Intellectual Property and Politics of Meaning

Framing contests over commodification of knowledge and culture in

Britain, France and Germany, 1992-2006

Outline of a research agenda, please do not cite, comments very welcome

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Abstract

The commodification of knowledge and culture via the expansion of intellectual property rights (IPRs) represents a major transformation of modern capitalism. Although there is ample evidence that the struggles about commodification are accompanied by a highly consequential 'framing contest' in which ideas are mobilized and counter-mobilized by signifying agents, the literature on IPR politics has so far failed to address these 'politics of meaning' within that policy domain. The proposed project aims to fill this empirical gap. The project will examine framing contests about the expansion of IPRs in public discourse by combining longitudinal quantitative and qualitative content analysis of leading national newspapers in Britain, France and Germany. It is supposed that frame contestation is highly dependent on national traditions of IPR regulation and government elites' capacity to influence public discourse. The project not only aims to explain success and failure in these framing contests but will also trace the impact of these framing contests on policy making processes. In order to detect long-term changes in frame contestation and causal links between policy impact, emergence of counter framing and policy processes, a longitudinal research design is to be applied.

Introduction

The global expansion of IPRs is supposed to represent a far-reaching and highly consequential transformation of modern capitalist economies. Therefore, the ongoing trend to commodify knowledge and culture has inspired research on the politics underpinning this development. There is ample evidence that corporatist interests played in major role in the politics of IPR expansion. Among others, they did this by convincing policy-makers from the developed economies of the general benefits of stricter IPR protection. Therefore, it should come out as a surprise that the politics of meaning within the policy domain of intellectual property rights (IPRs) and their impact on policy outcomes have not been the primary subject of empirical studies so far.

The project aims to fill this empirical gap in existing research. It will trace framing contests about intellectual property regulation within the public arena and will ask how these contests translate into policy outcomes. The central puzzle of broader theoretical and empirical significance is whether corporate interests can indeed succeed in shaping policy outcomes by establishing a hegemonic framing about a highly consequential expansion and re-allocation of property rights within a particular regulatory domain or whether societal counter-movements are able to initiate a framing contest challenging dominant elite framing.

By addressing this subject, the project combines ideas from several literatures: It takes on the ongoing debate about the controversially debated commodification of knowledge and culture and the related shifts in the balance between public and private power. The project is also inspired by economic sociology that has stressed the importance of legitimacy for successful creation of markets and industries. Yet, in order to analyse how the commodification of knowledge and culture has been legitimized and contested, the project tries to employ insights and approaches from the literature on 'framing contests'. Eventually, the project will build on insights from the policy-analytical literature which has stressed the central role of perceptions, frames and values in policy-making.

Framing contests and expansion of IPRs

The political significance of IPR expansion

The main inspiration for this project is the global trend toward increasing commodification of knowledge and culture that has far-reaching economic and political implications. The legal form that underpins this accelerated commodification intellectual property (May 2006). The expansion and tightening of intellectual property rights, referred to among its critics as 'second enclosure movement', represents a remarkable shift in or even a major transformation of modern capitalism that corresponds to the alleged emergence of what is called the 'knowledge economy' (Boyle 1997; Meier 2005):

'The new capitalism centres on proprietary control over algorithms, genes, formulae and other abstract objects. This is why it is difficult to overestimate the importance of intellectual property globalization to the foundation of a future world of capitalism and its systems of regulation.' (Braithwaite & Drahos 2000: 56)

This expansion of IPRs constitutes a particular interesting field for empirical enquiry on the political economy of modern capitalism. First of all, IPR regulation provides ample support for the claim that markets represent 'political-cultural constructions' (Fligstein 1996) since without such a political-cultural structuring there would be no intellectual property to be traded at all. Moreover, IPRs, just like any other property rights, have essential economic, social and political dimensions (Fligstein 2001; Carruthers & Ariovich 2004). Thus, allocations of property rights influence incentives and economic performance (North 1990); property rights are not only one of the most effective but least visible interventions of governments into markets (Campbell & Lindberg 1990). Moreover, there exists an obvious connection between property rights and social stratification/inequality. The right to control, govern and exploit things entails the power to influence, govern, and exploit people (Carruthers & Ariovich 2004).

In particular for the latter reason, the ongoing expansion of IPRs has been highly controversial. First of all, it is decisive to note that the ongoing commodification of knowledge and culture represents a major break with older traditions of IPR regulation. The global trend of expanded and tightened IPRs has also farreaching distributional consequences – it shifts the balance between actors in IPR markets – and is accompanied by the strengthening of private, that is, corporate power (Braithwaite & Drahos 2000; Sell 2003). The recognition and legitimization of IPRs has allowed corporations to consolidate and expand their control of the socio-economic relations of information and knowledge across the emerging global society (May 2006: 5). For these reasons, the global trend toward stronger IPR protection has been met with resistance and has inspired a number of societal counterresponses.

From a policy-analytical perspective, the controversial expansion of IPRs touches such crucial issues such as

- the relationship of private power and public law (Sell 2003),
- the dynamics of private ordering of markets (Dinwoodie 2004),
- the impact of societal counter-responses to what is perceived as excessive commodification and extreme or one-sided market governance (May 2007).

Moreover, the controversial expansion of IPRs raises important issues of legitimacy. Yet, so far, scholars of IPR regulation have mainly focused on the effects of IPR regulation and the elite politics underpinning the global trend toward stricter copyright protection. In addition, previous research has also examined the effects of the strengthening of corporate power that comes with stricter IPR protection. Only the fierce battle over copyright infringement in the Internet has inspired research about costumers' responses to what is perceived as excessive and unjustified commodification (Vaagan & Koehler 2005; Yar 2005). Thus, whereas the stock of existing research has considerably enhanced our knowledge about the politics and effects of IPR expansion, the politics of meaning within that domain have hardly been addressed directly by empirical research. Given the controversial character of IPRs in general, this should come out as a surprise.

The controversial character of IPR expansion

In order to comprehend the essential controversial character of IPRs it is decisive to pay regard to the economic literature on IPRs that has stressed the basic 'incentives vs. access trade-off' posed by IPR regulation (Landes & Posner 2003: 8). This regulatory dilemma is rooted in the public good character of knowledge and culture: On the one hand, since knowledge and culture are not exhausted when they are shared and consumers can hardly be excluded, creators of knowledge and culture face considerable problems internalizing at least some the benefits they create (Hess & Ostrom 2003). On the other hand, there exists a fundamental conflict between the goal to create incentives for innovation and the efficient dissemination of knowledge and culture. When innovators are compensated, knowledge and culture cannot be distributed to their marginal costs which equal zero (Grossman & Stiglitz 1980). The question how much IPR protection is necessary to provide sufficient incentives and how much is creating too much deadweight loss to society is still an unsolved theoretical and empirical puzzle (Radin & Wagner 1998; Landes & Posner 2003).

