0.02487
countrycode_matching	0.062484	0.47771	0.01885
Inventstep1code_matching	0.006839	0.33443	0.01364
Inventstep2code_matching	0.284751	0.47070	0.00607
Invenstep3code_matching	-0.023990	0.38000	0.01390
Scope1code_matching	-0.592689	0.38496	0.01961
scope2code_matching	0.071759	0.35441	-0.03970
TechnicalexpertsIS_matching	0.208447	0.34018	0.01884
TechnicalexpertsSP_matching	0.593475	0.35549	0.02687
Commentexpert_matching	0.211718	0.34126	0.00294
Whichrule_matching	-0.081438	0.33655	0.04263
Whichrulehappy_matching	0.064335	0.31897	0.00823
Type of capitalism_matching	**0.804568**	**0.32716**	**0.04687***
***discussion_arc**	**1.733816**	**0.35597**	**0.05842***
readwork_arc	0.655465	0.59419	0.06109
***explicitref_arc**	**3.055514**	**0.52312**	**0.06756***

For lack of room, we refrain here from interpreting several endogenous network effects that play a role in explaining the judge's selections. Suffice it to say here that clusters based on sharing the same type of capitalism, the same substantive definition of a good patent, the same procedural norm related to selection of technical experts for Inventive Step, and having social interactions with a colleague are jointly factors explaining the selection of this colleague as an institutional leader. In summary, judges follow other judge's work and this influences their view on who among them represents a uniform European position: having actually discussed with him/her about these issues and explicitly referred to his/her work in one's own work are especially relevant as predictors of future alignment. However, there is no procedural alignment on institutional leaders in general.

Institutional entrepreneurs building uniformity through anticipated future alignments

This raises the issue of the differences between the judges' own normative choices and the normative choices of the colleagues that they selected as super-central institutional leaders, the collegial oligarchy. We are interested in these differences as signals that judges receive as to the future work that they can anticipate in terms of normative alignment on the Uniform European positions related to patent litigation. It is important to measure such anticipations because they indicate how costly in terms of expected concessions the institutionalization process will be from the perspective of each participant.

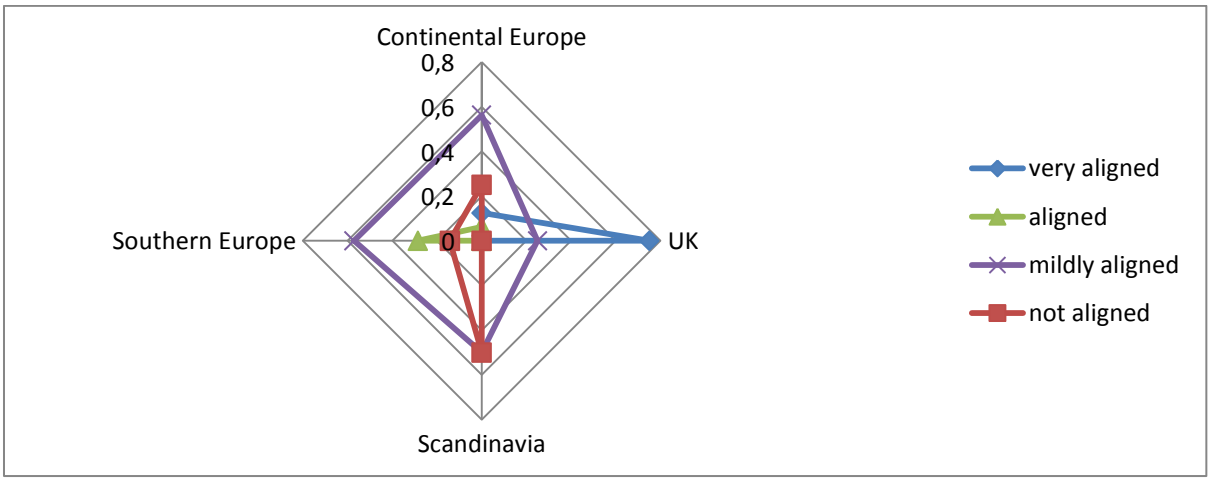
To look into this issue, we created a network in which a tie between two judges exists if judge A nominated judge B as a representative of the Uniform position AND judge A has very different normative choices to those of judge B. Figure 2 below (Match/mismatch) tells an interesting story: we have two central actors, one from continental Europe (1) and one from the UK (2). Part of the judges

from continental Europe are aligned on the European judge, despite large differences in normative choices, while others create a bridge between Europe and UK. Scandinavian judges appear to select the European judge, despite the lack of normative agreement and judges from the South are more within the UK "camp" despite differences in normative choices. In order to provide a basis for comparison, we also include the "match" graph that shows judges who nominate another judge as a representative of the Uniform European position and have a high level of agreement in terms of normative choices. This "match" picture shows that UK judges tend to agree normatively with each other, while there is much less consensus in the Continental side.

We can now take the rather consensual normative choices (with respect to procedure) of the judges with highest status and look at whether these choices are shared among the other judges. A majority of judges are "mildly aligned" (i.e., they share two of the four normative choices with the consensus from the most central judges). The distribution by type of capitalism shows that British judges tend to be more aligned, which makes sense since two of the four most central judges are British). Norm by norm, results show that the normative choices of the top four judges do represent a majority of the choices of the other judges, apart from the choice on the scope of protection. For scope of protection, Continental European, Scandinavian and Southern European judges are not aligned in their majority. Southern European judges are also not aligned in their majority regarding the use of technical experts to report on the scope of protection. Scandinavian judges are not aligned and Southern European judges are a little bit more aligned than Continental European judges. This would mean that Northern and Southern European judges will indeed need to change some of their normative choices if they want to be in line with the European consensus as represented by these super-central colleagues.

