



Collegial oligarchy and networks of normative alignments in transnational institution building



Emmanuel Lazega^{a,*}, Eric Quintane^b, Sandrine Casenaz^c

^a Institut d'Etudes Politiques de Paris, Centre de Sociologie des Organisations, 19 rue Amélie, 75007 Paris, France

^b Los Andes University, Bogotá, Colombia

^c CSO, Sciences Po, Paris, France

ARTICLE INFO

Article history:

Keywords:

Relational infrastructures
Institutional entrepreneurs
Collegial oligarchy
Normative alignments
European Unified Patent Court

ABSTRACT

This paper presents a combined relational and cultural approach to transnational institution building by focusing on a network analysis of a small collegial oligarchy and normative alignments among its peers. To contribute to a theory of institutionalization, we propose hypotheses about whom professionals as institutional entrepreneurs are likely to select as members of their collegial oligarchy, about the role of social networks among them in identifying these leaders, and about the costs of alignments on these leaders' normative choices. We test these hypotheses using mainly Exponential Random Graph Models (ERGMs) applied to a dataset including network information and normative choices collected at the so-called Venice Forum – a field-configuring event that was central in creating and mobilizing a network of European patent judges for the construction of a new transnational institution, the European *Unified Patent Court*. We track normative alignments on the collegial hierarchy in this network of judges and their divergent interpretations of the contemporary European patent. Highlighting this under-examined articulation of relational infrastructures and cultural framing in transnational institutionalization shows how Northern European forms of capitalism tend to dominate in this institutionalization process at the expense of the Southern European forms. It also helps reflect on the usefulness of analyses of small networks of powerful players in organizational societies, where power and influence are highly concentrated.

© 2016 Elsevier B.V. All rights reserved.

1. Introduction

In his work on precarious values, Selznick (1957) provides an early combination of a structural and an institutional perspective in sociology. A precarious value is one that is essential to the viability of the collectivity but in which most members may have no direct stake. In this illustration of the entanglement of structure and culture, a value is therefore precarious because it is always in danger of losing its flag carriers and representatives, that is, the active support by organized interest groups and elites that help preserve it as a candidate for top priority on the list of all competing values. In our view, this connection between structure and culture is still illuminating today with respect to understanding institution building by small networks of top level institutional entrepreneurs. At a very high level of generality, defining norms for collective action, i.e. the political process in a collectivity, depends

upon who are the actors promoting these rules, what are their strategies to carry out this task in the system of interdependencies and what are the relationships between them. In this spirit, this paper looks at institution building by exploring the relational dimension of 'institutional work' (Lawrence et al., 2011), i.e. at the system of interdependencies between a collegial oligarchy of institutional entrepreneurs (DiMaggio, 1988) involved in institutional framing.

We argue that, in the organizational society (Perrow, 1991), where power is extremely concentrated, this relational and cultural perspective enriches the study of institutionalization processes by focusing on their often collegial, elitist and personalized nature. In this process, the selection of priority norms and the personalization of authorities who champion them important step in the creation of frames of reference that become taken for granted over time, and thus institutionalized. Therefore, the creation of an oligarchy of actors, who are able to guide the regulatory process and to mobilize followers by helping them align upon the new rules, are key underlying mechanisms that belong to the institutionalization process as theorized by Selznick and encapsulated in his notion of precarious values. This is particularly the case in transnational

* Corresponding author.

E-mail addresses: emmanuel.lazega@sciencespo.fr (E. Lazega), eric@quintane.net (E. Quintane).

situations where governments cannot agree on a political compromise. Collegial oligarchies exemplified by the network that we analyze in this paper are then enrolled and brought in by powerful players to pursue the political process in the shadow of the failing officials and out of the limelight.

To apply and develop this perspective, we look at the construction of a new transnational judicial institution, the European *Unified Patent Court* (UPC) that was created in 2012 and that is scheduled to become operational when European countries will have ratified the agreement that created it. This institution provides an opportunity to develop this combined relational and perspective because it originated from a network of corporate lawyers and judges as institutional entrepreneurs who negotiated new patent rules on behalf of the transnational organizations and national institutions that they represented or in which they were affiliated. Intellectual property is a key institution of contemporary capitalism, but IP rights do not constitute a perfectly coherent and stable system across boundaries. They bring together complex, heterogeneous laws, rules and regulations protecting patents. Negotiating how IP rights, especially pragmatic definitions of patents (Gallini, 2002; Weatherall and Webster, 2014), can be established is a political, compromising process.

Judges have long played a political role in the construction of the European Community institutions (Dehousse, 1999), as have corporate lawyers (see for example Coen and Richardson, 2009; Schepel and Wesseling, 1997). With respect to intellectual property, European countries have different, competing legal cultures. Still today (2015), Europe has 27 jurisdictions and 27 different patent laws and jurisdictions with deep disagreement between European kinds of capitalism with respect to patents and underlying competition and innovation policies. We describe below the pattern of institution building that political scientists have identified and underline the similarities between the construction of the UPC and this pattern. With corporate lawyers working in the interest of large European companies (in sectors with patents at the core of their business model, such as pharmaceutical, biotech, semi-conductors, etc.), these judges have lobbied the European Union for more than forty years, pushing for a unified approach to intellectual property and related litigation.

As institutional entrepreneurs, in the case of the UPC, they helped create a discrete social network of European judges who worked together on framing the future institution. These European judges met in a ‘field-configuring event’ (Lampel and Meyer, 2008) organized by these corporate lawyers with help from a semi-public institution, the European Patent Office. During this event, called the Venice Forum (VF), these judges were able to work on the design of a future European transnational court specialized in patents. Although they have not (yet) reached a stage where all European judges would interpret European patent law in the same way, they did carry out the groundwork for defining common procedural rules for the emerging European *Unified Patent Court*.

In this case, we combined observations of these regulatory negotiations with a network study to look into how these judges interacted to create the procedural foundation for this new institution. In the spirit of Selznick, we combine structure and culture by considering legal procedure as a case of “weak culture” as defined by Breiger (2010) and by looking at the relationship between the pattern of interdependencies between these judges and the conflicting normative choices that they were trying to ‘harmonize’ for this institution across national borders – a task in which judges are increasingly involved at the global level (Hol and Langbroek, 2007; Slaughter, 2000).

The paper is structured as follows. We first present a combined relational and cultural approach to transnational institutional building by focusing on the notions of collegial oligarchy and normative alignments. Second, we present the regulatory process in

which we observe and further develop this approach. Third we formulate hypotheses about whom professionals as institutional entrepreneurs, in a key moment of this process, are likely to select as members of their collegial oligarchy and the role of social networks among them in identifying these leaders and the costs of alignments (to each judge) on normative choices. Fourth, we present our empirical setting, the Venice Forum and its contribution to the construction of the European *Unified Patent Court*, as well as the network data and normative choices that allow us to look at several dimensions of patents as construed by the judges assembled at this field configuring event so as to track normative alignments on this collegial hierarchy and its still divergent interpretations of the European patent. Fifth, we use mainly Exponential Random Graph Models (ERGMs) to measure the extent to which our data confirm our hypotheses. Our analyses confirm the important problems that emerge in the progressive construction of a future Uniform European position with respect to the interpretation of the European patent (Ilardi, 2015; Kranakis, 2007). We show how Northern European forms of capitalism tend to dominate in this process at the expense of the Southern European forms of capitalism. Finally, we reflect on the implications of the results provided by these combined relational and cultural analyses in a complex institutionalization process for the principles of division of powers in Western democracies.

2. Collegial oligarchy and normative alignments in transnational institutional building

Contemporary thinking about the emergence of institutions is dominated in sociology by a variety of neo-institutional perspectives focusing on conventions and structures that are embedded in formal organizations and promoted by “institutional entrepreneurs” (DiMaggio, 1988). The latter elaborate taken for granted cultural categories, classifications, rules and procedures that include beliefs and codes stabilizing action into routines. With respect to transnational governance, professions and their crucial role in transnational governance have been highlighted by Haas (1992) in his early work on ‘epistemic communities’. A broad sociological literature on building transnational institutions insists on the role of community formation around particular identities (Djelic and Sahlin-Andersson, 2006) and recursive learning between transnational and national actors (Meyer et al., 1997; Halliday and Carruthers, 2007). This literature suggests that transnational institutional entrepreneurs share common professional or cultural identities (Loya and Boli, 1999) that facilitate the process.