The controversial character of IPRs has given rise to at least two competing regulatory paradigms¹, which are supposed to be of some relevance for the public framing of the legitimacy of IPR expansion:

According to an *incentive paradigm* focusing on supply-side concerns, there exists a linear relationship between the level of IPR protection and incentives for innovation. Consequentially, the strongest incentives to innovate result from IPRs giving creators/innovators complete control over their products so that they can internalize the entire social benefit of their innovations (Lemley 2005; Merges 2004). This is supposed to bring about positive welfare effects through perfect price discrimination. In theory, this will result in an efficient allocation because even low-income consumers will be enabled to purchase information goods and creative products – albeit of a lower quality (Cohen 2000). Therefore, a coherent interpretation of the incentive paradigm argues for a decentralized system of license contracts because the contracting parties know their preferences for knowledge and culture far better than any political actor (Meurer 2001; Elkin-Koren 1998; Wu 2006).

While the incentive paradigm focuses on supply-side concerns, the competing 'public domain' or 'openness'-paradigm lays particular emphasis on the impact of IPRs on demand for knowledge and culture. Therefore, the 'openness'-paradigm points to the distributional impact and exclusive effect of IPRs It is stressed that strict IPRs create an artificial scarcity of and restrict access to knowledge and cultural goods (May 2006). The public domain paradigm interprets cultural and intellectual innovation as the result of a *cumulative social process* that heavily relies on 'free' material derived from the public domain. Since cultural and economic progress is perceived to be the result of the free circulation of ideas and knowledge, an open and rich public domain is supposed to provide creative inputs for a number of social processes and creates therefore positive benefits for the entire society (Cohen 1998; Lessig 2004). Since proprietary prices reduces consumption of knowledge and information and causes users to shift their use to less preferred substitutes (Jaffe 2000; Gallini, 2002), commodification of knowledge and culture is supposed to have a negative impact on innovation and creative processes since the public domain will sink into poverty and inputs for creative processes will be overpriced (Boyle 2003; Jaffe & Lerner 2004).

The rise of the knowledge economy has served to escalate the controversy between these two paradigms. While the incentive paradigm has stressed the need for stricter IPR protection because of the emergence of new copying technologies and the increased economic value of creative inputs, the 'openness'-paradigm has pointed to the fact that the digital age also provides new technological opportunities for 'open' and more participatory modes for innovation and the production of knowledge and culture (Balkin 2004; Ginsburg 2001; Lessig 2004; May 2006).

¹ For reasons of brevity, the paper does not deal with two older paradigms of IPR regulation, that is, the 'natural rights'-approach and the 'mental labour-theory' (cf. Sherman/Bentley 1999; Menell 2000).

The empirical puzzle of IPR regulation

The highly controversial character of IPRs poses a non-trivial puzzle for scholars interested in explaining the ongoing global trend ever toward stricter IPR protection (Abbott 1998). Thus, the elite politics of IPR expansion have attracted some scholarly attention. Rivalling 'master explanations' have been presented in order to account for the global trend toward stricter IPR regulation:

According to a *technological determinism-explanation*, stricter IPR protection was made necessary by the rise of the 'knowledge economy' that created new challenges for the incumbent IPR regime. Technological innovations created new forms of intellectual property, such as computer software or genetic sequences. These new forms of intellectual property required considerable investments but did not fit into the classical concepts of IPR regulation (Maskus 1998). In addition, the growth of global trade was accompanied by an increase in trade with counterfeited goods putting investments in innovation at risk (Preusse 1996). Accordingly, the rise of the 'knowledge economy' required a stricter and more sophisticated system of IPR protection in order to guarantee investment in R&D (David & Foray 2003). Yet such a technologically oriented argument can only account for the fact that IPR regulation had to be adjusted but fails to explain why regulators chose almost complete commodification as the route toward a modernized framework of IPR regulation (cf. Lessing, 2004).

Therefore, a competing *political economy-explanation* claims that the trend toward stricter global IPR protection can be mainly attributed to the rise of the *pax Americana* (Sell & May 2001). According to that account, the tightening and expansion of global IPR regulation is due to shifts in the global political economy as well as to 'regulatory capture' of Western policy-makers by IPR based industries. As the comparative advantage of developed economies has shifted to industries based on intellectual property, these nations have started to push for stricter global protection of IPRs. While global protection of IPRs may create new wealth for the entire global knowledge economy, policy-makers from the developed countries were aware that as net exporters of IPR based products their economies were to ones to benefit heavily from that development even in the short run (Ryan 1998; Sell, 1998, 2003; Drahos & Braithwaite 2002).²

What has become evident in several empirical accounts is that the IPR industries actually played a major role in shaping policy-making (Matthews 2002). This should not come as a surprise since stricter IPR protection is likely to generate IPR holders substantial economic rents. What is decisive for the proposed research project is that there exists some evidence that the IPR industries were very successful when it came to frame elite discourse on IPR issues. The demand of the IPR industries for stricter IPR protection gained legitimacy among government elites because

² It is highly in accordance with such a political economy-explanation that the developed economies are blamed for using IPRs as a tool of foreclosure akin to trade protection through tariffs or an import ban in order to stabilize the position of stagnant industries by enabling them to gain and maintain control over new technologies (Drahos & Mayne 2002; Wu 2003; Gillespie 2004; Maskus & Reichman 2004).

the IPR industry presented policy-makers narratives stressing the benefits of stricter IPR protection for the society as a whole and the damages caused by IPR 'piracy' (Aoki 1996; Weissman 1996; Boyle 1997; Litman 2001; Yar 2005). In result, policy-makers from the developed economies became dedicated to an agenda of complete commodification of knowledge and culture so that 'a small group of men within the US were able to globalize a set of standards that primarily serve the interests of those US corporations with large intellectual property portfolios' (Drahos & Braithwaite 2002: 28).

Thus, some political economists already suppose that politics of meaning have had considerable relevance for the considerable changes in IPR regulation. Nonetheless, the relevance of a perspective asking for the impact of framing contests on IPR expansion stills seems to be underestimated. While the literature on IPR politics has assumed the relevance of framing processes within elite policy-making, scholars have so far failed to systematically address the question how the legitimacy of the commodification of knowledge and culture via IPRs has been framed in general public discourse and whether these framing processes are somehow decisive for policy-making and policy-outcomes. That this represents a serious gap in empirical research becomes in particular evident when some insights from economic sociology are taking into account.

