ORGANIZED CREATIVITY

Organized Creativity Discussion
No. 18/3

Leonhard Dobusch, Konstantin Hondros, Sigrid Quack, Katharina Zangerle

Shaping Competition, Cooperation and Creativity in Music and Pharma: The Role of Legal Professionals, Intellectual Property and Regulatory Uncertainty

Berlin, October 2018

ISSN 2626-7217 (online)

Leonhard Dobusch, Konstantin Hondros, Sigrid Quack, Katharina Zangerle

Shaping Competition, Cooperation and Creativity in Music and Pharma: The Role of Legal Professionals, Intellectual Property and Regulatory Uncertainty

Organized Creativity Discussion Paper No. 18/3
ISSN 2626-7217 (online)
URL: http://www.wiwiss.fu-berlin.de/forschung/organized-creativity/discussion-paper01
Berlin, October 2018

About the Authors

Leonhard Dobusch is a member of the DFG Research Unit "Organized Creativity" (FOR 2161) and a Professor of Organization at the University of Innsbruck, Austria
Contact: leonhard.dobusch@uibk.ac.at
https://www.uibk.ac.at/iol/organisation/team/leonhard-dobusch/index.html.de

Konstantin Hondros is a member of the DFG Research Unit "Organized Creativity" (FOR 2161) and a doctoral student at the University of Duisburg-Essen, Germany
Contact: konstantin.hondros@uni-due.de
https://www.uni-due.de/soziologie/hondros.php

Sigrid Quack is a member of the DFG Research Unit "Organized Creativity" (FOR 2161) and a Professor of Sociology at the University of Duisburg-Essen, Germany
Contact: sigrid.quack@uni-due.de
https://www.uni-due.de/soziologie/quack.php

Katharina Zangerle is a member of the DFG Research Unit "Organized Creativity" (FOR 2161) and a doctoral student at the University of Innsbruck, Austria
Contact: katharina.zangerle@uibk.ac.at
https://www.uibk.ac.at/iol/organisation/team/katharina-zangerle/

Organized Creativity Discussion Paper Series

Downloads

http://www.wiwiss.fu-berlin.de/forschung/organized-creativity/downloads

Contact

Freie Universität Berlin, Department of Management
Prof. Dr. Jörg Sydow
Boltzmannstr. 20 (Raum 225)
14195 Berlin
http://www.wiwiss.fu-berlin.de/forschung/organized-creativity

Leonhard Dobusch, Konstantin Hondros, Sigrid Quack, Katharina Zangerle

Shaping Competition, Cooperation and Creativity in Music and Pharma: The Role of Legal Professionals, Intellectual Property and Regulatory Uncertainty

Abstract
This study examines how the relationship between competition, cooperation and creativity is shaped by regulatory uncertainty related to intellectual property (IP) rights in knowledge-intensive industries like music and pharma. By focusing on music and patent attorneys as key actors dealing with uncertainty about IP rights, we show that these legal professionals recommend practices to their clients that shape situations as either competitive or cooperative. We distinguish dissuading, circumventing and avoiding as practices that promote competition, and compromising, contracting, and licensing as practices that foster cooperation. Yet we also find that the advice of legal professionals leads to creative processes in which both aspects are interwoven tightly in a coopetitive manner. The results show that IP rights do not per se foster competition or cooperation. Whether competition- or cooperation-fostering effects prevail depends instead on how IP-related regulatory uncertainty is mediated by legal professionals.

Keywords
Intellectual Property, Creativity, Legal Professionals, Competition, Cooperation

---

Introduction

The relationship between competition, cooperation and creativity constitutes a strategic triangle of great relevance for contemporary organizations. This strategic triangle is of particular importance in creative and research-intensive industries where the winner often takes all, or at least a great proportion of the gains. While the winner-takes-all dynamics, emphasizing specific reputation-based forms of competition, have been widely studied (Schilling 2002; Lutter 2012), much less attention has been paid to the role of cooperation in these industries. In particular, we know little about what influences choices between competitive and cooperative strategies in creative and innovative endeavors.

Intellectual property (IP) rights can influence these choices in both directions. Most of the literature on IP strategies assumes that they have either competition-enhancing or competition-blocking effects, generally combined with the implicit understanding of competition as being beneficial for creativity (Dobusch 2012). Other authors point towards the effects that IP can have in terms of generating or enhancing cooperation in innovation ecosystems (Holgersson et al. 2018). In both cases, however, IP rights are often not straightforward and clear to the actors involved, but are rather subject to regulatory uncertainty: There are many situations in which actors cannot predict whether acting in one way or the other conforms to prevailing IP laws, standards and contracts. Given that artistic and scientific endeavours build on existing ideas and knowledge, regulatory uncertainties are particularly prone to arise in respect to using, referring to and transforming existing works and inventions.

Therefore, the effects of IP on competitive or cooperative strategizing cannot be understood without analyzing how actors deal with the regulatory uncertainty surrounding IP rights. Yet the existing literature makes very little reference to how dealing with this regulatory uncertainty shapes competition and cooperation in the creative and innovative industries. Legal professionals are one key group that has a significant influence on how regulatory uncertainty about IP rights is dealt with, interpreted and enacted. Typically, when actors are uncertain whether their strategies are in line with existing law, they will seek advice from specialized lawyers. In this paper, we therefore approach the

competition-cooperation-creativity triangle through a study of how IP rights are enacted by legal professionals and how the practices that they advise to their clients might promote competition or cooperation in creative and research-intensive industries.

The argument of this paper is not that IP regulation as such enhances competition or cooperation, but rather that it is only through the social practices of legal professionals acting in a range of brokerage roles that creative processes are attributed meanings of competition, cooperation or mixes of the two. In order to demonstrate this argument, our analysis focuses on the role of legal IP professionals such as copyright and patent attorneys who act as brokers between artists/scientists, managers, right holders and other stakeholders located at the intersection of the artistic/scientific, economic and legal sectors. IP professionals translate and apply IP law (the legislation applying to all organizations in a given country) and the tools of private IP contracting (a managerial device at the discretion of each organization to govern competitive and cooperative relations within and across its boundaries) to work in the arts and science sectors. Through the practices of advising their clients, these professionals shape creative work processes as either competitive, cooperative or mixes of both, and thereby help to manage the uncertainty and ambiguity inherent in IP law.

The structure of the paper is as follows: In the next section we develop the conceptual framework of our analysis. In the tradition of German sociologist Georg Simmel (1950), we conceptualize competition and cooperation as triadic relationships and analyze them by drawing on practice-based approaches from organizational theory (Schatzki et al. 2001). We then briefly introduce the methods and data basis before presenting our findings. The empirical part of our paper is based on the music (copyright) and pharma (patent) industry. While in both industries IP regulation forms an essential element in creative processes, they can be considered as most different cases in terms of underlying evaluation criteria and institutional logics, as well as the domain of IP law (copyright or patents) applied. We expect, therefore, that the comparison between these two industries will provide differentiation as well as robustness in the results of our analysis. We end with a comparative discussion and short conclusion.

Conceptualizing Competition, Cooperation and Creativity

Hasse and Krücken (2012, 2013) highlight that economic rationality in modern capitalism is constructed out of the interplay of strategies for enhancing and avoiding competition. This general pattern is also evidenced in the existing literature on creative processes, understood as the process of producing ideas and artefacts that are novel and valued (Amabile 1996). More specifically, key scholarly debates regarding the role of IP rights for incentivizing creativity circle around the question whether IP is a necessary precondition to competition (Landes and Posner 2003; Liebowitz and Margolis 2004) or rather constitutes an "intellectual monopoly" (Boldrin and Levine 2008; 2009) that hampers competition. What both perspectives have in common, however, is that competition is considered beneficial for creativity.

This view, however, has not remained uncontradicted. Empirically, Gross (2016: 1) shows that "intensifying competition both creates and destroys incentives for innovation". Using a sample of commercial logo design competitions, the author demonstrates that "[w]hile some competition is necessary to induce high-performing agents to develop original, uncontested designs over tweaking their existing work, heavy competition discourages effort of either kind." Other authors have highlighted that particularly with regard to the inputs necessary for creative processes, some degree of cooperation between actors in the industry is necessary, often mediated through licensing or contracting of IP rights. Since creative processes tend to build on the creative outputs of others, be it innovations protected by prior patents or music recordings covered by copyright and recording rights, cooperation is a prerequisite to enabling the use of such artefacts, as well as an important ingredient of the creative process itself, which is often an organized and collective one.