Figure 1 below visualizes these results. In sum, judges representing Northern and Southern forms of capitalism are less aligned and must anticipate more costly alignments, or leave the system. This is consistent with ethnographic evidence suggesting that many judges realize at the Venice Forum which concessions they will have to make in order to have a Uniform European patent and procedure.

Figure 1 : Existing normative alignments of VF European patent judges on their collegial oligarchy



The analyses above and interpretations of divergences as signals of future work on normative alignments thus shed some light into this institutionalization process and into its relative costs for different categories of members. Mismatches and alignments highlight for each member the differences between their own normative choices and that of the colleagues who were chosen as leaders, thus identifying the changes that are desirable from the perspective of the EPO and EPLAW strategy of institutionalization. Whether or not alignments will take place and costs will be incurred in the future remains to be observed. Whether or not the VF is successful in achieving these objectives of framing change as co-constructed in a personalized relationship with opinion leaders, and obtaining

adhesion of this very heterogeneous set of judges, is impossible to assess at this stage. It is difficult to separate adhesion based on interests, imposition and adaptation from adhesion based on personal beliefs co-produced in a network such as the VF. What is easier to observe is that many of its members became very active in the official committees that were set up to prepare for the installation of the UPC. In that respect much remains to be done by following the installation of this institution.

Conclusion

Creating an institution from which stakeholders who want to challenge patents as a way to protect innovation and investments in IP are excluded is a complex institutionalization process. Combined analyses of conventions and relational structures show that this process consists in exploring with institutional entrepreneurs the price that they will have to pay, the concessions that they will have to make, in order to further participate. The VF as a field configuring event was designed and funded by corporate lawyers, by existing semi-public institutions and by institutional entrepreneurs with inconsistent forms of social status, as a place for circulating and sharing knowledge about how each country handles patent litigation, for experimentations of role playing in mock trials with judges coming from different European countries, for socializing the future judges by building their commitment to the institution through acceptance that IP laws must converge and that consensus must be built, concessions made in future judicial decision making; but also through personalized relationships with each other and with colleagues identified as their leaders in institutional entrepreneurship. In many ways the VF was preparing for the socialization of future European judges who will be the main powers in this institution.

Network analyses have a revealing effect on specific dimensions of institutionalization processes, such as the negotiation of priority norms combined with the identification of a leadership that will personify the reference group and the norms that are deemed common to its members. Thus forging new appropriateness judgments as a specific step in the institutionalization process depends on the choice of priority norms in a controversial context, and this step is successful when this choice is collectively personalized by a collegial oligarchy, a step that is easier to achieve in elitist assemblies brought together in selective « field configuring events ». Progress in the negotiation of priority norms is achieved through these identifications, these creations of pecking orders and these alignment on the normative choices made by the members at the top of these pecking orders.

For business, forging these common and personalized appropriateness judgments is an way of framing, building, ultimately inflitrating and eventually capturing a public institution. This process facilitates the creation of a self-contained normative space where challenges are reduced to ‘safe criticism’ and exogenous control becomes very costly, next to impossible. The elitist nature of institution building has long been an issue for observers of a European « democratic deficit ». Elitism can also be a way to protect the institution : very generally, when an institution dysfunctions, individuals are blamed, which is only accepted by elite individuals. Neo-structural sociology shows that if institutionalization processes are facilitated by this personalization, then the issue raised by this deficit may be how to design institutions that depend less on this personification.

There were no clear winners and losers yet in 2009 in this institutionalization process as measured through normative alignments, although it was already obvious that some would have to make more concessions than others to be retained in the future as judges in the upcoming court. In the case in point examined here, the conditions under which this process is successful remain still uncertain. The « European compromise » on patents is still elusive : this lack of consensus is dangerous for this institution. For example, industrialists in the UK and Germany might fear of being dispossessed of their own conception of IP to the benefit of their competitors’ conception, a dangerous situation for their markets and profits that will lead to forum shopping. The future Uniform position is still unclear and institutionalisation process is just a kickstart in this definition. Without consensus on the substance, only personified consensus on procedural norms is achieved. These public/private institutions accept that the substantive rules can be forged as you go, formulated by highly selected judges who are considered epistemic and normative authorities by their peers before these rules are

injected into and tested by the political process. The institution as a « tool with a life of its own" has an unpredictable element in it for the players. But its specialized nature makes the process more capturable and safer for them than if the institution had been framed and built in the public arena, under the surveillance of the wider political spectrum.

Shedding this neo-structural light on regulation, showing these multilevel processes of institution building and lobbying in Europe, leads to the question of safeguards that should be created against elitism and more or less cosy collegial oligarchies so that the general public retains a say at the early stages of the institutionalization process. Discretion, if not secrecy, in the networking between institutional entrepreneurs and in the negotiations of new norms, have largely characterized the construction of Europe. The cost of these institutions to democratic legitimacy remains to be measured. In that area alone, much remains to be done.

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