This literature has made legitimacy into an anchor-point of its reasoning addressing the normative and cognitive forces that constrain, construct, and empower business actors. According to economic sociology, perceived legitimacy plays a central role for the successful establishing of markets and industries (Aldrich & Fiol 1994; Suchman 1995), in particular when consumers' acceptance is decisive for market creation (cf. Burr 2006). This project takes on the economic sociologists' idea that legitimacy as perception or assumption of observers is central for processes of property and market creation. For the policy domain under scrutiny it is decisive that this market creation is preceded and accompanied by political processes of commodification for which legitimacy has to constructed and established. Therefore, the so far neglected 'politics of meaning' or 'politics of signification' about the legitimacy of the trends within the IPR domain *and* their relevance for policy outcomes will be the subject of the proposed project. In order to address these politics of meaning empirically, it seems make use of the rich literature on framing processes.

The potential benefits of using frame analysis

As should have become evident, there is already some evidence that the struggles about IPR expansion have been accompanied by politics of meaning about the legitimacy of global IPR expansion. Regardless of all signs indicating the existence of a 'framing contest', research on IPR politics has so far not made use of the rich literature on framing processes. This should come out as a surprise since frame analysis seems to be able to capture central features of the politics of meaning within the IPR domain and can provide researchers the analytical tools required to trace the construction of the legitimacy of IPR regulation.

First of all, frame analysis defines frames as powerful discursive tools that are used 'to select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation' (Entman 1993: 52). Within framing literature, framing refers to the process of saying what a problem is, whose needs are to be addressed and what kinds of solutions are imaginable (Snow & Benford 1988; Ferree 2003). Framing is understood as an essential interactive process. Accordingly, the framing of IPR issues in public discourse will be depicted as the 'outcome of negotiating shared meaning' (Gamson 1992: 111). For the research project is essential that the literature on framing contests assumes that the outcomes of the politics of meaning have profound consequences for policy formation (Fiss & Hirsch 2005). For example, research on social movements considers the cultural resonance of counter frames to be the sine qua non of movement success (Ferree 2003). Following this reasoning, the project aims to trace the mobilizing and counter-mobilizing of ideas and meanings by signifying agents (business interest, politicians, NGOs) that try to produce and maintain meaning in order to mobilize political support (cf. Snow & Benford 1988; Benford & Snow 2000).

Within framing research, media discourse is understood as an essential part of the process by which individuals construct meaning. Since mass media actively set the frames of reference that readers or viewers use to interpret and discuss public events (Scheufele 1999), mass media are considered to be a 'master forum'. When a cultural code is being challenged, a change in the media forum both signals and spreads the change. As Ferree et al. (2002) have put it, to have one's preferred framing on an issue become more prominent in the mass media forum is both an important outcome in itself and carries a strong promise of a ripple effect.

For these reasons, the project will mainly focus on media discourse about IPR issues. It seems reasonable to assume that success in the framing contest in the mass media will determine whether initiatives of IPR critics will be restricted to insular remedies to blatant failures of restrictive IPR regulation or whether ideas on 'openness' and 'public domain' will eventually gain broad political and institutional support.

In addition, empirical research on this 'framing contest' is of theoretical significance not only for the literature on IPR regulation but also for reasoning about the quality of public discourse in a hyper-capitalist environment since IPR regulation touches central themes of political economy, that is, the definition of and balance between private profit motives and the public interests as well as the prospects for alternative modes of socio-economic organisation vis-à-vis strong pressures for commodification.

To sum up so far: The project aims to generate rich and comparative empirical data on framing contests about a far-reaching transformation of modern capitalism. Thus, the project will examine the interaction of competing frames within media

discourse in different institutional contexts over time. More specific, the project will ask whether corporate interests can successfully frame the public debate about a highly consequential expansion and re-allocation of property rights in modern capitalism or whether societal counter-movements are able to initiate a framing contest challenging dominant elite framing. Moreover, the project will try to systematically trace the impact on these framing contests on policy outcomes.

Theoretical framework and theoretical expectations

Framing as an active and processual phenomenon

Within the context of the project, a frame will be defined as a persuasive device used to 'fix meanings, organize experience, alert others that their interests and their identities are at stake, and propose solutions to ongoing problems' (Barnett 1999: 25). The project shares the central assumption of the rich literature on framing processes that defining issues over time and adapting those definitions to fit the changing political and social climate determines policy entrepreneurs' ability to inspire and mobilize support for the policy campaigns. Accordingly, the political process has also to be understood as a struggle over whose definition of a phenomenon will prevail (Callaghan & Schnell 2001). To generate support on a mass level, interest groups need to insert their language and symbols into media coverage of an issue (Entman 2004). Vice versa, doing badly in mass media discourse creates vulnerabilities in pursuing policy interests (Ferree et al. 2002). Thus, framing is a central mission of policy entrepreneur in the first stage. For interest groups and movement activists, framing is 'meaning work'. In accordance with the literature on framing and social movements, framing is here defined as an active, processual phenomenon that implies agency and contention at the level of reality construction:

'It is active in the sense that something is being done, and processual in the sense of a dynamic, evolving process. It entails agency in the sense that what is evolving is the work of social movement organizations or movement activists. And it is contentious in the sense that it involves the generation of interpretive frames that not only differ from existing ones but that may also challenge them.' (Benford & Snow 2000: 614)

Whereas the project aims at generating rich descriptive evidence on the dynamics of framing contests, a central goal of the project is also to explain why some actors win in the framing contests and why some are marginalized. Concerning this explanatory intention, we are quite aware that, due to the relevance of a number of intermediary variables resulting in causal complexity, the literature on framing contests is much stronger in tracing the dynamics of framing contests than in demonstrating the causal influence of these contests on policy processes and outcomes. As a short glimpse on research on news framing reveals, the literature has presented a large number of possible explanatory variables that could account for success and failure in framing contests (Entman 1993; Scheufele 1999; D'Angelo 2002). Culture, structure, and situated action interact in complex ways in shaping understandings and contention in different national contexts (Ferree et al. 2002). The explanatory factors mentioned in the literature are exogenous as well as endogenous to public discourse; they also imply very different theoretical models for conceptionalizing discourse and news framing processes. This poses considerable problems for a research interesting in explaining success and failure in framing contests. *Therefore, while the project accepts the challenge to trace causal links between framing contests and policy outcomes, it will focus its explanatory efforts to a test of a set of factors supposed to be of particular importance for framing processes within the policy domain under scrutiny.*

Possible factors affecting success in framing contests

Among the factors mentioned in framing research, 'cultural resonance' is supposed to be crucial for success in framing contests (Snow & Benford 1988). Cultural resonance means the objective congruence with society's values and principles. Thus, cultural resonance is understood as reflecting properties of the frame itself (its narrative fidelity, experiential commensurability, and empirical credibility) (Ferree 2003: 307; see also Levin 2005). This claim about the relevance of cultural resonance is echoed in the literature on IPR politics that has argued that corporate interests from the IPR industries presented a compelling narrative linking the project of expanding IPRs strongly to the emergence of a knowledge economy/information society. In this way, tighter IPRs appeared as a necessary prerequisite of the information age. IPR critics on their behalf have stressed the potential of new information technologies to allow for open modes of producing innovation, knowledge and culture (only: Abbott 1998; Litman 2001; Lessing 2004; May 2007). While there is some preliminary evidence that cultural resonance and narrative fidelity did a play a role in the framing contest about IPR regulation, the problem with cultural resonance is that the concept is hard to operationally define independently of the outcomes it is claimed to produce (Ferree 2003).