We argue that this institutional process includes a moment of identification of a collegial oligarchy among these professionals and a mechanism for aligning these professionals’ normative choices on the choices of this oligarchy. This articulation of professional networks and negotiations used to shape transnational institution but is not very well explored empirically (Lawrence et al., 2011). In transnational institutionalization, stakeholders try to shape each other’s reasoning and framing to define jurisdictional roles common to all. We argue that they do so by combining rules and networks in the perspective identified by Selznick. In the case of legal/judicial institutions, professional networks, normally composed of lawyers and judges, transnationally organize and can change how an issue is treated and who has the right to work on it (McIntosh and Cates, 1997; Alter, 2009; Quack, 2007).

We highlight an under-examined moment, a set of processes revolving around the joint identification of priority norms and judicial leaders championing them in such networks, as well as future alignments on these norms and leaders as part of the dynamics of the transnational institutionalization process. This approach is

useful because it helps identify small collegial oligarchies with particular influence in transnational institution building, who are able to handle some professional hurdles linked to the diversity of approaches to the same issue in different countries. Describing social and communication networks during these field-configuring events can help explore the micropolitics of institution building among peers.

In effect, knowledge of interdependencies between the actors and network analyses of these interdependencies help test several hypotheses about the determinants underlying the creation of this oligarchy and about the alignments of followers upon this set of prominent peers. Firstly, the latter could represent a core of leaders with whom they agree on common substantive norms. However, in a transnational context, if the leaders come from countries with different interests or even with different kinds of capitalism, the collegial oligarchy itself could disagree about substantive norms and followers might not select as their leaders colleagues with whom they agree on substantive issues. Agreement upon specific procedural norms that are easier to figure out and promote might be a sufficient ground for selecting colleagues as leaders. Homophily based upon sharing strong substantive norms or weak procedural norms becomes testable.

Secondly, knowledge of interdependencies between the actors can help test hypotheses about the extent to which social networking is an efficient mechanism for selecting a collegial oligarchy. Are professionals as institutional entrepreneurs who interact directly with each other more likely to select their institutional leaders among the colleagues with whom they have these direct personal ties than among the colleagues with whom they do not have such ties? Thirdly, such interdependencies can help test ideas about alignment itself. Are members of the collegial oligarchy recognized by their colleagues as more influential in consensus building than other colleagues? Finally, these interdependencies can help test the idea that such alignments, if they exist, may have different costs for different actors depending on how different these actors are from the leaders that are recognized as members of this collegial oligarchy.

3. Alignments as part of a more general institutionalization pattern in Europe

The process that we examine here has a history and is part of a wider process of European (lack of) legal integration. This process is based on recurrent and well-documented dynamics (Dehousse, 1999). Beyond the first European economic agreements of the 1950s, the history of this process of European level legal integration starts in the 1960s, as identified by a rich political science literature. The pattern is the following (see for example Mark Thatcher for a review). The functional need for cooperation and harmonized regulation emerges when national regulators encounter similar problems, sector by sector. For example, the case of the European regulation of the telecom industry¹ is a good analogy. Telecom operators have trans-border problems and they seek regulatory coordination at the European level to solve these problems. The political level, i.e. governments, however, is not ready to concentrate powers sufficiently at the European level to impose a common solution. The problem is then sufficiently “depoliticized” so as not to threaten the governments. A European market for each specific sector is then created and national regulators are brought together in a “network” where they talk to each other, measure the distance that separates them in terms of preferred solutions to such trans-border problems, look for acceptable concessions, prag-

matic solutions as well as for well identified institutional leaders who would be able to represent, carry and justify such solutions both among the regulators and to European level public authorities. The next step for this “network” of regulators is to codify these pragmatic solutions and to ask the European Commission (EC) to create a decentralized European agency² that should have the power to enforce the codified solutions hammered out by the assembled national regulators. This agency is created for each sector by the EC, but over time it separates or disembeds itself from the “network” of national regulators when the leaders come to use their newly acquired powers of enforcement. In addition, in general, governments have very Europhile discourses, but reluctant practices and attitudes. At the next stage each large country (particularly the governments of France, Germany and pre-Brexit UK) re-enters the stage and argues that it is happy with one common and codified solution to the problem as it should be enforced by the agency, provided the solution is its own national solution.³ Recurrent and self-destructive dynamics are then triggered at the level of the EC that increasingly perceives these agencies, which it has itself created, as rivals. Being also the watchdog of these decentralized agencies, the EC tries to interfere with their work and steer their activities. This war between the EC and the decentralized agencies is a very real – and not just theoretical – problem of political control between the top of the European administration (remote controlled by national governments) and its internal substructures that have very different visions and strategies, thus questioning the unitary view that the public usually has of these institutions (Thatcher, 2002, 2005).

The history of the emergence of European institutions is full of examples of the same dynamics, and the same pattern works for the integration of European judicial institutions (see for example Dehousse, 1999). When national government representatives failed to build consensus to coordinate judicial institutions, judges built a “network” that bypasses the European executive powers – in the case of IP law it was with the quiet support from private operators such as corporate law firms. Judges who proceed in this way are public servants, but they think of themselves also as citizens who need to make alliances to push forward the stalled integration process. Based on this pattern, it is important to realize that the national judge becomes the first level European Community judge. Thus the regulatory strategy of this “network” is to convince the national judges to participate in the push and to enrol them in the institution building process, i.e. a European level court topped with a Court of Appeal (a functional equivalent to the agency as presented in the previous paragraph). In this cooperation among themselves, the judges work on outlining a political vision of their institutions, sometimes losing sight of the division of powers characterizing Western democracy. This has been widely documented, including at the global level (Alter, 1996; Cichowski, 2007; Dehousse, 1998; Dehousse et al., 2010; Green, 1969; Jettinghoff and Schepel, 2004; Levi-Faur, 2011; Slaughter, 2004; Slaughter et al., 1998; Stein, 1981; Stone Sweet, 2004; Thatcher, 2005; Weiler, 1994). When these judges hammer down pragmatic solutions to the problems that they encountered to begin with (in the case that we study, ‘How to enforce a national patent across borders?’), they measure the distance that separates them in terms of preferred

¹ But it is the same with other regulatory agencies such as agencies in charge of regulating immigration, fighting drug traffic, etc.

² Unlike centralized US agencies, such as the Federal Reserve, European agencies are still decentralized, and rarely have the power to impose a unique solution. The same dynamics have been observed with industrial norms. Industrialists were left to define their own quality standards as if this definition was only an issue for them, and not for the public in general. Normalization organizations were allowed to emerge in all sectors of the economy based on the idea, strongly supported by Germany and the UK, that what is good for the market economy is always good for society.

³ Sometimes, national governments accept the solutions imposed by the agencies if they (the governments) can claim that they steer the agencies.

solutions, look for acceptable concessions from their respective national perspective, as well as for institutional leaders who would carry the negotiated solutions.

Based on this pattern, it is also important to realize that the process of selecting an institutional leadership that is expected to represent a possible consensual, uniform position is not a simple process. In the cognitive process of the judges, they need to imagine a potential uniform European position and then evaluate the closeness of each judge's position to that future uniform European position. Interacting with this imagination and evaluation, judges nominate this leadership among their peers based on a multilevel judgement call that is political in essence and that will shape the alignment process. This judgement brings in firstly the fact that, at one level, they are themselves representatives of national interests (in our case, for example, a specific type of capitalism) from which they are not expected (at home) to diverge; and secondly the fact that they know that they need to make concessions to reach a consensus, or at least an apparent consensus, that will be used to make judicial decisions. In order to control and minimize these concessions these judges use their personal knowledge of their peers, at another level, as professionals and individuals, and their evaluation of the flexibility that these peers will show in their individual ways of managing differences between national traditions and ways of solving problems, even if these peers are affiliated to a specific nation. Thus each focal member must balance between nominating peers like him/herself and nominating peers who, although different from him/herself, can be expected to negotiate, represent and carry solutions that are not too different from the solutions defended by this focal member. This is the reason for which individuals sometimes make decisions that are different from other individuals who are affiliated to the same blocks. This is also the reason for which individuals from the same block can be more mildly or strongly aligned than their fellow block members.