A further complication arises from the fact that the search for novelty is an open-ended process and inevitably involves uncertainty in the sense of actors not being able "to predict and foresee what will happen when acting or not acting" (Aspers 2018: 133). Hence, actors cannot be sure of whether taking a competitive or cooperative stance will better foster their goals. At the same time, actors are not passively exposed to but also shape, enact and may even foster uncertainty in some instances through their strategies. Hutter and Farías (2017) argue that actors are not only passively exposed to, but also actively seek to inflict indeterminacy and uncertainty by employing socio-material practices in creative practices. Analyzing the productive links between uncertainty and creativity, Ibert et al. (2018) identify embracing, ignoring and fixing as distinct and interrelated practices that actors employ in order to shift between different forms of uncertainty as the creative process unfolds. Choosing and switching between strategies that involve a competitive or cooperative stance towards other actors relevant for the creative processes under question can therefore be seen as a way of actors dealing and engaging with their inherent uncertainties.

In terms of IP rights, which originally sought to promote creativity by granting copyrights and patents to creators, and thereby allowing them to form reliable expectations about future returns, they have increasingly become a source of uncertainty in respect to the input side of the creative process. In the realm of music, McLeod and DiCola (2011: 167) report that "[e]ven veteran musicians who sample face uncertainty over what they might owe for sample licenses – or even if it is possible to clear a sample." (see also Döhl 2016). With regard to pharmaceutical patents, firms devote increasing efforts to "threatening, initiating, responding to, pursuing, and settling litigation" (Heller 2010: 73), which increases uncertainty throughout all phases of patent-related activities. Hope (2008: 44) observes that the complex dynamics of biotechnology patenting have inserted an "irreducible uncertainty" into the research process. Regulatory uncertainty, defined as situations in which actors cannot predict whether acting in one way or another conforms to law and regulations, therefore forms a significant part of the overall uncertainty that actors face in creative processes.

Accordingly, striving for recognized novelty involves the search for a complex balance between competitive and cooperative approaches towards actors that hold IP rights over potential inputs relevant for creative processes. It also is likely to require some fluidity, change and adaptability of the competitive versus cooperative stances taken over the duration of the creative process itself. In the following we use three building blocks to conceptualize competition and cooperation for our study: economic sociology, practice theory and concepts of brokerage roles.

Following Simmel (1950), competition denotes a social constellation, in which at least two actors are involved in an indirect struggle (i.e. peaceful conflict) in order to achieve a third party's favor. This sociological concept of competition transcends traditional economic definitions in several ways (Werron 2010; Wetzel 2013). Firstly, it not only refers to situations of scarce goods, but to a wider range of indirect struggles to gain favor. Secondly, it embraces a much broader range of constellations than just zero-sum-games in which a competitor can only gain advantage at the cost of another competitor. Lastly, and most importantly, it opens avenues for a phenomenological analysis of competition: Only if the struggling actors and the third party attribute specific meanings to their interactions can we speak of competition. Such construction of meaning should be observable at the institutional (IP and competition law) as well as the practice level.

By contrast, cooperation refers to processes of interaction and exchange between autonomous actors, which involve dispensing with potential individual advantage in favor of sharing resources with the aim of achieving joint gain. In this sense, strategic cooperation can be seen as an activity aiming at (partially) excluding or preventing competition, at least for those involved in cooperation. Beyond increased control over the resource environment, cooperation also has the benefit of stabilizing mutual expectations and thereby partially absorbing uncertainty and ambiguity (Weyer 2012). One form of cooperation is contracting. Priddat (2012), based on economic institutionalism, argues that contracting

should be considered as a two-phase process: While the search for an appropriate contracting partner involves a competitive logic, the second phase of actual collaboration discursively and organizationally involves the "collaborative exclusion of competition" (Priddat 2012: 76, translated by the authors). Accordingly, networks of collaborative contracts form institutional arrangements in which contracting actors generate shared mental models, which can lead to the exclusion of competition.

Both competition and cooperation are abstract umbrella concepts, which cannot be directly observed. As soon as situations or processes are not a priori categorized as either competitive or cooperative, investigating the respective dynamics requires a conceptual operationalization in terms of practices (see already Blau 1954). Interestingly, such an operationalization is most common in antitrust and IP contexts as far as "anti-competitive practices" are concerned. For example, Economides (1998) lists "raising rivals' costs", "imposing contracts with certain exclusivity requirements" and "imposing some anti-competitive form of price discrimination" as examples of anti-competitive practices. In IP contexts, we find examples such as "exclusive grant back clauses" or "clauses that preclude challenges to validity of the patent" (Musungu et al. 2004: 20). To a certain degree, the term "anti-competitive" is misleading, since what it actually describes are hyper-competitive practices with the potential of establishing monopolistic market domination by firms with already strong market positions.

Taken together, this points to the fact that competition or "competitiveness" of practices is taken for granted, at least in market contexts. Any business activity described in perspectives dealing with "competitive advantage", no matter whether rooted in market-based (e.g., Porter 1981) or resource-based traditions (e.g., Prahalad and Hamel 1990), is considered to be "competitive" in nature. The competitive character of practices in market contexts is thus mostly implicit. Only where competitiveness is negated, as, for example, in the realm of antitrust regulation or networked forms of organizing, is the "other" in terms of anti-competitive or cooperative practices identified, but still not the "standard" competitive practice. This is also evidenced by the substantial body of works on cooperative or collaborative (e.g., Windeler and Sydow 2001) practices, mostly in network contexts (e.g., Provan et al. 2007).

Studying the social construction of competition and cooperation respectively thus requires explicating what makes practices "competitive" or "cooperative". Treating practices in general as "the 'smallest unit' of social analysis", Reckwitz (2002: 249) defines them as "a routinized type of behaviour which consists of several elements, interconnected to one another: forms of bodily activities, forms of mental activities, 'things' and their use, a background knowledge in the form of understanding, know-how, states of emotion and motivational knowledge." Practices cannot be reduced to any one of these single elements, but are rather bundles of activities that combine a set of embodied "doings and sayings" (Schatzki 2002: 75) organized by a pool of socially shared background understandings, rules, and normative and affective evaluations. Still, in this paper we propose to focus specifically on the cognitive and discursive aspects of practices, which frame certain activities as competitive or cooperative respectively. In other words, since "competitiveness" or "cooperativeness" are only aspects – two among many potential frames – of practices, we deem it both necessary and helpful to extract respective categorizations and attributions by actors in the field to improve our understanding of competition and cooperation more broadly.

This conception of practices, in turn, is geared towards a better understanding of the interplay between competition and cooperation in organized creative processes. Sequences of organizational activities are considered as creative if, according to the people involved and/or observers, they generate something new and valuable (Amabile 1996). However, organized creative practices always appear at the intersection of various societal subsystems, which each have their codes, categorizations and action repertoires – bundled and enacted as practices. While economic practices focus on coping with scarcity and abundance, legal practices are oriented toward stabilizing normative expectations about

legality, practices in the arts are organized around notions of aesthetic novelty, and research practices are oriented towards scientific novelty. While system theory highlights the different media, codes and procedures that maintain and reinforce the differentiation of such systems (Luhmann 1995), interactionist theory has described them as different social worlds with distinct repertoires of action available to their incumbents (Strauss 1978). Organizations in the music and pharma industries are placed at the intersections of these subsystems or social worlds and need to navigate between their various rules, conventions and expectations to achieve their goal of generating artefacts that are perceived as novel and valuable.

In organization theory, gatekeeping and boundary spanning have been used to conceptualize practices, positions and actors located at or across dividing lines between subsectors or social worlds. While gatekeeping emphasizes the protection of a subsystem's internal rules by enforcing access rules, boundary spanning highlights the importance of actively managing boundaries to foster a flow of knowledge and other resources between sectors (Aldrich and Herker 1977; Tushman 1977). Both gatekeeping and boundary spanning have been extensively discussed in the innovation literature in respect to brokering knowledge (e.g., Rosenkopf and Nerkar 2001; Fleming and Waguespack 2007; Dokko et al. 2014). Less attention, however, has been given so far to the various brokering roles of legal professions in the creative and research-intensive industries.