For this reason, Ferree et al. (Ferree et al. 2002; Ferree 2003; Gerhards & Schäfer 2006) have developed the institutionalist concept of a *discursive opportunity structure* that interacts with framing strategies of actors who try to shape the meaning process. The idea of a discursive opportunity structure takes on older concepts of political opportunity structures. Political opportunity theory highlights the way in which a social movement's political environment influences the form, intensity, and outcomes of protests. Political opportunity structures refer in particular to the openness of a political system for social movements; such openness is constituted by fixed or permanent institutional features as well by more short-term and volatile factors (Kitschelt 1986, 1996). Political opportunity structures are defined as specific configurations of resources, institutional arrangements and historical precedents for social mobilization (Kitschelt 1986). In a similar manner, the con-

cept of a discursive opportunity structure represents a configurational approach. Discursive opportunity structures are defined as institutionally anchored ways of thinking that provide a gradient of relative political acceptability to specific packages of ideas (Ferree 2003). As institutionally anchored patterns of interpretation, discursive opportunity structures in modern democracies can be found in major court decision, as well as in the prior constitutional principles they invoke and in subsequent legislation written to be consistent with these principles. These texts provide concrete ways of understanding what an issues means politically in that particular place and time. Yet the concept of discursive opportunity structure also includes mass media norms and practices as relevant features of a discursive configuration (Ferree et al. 2002). Moreover, the project is highly sympathetic to approaches in framing research that see struggles over meaning as not exclusively as the outcome of processes in the sphere of symbolic codes but as also shaped by larger economic and political structures. Thus, instead of focusing exclusively on meaning construction, the project tries to connect framing contests to the structural context in which this meaning-making occurs (cf. Fiss & Hirsch 2005).

Within the proposed research project attempts to empirically operationalize the concept of discursive opportunity structure will on the one hand focus on the correspondence of certain frames of IPR regulation with specific cultural narratives and traditions of IPR regulation as well as with current events and experiences of the target audience. On the other hand, when the project accounts for discursive opportunity structure, particular emphasis will be placed on the institutionalized ability of government elites to construct and legitimize their policy programs, which has been proven to be critical for policy innovation (Schmidt 2002). This stress on communicative capacities of governments is due to the fact this variable is of crucial importance for the two competing hypothesis on the dynamics of framing contests within the IPR domain and their impact on policy-making. IPR expansion has been depicted as an elite project driven forward by top echelons of the government executive.

Theoretical expectations

Although research on IPR regulation has neglected framing literature, it has to be admitted that the literature on the politics of IPR expansion has already come up with competing expectations concerning the dynamics of framing within IPR regulation. At least one of these expectations corresponds with theoretical models as developed by the literature on framing processes.

According to a *corporate power expectation*, the corporate interests of IPR based industries have successfully captured the regulatory process in order to push for stricter IPR regulation that serves business interests well but might have a detrimental impact on innovation and creativity (Drahos & Braithwaite 2002; Lessig 2004; Imfeld & Smith Ekstrand 2005). There exists a public choice-version of this power elite hypothesis and a more constructionist one. The public choice-version explains the successful restructuring of IPR regulation by IPR based industries by pointing to the superior capacity for collective action on part of producers' interest

(Wu 2003); the benefits of enhanced IPR protection are highly concentrated while its costs are diffuse distributed among costumers (Drahos & Braithwaite 2002: 14). Therefore, IPR based industries could succeed in regulatory capture.

The constructionist explanation stresses the relevance of ideational factors for the politics of problem definition and the choice among possible interests. It argues that the IPR industries have successfully captured the minds of policy-makers. Regardless of the highly controversial character of economic theories on IPR regulation, policy-makers became convinced by the IPR industries' claim that stricter IPRs would make everybody better off in the long run because strong IPRs are a perquisite for trade, growth and wealth in the knowledge economy (Ryan 1998; Litman 2001; Drahos & Braithwaite 2002). What is common in both versions of the corporate power hypothesis is that the public is depicted as primarily inattentive and unaware of the far-reaching shifts in IPR regulation. It has been even said that corporate interest could commit a 'silent theft' (Bollier 2002). This fait accompli is supposed to be irreversible since stricter IPRs will create their own 'interdependent web of an institutional matrix' (North 1990) forcing affected actors to adapt. Such a dynamic can be observed in patenting: IPRs have become of increased importance for investors because IPRs represent by now a 'currency' that is used increasingly to demonstrate to financial markets, suppliers, and customers that a firm has a sustainable competitive advantage (Jaffe & Lerner, 2004). Thus, markets and industries will be run according to the logic of complete commodification of culture and knowledge; IPR industries will reap huge monopoly rents due to tighter IPRs and make an end to the public domain as a source of innovation and creativity. Costumers will accept restrictive licensing agreements - either because the transformation of private power into public law will force them to do so or because the hegemonic discourse will prompt them to change their preferences. The constructionist explanation of the expansion of IPRs echoes to the cascade effectmodel as developed by Entman (2004). This model of framing processes interprets frames merely as 'imprints of power' (Entman 1993). According to the cascade model, elite opinions trickle down from government to journalists and audiences (Entman 2004). The fact that the existence of such cascade effects has been claimed to be very typical for foreign policy is of particular relevance for the policy domain under scrutiny because it has strong connections to foreign trade policy. Thus, applied to IPR regulation, the cascade or hegemonic discourse model implies a pattern where the contestation of a hegemonic frame is reduced because critical voices are silenced as the frame gains dominance in public debate and stricter IPR regulation becomes institutionalized and creates its own institutional matrix. Actually, it has been claimed that '[t]he discourse privileging trade interests in IPR protection has almost completely drowned out development and/or public goodrelated interests and concerns at both the international and national levels' (May 2007:45).