Governments may end up ratifying these solutions sometimes after generations of lobbying, for example by creating a European level institution able to enforce the pragmatic solutions previously hammered out by the “network”. However, as shown by Leron (2014), and consistent with the pattern described above, when the process reaches constitutional courts, it usually becomes much less cooperative. Indeed national constitutional courts are less prone to collaboration with each other because their integration is a much more direct threat to their «market share» (in their own country).⁴

The emergence of the Unified Patent Court (UPC), our empirical site, follows similar dynamics. It is part of the history of the European legal integration since the 1970s: the European patent (i.e. a protection against competition that is valid across the whole of the European Community) was created in 1973 and it took forty years to create – on paper in 2012 – the UPC that will enforce this patent. Indeed this history from the 1960s was an inspiration to the Venice Forum forces when they pushed for the emergence of a European patent court (Jettinghoff, 2011). The history of this court coincides with several steps of the now familiar pattern: a political freeze when governments failed to agree on a common IP regime for Europe – mainly because of the strong differences in approaches to innovation by German and UK kinds of capitalism; then a phase of intense judicial activism, at the Venice Forum, by (future) European-level judges who can only play an institutional role and open new regulatory doors when they are supported by national judges (who, as mentioned above, are the

only judges who can trigger this regulatory process). The VF judges were the functional equivalent of the “network of regulators” codifying pragmatic solutions and seeking the European Commission (EC) to create a decentralized European agency, in this case a new judicial institution, a European patent court with the power to enforce the codified solutions that they (the judges) were negotiating in Venice. The process that we examined with the creation of the UPC is revealing in that sense: national judges wanted to be in a position to promote functional cooperation in the IP field, to avoid contradictory and paralyzing political interference by national governments, and to hammer out a (nevertheless political) “harmonized” solution that they hoped would become judicial, acquire jurisprudential authority and be enforced by national judges guided by the jurisprudence of an elite European Court of Appeal judges selected among themselves. This mechanism of collusion between national judges and (future) community judges is exactly what we observed at the Venice Forum. This analogy exposes the precious value of the concept of duality as used by Breiger (1974) to help understand this co-constitution of levels.

The value added of our research is in helping to specify the dimension of this process at one specific stage of the process: the crucial stage when the network of judges meets to design pragmatic solutions to the problems that their national jurisdictions encounter while trying to uphold (or cancel) patents across borders. Their work as they defined it was to “harmonize” their interpretations of the European patent, to create procedural and/or substantive convergence in this interpretation, which is the exact nature of the problem of legal integration itself as presented above. This case thus reproduces the classical problem of the same text being interpreted in different ways in different societies. Convergence as a product of efforts made by the judges towards a common interpretation is the essence of judicial integration as defined above by political scientists specialized in European politics.

This “harmonization” by the judges as judicial entrepreneurs is equivalent to the construction of a common interpretation of the same body of law within the Venice Forum social network. This construction is carried out by measuring differences in normative choices and preferred pragmatic solutions, by searching for acceptable concessions, and by identifying institutional leaders personifying these solutions. After discussing this with a series of judges and lawyers, we captured this key – both normative and relational – step in the process using a name generator called the *Uniform network*. This step was equivalent, in their minds, to identifying the judges who would sit on the yet-to-be-created Court of Appeal of the future UPC, i.e. what we call a collegial oligarchy of peers who will perform convergence by making essential decisions about framing this harmonized interpretation, signalling to followers in which direction it is going, clarifying what differences exist between the “harmonized” version and their own interpretation – and thus what efforts they would each have to make (or “costs” they will have to incur) in their own country in order to align with the “harmonized” version. In our case, with our Uniform network combined with normative choices, we believe that we help the actors spell out a key of this social logic of transnational European integration, and that we capture the essence of the progress that takes place when similar people with similar problems are brought together in the same room and agree to work together, identify their leaders and find common solutions.

Thus if normative alignments on epistemic leaders who are *primi inter pares* take place in combining norms and status, networks become useful indicators of mobilizing, learning, building personal adhesion – or refresh commitment – to norms and their champions. In the case of the UPC, the collective work and discussions of these legal professionals are meant to guide their lobbying efforts in the process of constructing a judicial institution dealing with patent litigation. Patents are specific types of

⁴ This has become obvious, for example, in the tensions between the European Court of Justice (ECJ) and the highest national courts, for example with the German Constitutional Court in Karlsruhe or the French Conseil d'Etat. The same problems are currently beginning to emerge between the new UPC and the ECJ before even the UPC has actually been installed.

protections against competition and the conditions under which they should be awarded to entrepreneurs, and the ways in which they should be defined when adjudicating patent-related litigation, are discussed by judges who, in such transnational institutions, represent themselves but also, inevitably, their national public authorities and the kind of capitalism that dominates in their respective country. Similarities between judges in terms of national systems and their broad specificities can help understand the extent to which alignment on the views of the dominant collegial oligarchy in Europe takes place in a set of processes bringing together norms and, culture and status.

4. Hypotheses

This institutionalization process is thus a complex social process. It involves status and legitimacy issues, economic-cultural-political heterogeneity of the players, social networks, controversies, and epistemic construction of consensus. Based on this theoretical discussion and using control variables (language, kinds of capitalism, legal culture, etc.), we derive the following hypotheses on the nature of this institutionalization process in terms of relationships between networks, controversies and consensus building.

- H1.** Institutional entrepreneurs are more likely to select as leaders colleagues who share the same substantive norms.
- H2.** Institutional entrepreneurs are more likely to select as leaders colleagues who share the same procedural norms.
- H3.** The more institutional entrepreneurs interact directly with each other, the more likely they are to select their institutional leaders among the colleagues with whom they have these direct personal ties.
- H4.** The more central the institutional entrepreneurs in their social network, the more they will be perceived by their peers as members of the institutional leadership expected to influence consensus building and future normative alignment.
- H5.** The less central institutional entrepreneurs are in their common social network the more costly (in terms of the number of normative changes required by their future personal alignments) the institutionalization process will be for each of them.

In order to test these hypotheses we further specify the case of the UPC and present the data collected during the observation of the Venice Forum, a field-configuring event assembled to build this European-level institution and during which the judges as institutional entrepreneurs identify their institutional leaders.

5. Building the European Unified Patent Court

The complex institutionalization process that led to the creation of the UPC in 2012, a transnational court system specialized in patent litigation, was part of several attempts at organizing a single European economic space for this dimension of intellectual property, as well as to homogenize the European practices of the specialized jurisdictions dealing with patent-related conflicts in the signatory countries. It took the business world forty years of lobbying until a European judicial institution was created (in 2012) due to become operational in 2015. [Jettinghoff \(2011\)](#) has provided a detailed reconstruction of the history of the failed attempts to build a common interpretation of the European patent and a truly judicial European Patent Court in two parallel and competing political arenas, with a presentation of the underlying political dynamics, including a presentation of the stakeholders and an exploration of the influence of groups of “patent law experts” in the process, i.e. the corporate lawyers and

judges who were, for the latter, our respondents at the Venice Forum. Jettinghoff – referring to [Schepel and Wesseling \(1997\)](#) and [Jettinghoff and Schepel \(2004\)](#) – presents the corporate lawyers and judges that we discuss here as a “community legal experts”, i.e. “legal specialists that are directly involved in the development of material and procedural patent law”. He presents the Venice Forum as an initiative of the European patent judges that was meant to “harmonize the interpretation of European patent law”.