Legal professionals, specialized in copyright and music or patent law, often act as mediators between their clients and other actors in the music and pharma industries. As mediators they can take on various brokerage roles discussed in the literature on social networks and distinguished based on the group affiliations of those involved (Gould and Fernandez 1989; De Nooy et al. 2018: 136). In a legal conflict, lawyers can act as a *representative* of one claimant towards the defendant, or as a representative of the defendant vis-à-via the claimant. More often, however, legal professionals act as an *itinerant broker*, clearly set apart from the actors in the music or pharma industries between whom they facilitate an interaction by their adherence to the legal sector. Legal professionals can also act as *gatekeepers* for their organization, as well as *liaison* in the sense that they establish a link between actors belonging to different groups that previously were unrelated. In some cases, legal IP professionals may also act more in their capacity as technical or musically knowledgeable people rather than legal specialists, which comes close the brokerage role of a within-group *coordinator*. While these brokerage roles are structurally distinct, legal professionals can and do act in various roles in different situations.

For the purpose of this paper, the main emphasis is on how the recommendations that they provide for their clients in these roles shape the way in which their clients deal with regulatory uncertainty. We thus seek to analyze how legal professionals' intervention shapes creative processes in shaping them as competitive or cooperative. Such an approach can build on the recent practice-turn in the social sciences more generally (Schatzki et al. 2001) and in strategy research in particular (Jarzabkowski and Spee 2009; Vaara and Whittington 2012). It can also integrate insights from recent socio-legal research suggesting that organizational actors in music and pharma find themselves faced with an increasingly complex and unpredictable regulatory environment as they move their creative and research projects forward. As we will show in our analysis, some of the practices recommended by legal professionals produce triadic network constellations in which the broker keeps the other two actors apart, thereby fostering competition, whereas other proposed practices connect all the actors involved into a complete triad, thereby promoting cooperation.

Methodology

In order to analyze how legal IP professionals mediate regulatory uncertainty through advice given to their clients we have chosen a comparative approach. We study how legal professionals translate and apply IP law in the fields of music and pharma, how they categorize situations and processes, and what advice they give to the managers, musicians and researchers that are their clientele. While in both

industries IP regulation forms an essential element in creative processes, they can be considered as most different cases in terms of underlying evaluation criteria and institutional logics as well as the domain of IP law (copyright or patents) applied. Integrating legal professionals working in different industries permits a broader exploration of the construction of competitive and collaborative situations and practices associated with IP, including patents and copyright. We expect therefore that the comparison between these two industries will provide differentiation as well as robustness in the results of our analysis.

Research Field: Legal Practitioners in the Music and Pharma Industry

Regulatory uncertainty related to IP rights has become ubiquitous in creative and innovative processes. IP rights, which originally sought to promote creativity by granting copyrights and patents to creators and thereby allowing them to form reliable expectations about future returns, are increasingly portrayed as a source of uncertainty, penetrating the creative and research process rather than preceding and following it (Kretschmer and Pratt 2009). Musicians, scientists and managers typically have limited knowledge of IP law. Therefore, they rely on advice from the legal professionals. As a result, legal professionals have gained an increasingly important brokerage role in creative and research-intensive industries.

Silbey (2015: 18), in a study of artists and scientists in the New England states of the US, finds that managers, lawyers and artists/scientists often develop distinctive practices to deal with IP-related uncertainties at different stages of the creative process. The author distinguishes three forms of intervention of lawyers in creative processes: disruption, instruction and gate-keeping (see also Nelson and Nelson 2000). Legal professionals are seen as disrupting creative processes when they take the role of a "cop" policing possible cooperation in reference to whether it is desirable in terms of intellectual ownership for their firm or business client. This includes activities such as approving contracts or implementing compliance programmes in scientific research departments. Legal professionals, however, can also play an instructive role. In this case, they explain to artists, scientists and managers how certain phases of the creative process should be considered in legal terms. Their instructive role is based mainly on translating between the social categorizations and practices prevalent in the legal sector and those in the business, artistic or scientific realm. Finally, legal professionals act as gatekeepers when they go beyond mere advising, and create and facilitate structures that are integrated into the creative process (Silbey 2015: 186).

While Silbey (2015) emphasizes the legal repertoires that lawyers use to intervene in the creative process, her study highlights equally how many of these lawyers have rather versatile qualifications and skills. In patent law, this typically includes technical knowledge in the specific area that they work in, and in music it often includes personal affinities to music or earlier experiences in artistic or managerial functions in the music industry. Against this background, IP professionals might also act as boundary-spanners, in the sense that their practices not only mobilize legal repertories to intervene in artistic and business processes; they may equally draw on repertoires of action from the artistic/scientific and business sector to provide advice for their firms and clients on pursuing a competitive or cooperative strategy in a given project and specific situation. Suchman (1994), for example, found that legal counsel in Silicon Valley used their networks to become information intermediaries that facilitated the flow of venture capital between firms rather than just giving legal advice.

While there are many similarities between the realms of patent and copyright law, there are also significant differences. While patents in pharma are temporary exclusive rights granted by a public institution to inventors, provided the invention is 'novel', 'useful' and 'nonobvious' (Stim 2007), artistic creations like music earn their copyright instantly with their creation and continue for 70 years after the creator's death. German copyright's linchpin is the term "work", in the sense of "personal, intellectual creations". In contrast to the ephemeral music business, the pharma industry allegedly

depends on IP for commercialization due to long and expensive R&D phases (Dutfield 2009). However, the music industry builds – especially after the industry's near collapse in the mid-2000s – its business models on the exploitation of IP rights, as well. While reproducibility in Benjamin's sense (Benjamin 2011) may have less of an overall effect on artefacts' auras in music, in pharma it also heavily influences its ability to be monetized. The focus on valorization of creativity through IP law suggests that despite differences in patent and copyright law, we may find also similarities in the practices that legal professionals advise in both realms of IP law.

Data Collection

In the period from July 2016 to April 2017 we conducted semi-structured interviews with legal professionals, focusing on patent and music attorneys, and other legal experts in Austria and Germany. The interviews with patent attorneys were conducted by Dobusch and Zangerle, the interviews with music attorneys by Hondros and Quack. First access was facilitated through research and official requests. By means of snowball sampling, we established further contacts with legal professionals. Overall, we conducted 18 interviews in 14 organizations, with self-employed attorneys as well as in-house lawyers, covering the main tasks of legal professionals in the music and pharma industry. Interviews usually took place in the legal professionals' offices with durations ranging from one to two hours. We used an open-ended interview guideline that was directed towards initiating situation-based narratives about the legal professionals' daily practices. The semi-structured interviews (e.g., Flick 2006) were fully transcribed and coded using the software oTranscribe, easytranscript and MAXQDA. To complement the interview data, we collected data through observations lasting several days, for instance shadowing legal professionals in a law firm, or by attending conferences. We documented observational data as field notes and by taking photographs and audio recordings. Since we collected data mostly in the German-speaking area, analysis was conducted with the original data in German and selected illustrative quotes presented in this article have been translated into English.

Analytical Framework and Coding Process

As suggested by Gioia et al. (2012), we analyzed our data in a multi-step and iterative coding process similar to combining open and axial coding in grounded theory (Strauss and Corbin 1990). Such an approach is a means to bring together theoretical concepts with quotes from our data and vice versa. The following figure presents the analytical approach followed here.

Figure 1: Analytical Approach

We started out from our theoretically defined concepts of competition and cooperation as "aggregate dimensions" showing the highest degree of abstraction. We then coded "practices" as bundles of "activities", the latter having the lowest degree of abstraction (Gioia et al. 2012). While the aggregate dimensions were derived deductively, practices and activities were coded inductively. However, during coding with reference to competition and cooperation, the material suggested adding co-opetition as a third aggregate dimension. Thus, our analytical approach was open enough to allow for changes even on the aggregate level.

After a first round of initial coding for the music and pharma industries, the coded data was integrated following joint discussions between the researchers. In the course of these discussions, we exchanged knowledge about the two different hemispheres of IP law and the two industries. The process allowed for an in-depth comparison of the two research fields and showed that apparent differences – patent lawyers' in particular use technical terms in abundance – referred predominantly to the level of activities. A careful in-depth analysis of the interview material from both research fields revealed that

the work of legal professionals in the music and pharma industries displays many similarities at the level of practices. This allowed us to connect field-specific activities in music and pharma to common cross-field practices. Table 1 illustrates the coding process by providing examples of selected quotes for competition and cooperation in both industries.