The competing 'double movement'-expectation, as developed by Christopher May (2006), assumes that exceeding commodification is only the first part of a dialectical sequence in which societal resistance against excessive commodification

will succeed in tempering too restrictive IPR regimes. Without any doubt, the commodification of knowledge and culture has provoked the emergence of societal counter-movements in domains affected by stricter IPR regulation (May 2006). These counter-movements are no longer exclusively formed by NGOs that stress the detrimental impact of stricter IPR protection on developing countries. Quite in contrast, producers, consumers and citizens of developed economies find themselves increasingly affected by commodification. For example, protests by computer scientists, user groups and representatives of small and medium sized enterprises prompted the European Parliament to dismiss a proposal for a European directive on software patents in 2005. As the 'Open Software', the 'Creative Commons' and the 'Open Access'-movements show, societal resistance against stricter IPR regulation is also formed by producers of knowledge and culture that waive IPRs, e.g. by using 'copyleft'-licences, in order to maintain the public domain as a source of innovation and creativity. This new dynamism in the public domain has inspired scholars to point to the raise of 'openness' as a new paradigm for knowledge production (Sell 2003; Merges 2004; May 2007). Yet, so far it remains unclear what impact the idea of 'openness' as a new paradigm for producing knowledge and culture will have. As James Boyle (2003), one of the most influential academic IPR critics, has acknowledged, the IPR critics movement is in need of an encompassing concept serving similar unifying purposes as the concept of the environment did for the ecological movement. According to Boyle, the idea of the 'public domain' could fulfil this role:

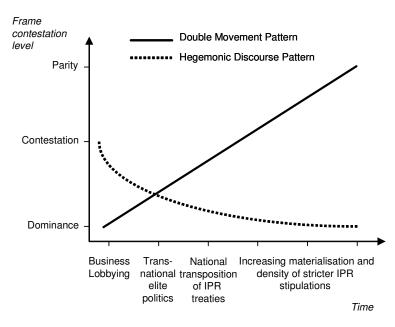
'The idea of the public domain takes to a higher level of abstraction a set of individual fights – over this chunk of the genome, that aspect of computer programs, this claim about the meaning of parody, or the ownership of facts. Just as the duck hunter finds common cause with the bird-watcher and the salmon geneticists by coming to think about the "environment", so an emergent concept of the public domain could tie together the interests of groups currently engaged in individual struggles with no sense of the larger context.' (Boyle 2003: 72)

Put in the terminology of framing research, Boyle expects the emergence of 'generic master frame' able to challenge hegemonic discourse and to influence policy processes. What is decisive for the proposed project is that the double movementhypothesis expects a very different pattern to appear. The framing contest in public discourse is assumed to show a dialectical movement. Whereas corporate interests are expected to be able to shape early debate about IPR regulation as long as policy development remains in the arena of elite politics, IPR critics are supposed to successfully contest that dominant framing by stressing the problematic effects of expanded and tighter IPRs that will become evident as stricter IPR regulation becomes institutionalized. As ideas about 'openness' and '*the* public domain' as unifying concepts for contestation imply, some observers expect that the policy entrepreneurs among the IPR critics will finally succeed in developing a 'generic collective master frame'.

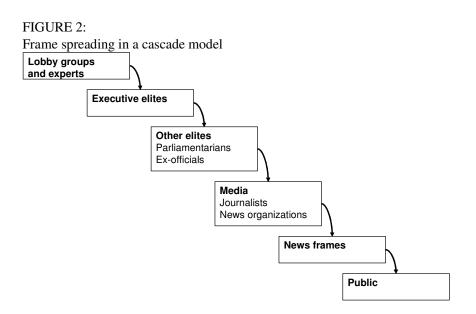
Therefore, when the idea of a frame contestation continuum stretching from frame dominance to parity of competing frames is borrowed from Entman (2004), the two hypothesized patterns can be graphically displayed as shown in figure 1.

FIGURE 1:

Assumed framing patterns

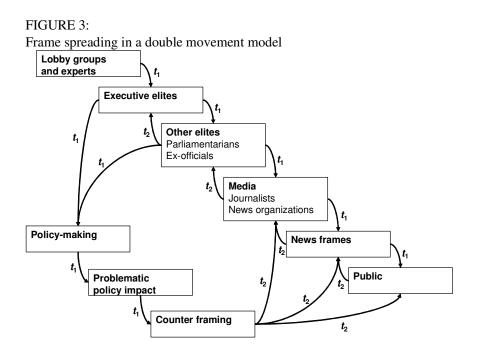


These two competing expectations concerning framing contests within the IPR imply very different dynamics of the politics of meaning and also yield some implications for the factors relevant for the emergence and success of societal resistance and counter framing activities. The *corporate power hypothesis* corresponds to Entman's (2004) cascade model where elite framing trickles down to public opinion and policy outcomes. Within the cascade model, the ability to promote the spread of frames is highly stratified – "moving downward in a cascade is relatively easy, but spreading ideas higher, from lower levels to upper, requires extra energy" (Entman 2004: 420). Therefore, the process of frame spreading as displayed in figure 2 should result in a decreasing contestation of the commodification frame over time if this model applies to IPR regulation.



Source: Slightly modified adapted from Entman (2004)

While the cascade model is exclusively focused on the framing process as an empirical subject in its own right, the double movement hypothesis expects a less stratified spreading of frames because it takes policy impact as contextual and structural variable into account. The double movement hypothesis expects that substantial policy making will give rise to counter-framing processes as stricter IPR regulation brings about controversial policy impact. As counter framing is taking up by the public and the media, not only dominant frames are challenged but also policy-making is to be modified. What should be observed on the empirical dimension of frame contestation is an increasing controversial character of the commodification frame. It should be obvious that within the double movement model causal relationships are more complex (and harder to test) than in the cascade model because this model assumes the existence of a feedback loop between framing contests and policy-making and policy-outcomes. While in an initial period, t_1 causal directions in the double movement hypothesis are in accordance with the cascade model, in a subsequent period, t_2 these causal directions are reversed even to the extent that counter-framing, if taken up by the public and the media, should be able to influence elite framing and policy-making (cf. fig. 3).



We are quite aware that testing such a complex model of a framing contest is intricate. Yet the central role of perceptions and problem definitions is nothing new to researchers working in a policy-analytical direction. Within policy analysis, it is well-known that ideational factors can determine choices among possible interests, redefine interests and reconfigure interest-based coalitions (Schmidt and Radaelli 2004). Nonetheless, the way how ideas enter the policy making process and what role framing contests within the public arena play still requires more detailed empirical research. Regarding the related problems for empirical analysis, the proposed project is quite fortunate because a test of the double movement model can start from the expected pattern of frame dominance and contestation. Moreover, the causal assumptions of the model imply a certain temporal order of events, which can be studied by a careful process tracing of temporal sequences in order to examine causal links between framing contests and policy-making. Thus, it should be obvious that in order to study causal connections and potential feedback loops between framing processes and policy-making, a longitudinal perspective has to be adopted. Thus, the empirical investigation has to develop indicators and measures for these dimensions:

- Framing processes in elite politics/policy-making and in the public arena
- The discursive opportunity structures
- Policy impact and emergence of counter-movements

Empirical questions

The theoretical framework and the theoretical expectation imply a number of descriptive and explanatory questions which will be sketched out now.