The VF was a microcosm dedicated by the conveners to this complex activity of institutionalization that led to the construction of a transnational judicial institution, the Unified Patent Court. It accelerated the process by bringing together European judges making decisions on patents. The corporate lawyers who orchestrated this process were organized in an association called EPLAW (European Patent Lawyers) backed up by powerful in-house lawyers. Together with the European Patent Office (EPO, the intergovernmental organization that was set up on 7 October 1977 – on the basis of the European Patent Convention (EPC) signed in Munich in 1973 – to award European patents to companies) they helped patent judges create an association of judges (called IPJA, for Intellectual Property Judges Association) coming from all over Europe. From our perspective, the main actors at this event, the judges, were a heterogeneous set of judges. They mixed Supreme Court judges with lower level judges specialized in patent litigation, and at different stages of their career. At the time, and still today in practice (2015), Europe had 27 jurisdictions and 27 kinds of patents decisions. During this event, lawyers and judges got to know each other, gave conferences, organized mock trials, measured the extent to which they did not agree on their substantive interpretation of the European patent, dreamed up the future institution and drafted a number of compromises related to its procedure.

The social construction of a European Patent judiciary as a bottom-up process relied on transnational interactions and dialogue between these judges who can be considered to be ‘institutional entrepreneurs’. One had to be invited by EPLAW and EPO in order to participate. The judges were country delegations, usually a couple of judges from each country, except for the largest countries or the more active ones in the field. They were a mix of activist judges committed to the idea of building a European institution to protect European interests in the global IP competition, more curious judges concerned with patent issues and about the emergence of the future UPC, or judges who simply wanted the voice of their country to be heard in this private process. Some had mixed feelings with respect to participating in a discreet lobbying and political process. All knew that their gathering was part of a broader political process. We also know of judges who refused to participate in these events. Patent judges are often the targets of groups lobbying on behalf of industry, and some of them saw the Venice Forum as.

This set of actors is therefore quite specific, closed and selective. We were not allowed to attend their mock trials per se, but we could see that fierce discussions could take place – although no one left shaking their head. The judges knew that a substantive and political consensus could not emerge in Venice around a single interpretation of the European patent. Their purpose was to start with the goal of creating procedural norms, circulate them, and win the adhesion of European judges for these norms. Talks and mock trials were meant to present and stage the use of such norms, discuss them, compare them to other norms, and try to on how to use them. Open and direct political discourse was inappropriate because judges as a principle are used to defend their independence in that area; but the same ideas were framed in discreet political discourse about the necessity of convergence between legal cultures and bodies of law.

The VF succeeded in enrolling and mobilizing this population of judges around a core of already committed judges, and to build a personalized network of European judges who know each other well. It provided 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 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. Corporate lawyers were able to get know their judges better. They also used sociological thinking about the judges. One corporate lawyer even referred to sociology to assert that actors who contribute to construction of norms are much more likely to enforce these norms than actors who are simply subjected to them.

Redesigning the institutional framework of property, let alone intellectual property, is a momentous endeavour. Even the more modest goal of the VF in promoting a specific and harmonized interpretation of the European patent did not succeed. Substantive differences in the definition of what is a 'good patent' are derived from differences in political economies between European countries, and getting rid of these differences was the scope of the judges. But the VF succeeded in ensuring that the intellectual activity of these judges is not simply aligned on that of the institutional model and constraints of their respective countries. The multilevel character of the judicial European system allows for discretion and flexibility at that individual level. Judges from the same country can also interpret the same patent in different ways. These variations are presented below and they still hold today. Yet each national system has broad specificities, and our purpose is to examine the extent to which alignment on the dominant views in Europe takes place in a set of processes bringing together norms and, culture and status.

6. Fieldwork and data

Fieldwork to reconstitute the network that is created by the relations between these judges was carried out in Venice (San Servolo Conference, 30–31 October 2009). We took advantage of the existence of this annual meeting in Venice in order to carry out our face to face interviews with all participating judges. We encountered a relatively open attitude in general, once the judges knew that the interviewers were academics. The survey received a 100% participation rate among the judges present at the VF.

We use three kinds of data collected at the VF to test our hypotheses. 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.

6.1. IP related normative choices framing the future institution

European countries have different judicial cultures, which allows for forum shopping by who favour the country that interprets substantive patent law in a way that best protects their interests. 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 the right interpretation of the existing European patent (either as exceptions to the freedom of copying, or as a reward to the contribution of the inventor to technological development); and the right procedure to be used in the attribution of a patent by the future UPC: assessment of inventive step, determination of scope of protection, and involvement of technical experts.

Agreements and disagreements on the different existing controversial issues between European judges led to a failure to reach a common view on the substantive interpretation of the existing European patent and to intensive discussions about future procedural rules. Based on our interviews, there are three main rules that were subjects to controversies because they are important steps of the process of deciding on the attribution of a patent: first, the assessment of the inventive step; second, the determination of scope of protection; and third, the involvement of technical experts.

- *Divergences in substantive interpretation of the European patent:* The judges were asked about their personal and substantive interpretation of the existing European patent, 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. On the other hand, 27.3% of the judges thought that patents are rewards to the contribution of the inventor. A Portuguese judge thinks that "progress and innovation should be promoted – it takes a lot of work to create something and this work should be rewarded by creating a calm environment". 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". In many ways, the low figure of the European Compromise reflects the failure of political Europe to reach a common position on IP.
- *Inventive step:* EPO provides guidelines for European patent judges in order to assess the inventive step for a creation to be patented: It is called the 'problem and solution approach'. To simplify, a patent can be awarded to a new solution to a well-defined problem. Some judges have pointed out weaknesses in this approach that only takes into account written documentation, whereas they also want to take into account the "normal knowledge of the skilled-in-the-art-person", i.e. experts. In addition, decisions of foreign courts in relation to the same patent may or may not be relevant.
- *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. Judges must also decide whether the applicant's statements during the grant procedure before the EPO play a role in the determination of the scope of protection, then if so whether the applicant's statements could only lead to the limitation of the scope of protection, i.e. "play a role if they are in the interest of the alleged 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. But the use of experts is 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. Judges must therefore decide whether or not to use independent

technical experts when assessing inventive step, when assessing the scope of protection, and if so, whether or not to let the parties have the opportunity to comment on the reports of the experts. In sum there was diversity in among Venice Forum IP judges on their approach to the procedure. A real risk existed that differences among the practices of these judges could lead to diverging decisions.

6.2. 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 sociometrical questions to reconstitute networks of interactions among these judges with respect to learning about each other's 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).

6.3. Uniform network identifying future judicial leaders

The Venice Forum 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 face to face 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.⁵ Nominating the judges who were closest to a future EU uniform position was equivalent, in these judges' minds, to electing these opinion leaders to become the first sitting judges at the future Court of Appeal of the European Court, under the control of which judges at the national level would operate.

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 European Compromise. In this network, these judges are Dutch, German, British, Italian and Swiss. Some of them are already central in the social networks presented above (discussion, reading, citing). 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 an 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.

6.4. Control variables

- *Country*: Seventeen countries are represented in this population of Venice Forum judges in 2008 and 2009: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Italy, Netherlands, Norway, Portugal, Romania, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.
- *Types of capitalism*: Countries are clustered into blocks, each representing a different type of capitalism. We refer to the classification of types of capitalism identified by Amable (2003) in four kinds of capitalism: (1) European continental capitalism (characterizing CH, NL, IR, BE, NO, D, F, A) with Germany, and in part the NL, as its leaders on this terrain of patent law, (2) social democratic capitalism (characterizing DK, FI, SE), (3) the liberal market capitalism represented by the UK, and (4) Mediterranean or Southern capitalism, which includes GR, IT, Port, SP also happen to be countries without strong IP specialization in their judiciary.