Table 1: Exemplary Codes

Quotes	Activities	Practices	Aggregate dimensions
I can only point to where the risks lie, and my recommendation is that they get some kind of consultation before entering into a discussion with someone and not just work with a non-disclosure agreement. (Interview patent attorney)	negotiating confidentiality agreement	contracting	cooperation
Even if I have a row of antibodies in an application, and the work is initially interesting or promising, the focus at large companies changes a lot. Then they determine, I don't know, that I won't get a license or that I entered into some kind of cooperation or something, then yes, the focus in the application often shifts. And then, one has to say, a lot of applications are abandoned. (Interview patent attorney)	not doing drug development	avoiding	competition
So, for example, at the time I called a major label because we had a sampling of some vocals in the title track from a famous American jazz artist, and so I called the label and asked, we've used the sample, now what do we do? (Interview music attorney)	agreeing informally	compromising	cooperation
And regarding the whole project, there was uncertainty until all parties with concerns related to the titles said: "We're doing it." Whereby, of course, if roughly half of the titles are cleared up, they'll say "good, we'll seal the deal," because in the worst case scenario, we'll find replacement titles. (Interview music attorney)	replacing titles	circumventing	competition

Source: Authors' research.

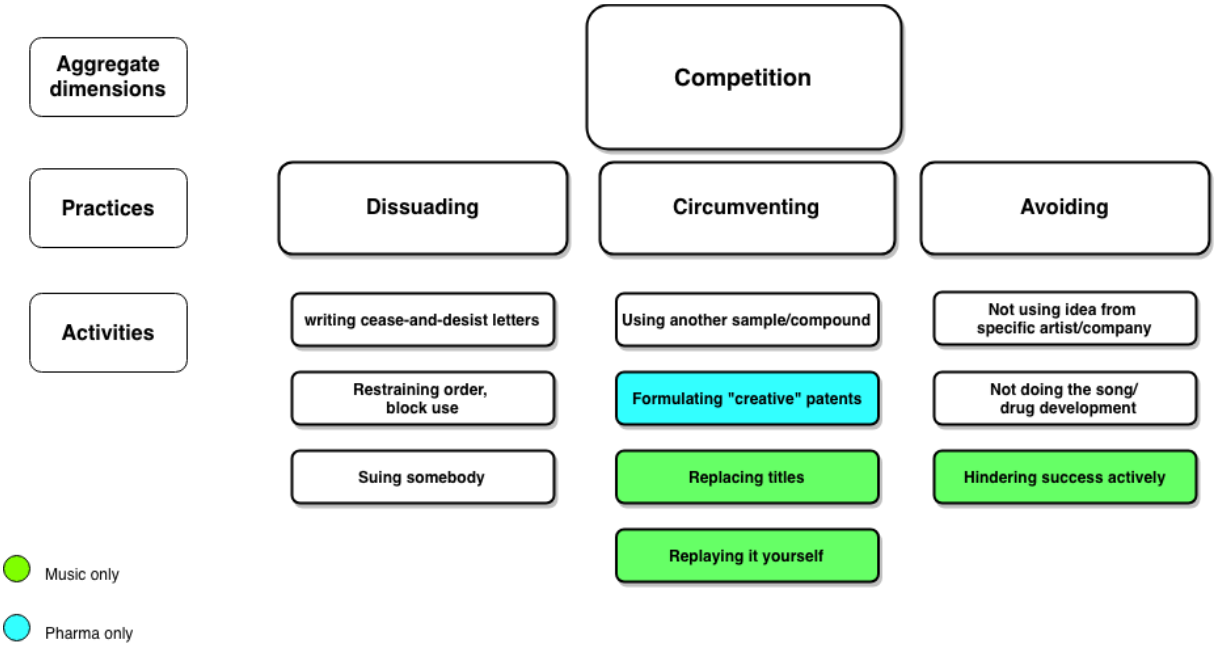
Data Analysis

We identify dissuading, circumventing and avoiding as practices recommended by legal professionals that tend to promote competition (see Table 2). 'Dissuading' comprises a range of practices aiming at threating somebody to prevent him or her from doing something. In the IP field, it includes writing cease-and-desist letters, blocking the use of music or patents, as well as suing a party for alleged IP infringement. 'Avoiding' refers to not using certain (parts of) ideas in order to not infringe the IP of other parties. 'Circumventing' means going around certain ideas in order to achieve a similar outcome. Within the competition tree, avoiding and circumventing seem to be of a similar kind. However, while avoiding means 'the end of a road' – at least when it comes to this specific piece of IP – circumventing involves using ways around the infringement of IP to prolong one's own creative process. Adding to this, the difference between avoiding and circumventing is of great importance

regarding regulatory uncertainty and ambiguity. Avoidance is a common means to cope with uncertainty due to its powerful character. 'No' as the most secure – and not rare – answer to a question regarding usage of IP in music shows the possible existence of a very strict stance towards usage of samples. Circumventing, on the other hand, usually comes with regulatory uncertainty and is practiced in the context of legal twilight zones. For example, legal professionals might decide to replay a sample or to use another sample/compound in order to not infringe IP-rights.

One activity specific to the music industry is the copyright lawyers' option to advise to replay music in order to avoid the use of a sample. This practice is of particular importance when sampling very small bits of music and has its roots in the rather complicated design of music's copyright law.[1] To circumvent the performance rights of musicians and labels, a musician can perform the desired sample him- or herself, thereby not infringing copyright law.

Figure 2: Competition-fostering practices

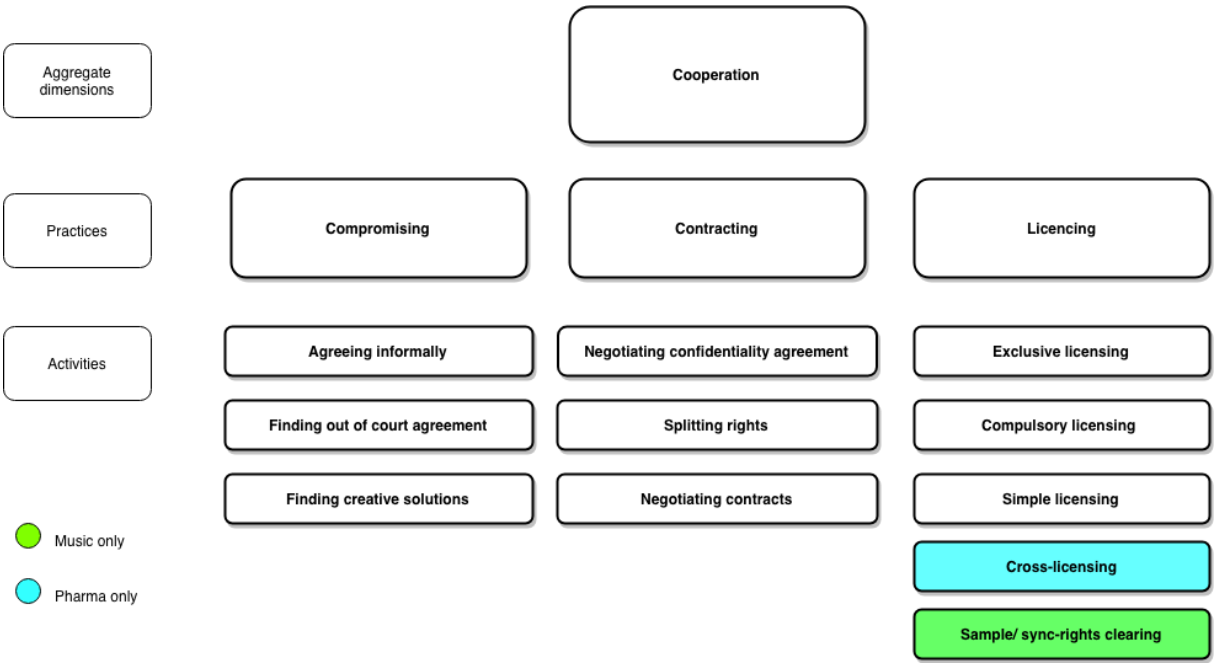


Source: Authors' research.