Descriptive questions on framing processes

The descriptive questions concerning framing processes in elite politics/policy making and in the public arena are to some extent similar. In order to measure success in framing contests, the project will have to ask for the standing, positioning and framing of actors. By doing-so, the project adopts a distinction made by Ferree et al. (2002) and Gerhards and Schäfer (2006): 'Standing' refers to who are the groups treated as actors with voice and not merely as an object being discussed by others. 'Positioning' refers to who are the groups making their position dominant in public debate. Finally, 'framing' refers to actors that get their frames displayed by the media. For both elite policy-making as well as framing in public discourse, a combination of quantitative and qualitative methods of content analysis will be performed. In order to trace causal influences of framing processes within elite politics, that content analysis will be complemented by a process tracing of central policy decisions. Within this context, the following questions will be asked:

- 1. Who are the major players having a standing in elite politics/the media?
- 2. Who are the major players getting their position accepted in elite politics/the media?
- 3. Who are the major players getting their preferred frames displayed in elite politics/the media?
- 4. Which frames proved to be influential in policy-making?

The two hypotheses on the dynamics of framing contests about IPR regulation have different implications for the public's awareness. In order to measure public attention for IPR issues, the project will ask:

- 5. What is the quantitative amount of newspaper coverage of IPR issues in comparison to other subjects?
- 6. Is there awareness in newspaper accounts that a major expansion of IPRs is going on?

To measure success in public framing contests, the set of following questions has to be asked:

- 7. Has the framing of IPR regulation in media discourse changed over time?
- 8. In that case, in which direction has framing changed?
 - a. Is there growing consensus about the necessity of stricter IPR regulation (hegemonic discourse-hypothesis)? or alternatively
 - b. Is there growing awareness for the problematic effects of expanded IPRs (double movement-hypothesis)?

Questions on discursive opportunity structure

As has been shown, the institutionalist concept of a discursive opportunity structure attempts to describe a complex configuration of variables with a possible impact on success in framing contests. As has been already mentioned, particular emphasis will be placed on the capacity of governments to construct and legitimize, that is, to communicate their policy programs to the broad public. This is due to the fact that the commodification of knowledge and culture has been depicted as an elite project. Due to its far-reaching consequences, this project is highly in need of what has been called a 'transformative discourse'. According to Schmidt (2002), the institutional setting not only influences the problem-solving capacity of political systems but also the very locus of discourse. The capacity to seek acceptance from the general public though legitimating discourse differs considerably between 'single-actor systems', such as Britain, and "multi-actor systems", such as Germany. In the former systems, power is concentrated in the executive; policies are formulated by a small elite that can engage in elaborate communication of the government's policy decisions. In contrast, in multi-actor-systems governments have to seek approval for their policy initiatives from a broad range of actors so that the capacity to communicate policy initiatives is less developed. Thus, the project will ask

9. Does the degree of contestation of stricter IPR regulation as a major policy reform differ in relation to governments' communicative capacities?

Moreover, since discursive opportunity structures are understood as institutionally anchored patterns of interpretation, the project will ask whether the commodification of knowledge and culture has been framed differently according to national traditions of IPR regulation. The assumption is that the further commodification of IPRs is less contested in systems already shaped by more commercial IPR regulations so that knowledge and culture are mainly framed as assets to be commercially exploited. In this context, the difference between continental *droit d'auteur* and the Anglo-Saxon tradition, where the interests of the generating, creative party, could matter (Littoz-Monnet 2006). Thus, in order to determine the extent to which framing on IPR issues is pre-structured by national legacies, the question has to be raised:

10. Are there any systematic cross-country differences in the framing of IPR expansion that can be traced to differences in national traditions of capitalism or IPR regulation?

In addition, it will be asked how the discourse about the commodification of knowledge and culture relates to wider processes of capitalism and modernity since research on social movements has shown that in order to generate mass support, social groups have to be able to translate domain-specific frames into master frames or relate domain-specific frames to master frames that signify meaning on a broader scope (Snow et al. 1986: 474-5; see also: Triandafyllidou & Fotiou 1998). By addressing this question, the project can build on previous research on the fram-

ing of the information society (cf. Boyle 1997; May 2003; Gorz 2004; Kübler 2005). Thus, the project will ask:

11. How is the relationship between the emergence of the information society/knowledge economy and stricter IPR regulation framed?

As has been referred above, cultural resonance also refers to the compatibility of frames with current events and personal experiences. Regarding this dimension of frame resonance it has to be taken into account that for a considerable period of time, IPR regulation has been considered to be a rather arcane subject somehow detached from the life of ordinary citizens and falling outside the scope of public attention due to its complexity (Litman 2001). Yet, expanded IPRs have increasingly visible effects. The implications of exceeding commodification for access to medical treatment or breeders' rights in the developing countries have been fiercely debated in international arenas and have mobilized social movement resistance also in OECD countries (Sun 2004; Elangi Botoy 2004). Nonetheless, for citizens from the developed economies 'exceeding commodification' is most visibly felt in the realm of copyright because expanded copyright comes with distributional consequences. Therefore, the project will have to ask whether the commodification of knowledge and culture is framed different when it is more visibly to ordinary costumers and citizens. The assumption is that direct affection makes commodification more contested. In order to account for direct affection, the project will pay particular attention to the question how the expansion of copyright and the privatisation of copyright enforcement via technological self-help measures have been framed. Thus, the related research questions are as follows:

12. Is there a systematic difference of how IPR issues are framed in general in comparison to IPR issues with direct and visible relevance to citizens and costumers?

Eventually, the project will ask how the framing contest about IPR expansion relates to older left-right cleavages because some authors have argued that due to the distributional impact of IPRs, the demand for stricter IPR regulation has induced a classical left/right controversy that pits social interests against the interests of capital owners (Hunter 2005). Therefore, the project will address the following question:

13. Is there a systematic difference between the framing of IPR issues in 'left' and in 'right' newspapers?

Questions on policy impact and the emergence of counter-movements

Concerning factors exogenous to public discourse, it is of relevance that the rival hypotheses about the dynamics of IPR regulation come with very different implications for the effect of stricter IPRs on framing contests. Since IPR advocates expect stricter IPRs to generate new wealth for the entire society, societal resistance should cease to exist the more institutionalized a stricter IPR regime becomes. The corporate power-hypothesis also expects societal resistance against stricter IPRs to be silenced in the long but not due to fact that expanded IPRs are beneficial to all. The corporate power hypothesis expects that IPR critics will have to adjust their preferences to the realities created by the new regulatory regime.

In contrast, the double movement-hypothesis expects ever stricter IPR regulation to provoke societal resistance because of the detrimental effects of expanded IPRs on innovation and creativity that will materialize in the long run. Therefore, the project will try to measure factors exogenous to public discourse that denote the economic importance of IPRs for national economies, the negative effects of stricter IPRs and the level of acceptance of/resistance against stricter IPR regulation. Assumed that the project succeeds with constructing valid indicators, it will be asked whether and how these trends are reflected in public discourse:

- 14. Do differences/changes in public discourse about IPR regulation reflect
 - a. Differences/changes in the economic importance of IPRs?
 - b. Differences/changes in negative effects of IPRs?
 - c. Differences/changes in the level of acceptance of/resistance of stricter IPR regulation?