7. Results

We test our hypotheses using Exponential Random Graph Models (Lusher et al., 2013), or ERGMs. ERGMs are akin to a logistic regression with the difference that the models specifically cater for the dependencies between observations inherent to network data. Specifically, in our case the likelihood that a judge nominates another judge as representing the uniform European position is dependent on the characteristics of the judges but it is also dependent on the pattern of relationships and nominations in which the two judges are embedded. Hence the decision of judge A to nominate judge B can be dependent on the decision of judge C to nominate judge B, especially if judge A and C are connected. Hence the ties between A and B and between C and B are not independent. For this reason, logistic regression is not an appropriate modelling choice. By contrast, ERGMs are specifically designed to predict the existence of a tie between actors in a network based on a series of attributes of the actors or embeddedness in networks of different types, while accounting for the dependence between observations. ERGMs account for the dependence between observations by using the network to be predicted both as a dependent variable (to predict the existence of a tie) and as an independent variable, controlling for the endogenous network processes that can cause the existence of the tie. Hence, all our models that predict the likelihood of a nomination from one judge to another judge in the Uniform network also include network based processes that have been shown to explain the creation of ties (independently from actor attributes), such as transitivity or reciprocity. This enables us to evaluate the weight of characteristics of judges in their choice of nominee while controlling for these network processes that could be alternative explanations for the nominations.

7.1. Building agreements on procedural rules as weak culture

As seen above, Venice Forum judges disagree in their interpretation of the European patent, i.e. basically on 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. Because they do not agree in their basic interpretation, they concentrate on finding agreements and make compromises concerning several rules of procedure that should be used and that stem from the rules already used by EPO. This strategy of strengthening procedure instead of agreeing in substance on the right interpretation is not entirely

⁵ This variable is not a social network like the three previous ones, or as defined in neo-structural sociology, but for modelling purposes it can technically be considered to be a network.

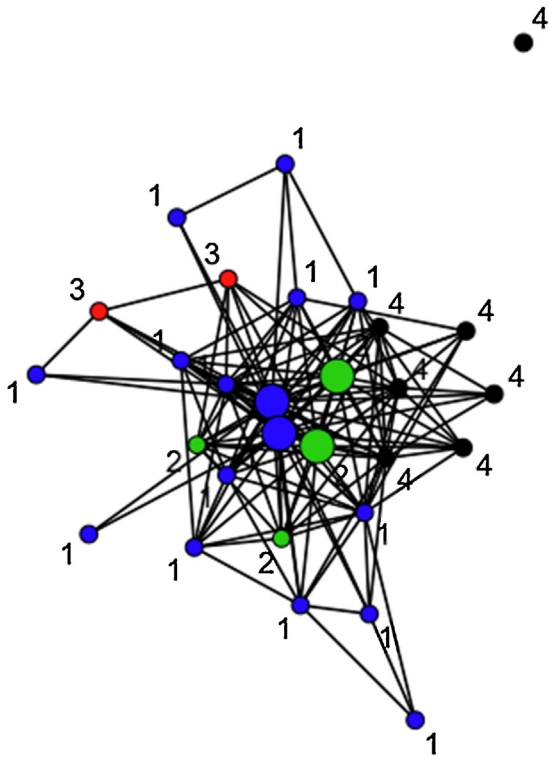


Fig. 1. A collegial oligarchy of judicial entrepreneurs. *Legend:* The larger the node, the more central the judge in the Uniform network, i.e. the more often s.he is nominated by his/her peers as closest to the future European Uniform position on interpretation of patents. *Note:* Colours are based on type of capitalism: 1. Continental Europe; 2. UK; 3. Scandinavia; 4. Southern Europe.

successful. Even on procedure, there are some disagreements. 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 the experts. In the civil law tradition, experts can be involved by the judges themselves.

7.2. Identifying institutional leaders and future substantive alignments in the 'Uniform' network

The Uniform network provides information about who the members of the future collegial oligarchy will be and how the judges position themselves and others with respect to a future possible Uniform European doctrine on patent issues hammered down by this judicial leadership. The aim of our analyses is to understand what drives a judge to nominate another judge as representative of a Uniform European position on such issues. Fig. 1 represents this Uniform network, with colours based on type of capitalism and the size of nodes representing the centrality of the judges. The Uniform network is a highly centralized one. Nominations converge towards the super-central core composed of Continental (German) and UK judges who are very central in the other networks and do not always nominate each other as representative of the uniform European position. In this figure, the larger the node, the more cited s.he is by the colleagues and the more likely s.he is to be part of the collegial oligarchy who will define the future European Compromise with respect to the interpretation of the European patent. We

identified the core of this network, i.e. the most nominated judges based on the number of nominations above the 90th percentile in this network. The core/periphery dimension of the structure of this system is confirmed by statistical analyses below. This picture indicates very clearly that the UK and German capitalisms are in the core and that alignments go from the North and the South of Europe towards two kinds of capitalism. The four most central judges are repeat players as far as participation in VF events is concerned.

Based on our analyses, the selection of these leaders is a complex process. Table 1 introduces in the explanatory model a series of variables that test Hypothesis 1. A first observation is that procedural choices are not independent from substantive ones. Judges in the core are Northern European, and therefore the core is in part defined by the types of capitalism that these judges represent. One way to look at the effect of type of capitalism on the selection of a judge representing the Uniform position is to introduce interaction effects with the substantive norm selected by the judges in the 'Which substantive rule do you apply?' question. Table 1 looks at the extent to which there is an interaction effect of 'type of capitalism' and substantive rule on the selection of colleagues personifying the future Uniform European position. The ERG model predicts the Uniform network using Which rule?, type of capitalism, and four interaction variables. This shows whether individuals from countries with the same type of capitalism nominate judges as representative of the European Uniform position based on the alignment between substantive choices about the rule to use in order to interpret the European patent.

This analysis shows that interaction effects between these attributes and structural parameters are useful. A judge is more likely to nominate another judge as a representative of the future Uniform European position when there is a match between both judges in the substantive choices about the definition of a good patent and if they come from countries with the same type of capitalism. This shows that the substantive divide between European judges is still a deep one. Selection as an institutional leader depends upon substantive normative agreement with the leader when the latter come from the same type of capitalism. Hypothesis 1 is thus confirmed.

7.3. Alignments on institutional leader's procedural choices

As formulated above, there are three interrelated hypotheses. First, 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 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. Second, 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 2 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 the same kind of capitalism as a representative of a uniform European position, using the same procedural norms is generally not a predictor of selection of institutional leader. Notably, sharing the same conception of the rule of law that underlies a patent does not

Table 1
Effect of interactions between 'type of capitalism' and 'personal rule used to interpret the European patent' in predicting the Uniform network – an Exponential Random Graph Model.

Effects	Parameter estimate	Standard error	T-ratio
<i>Variables of interest</i>			
Judges apply the same rule	-0.579	0.272	-0.026
Judges belong to same capitalism block	-0.707	0.452	0.053
Judges apply the same rule AND belong to continental Europe capitalism block	1.242	0.346	0.043
Judges apply the same rule AND belong to UK capitalism block	0.673	0.335	0.053
Judges apply the same rule AND belong to Scandinavia capitalism block	0.951	0.402	0.020
Judges apply the same rule AND belong to southern Europe capitalism block	0.945	0.351	-0.048
<i>Endogenous network controls</i>			
Density	-4.537	1.039	0.005
Reciprocity	1.261	0.394	0.041
Indegree control 1 (Markov)	0.012	0.001	-0.099
Outdegree control 1 (Markov)	0.012	0.001	0.061
Twopath	-0.087	0.025	0.02
Indegree control 2	-0.061	0.331	-0.007
Outdegree control 2	-0.340	0.350	0.011
Transitive closure	1.167	0.211	-0.001
Cyclic closure	0.029	0.120	0.051
Transitive connectivity	-0.058	0.032	0.041

Note: Substantial effects (the parameter estimate equals at least twice its standard error) are indicated in bold.

Table 2
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 – ERG Model.

