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**Projects, Paths, and Practices:
Sustaining and Leveraging Project-Based Relationships**

Stephan Manning

University of Massachusetts Boston
College of Management
100 Morrissey Boulevard
Boston, MA 02125, USA
Stephan.manning@umb.edu

Jörg Sydow

Free University of Berlin
Institute for Management
Boltzmannstrasse 20
14195 Berlin, Germany
joerg.sydow@fu-berlin.de

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PROJECTS, PATHS, AND PRACTICES: SUSTAINING AND LEVERAGING PROJECT-BASED RELATIONSHIPS¹

ABSTRACT

In this paper, we examine how project entrepreneurs maintain and leverage longer-term project-based relationships in highly uncertain and volatile project businesses with clients and key service providers across ever changing collaborative contexts. Based on a thorough analysis of TV project networks, using both quantitative and qualitative data, we find that project entrepreneurs form core teams with particular clients and service providers, and establish sequences of related projects thereby forming collaborative paths. These paths allow partners to exploit and stretch existing, and explore new capabilities and partner resources across time and contexts of collaboration. Paths are promoted by connecting practices partners apply to establish task and team linkages between past, present and potential future projects. Our findings promote a more processual understanding of project-based organizing and learning, and tie formation in dynamic industry contexts.

Keywords: project network, project entrepreneur, path dependence, project capabilities, project-based organizing, repeated collaboration, project portfolio.

INTRODUCTION

Projects have become an increasingly important form of organizing economic activities across industries (Lundin & Hartman, 2000; Whitley, 2006). As so-called temporary systems (Goodman, 1981), they provide managerial flexibility and the opportunity to mobilize resources and capabilities for the accomplishment of complex and partially unique tasks (Lundin & Söderholm, 1995). While in some industries, e.g. the automotive industry, projects co-exist with more conventional forms of organizing and production, other industries, e.g. film, software, consulting, and construction, operate almost entirely in a project mode. In these latter industries, companies and individual entrepreneurs, e.g. film producers, face a permanent managerial challenge: how to establish and leverage continuous business relationships. This is because projects, by definition, are more or less unique endeavors with an ‘institutionalized ending’ (Lundin & Söderholm, 1995),

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which – in theory and managerial practice – raises the question of how project partners sustain and exploit on project relationships *after* each project. In this paper we seek to examine how project entrepreneurs, i.e. actors who repeatedly initiate projects and assemble project teams, sustain and leverage longer-term project-based relationships, i.e. relationships that are continued project by project, with their clients and key service providers.

Project researchers, on the one hand, have increasingly studied the embeddedness of temporary projects in longer-term organizational, relational and institutional structures (e.g. Sahlin-Andersson & Söderholm, 2002; Engwall, 2003; Sydow & Staber, 2002; Manning, 2008). In particular, they have looked at the embeddedness of projects in organizations and the establishment and exploitation of routines and capabilities on a project basis (Brady & Davies, 2004). However, we lack understanding of how project entrepreneurs manage to sustain and leverage longer-term project-based relationships with key clients and suppliers. Network researchers, on the other hand, have studied relationships in project businesses quite extensively (e.g. Jones, 1996; Sorenson & Waguespack, 2006; Schwab & Miner, 2008). They indicate that relational trust, prior collaborative experiences and interdependencies are important drivers of repeated partner selection and long-term relationships (see also Gulati, 1995; Uzzi, 1997; Gulati & Gargiulo, 1999). More recently, some scholars have also noted that continuity in partner selection often results from inertia and path dependencies, as entrepreneurs try to repeat previously successful collaborations (see e.g. Sorenson & Waguespack, 2006; Li & Rowley, 2002).

Nevertheless, most of these studies do not examine *how* prior experience and success are leveraged for future projects. This is because they often apply concepts from tie and network research without accounting for the particular challenges of project-based organizing. Unlike in industries where conventional forms of exchange dominate, project entrepreneurs typically face two major challenges: the interruption of project-based relationships by shorter or longer latent time periods (e.g. Hadjikhani, 1996); and the partial uniqueness and novelty of any particular project (e.g. Lundin & Söderholm, 1995). Project-based organizing, therefore, is often described as

a paradox (e.g. DeFillippi & Arthur, 1998; Sahlin-Anderson & Soederholm, 2002), since more or less project-specific resources and capabilities have to be developed and exploited across ever changing project contexts over time (Brady & Davies, 2004). The challenge of leveraging past experiences in future projects is even amplified within inter-organizational, often discontinuous project-based relationships. Based on two in-depth, inductive case studies of TV project networks, we investigate how TV producers and their clients and key suppliers deal with these challenges in their effort to sustain and leverage longer-term project-based relationships.