According to the double movement hypothesis, the emergence of societal resistance against stricter IPR regulation is unavoidable. Yet, since research on framing contests assumes that discursive opportunity structures interact with framing strategies of actors participating in the contest, the project will not only ask for frame sponsorship (Carragee & Roefs 2004) but aims to trace framing strategies more thoroughly. Therefore, the following questions have to be addressed (cf. Gerhards & Schäfers 2006):

- 15. What preferences do actors involved in the framing contest have?
- 16. Which framing strategies do they pursue?
- 17. What resources have these actors at their hand?

Increased awareness for problematic effects of expanded IPR regulation and attempts of counter-framing are not sufficient in order to confirm the double movement-hypothesis. As research on the development and spread of mobilizing ideas that are integral to movement dynamics has shown, social movements have to establish a 'generic collective action frame' in order to successfully challenge the incumbent order (cf. Snow et al. 1986, Snow & Benford 1988; Benford 1997). Therefore it will be asked:

18. Does media discourse pay attention to 'openness' or the 'public domain' as a unifying frame that transcends issue, time and space limits (de Vreese et al. 2001).

Method(s)

The project aims to trace framing contest about the legitimacy of IPR expansion by gathering rich empirical data in a comparative manner. This will generate new insights about causal links between framing processes and policy making. In order to achieve these goals, it is intended to conduct a comprehensive quantitative and qualitative content analysis of media coverage of IPR issues in Germany, France and Britain. The empirical design of the project combines elements of the projects of Fiss and Hirsch (2005), Gerhards and Schäfer (2006) and Risse and Kantner (2006). Thus, the project will combine quantitative and qualitative content analysis of accounts in leading national newspapers. Framing within elite politics is to be examined by a content analysis of policy papers issued by government officials and of parliamentary proceedings. Moreover, the project will measure the impact on framing processes on policy making by tracing temporal causal sequences and examining policy outcomes in the IPR domain. The project will focus on the period from 1992 to 2006 in order to account for major changes in IPR regulation and to be able to detect long-term changes in public awareness and perception.

Country sampling

As has been referred above, research on framing processes links success in framing processes to a complex configuration of institutional factors that has been called 'discursive opportunity structure'. Among the institutional factors subsumed under the label of a discursive opportunity structure two are supposed to be of particular importance for the policy domain under scrutiny. These two critical factors are national traditions of IPR regulation and government's capacity to influence public discourse.

The project starts from the assumption that resonance with national cultural and economic traditions is highly consequential for the public framing of IPR expansion. Therefore, countries will be selected according to differences in traditional IPR regulation, that is, according to the degree of commercialisation before the recent wave of IPR expansion.

Moreover, since IPR expansion seems to be in essence a project of executive elites, the capacity of these elites to communicate and legitimate their programs in public discourse should be decisive for the framing contests. Since this capacity is supposed to be dependent on the institutionally determined dispersion of power, countries from single actor and multiple actors system should be chosen for empirical analysis. For these reasons, Britain, France and Germany are selected as cases for the comparative analysis. If the institutional factors chosen are actually relevant for framing contests, the degree of frame contestation should vary as displayed in table 1. TABLE 1: Rationale for country sampling (Expected degree of frame contestation)

		National traditions of IPR regulation	
		Strongly commercialized	Less commercialized
Capacity to influence public discurse	Low		Germany (High)
	High	Britain (Low)	France (Moderate)

Methods of analysis

Whereas the 'empirical core' of the project consists of a comparative, large-n content analysis, in order to realize the explanatory goals of the project it is necessary to conduct additional data by relying on other methods of data gathering (cf. table 1, inspired by Gerhards & Schäfer 2006).

TABLE 2:

Methods and data of the proposed project

	Contextual analyses	Content analysis	Interviews	Process tracing
Goals	Determining the importance of contextual and structural factors for framing contest	Tracing of discourses about IPR regulation and commodification of knowledge and culture	Determining the importance of preferences, media strategies and resources of actors involved in the framing context	Determining the relevance of framing contests for policy making processes
Data	Tracing national traditions of IPR regulation Conducting data on economic importance of IPRs for national economies Conducting data on patenting activity and patent litigation Conducting data on the acceptance of 'openness' Conducting data on IPR infringement	Quantitative and qualitative content analysis of media coverage of IPR regulation in two leading newspapers in Britain and Germany for the period from 1992 to 2006	Semi-standardized, guided interviews	Conducting data on policy processes by analyzing policy papers and administrative and parliamentary records

Contextual and structural analysis

In order to determine the importance of contextual and structural factors, the project will trace national legacies of IPR regulation in a historical-instutionalist manner, conduct data that indicate the economic importance of IPRs as well as the acceptance of IPRs and alternative modes for the production of knowledge and culture. Thus, the project will gather data on the economic importance of IPR industries, patenting activity and patent litigation (if available). Hopefully, data on the diffusion of open modes for the production of technology and knowledge will be made available by using lists of open source projects (as listed by SourceForge.net) and open access journals (as listed by the Directory of Open Access Journals). Eventually, we will conduct data on infringement activity even though such figures could indicate both economic threats to IPR industries and low acceptance of expanded IPRs. Preferably, the project should be able to measure problems caused by stricter IPRs directly. Yet, as previous research has shown, constructing reliable indicators for problematic effects of IPRs is intricate since these effects represent 'non-events' (breakdown of patent negotiations, failure of projects dependent on the combination of a large number of IPR portfolios, taming of creative activity). Ideally, these quantitative data should be employed in multivariate analyses of the framing processes under scrutiny (cf. Fiss & Hirsch 2005).

Content analysis

As has been already said, content analysis will be the main method of the project. The project will employ a combination of quantitative and qualitative methods of content analysis similar to the one used in the projects of Gerhards and Schäfer (2006) and Risse and Kantner (2006). Thus, the project will follow the trend toward large-*n* frames analyses in order to trace cycles of public attention and the interaction of competing frames in the framing contest. A main advantage of the project proposed here is that it can build on well-defined competing theoretical paradigms for the framing of IPR issues as a starting point for empirical analysis. Snow and Benford (1988) have identified three core framing tasks. The three tasks are: (a) diagnostic framing for the identification of a problem and assignment of blame, (b) prognostic framing to suggest solutions, strategies, and tactics to a problem, and (c) motivational framing that serves as a rationale for action. If this proposal for classifying framing tasks is adopted, the main features of two most important competing paradigms for interpreting IPR issues can be summed up as displayed in table 3.