Effects	Parameter estimate	Standard error	T-ratio
<i>Variables of interest</i>			
Judges belong to the same country	1.320	0.711	-0.004
Same conception of inventive step 1 (problem-and-solution approach)	-0.179	0.360	0.042
Same conception of inventive step 2 (relevance of foreign courts decisions)	-0.161	0.535	0.002
Same conception of inventive step 3 (referring to foreign courts decisions)	0.065	0.380	0.012
Same conception of scope 1 (statements of applicant)	-0.500	0.416	0.021
Same conception of scope 2 (limitation of scope)	-0.070	0.465	0.048
Same conception of technical experts involvement in inventive step	0.353	0.324	-0.008
Same conception of technical experts involvement in scope of protection	0.306	0.372	0.014
Same conception of opportunity to comment on technical experts' comments' report	0.024	0.372	0.025
Judges apply same rule	-0.022	0.393	-0.043
Judges are happy to apply the same rule	0.115	0.338	0.006
Judges belong to the same capitalism block	1.101	0.390	0.026
Judges discuss with each other	1.262	0.381	0.021
Judges read each other's work	0.471	0.607	0.051
Judges make explicit reference to each other's work	2.753	0.591	0.057
<i>Popularity of the receiver</i>			
Popularity of the receiver in the discussion network	0.143	0.077	-0.019
Popularity of the receiver in the reading network	-0.036	0.126	-0.025
Popularity of the receiver in the explicit reference network	0.0203	0.107	-0.028
<i>Endogenous network controls</i>			
Density	-7.070	2.292	0.010
Reciprocity	0.120	0.547	0.024
Indegree control 1 (Markov)	0.003	0.007	-0.042
Outdegree control 1 (Markov)	0.024	0.010	0.077
Indegree control 2	-0.348	0.807	-0.001
Outdegree control 2	1.026	1.086	0.008
Transitive closure	0.273	0.384	-0.001
Cyclic closure	-0.152	0.144	0.009
Activity closure	0.117	0.336	-0.019
Transitive connectivity	-0.072	0.075	0.037
Shared activity	-0.085	0.173	0.064
Shared partners	0.106	0.139	-0.012

Note: Substantial effects (the parameter estimate equals at least twice its standard error) are indicated in bold.

drive the selection of another judge as a representative of a uniform European position. Thus [Hypothesis 2](#) is not confirmed.

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. [Hypothesis 3](#) is partly confirmed: 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 future Uniform European position. Social interactions and

familiarity with others facilitate their selections as institutional leaders. However, just reading the work of this other judge 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

Table 3
Stepwise linear regression with popularity (indegree) in the Uniform network as dependent variable.

	Model 1	Model 2	Model 3	Model 4	Model 5
(Constant)	-.722 (.658)	-1.621 (.642)*	-3.86 (.946)**	-6.67 (1.43)**	-11.05 (1.09)**
Popularity in the reading network	1.092 (.10)**	.703 (.169)**	.634 (.137)**	.738 (.123)**	.564 (.071)**
Popularity in the discussion network		.406 (.154)*	.444 (.123)**	.380 (.107)**	.559 (.064)**
Technical expert involvement in inventive step			1.742 (.618)*	1.948 (.527)**	.855 (.338)*
Type of capitalism				1.027 (.436)*	1.739 (.260)**
Technical expert involvement in scope of protection					2.341 (.434)**

* $p < .05$.

** $p < .01$.

respect to patents. These blocks are not homogeneous with respect to their definitions of a “good patent”, which indicates that these coalitions are more social than ideological, which strengthens the positive test of [Hypothesis 3](#). It is clear that judges do sort each other in social networks based on their belonging to blocks of countries with similar types of capitalism. It is within each type of capitalism that most interactions between judges take place. It seems that in general all these interactions (discussions, knowledge of others’ work, etc.) are easier with colleagues similar with respect to block membership: they use the same language, they refer to similar or comparable bodies of laws and procedures, etc. Statistically, types of capitalism (a category of individuals) and networks are substitutable. Individuals of each category of capitalism find it easier to interact with colleagues of the same category (homophily of type of capitalism), but even within a block there are individuals who make choices different from that of their block fellows, and that is what is seen in the communication/learning networks, controlling for homophily.

Beyond these factors, several endogenous network effects play a role in explaining the judge’s selections. The parameter estimate for reciprocity is not significant (as expected). Heterogeneity in the outdegree distribution shows that some judges nominate many other judges as possible representative of a uniform European position. This can indicate that certain judges see the European position as not being uniform (i.e. represented by judges).

It is important to insist on the result that when our dyadic networks are included as explanatory variables together with type of capitalism in the same model, the latter effect is no longer significant. When dyadic networks are taken away from the model, type of capitalism comes back as a significant effect. Types of capitalism (measured as a category of individuals) and networks are thus substitutable. Individuals of each category find it easier to interact with colleagues of the same category. Therefore, we drop one of the two variables, in this case networks, from the final modelling of alignments in this empirical case (but of course not from reasoning on the case). However, even with this form of relational homophily based on Type of capitalism, even within a block, there are individuals who make choices different from that of their block fellows. This can be seen in the communication/learning networks, controlling for homophily. Type of capitalism is a rough clustering of individual judges, and there are individual variations among judges, within each type of capitalism. These individual variations are captured by the networks as independent variables. The latter show that homogeneity based on Type of capitalism is real but not entirely consistent, for example, across types of procedural rules chosen by these individuals. Alignment is never perfect in a political activity, which introduces complexity in the picture of the struggles to reach and impose a single interpretation of patents at the European level.

Beyond these factors, several endogenous network effects play a role in explaining the judge’s selections. The parameter estimate for reciprocity is not significant (as expected). Heterogeneity in the outdegree distribution shows that some judges nominate many other judges as possible representative of a uniform European

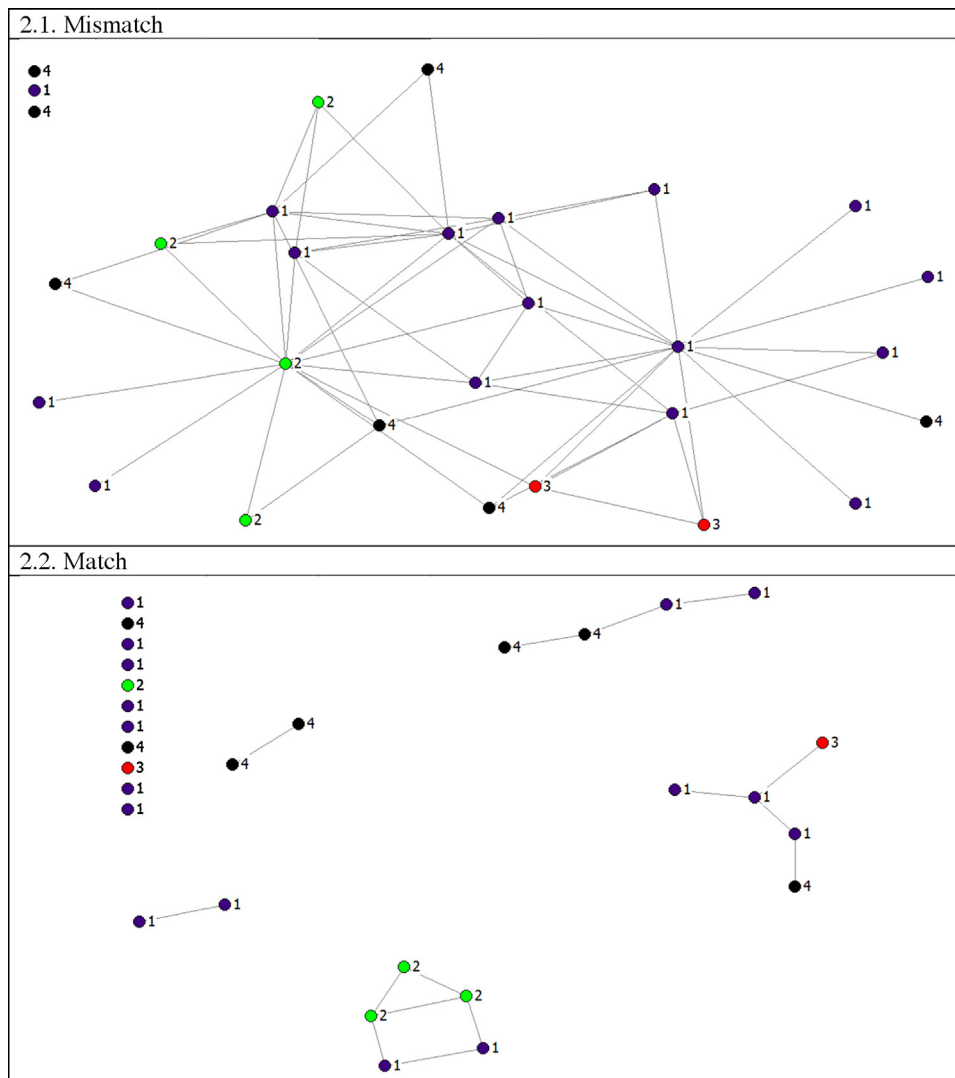
position. This can indicate that certain judges see the European position as not being uniform (i.e. represented by many heterogeneous judges). In addition, much clustering is not explained by other parameters. Positive transitivity and negative cyclicality (not significant) together are usually interpreted as a sign of hierarchy (consistent with the lack of reciprocity). This strengthens the interpretation of the tests above. 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, i.e. the future collegial oligarchy: 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.