In terms of cooperation, we identify three main practices recommended by legal professionals, which bundle a range of activities. While 'compromising' is defined as finding agreements due to expert advice, 'contracting' means agreeing on circumstances of dealing with ideas, and 'licensing' refers to allowing the use of (parts of) ideas with charge. We distinguish between contracting and licensing because we found that the latter, as the process of leasing a legally protected entity, is of special importance in both music and pharma. As a special form of contracting, here we treat it as a separate practice.

[1] Music Copyright law is founded on two "pillars": one is the general copyright law covering the "idea" of a song – the composition, the lyrics, and the rights of the publisher. The other pillar is called "ancillary copyright", covering performance rights for musicians and labels. Usually, a very small sample is too insignificant to be awarded copyright as an idea itself, but it might still be protected by the ancillary copyright law.

Figure 3: Cooperation-fostering practices



Source: Authors' research.

Results

The date analysis revealed that legal professionals' recommendations can be characterized in terms of a repertoire of practices suggested to their clients. We first present the competition-fostering practices and illustrate them with selected interview quotes before we proceed to the cooperation-fostering practices.

Competition-fostering practices

We find that legal professionals construct situations as competitive and recommend certain ways to act. As key practices we identify dissuading, circumventing and avoiding. If followed by the clients, legal professionals' recommendations impact on the options for further courses of (creative) action. Dissuading comprises all activities aimed at discouraging other actors from alleged IP infringement. It is a legally forceful way to act competitively, as it makes it harder – if not impossible – for other actors to offer similar products or services. Activities connected to circumventing in pharma are, for example, the usage of another biological or chemical compound for drug development, or the modification of a protected product or process patent. Similarly, in music production, circumvention refers to the use of another piece of music. In pharma, "secondary patents" allow the use and protection of a compound that is already protected. Examples of secondary patent coverage are pharmaceutical formulation – the process in which different chemical substances, including the active compound, are combined to produce a final drug – or a manufacturing method of a chemical compound. These practices allow competition with rights holders by offering comparable products or services without either violating or licensing a rights holder's IP. Practices of avoiding, in turn, are ways to actively prevent a confrontation. A rights holder is explicitly constructed as a competitor, whose rights are untouchable and should not be infringed. While circumventing and avoiding are practices that are recommended to creators when they actively create works covered by IP, dissuading is predominantly addressed to actors (mostly competitors) who have potentially infringed IP.

Dissuading comprises a range of practices, including writing cease-and-desist letters, blocking the use of music or patents, as well as suing a party for alleged IP infringement to prevent them from using it. In music, writing cease-and-desist letters is a frequently used practice. The following interview quote suggests an everyday practice of dissuading in music:

> So essentially, if you feel infringed, you go to the attorney and say: >Please write to them that this is not okay" then he writes and says: >Dissuasion! This is not okay. We request omission." (Interview music attorney)

In the music business, where tracks can suddenly can take off and "one-hit-wonders" are commonplace, legal dissuasions responding to unforeseen success occupy legal professionals' stances towards rights clearings, and show a good deal of the uncertainties actors face in this field.

> If there are expectations that success will be achieved through the number of clicks, this also leads to greed. In that case, I'll almost definitely get a written legal notice, because it'll be interesting for some lawyer colleague, and of course it'll be interesting for the companies, too (...). (Interview music attorney)

Installing attorneys concerned with dissuasion not only saves the owner's copyrights, but also hinders new, competitive actors from entering the music market. While this gives the impression of a top - bottom activity, it is not only a practice "invented" by the successful (or big) music business, but at least "co-developed" by the legal professionals themselves:

> (...) the whole jurisprudence that unfolded on the side has, of course, been worked out and arranged much better in the past years. The entire industry surrounding legal written notices, if we can call it that, is, like, relatively independent of the labels. Many attorneys receive what we might call general commissions, meaning they can take legal action against everything in principle, so unfortunately this communication doesn't take place anymore. (Interview with music attorney)

The music attorney envisions a market of dissuasions, which has lost its grounding within music and is rooted solely in legal practice. This practice is clearly avoiding cooperation for the potentially cooperative partners (the ones actually acting as creative professionals), who could have an interest in finding "solutions in-between."

In the pharma industry, *dissuading* is a structured organizational process encompassing distributed roles and responsibilities on different firm levels. *Dissuading* serves the purpose of maintaining and defending patent protection for commercially valuable products and "ensuring that patents are respected by third parties" (Interview with patent attorney, pharma). Prior to the actual act of dissuading a potential infringer, organizational actors would continuously monitor the market for "red flags". In a next step, data are gathered, e.g., in the form of competitors' product samples for analysis. Based on reports, a "response plan" will serve as the basis for the form of response. Transparency, and internal and cross-national cooperation present organizational conditions enabling this process. By means of IP "awareness-raising activities" e.g., IP campaigns or trainings, an overall sense of competition and potential infringers is created within big pharma.

Dissuading encompasses giving competitors a written warning in the form of a "letter before action". After this formalized act, an infringement claim may follow. Both initiating and responding to IP-related litigation creates competitive situations. Opposition and revocation proceedings are administrative processes that allow others to challenge the validity of a pending patent application ("pre-grant opposition") or of a granted patent ("post-grant opposition).

> I mean, if there is a dominant patent, then the question arises whether this patent remains legally valid, yeah, if I can eliminate the patent, by either, if it is in an early stage, making opposition or later starting a revocation proceeding, I can get active despite the patent, because I know I can get rid of it. (Interview with patent attorney, pharma)

Opposition or revocation actions are – as the above quote illustrates – mostly initiated when it comes to "dominant" or "disturbing" patents. Thereby, reasons e.g., in the form of scientific evidence, must be given as to why the patent was not rightfully granted.

Circumventing in the pharma field refers to bypassing protected products or processes, and aims at avoiding infringements of competitors' IP. At the same time, circumventing aims at creating results that are similar to competitors' products or processes. A lower value will be attributed to the patent if there are actually ways to bypass it. The following quote illustrates that possible workarounds are considered in the process of patent formulation, possibly resulting in extended research processes.

> If, for example, a process for the manufacture of something is invented, it is often the case that the inventor comes to us and says that the process is performed at a temperature of 37 degrees Celsius and at a pH value of 7.2. Because those are the preconditions the inventor has selected, and maybe he has optimized the test already and determined that it works best at a temperature of 37 degrees and a pH value of 7.2. This doesn't mean that if the competitor now, for example, works with a pH value of 7.5 and changed some other values or buffers or whatever, the competitor can't produce equally optimal results. That means that as a patent attorney it's vital to always take a precise look at the invention and to think about how it works and how it might continue to operate. What are some possible workarounds? And, if possible, these workarounds should be covered by the patent application and the claims and requirements should be as broadly formulated as possible. (Interview with patent attorney, pharma)

In music, a typical recommendation is to replay parts of a song oneself, which would lead to an IP infringement in pharma.

> There are of course projects that, if a sample clearing is not possible, are changed by recording something similar on your own, even if it's possible that this also changes the sound design somehow. (Interview music attorney)

Thus, the attorney might guide his clients to circumvent the competitive stance that other actors take on. As well as replaying a sample, circumventing IP issues is done by simply using a different sample, which is another general piece of advice given by music attorneys.

Avoiding legal disputes and dissuasion is one way legal professionals construct situations as competitive.

> So if there is something in the song that does not belong there, a lawyer does not help afterwards. I need to avoid this in advance. (Interview music attorney)

The attorney describes the regulatory uncertainties of the field with media influence, but bases his assumption on the main competitive practice of legal professionals, dissuasion:

> So because the uncertainty, so to speak, is there throughout the media with things like illegal downloads and uploads, the entire story with the written legal notices, these are topics that the press certainly hasn't abandoned. This has been so unsettling for a lot of creatives that they now try to steer clear of legal disputes. (Interview with music attorney)

Steering musicians clear of legal disputes is thus a major task of attorneys. It is also a common recommendation regarding litigation in pharma, as the following quote illustrates,

> We try to avoid stress. (…) And try to find a solution outside of court. Because this comes along with costs, and risks, and to be honest, it never ends in favor of creativity. And this is why our proportion of litigation is quite low. (Interview with patent attorney)

In sum, the analysis shows that legal professionals take an active role in enacting and interpreting regulatory uncertainty related to IP rights. Legal professionals provide advice to their clients on legal opportunities and risks (e.g. opposing court proceedings), as well as issuing recommendations for musical or research strategies (to replay or to search for a different compound). By recommending practices of dissuading, circumventing and avoiding, legal professionals mediate between the legal,

economic and artistic/scientific system in ways that provides their clients with alternative options for acting. Yet, by recommending dissuading, circumventing and avoiding, they also shape the relations between the actors involved in the artistic and innovative industry in ways that foster competition by systematically keeping them apart. In the case of dissuading, for example, the brokerage relationship runs via the legal professional, whereas the musicians or scientists involved never get to speak directly to each other. The brokers' recommendations of circumventing and avoiding, similarly, are directed towards the actions of one party in potential competition to the other parties involved.