TABLE 3:
Framing of IPR issues in two rivaling regulatory paradigms

	Incentive paradigm	Openness/Public domain
		paradigm
Diagnostic	Piracy and low IPR protection	Greedy copyright owners and the
framing	threaten innovation and creativity enclosure of the public domain	
		threaten innovation and creativity
		and exclude people from
		participating in technological and
		intellectual progress
Prognostic	The knowledge economy will only	The knowledge economy will only
framing	flourish when IPRs are sufficiently	flourish when a rich public domain is
	protected	preserved since innovation is a
	Technological, cultural and	cumulative social process
	intellectual innovation and	Technological, cultural and
	affordable access for everyone will	intellectual innovation as well as
	be guaranteed by giving innovators	affordable access for everyone will
	adequate incentives and by giving	only be guaranteed by an open
	innovators complete control over	public domain
	intellectual property	New dissemination and copying
		technologies allow for openness as
		an alternative mode for producing
		knowledge and culture
Motivational	J	Give innovators sufficient incentives
framing	maximizing innovators' control over	to innovate
	their products	Preserve the public domain
	Fight piracy in order to protect and	Promote open modes of knowledge
	facilitate the trade in intellectual	production
	property	

While these regulatory paradigms will be used as starting points for the content analysis, the project is well aware that frames should not be interpreted in a static and reified way since they are probably less integrated and well-defined than regulatory paradigms (Benford 1997; Benford & Snow 2000). Even though the project assumes that frames have to be understood as 'interpretive packages' with an internal structure organized a central idea (Gamson & Modigliani 1989), it seems reasonable to proceed in the same manner as Gerhards and Schäfers (2006) who inductively identified discrete units of meaning ('Ideenelemente') and analysed which of them were invoked by actors involved in the framing contest.

Sources for content analysis

Resembling the research design as developed by Risse and Kantner (2006), the project will focus on two national quality newspapers. Since the distributional dimension of IPR regulation makes the field prone to ideological confrontation, a rather left-liberal and a rather conservative newspaper will be chosen as sources for analysis. According to Risse and Kantner, the following newspapers fit into that requirement:

- France:
- Germany: Süddeutsche Zeitung and Frankfurter Allgemeine Zeitung;
- Britain: Guardian and The Times.

Sampling period

In order to trace public attention cycles as well as the assumed dialectical relationship between the competing paradigms of IPR regulation, it is necessary to perform a longitudinal content analysis. Yet, to minimize the costs for the project, the sampling will be restricted to the period from 1992 until 2006 because German newspaper sources are only digitized from the year 1992 on. Thus, the project will only use electronic sources. That will considerably reduce funding requirements.

In order to reduce the workload to a manageable amount, detailed quantitative and qualitative coding will focus only on articles in which IPR regulation is the main subject. According to first pre-tests, the number of articles to be coded will be once more reduced at least by 50%. Thus, qualitative content analysis will have to deal with 6,000 articles according to that rough estimate.

First level of coding (quantitative analysis)

At the first level of coding, the project will quantitatively analyse newspaper coverage of IPR issues. Quantitative content analysis will allow answering the questions regarding *awareness for IPR issues* and the *major actors having a standing and positioning in the media*. This means that the first level of coding will ask who is displayed as being affected by IPR regulation and what benefits and disadvantages of IPR regulation are stressed. Moreover, it will be asked if newspaper coverage is visibly sympathetic to a certain treatment of IPR issues. The first level of coding will allow tracing the changes in newspaper coverage concerning these dimensions. Thus, quantitative coding will focus on the items as referred in table 4.

TABLE 4:

Units of analysis and items in quantitative coding

Unit of Analysis	Items
Article	 General Information (Country, Newspaper, Year, Month). Are IPR issues the main subject or only the minor subject of the article? Following coding will only be performed when IPR issues are the main subject: Who is main actor/agenda setter? What is the main problem associated with IPR questions? Who is supposed to be affected by IPR issues?
	 What are the supposed benefits/disadvantages of IPRs? What solution for IPR issues is proposed/supported (if any)?

For the first level of coding, an Access database will be defined in order to avoid logical coding errors by using a standardized input screen. The quantitative data generated will be analyzed by using descriptive and basic inferential statistics. The first level of coding will allow tracing issue and awareness cycles as well as changes in the relationship between positive and negative framing of IPR issues. Thus, quantitative content analysis is crucial for testing for the two expected patterns of frame contestation. Based on the quantitative coding of newspaper accounts, the project will answer the questions who are the agenda setter in public discourse about IPR regulation and who is presented as to be affected by IPR regulation. Moreover, the project will generate results concerning the question whether there are significant differences between the three countries chosen for analysis and between liberal and conservative newspapers. Ideally, quantitative coding should also allow for multivariate analyses that include factors exogenous to public discourse (cf. Fiss & Hirsch 2005).

Second level of coding (qualitative analysis)

The second level of coding, that is the qualitative content analysis, will focus on the question which groups succeed in getting their framing displayed by the media and whether success in shaping public discourse can be traced to higher cultural resonance/narrative fidelity of a particular frame. Detailed qualitative content analysis is necessary for two reasons: (a) At first, the project does not assume that media framing of IPR issues is as well-integrated and well-defined as regulatory paradigms. Thus, a central question of the research project is whether a new unifying generic master frame does materialize at all. The answer to this question requires a more sophisticated content analysis in order to reveal complex patterns of meaning. (b) At second, to account for resonance/narrative fidelity requires tracing narratives that link IPR regulation to cultural/economic traditions and to the experiences of the audience. Again, this is only possible by employing qualitative content analysis. Therefore, the project will develop a qualitative methodology focussing on sequences within articles having IPR issues as the main subject.

 TABLE 5:

 Units of analysis and items in qualitative coding

Unit of Analy-	Items
sis	
Sequences	Speaker
interpreting	– Experts, politicians, business representatives, business associations,
IPR issues	journalists, NGOs
	Frames
	 Diagnostic framing for the identification of a problem and
	assignment of blame
	 Prognostic framing to suggest solutions, strategies, and tactics to a
	problem
	 Motivational framing that serves as a rationale for action
	Narrative fidelity
	– Framing of the relationship between IPR expansion and information
	society/knowledge economy
	 Framing of the relationship between IPR expansion and national
	varieties of capitalism and traditions of IPR regulation
	- Framing of the relevance of IPR expansion to citizens and costumers
	 Framing of IPR expansion in relation to older left-right cleavages

In order to conduct the qualitative content analysis, the project will use the content analysis software Atlas.ti that allows using complex and multiple coding schemes which can be inductively refined. The coding of entire sequences will serve the hermeneutic interpretation of complex patterns of meaning. Electronic storage will make retrieval of similar coded sequences possible as well as the filtering of paradigmatic sequences. In this manner, data generated by qualitative content analysis can probably also be used for statistical analysis.

Process tracing

The different methods of content analysis will be complemented by intensive research on selected policy making processes. As method particular suited for the revealing causal links between framing contests and policy making, the project will rely on process tracing. Process tracing will allow dissecting the time order between variables and identifying the mechanism that explains why the cause led to the effect (George & Bennett 2005).

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