[Table 3](#) confirms these results from a different angle and tests [Hypothesis 4](#). The same effects are introduced in an analysis in which it is no longer the Uniform network itself that is modelled (as in the above ERGMs) but indegree centrality in the Uniform network. It is used as dependent variable in a stepwise linear regression, along with normative choice, block membership and procedural position with respect to choice of expert. [Table 3](#) provides confirmation of the positive and significant effects of these variables as explanatory in the selection of the most central judges of the Venice Forum as representatives of the Uniform European position with respect to patents. It shows that 99% of the variance in this indegree of the Uniform network is explained by these five variables.

In sum, centrality (indegree) in the Uniform network, a measure of influence, is explained at 99% by centrality in the three other social networks and by the clustering into blocks of countries sharing the same kind of capitalism. [Hypothesis 4](#) is thus confirmed.

7.4. Future normative alignments anticipated by the judges

As shown in [Fig. 1](#), four super-central judges emerge as institutional leaders in the Uniform network. Looking more closely at their normative choices to see if there is a consensus among them in terms of normative choices that define a European uniform position, we find that there are significant divergences and uncertainties among them on several key issues, and that at least two are often quite uncertain about which positions to take. Three out of four select the European compromise for the substantive definition of the good patent, and the last one selected patents as exceptions rather than rewards. They do not agree on the usefulness of EPO’s problem-and-solution approach to assess inventive step (two agree, two do not), and this is not a divide between types of capitalism. They all refer in their decisions to decisions of foreign courts, which marginalizes, for example, French judges who do not have the right to explicitly cite foreign decisions in their own decisions. For the determination of scope of



Note: 1. Continental Europe; 2. UK; 3. Scandinavia; 4. Southern Europe

Figs. 2.1 and 2.2. Mismatches and matches between the judges and their institutional entrepreneurship leaders. Note: 1. Continental Europe; 2. UK; 3. Scandinavia; 4. Southern Europe.

protection provided by the patent, three out of four consider that the statements of the applicant during the grant procedure before the EPO play a role. Two of them involve independent technical experts to report on inventive step, and two others do not. Three of them involve independent technical experts to report on scope of protection. One of the super-central judges does not have a clear position neither on the issue of involving technical experts nor on the substantive definition of patents. Thus the details of normative choices made by the super-central judges show little consensus among them as a core of the Uniform network. Although pragmatism seems to be the rule among the leaders, an influence process creating alignments of the judges on their institutional leaders cannot lead to systematic convergence at this stage.

Normative divergences among institutional leaders in the collegial oligarchy raise the issue of the differences between the nominator judges own normative choices and the normative choices of the colleagues that they selected as super-central nominees and institutional leaders. We are interested in these differences as signals that each judge receives as to the future work that s.he 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 and changes, the institutionalization process will be from the perspective of each participant, and that s.he perceives during the discussions in this field-configuring event.

To test [Hypothesis 5](#), 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 from those of judge B. [Figs. 2.1 and 2.2](#) (Match/Mismatch) tells an interesting story. There is much more mismatch than match in the Uniform network, i.e. many judges tend to recognize as future representatives of the European Compromise, if any, colleagues with whom they actually disagree. This is consistent with the process of alignment as described in our theory section, and the kind of awareness about future alignments that the VF is meant to achieve. In addition, this “match” picture shows that UK judges tend to agree normatively with each other, while there is much less consensus on the Continental side. We have four central actors (more visible in [Fig. 1](#)), two from continental Europe (1) and two from the UK (2). Part of the judges from continental Europe are aligned on the continental European judge, despite large differences in normative choices, while others create a bridge between Europe and the UK. Scandinavian judges

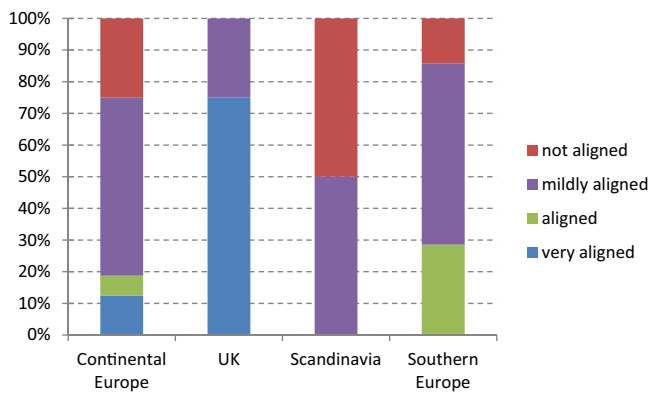


Fig. 3. Existing normative alignments between the judges and the members of their collegial oligarchy, i.e. super-central peers.

appear to select the European judges 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 much sparser “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.

7.5. Interpreting divergences as pressure towards future normative alignments

We can now take the normative choices of the judges with highest status and measure the extent to which 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 dominant position among the most central judges, when there is a dominant one, norm by norm). The distribution by type of capitalism shows that British judges tend to be more aligned (which is trivial but worth reminding nevertheless 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 with respect to the use of technical experts to report on the scope of protection. Scandinavian judges are not aligned and Southern European judges are somewhat 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 a European consensus as represented by their super-central colleagues.

Fig. 3 below summarizes these results. In sum, the less central judges representing Scandinavian, Continental and Southern forms of capitalism are less aligned (with the significant exception of German judges) and must anticipate costlier alignments – or leave the system. This is consistent with ethnographic evidence suggesting that many judges realize at the Venice Forum which concessions they are expected to make in order to make it (the Uniform European patent and procedure) work. In that respect, [Hypothesis 5](#) is confirmed.

The analyses above and interpretations of divergences as signals of future work on normative alignments shed some light on this institutionalization process and on 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 whom they collectively chose as leaders, thus identifying the changes that are desirable from the perspective

of EPO’s and EPLAW’s (i.e. representative of big business) 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 from 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.

8. Conclusion

This paper shows that social 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 small leadership that will personify the reference group and the norms that are deemed common to its members. Thus forging new norms in a controversial context as a specific step in the institutionalization process depends in part on the collective selection of a personalized collegial oligarchy, on the creation of personalized social networks connected to this oligarchy, and preparing for future alignments on the choices of this oligarchy. Combined relational and cultural analyses in a complex, both impersonal and personalized, institutionalization process show that this process also consists in exploring with institutional entrepreneurs the price that they will have to pay individually and collectively, the normative changes and concessions that they will have to make, in order to further participate by aligning their culture on that of this oligarchy. Finally, we show that the weaker the institutional entrepreneurs the costlier (in terms of the number of normative changes required by alignments) the institutionalization process will be for them.

The Venice Forum as a field configuring event was designed and funded by corporate lawyers, by existing semi-public institutions and by judicial entrepreneurs as a place where these very processes would take place. There were no clear winners and losers in 2009. In the case in point examined here, the conditions under which this process is successful still remain uncertain, especially after the June 2016 “Brexit”. The ‘European compromise’ on the interpretation of the European patent is still elusive, although without the UK judges the weight of the German judges likely to increase considerably. In terms of this kind of institution building it will be up to this collegial oligarchy at the Court of Appeal of the UPC to define the norms and the costs of alignments before 2022.