Cooperation-fostering practices

The interviews also point towards situations that are shaped as cooperative by legal professionals. We identify compromising, contracting and licensing as cooperation-fostering practices recommended by legal IP professionals in their various brokerage roles. These are practices that potentially create direct interaction and linkages between all parties involved.

Compromising summarizes practices that are based on the legal professionals' expert knowledge of the field. Patent attorneys in the field mediate, for instance, the interaction between patent applicants and the patent office. Often, negotiations and amendments of the invention precede the patent grant. Thus, the pre-grant prosecution process is based upon compromising and knowledge sharing that goes along with interaction between applicants (e.g., scientists, firms, universities), their legal representatives and the patent office.

> After we have filed the patent application and before the patent is granted, these things often arise – you perhaps discover so much in the past few days or you knew it already – so that there's a dialogue between the patent office and the patent attorney. The patent attorney is the applicant's representative. And then the patent office writes: 'This invention isn't innovative or isn't new because it was already published in such and such a document.' (Interview with patent attorney, pharma)

Autonomous parties are in exchange and negotiate about the nature of the potential invention, with patent attorneys having a key role in this process, as they act as mediators and intermediaries between the patent office and patent attorney's clients.

> And in this dialogue with the patent office, or in this conflict with the patent office, we often have to consult with the inventor and ask him: 'Is what the reviewer is arguing true? Is it true when he says that it's widely known that halogenated chlorinated hydrocarbons have a melting point or a boiling point at such and such a level? (Interview with patent attorney, pharma)

The exchange between legal professionals and patent office can come along with extended research activities in order to support the applicants' arguments in the patent applications. In turn, the need for further research can be the basis for future cooperation, as patent applicants might also outsource extended research activities. Thus, the patent office's evaluations can be the basis for research cooperations.

In pharma as well as in music, attorneys' knowledge mediates artists and labels or publishers, often by advising on complex contractual questions. Usually the attorney inserts suggestions for contractual changes and discusses them with his or her clients to find compromises between the different aspects under consideration:

> So, these are the things that I think are in need of change. Sometimes you talk to them over the phone and then you explain, and you say: Why this or that, or I don't think that this is so problematic, or I just ask a concrete question: Is this important for you or are there some alternatives. (Interview music attorney)

Especially in clearing processes, distinct field knowledge is used by music lawyers. Through their dealings in the industry they are in regular contact with key business actors, which they can use as leverage for their clients:

> Oftentimes...so I know a lot of labels and I know a lot of colleagues who represent certain labels, and I also know the lawyers from the big companies. So I can say: ok, can I ask how big your budget is for that? (Interview music attorney)

The attorney's involvement in the legal field of music is clearly an invaluable asset of his/her practice. Knowledge of the actors involved gives not only a professional advantage but also the chance to advise on further activities. Besides, the legal professionals are engaged as legal evaluators for a creative product. The main question the musicians have, of course, is not "are we allowed to do this?". The attorney's evaluation of the (il)legality of what has been done and his or her recommendation for further action might decide whether a track comes into – publicly recognizable – existence, or not.

Contracting means agreeing on circumstances for dealing with ideas. An exclusive contract, e.g. between musician and producer, can form the basis for an exchange of resources with the common aim of working on a new product/service. The high number of rather small differentiations on the level of activities shows that a lot of typical attorney's work is based on developing and recommending contractual solutions for their clients. In music, contracting is regular advice given by attorneys. Its primary use is to guarantee a stable agreement before and especially after a music production:

> Make contracts with your vocalists, because if you do not have a contract, then a record comes out, then the vocalist says, I do not want my voice on it any more. I just had a recent case where, luckily they had a short contract, where a track was finished and the singer then said: I don't like the recording anymore, you shouldn't use it. And there, it is better to make a contract beforehand. (Interview music attorney)

In pharma, we find situations of patent dispute settlements between originators and generic manufacturers in the late phase of an expiring patent. So-called "pay for delay" agreements are a type of contract in which a generic manufacturer agrees to refrain from marketing the generic product for a specific period of time. In return, the generic company receives a payment from the originator. Practices of this kind are under scrutiny by the competition authorities. For start-ups, confidentiality agreements are a type of contract that often builds the basis for first discussions on cooperation with potential investors. A company's patent or patent portfolio can serve as an initial point for potential cooperation. The quality of the patent portfolio enables the investor/cooperation partner to draw conclusions about the cooperation partner's resilience and competitive capability. Experts including legal professionals clear the clients' or other parties' rights, for example, by means of due diligence checks, freedom to operate analysis, or individual risk assessment. These 'quality checks' of IP build the basis for potential cooperative situations.

> [W]e perform quality control (...) for the entire company, usually of course for the IP part, so what a certain company has, what the guys have on their hands with their start-up, or also if one company wants to acquire a division of another company, that can happen, too, we're hired to screen their IP portfolio. And this screening takes place so that we can determine how good the patents are, meaning how strong they are, and therefore what can be prevented or proscribed with them, yes. In many cases, it's a question of whether the product that is supposed to be the company's cash cow is protected by the patents, whether it's congruent, so to speak (...). (Interview patent attorney, pharma)

Licensing involves contracting and allows for the use of (parts of) ideas. It is based on interaction between two parties to achieve a joint gain. For example, in cases of reciprocally blocking patents, two concerned parties come together to figure out a settlement, for example in the form of cross-licensing.

One typical example of *licensing* in music is the clearing of rights, which is not solely a task to be performed by legal professionals, however often it is. Regularly, one hears in the field of music that it is best if the artist him- or herself gets in touch with the rights holder and clears the sample on an artist to artist basis. Even attorneys themselves recommend that their clients aim for an inter-artist solution, as it provides good results. However, especially due to the possible complexity of property structures in one single track - often more people hold some percentage of a track's rights and are therefore in a

position to veto competitively the cooperative proposal of a sample licensing - legal professionals get involved in the process. Usually, this kind of involvement needs some financial backing and therefore happens more regularly in projects with a commercially successful outlook.

> I had a client for whom I regularly formulate legal statements, right? And then of course we're working on songs from the 1930s, which he checks together with his publisher, and we're trying to find out who wrote a song, when it was published, whether the copyright has expired, and whether and when the song can be used freely. (Interview music attorney)

The respective client in this case works with samples often originating from songs that were recorded in the 1930s. Working together with others - in this case the publisher - the first steps are collecting detailed information about the old song, which might have quite a fuzzy past - the attorney calls it "detective work" :

> I often take part in clarification processes and do detective work with them, and then we see to it that we get as many details as possible in order to get a clear picture, because there are sometimes songs that aren't registered if they're older. (Interview music attorney)

In sum, compromising, contracting and licensing are based on interaction and partial exchange between actors. Actors might accept a disadvantage (e.g., paying money for a license) in favor of sharing resources (e.g., knowledge, money). By recommending practices that potentially foster cooperation (e.g., through clearing rights, making quality control of IP), legal professionals absorb uncertainty (Weyer 2012) and stabilize mutual expectations (e.g. about development of a product).

The complex balance between competition- and cooperation-fostering practices: Coopetition
While it is useful to distinguish competition and cooperation analytically as ideal types, in reality they often appear in various mixes, some of which have been discussed in the organizational literature under the label of "co-opetition" (Schreyögg and Sydow 2007). Co-opetition refers to settings in which both logics of action are in dialectic tension with each other. For example, organizations may pursue agreements of cooperation in some market segments, while competing in others. They may choose to cooperate with some types but exclude other types of competitors.