For business, ensuring that judges forge these common judgments is a way of building, framing, and ultimately ‘capturing’ a public institution ([Carpenter and Moss, 2013](#)). This process facilitates the creation of a self-contained normative space where challenges are reduced to ‘safe criticism’ and exogenous control becomes very costly, perhaps next to impossible. The elitist nature of institution building has long been an issue for observers of a European democratic deficit. This is particularly the case with institutions such as the UPC, given that formal European political institutions failed to reach a European Compromise in their definition of the European patent and IP regime, triggering the processes examined in our empirical observations, but also creating a challenge for the principles of division of powers in European democracies.

Shedding this combined structural and cultural light on institutionalization as a complex network process, in which institutional entrepreneurs must make complex multilevel judgement calls with

consequences for their future normative alignments, thus leads to the question, among others, of safeguards that should be created to monitor cosy (or even conflictual) collegial oligarchies so that the general public retains a say at the early stages of the 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 the area of observing such collegial oligarchies and regulatory processes, much remains to be done for social network analysts.

References

- Alter, K., 1996. The European Court's political power. *West Eur. Polit.* 19, 458–487.
- Alter, K., 2009. *The New Terrain of International Law: Courts, Politics, Rights*. Princeton University Press, pp. 2013.
- Amable, B., 2003. *The Diversity of Modern Capitalism*. Oxford University Press, Oxford.
- Breiger, R.L., 1974. The duality of persons and groups. *Soc. Forces* 53, 181–190.
- Breiger, R.L., 2010. Dualities of culture and structure: seeing through cultural holes. In: Fuhse, J., Mützel, S. (Eds.), *Relationale Soziologie: Zur kulturellen Wende der Netzwerkforschung*. Springer Verlag, pp. 37–47.
- Carpenter, D., Moss, D.A. (Eds.), 2013. *Preventing Regulatory Capture: Special Interest Influence and How to Limit it*. Cambridge University Press.
- Cichowski, R.A., 2007. *The European Court and Civil Society: Litigation, Mobilization, and Governance*. CUP, Cambridge.
- Coen, D., Richardson, J. (Eds.), 2009. *Lobbying in the European Union: Institutions, Actors and Issues*. Oxford University Press, Oxford.
- Dehousse, R., 1998. *The European Court of Justice – The Politics of Judicial Integration*. Macmillan, London.
- Dehousse, R., 1999. *L'Europe par le droit*. *Crit. Int.* 2, 133–150.
- Dehousse, R., Boussaguet, L., Jacquot, S., 2010. From integration through law to governance: has the course of European integration changed? In: Koch, H., et al. (Eds.), *Europe: The New Legal Realism. Essays in Honour of Hjalte Rasmussen*. DJØF Publishing, Copenhagen, pp. 153–169.
- DiMaggio, P., 1988. Interest and agency in institutional theory. In: Zucker, L. (Ed.), *Institutional Patterns and Culture*. Ballinger Publishing Company, Cambridge, MA, pp. 3–22.
- Djelic, M.-L., Sahlin-Andersson, K. (Eds.), 2006. *Transnational Governance*. Cambridge University Press, Cambridge.
- Gallini, N., 2002. The economics of patents: lessons from recent U.S. patent reform. *J. Econ. Perspect.* 16 (2), 131–154.
- Green, A.W., 1969. *Political Integration by Jurisprudence*. Sijthoff, Leyden.
- Haas, P.M., 1992. Introduction: epistemic communities and international policy coordination. *Int. Org.* 46, 1–35.
- Halliday, T.C., Carruthers, B.G., 2007. The recursivity of law: global norm-making and national law-making in the globalization of corporate insolvency regimes. *Am. J. Sociol.* 112 (4), 1135–1202.
- Hol, A., Langbroek, P. (Eds.), 2007. Special issue on adjudication in a globalizing context. *Utrecht Law Rev.* 3 (1) <http://www.utrechtlawreview.org/index.php?url/issue/view/5>.
- Ilardi, A., 2015. *The New European Patent*. Hart Publishing.
- Jettinghoff, A., 2011. The quest for a transnational patent system in Europe: a preliminary reconstruction. *Recht der Werkelijkheid (J. Socio-Legal Stud.)* 32, 52–65.
- Jettinghoff, A., Schepel, H. (Eds.), 2004. *Lawyer's Circles: The Role of Lawyers in European Legal Integration*. Elsevier, Gravenhage.
- Kranakis, E., 2007. Patents and power: European patent-system integration in the context of globalization. *Technol. Cult.* 48, 689–728.
- Lawrence, T.B., Suddaby, R., Leca, B., 2011. Institutional work: refocusing institutional studies of organization. *J. Manag. Inq.* 20 (1), 52–58.
- Lampel, J., Meyer, A.D., 2008. Field-configuring events as structuring mechanisms: how conferences, ceremonies, and trade shows constitute new technologies, industries, and markets. *J. Manag. Stud.* 45 (6), 1025–1035.
- Leron, N., 2014. *La Gouvernance constitutionnelle des juges*, Thèse de doctorat. Institut d'Etudes Politiques de Paris (Sciences Po), Paris.
- Levi-Faur, D., 2011. Regulatory networks and regulatory agencification: towards a Single European Regulatory Space. *J. Eur. Public Policy* 18, 810–829.
- Loya, T.A., Boli, J., 1999. World polity: technical rationality over power. In: Boli, J., Thomas, G.M. (Eds.), *Constructing World Culture: International Non-governmental Organizations Since 1875*. Stanford University Press, Palo Alto, pp. 169–197.
- Lusher, D., Koskinen, J., Robins, G. (Eds.), 2013. *Exponential Random Graph Models for Social Networks: Theory, Methods and Applications*. Cambridge University Press, New York.
- McIntosh, W.V., Cates, C.L., 1997. *Judicial Entrepreneurship: The Role of the Judge in the Marketplace of Ideas*. Greenwood Press, Westport, CT.
- Meyer, J.W., Boli, J., Thomas, G.M., Ramirez, F.O., 1997. World society and the nation-state. *Am. J. Sociol.* 103, 144–181.
- Perrow, Ch., 1991. A society of organizations. *Theory Soc.* 20, 725–762.
- Quack, S., 2007. Legal professionals and transnational law-making: a case of distributed agency. *Organization* 14 (5), 643–666.
- Schepel, H., Wesseling, R., 1997. The legal community: judges, lawyers, officials and clerks in the writing of Europe. *Eur. Law J.* 3, 165–188.
- Selznick, P., 1957. *Leadership in Administration*. Row, Peterson & Co., Evanston, IL.
- Slaughter, A.-M., 2000. Judicial globalization. *Virginia J. Int. Law* 40, 1103–1124.
- Slaughter, A.-M., 2004. *A New World Order*. Princeton, PUP.
- Slaughter, A.-M., Stone Sweet, A., Weiler, J. (Eds.), 1998. *The European Court and National Courts – Doctrine and Jurisprudence. Legal Change in its Social Context*. Hart Publishing, Oxford, pp. 331–364.
- Stein, É., 1981. Lawyers, judges, and the making of a transnational constitution. *Am. J. Int. Law* 75, 1–27.
- Stone Sweet, A., 2004. *The Judicial Construction of Europe*. OUP, Oxford.
- Thatcher, M., 2002. Analysing regulatory reform in Europe. *J. Eur. Public Policy* 9 (6), 859–872.
- Thatcher, M., 2005. The third force? Independent regulatory agencies and elected politicians in Europe. *Governance* 18 (3), 347–373.
- Weatherall, K., Webster, E., 2014. Patent enforcement: a review of the literature". *J. Econ. Surv.*, 1–32.
- Weiler, J., 1994. A quiet revolution – the European Court of justice and its interlocutors. *Comp. Polit. Stud.* 26, 510–534.