Similarly, actors in the music and pharma industry can switch between competitive and cooperative practices when dealing with IP-protected inputs for their creative processes. The interview data suggests that over the life course of a creative or innovative project, the practices recommended by legal professionals intertwine in ways that occasionally produce complex and overlapping constellations, in which competition and cooperation stand in such a dialectic tension.

Coopetition in pharma can arise in cases of reciprocally blocking patents. Hereby, a consortium of at least two companies agrees to cross-license patents aiming to achieve a competitive advantage over third parties. If no agreement is reached, public authorities might, in some cases, act as a mediator by granting compulsory licenses. Thereby, a patent owner allows others to utilize the invention in exchange for reasonable compensation. In many countries, a patent owner's failure to actually develop the underlying invention covered by the patent within a specific time period can result in the owner being forced to grant a license.

In music, cases in which legal professionals achieve informal cooperative arrangements for their clients under the precondition that the resulting product will not enter economic competition with those of the right holders provide an illustration of coopetition. Asking a major label for a clearing of sampling rights, the attorney got this answer:

> We could go the official way now, then we would have to send this to America, that takes three quarters of a year and they definitely want twenty-thousand dollars. We made 500 vinyl records. And he said: bring out the 500 vinyl copies and watch out it does not get too successful. (Interview music attorney)

The legal professional arranges an informal cooperation with the right holder, while the latter makes clear that competitive positioning of the record leading to success would be inadvisable. This mode of coopetition is very much one sided, of course, with one actor holding the main bargaining power. Different actors' perspectives also shed a different light on contracts, which are a means of cooperation, yet are not such in every feasible situation and not for every concerned actor. As the following quote shows, contracts provide legal grounding for cooperation among musicians and labels, but at the same time foster competition:

> And the contracts that we've drafted since at least the mid-2000s, if we are on the side of the licensees, there's always a clause in the contracts: The artist guarantees that through his or her recording, through his or her work, no third-party rights are infringed upon. This means that if the artist were to look into his or her contract, that he or she could read that this kind of thing isn't allowed. (Interview music attorney)

In sum, legal professionals' recommendations for practices that foster competition or cooperation are interwoven in fluid ways over the course of creative processes. In either one way or another, they meditate IP-related uncertainty in ways that allow the actors to deal with regulatory uncertainty.

Discussion & Conclusion

This paper started out from the observation that the relationship between competition, cooperation and creativity constitutes a strategic triangle in the creative and innovative industries, particularly when it comes to the use of IP-protected input for creative processes. Given the uncertainty inherent in the search for novelty, added to by regulatory uncertainty about the applicability and meaning of existing IP rules, choices between competitive and cooperative strategies are often not obvious. Yet the existing literature makes very little reference to how dealing with this regulatory uncertainty shapes competition and cooperation in the creative and innovative industries. In this paper, we have presented an exploratory analysis of how legal professionals mediate the actual application of IP law and how the practices they recommend to their clients shape competition and cooperation, as well as combinations thereof. Our results show that cooperation or competition cannot be looked at as two-sided and not even as two sides of the same coin, but as more or less intermingled, depending on the actors involved and the point of time within a creative process. More specifically, the results offer two contributions to the literature on competition, cooperation and intellectual property rights in the creative and innovative industries.

First, our investigation provides surprising evidence that legal professionals do not restrict themselves to legal advice but also provide recommendations that engage with musical and technical practices, as well as economic and managerial issues. In this way, legal professionals mediate between the legal, artistic and scientific as well as the economic sectors. Their advice often does proceed or follow but instead enters into the creative process and seems to shape the directions in which searches for novelty unfold.

Second, our results show that by translating IP law into recommendations for practice to their clients, legal professionals shape competitive and cooperative strategies for actors in both industries. We identified dissuading, circumventing and avoiding as practices that promote competition, and compromising, contracting, and licensing as practices that foster cooperation. Moreover, our material indicates that the link between competition and creativity, as mediated by legal professionals, is not so straightforward after all. In both fields we find examples of situations or processes in which competition and cooperation are closely intertwined or occur in a dialectic tension with each other, pointing toward coopetition. For example, many cooperative practices enable creativity by avoiding competition between the two parties involved. However, in respect to other actors in the industry, they remain competitors. When legal professionals advise cooperative strategies in the form of rights clearing and licensing, this might also shift competition to other levels or arenas instead of entirely avoiding it.

As our research is still ongoing, some caveats are in place. Research for this paper focused on the practices that legal professionals propose to their clients. We do not know whether clients always follow this advice. In order to come to more robust findings, we will need to triangulate findings from our interviews with lawyers and those from artists, scientists and managers. A preliminary analysis of our interviews with these other actors suggests that these take legal advice pretty seriously. But certainly, more in-depth analysis is required to assess the robustness of our findings. The findings also show that bargaining power plays a significant role in both industries. One therefore should not overestimate the importance of legal advice as such, since it often comes in combination with recommendations on how to play the economic power game. As our data shows that legal IP professionals act in a variety of brokerage roles combining legal, technical/musical and economic advice, this does not necessarily detract from their influence. An interesting issue for future research is the relationship between the different brokerage roles, practices recommended, and their effects on creativity.

Overall, our research points towards legal professionals as key actors shaping competitive, cooperative and coopetitive strategies towards valorization of creative processes in the music and pharma industry. Further research will be needed to show to what extent these practices are experienced as creativity enhancing or limiting by those involved.

References

Aldrich, H., & Herker, D. (1977). Boundary spanning roles and organization structure. *Academy of Management Review* 2(2), 217–230.

Amabile, T. M. (1996). *Creativity in context: Update to "The Social Psychology of Creativity"*. Boulder, CO, US: Westview Press.

Aspers, P. (2018). Forms of Uncertainty Reduction: Decision, Valuation, and Contest. *Theory and Society* 47(2), 133–149.

Benjamin, W. (2011). *Das Kunstwerk im Zeitalter seiner technischen Reproduzierbarkeit*. Stuttgart: Reclam.

Blau, P. M. (1954). Co-operation and Competition in a Bureaucracy. *American Journal of Sociology* 59(6), 530–535.

Boldrin, M., & Levine, D.K. (2008). *Against Intellectual Monopoly*. Cambridge: Cambridge University Press.

Boldrin, M., & Levine, D.K. (2009). Does Intellectual Monopoly Help Innovation? *Review of Law and Economics* 5, 991–1024.

De Nooy, W., Mrvar, A., Batagelj, V. (2018). *Exploratory Social Network Analysis with Pajek*. Cambridge: Cambridge University Press.

Dobusch, L. (2012). The Digital Public Domain: Relevance and Regulation. *Information & Communications Technology Law* 21(2), 179–202.

Döhl, F. (2016). *Mashup in der Musik. Fremdreferenzielles Komponieren, Sound Sampling und Urheberrecht*, Bielefeld: transcript Verlag.

Dokko, G., Kane, A. A., Tortoriello, M. (2014). One of Us or One of My Friends: How Social Identity and Tie Strength Shape the Creative Generativity of Boundary-Spanning Ties. *Organization Studies* 35(5), 703–726.

Dutfield, G. (2009). *Intellectual Property Rights and the Life Science Industries: Past, Present and Future*. Singapore: World Scientific.

Economides, N. (1998). Competition and Vertical Integration in the Computing Industry. New York University, Leonard N. Stern School of Business.

Fleming, L., & Waguespack, D. M. (2007). Brokerage, Boundary Spanning, and Leadership in Open Innovation Communities. *Organization Science* 18(2), 165–180.

Flick, U. (2006). An Introduction to Qualitative Research (3rd ed.). London [u.a.]: Sage Publ.

Gould, R.V. and Fernandez, R.M. (1989). Structures of Mediation: A Formal Approach to Brokerage in Transaction Networks. *Sociological Methodology* 19, 89-126.

Gioia, D.A., Corley, K.G., Hamilton, A.L. (2012). Seeking Qualitative Rigor in Inductive Research: Notes on the Gioia Methodology. *Organizational Research Methods* 16(1): 15–31.

Gross, D.P. (2016). Creativity Under Fire: The Effects of Competition on Creative Production. Harvard Business School, Working Paper, No. 16-109.

Jarzabkowski, P., & Paul Spee, A. (2009). Strategy-as-practice: A Review and Future Directions for the Field. *International Journal of Management R*eviews 11(1): 69–95.

Lutter, M. (2012). Soziale Strukturen des Erfolgs: Winner-take-all-Prozesse in der Kreativwirtschaft. *MPIfG Discussion Paper*. Cologne.

Hasse, R., & Krücken, G. (2012). Ökonomische Rationalität, Wettbewerb und Organisation. Eine wirtschaftssoziologische Perspektive. In Engels, A., & Knoll, L. (eds.). *Wirtschaftliche Rationalität: Soziologische Perspektiven.* Wiesbaden: Springer, 25–45.

Hasse, R., & Krücken, G. (2013). Competition and Actorhood: A Further Expansion of the Neo-institutional Agenda. *Sociologia Internationalis* 51(2), 181–205.

Heller, M. 2010. *The Gridlock Economy: How Too Much Ownership Wrecks Markets, Stops Innovation, and Costs Lives*. New York: Basic Books.

Hope, J. 2008. *Biobazaar. The Open Source Revolution and Biotechnology*. Cambridge, MA: Harvard University Press.

Holgersson, M., Granstrand, O., Bogers, M. (2018). The Evolution of Intellectual Property Strategy in Innovation Ecosystems: Uncovering Complementary and Substitute Appropriability Regimes. *Long Range Planning* 51, 303-319.

Hutter, M. & Farías, I. (2017). Sourcing Newness: Ways of Inducing Indeterminacy. *Journal of Cultural Economy* 10(5), 434–449.

Ibert, O., Jackson, G., Theel,T., Vogelgsang, L. (2018). Uncertainty as an Asset for Creativity? Dynamic Shifts between Embracing, Ignoring and Fixing Uncertainty: The Cases of Music and Pharma. *Organized Creativity Discussion Paper No. 18/1*, Berlin: Freie Universität Berlin.

Kretschmer, M., Pratt, A.C. (2009). Legal Form and Cultural Symbol. *Information, Communication & Society* 12(2): 165–177.

Landes, W.M., & Posner, R.A. (2003). Indefinitely Renewable Copyright. *University of Chicago Law Review* 70, 471–518.

Liebowitz, S., & Margolis, S. (2004). Seventeen Famous Economists Weigh in on Copyright: The Role of Theory, Empirics, and Network Effects. *Harvard Journal of Law and Technology* 18, 435–457.

Luhmann, N. (1995). Social Systems. Stanford: Stanford University Press.

McLeod, K., & DiCola, P. (2011). *Creative License: The Law and Culture of Digital Sampling*. Duke University Press.

Musungu, S. F., Villanueva, S., Blasetti, R. (2004). Using TRIPS Flexibilities for Public Health Protection through South-South Regional Frameworks. Geneva: South Centre.

Nelson, R. L., & Nielsen, L.B. (2000). Cops, Counsel, and Entrepreneurs: Constructing the Role of Inside Counsel in Large Corporations. *Law and Society Review* 34(2), 457–494.

Prahalad CK, & Hamel G. (1990). The Core Competence of the Corporation. *Harvard Business Review* 68(3): 79–91.

Priddat, B. P. (2012). Märkte, Verträge, Netzwerke: Kompossibilität. Über Verträge als kollaborative Interaktionen. In Engels, A., & Knoll, L. (eds.). *Wirtschaftliche Rationalität: Soziologische Perspektiven*. Wiesbaden: Springer, 67–82.

Porter M. (1981). The Contributions of Industrial Organization to Strategic Management. *Academy of Management Review* 6, 609–620.

Provan, K. G., Fish, A., Sydow, J. (2007). Interorganizational Networks at the Network Level: A Review of the Empirical Literature on Whole Networks. *Journal of Management* 33(3), 479–516.

Reckwitz, A. (2002). Toward a Theory of Social Practices: A Development in Culturalist Theorizing. *European Journal of Social Theory* 5(2), 243–263.

Rosenkopf, L., & Nerkar, A. (2001). Beyond Local Search: Boundary-Spanning, Exploration, and Impact in the Optical Disk Industry. *Strategic Management Journal* 22(4), 287–306.

Schatzki, T.R, Knorr-Cetina, K., Savigny, E. von, (2001). *The Practice Turn in Contemporary Theory*. London: Routlegde.

Schatzki, T. R. (2002). *The Site of the Social: A Philosophical Account of the Constitution of Social Life and Change*. University Park, PA: Penn State Press.

Schilling, M. A. (2002). Technology Success and Failure in Winner-take-all markets: The Impact of Learning Orientation, Timing, and Network Externalities. *Academy of Management Journal* 45(2), 387–398.

Schreyögg, G., & Sydow, J. (eds.). (2007). *Kooperation und Konkurrenz*. Managementforschung Band 17. Wiesbaden: Gabler-Verlag.

Silbey, J. (2015). *The Eureka Myth. Creators, Innovators, and Everyday Intellectual Property*. Stanford: Stanford University Press.

Simmel, G. (1950). On the Significance of Numbers for Social Life. In: Simmel, G., & Wolff, K. H. (Ed.) *The Sociology of Georg Simmel*. New York: Macmillan, 87–104.

Stim, R. (2007). *Patent, Copyrights & Trademark. An Intellectual Property Desk Reference*. Berkeley: Nolo.

Strauss, A. and Corbin, J. (1990). *Basics of Qualitative Research. Grounded Theory Procedures and Techniques.* Newbury Park: Sage.

Strauss, A. (1978). A Social "World Perspective. *Studies in Symbolic Interaction* 1(1), 119–128.

Suchman, M. C. (1994). On Advice of Counsel: Law Firms and Venture Capital Funds as Information Intermediaries in the Structuration of Silicon Valley. Stanford: Doctoral Dissertation.

Tushman, M. L. (1977). Special Boundary Roles in the Innovation Process. *Administrative Science Quarterly* 22(4), 587–605.

Vaara, E., and Whittington, R. (2012). Strategy-as-Practice: Taking Social Practices Seriously. *Academy of Management Annals* 6(1), 285–336.

Werron, T. (2010). Direkte Konflikte, indirekte Konkurrenzen: Unterscheidung und Vergleich zweier Formen des Kampfes. *Zeitschrift für Soziologie* 39(4), 302–318.

Wetzel, D. J. (2013). *Soziologie des Wettbewerbs: eine kultur-und wirtschaftssoziologische Analyse der Marktgesellschaft*. Wiesbaden: Springer-Verlag.

Weyer, J. (Ed.). (2012). Soziale Netzwerke: Konzepte und Methoden der sozialwissenschaftlichen Netzwerkforschung. München: Oldenbourg Verlag.

Windeler, A., and Sydow, J. (2001). Project networks and changing industry practices collaborative content production in the German television industry. *Organization Studies* 22(6), 1035–1060.

Organized Creativity - Practices for Inducing and Coping with Uncertainty

The aim of this DFG-sponsored Research Unit (FOR 2161) is to examine different dimensions of uncertainty in several practice areas and investigate what role they play in creative processes in different contexts and over time. Therefore four different projects will be conducted in which the dynamics in both the music and pharma industries will be compared. The focus of all these projects will thereby be the creative process both in organizations and in interorganizational networks.

Principal Investigators

Prof. Dr. Jörg Sydow, Professor of Management, Freie Universität Berlin (Spokesperson)
Prof. Jana Costas, Ph.D., Professor of Human Resource Management, Europa-Universität Viadrina, Frankfurt/Oder
Prof. Dr. Leonhard Dobusch, Professor of Business Administration, Universität Innsbruck
Prof. Dr. Gernot Grabher, Professor of Urban and Regional Economic Studies, HafenCity Universität (HCU) Hamburg
Prof. Dr. Oliver Ibert, Professor of Economic Geography, Freie Universität Berlin, and Leibniz Institute for Social Science-based Spatial Research (IRS), Erkner
Prof. Gregory Jackson, Ph.D., Professor of Human Resource Management and Labor Politics, Freie Universtität Berlin
Prof. Dr. Sigrid Quack, Professor of Sociology, Universität Duisburg-Essen
Prof. Dr. Elke Schüßler, Professor of Organization Theory, Johannes Kepler University, Linz

For further information

http://www.wiwiss.fu-berlin.de/forschung/organized-creativity/

Organized Creativity Discussion Paper