Our findings suggest that project partners engage in building 'collaborative paths', i.e. sequences of projects that allow partners to exploit established, but also explore new resources and capabilities, while actively bridging periods of latency. Based on our analysis, we identify key features of collaborative paths as well as mechanisms of path change to inform future research. Thereby, we investigate the importance of core teams and 'connecting practices', i.e. practices of enacting team and task similarities between past, present and potential future projects. These practices are supported, but also constrained by the pursuit of collaborative paths. Our findings contribute to current research on project-based organizing and learning as well as tie and network formation. In particular, we promote a more dynamic understanding of project-based relationships, accounting for possibilities and constraints of developing and exploiting project-based resources and collaborative capabilities across project contexts over time.

THE CHALLENGE OF SUSTAINING AND LEVERAGING PROJECT-BASED RELATIONSHIPS

In face of the dynamics of project businesses, developing successful longer-term business relationships with clients and suppliers often poses a managerial challenge (Söderlund & Andersson, 1998; Hadjikhani, 1996; Starkey et al., 2000). Yet, a number of studies indicate that project-based relationships often do last. For example, prior successful collaborative projects seem to promote repeat partner selection and continuity in project-based relationships (e.g. Soda et al.,

2004; Sorenson & Waguespack, 2006; Schwab & Miner, 2008; Manning, 2010). This is because collaborative experience promotes trust or confidence in the ability of partners (Gulati, 1995; Uzzi, 1997), which, under conditions of high uncertainty, is an important factor in partner selection (Rousseau et al., 1998; Beckman et al., 2004). Reselecting partners from previous projects also helps avoid search and transaction costs involved in finding new partners (Williamson, 1985; Li & Rowley, 2002). In addition, collaborating repeatedly can promote the development of collaborative capabilities, norms and routines (e.g. Larson, 1992), and other forms of relationship-specific qualities. Finally, prior studies suggest that team interdependencies may develop between particular partners, increasing the likelihood of partner reselection and longevity of relationships (Soda et al., 2004; Manning, 2005; in general Gulati & Gargiulo, 1999). Table 1 summarizes previous research addressing these drivers of sustainability.

Insert Table 1 Here

More recently, it has been argued that prior collaborative experience and success may even lead to path dependencies in partner selection (Li & Rowley, 2002; Sorenson & Waguespack, 2006; see also Table 1). Path dependence in general means that certain events trigger self-reinforcing processes leading to lock-in situations (David, 1985; Arthur, 1994). In our context, it means that successful collaborations may result in a continuous effort by project partners to repeat success and thereby 'increase returns' (Arthur, 1994) based on the exploitation of collaborative capabilities. This dynamic may prevent project partners from searching for new partners and eventually 'lock' them into existing relationships (e.g. Ghemawat, 1991). Research in project businesses indicates that lock-in situations are partially desired by project partners. This is because, facing high uncertainty, project partners aim for 'economies of repetition and recombination' by exploiting existing resources and capabilities (Davies & Brady, 2000; Grabher, 2002; Brady & Davies, 2004; Lavie & Rosenkopf, 2006; Kogut & Zander, 1992). However, these positive effects are often coupled with

significant risks, including decreasing flexibility and performance over time (Martin & Sunley, 2006; Sydow et al., 2009). For example, Sorenson and Waguespack (2006) show that film projects with deeper prior relations often perform worse than projects involving new partners. Despite this risk, distributors continue to work with producers from previous successful project collaborations.

Such findings point to an important question which has not been sufficiently addressed: How do project partners actually leverage partner resources and capabilities across ever changing collaborative contexts over time? Project scholars have suggested that developing and exploiting sustainable project capabilities and project-based relationships comes close to a managerial paradox (see e.g. DeFillippi & Arthur, 1998; Sahlin-Anderson & Soederholm, 2002; Brady & Davies, 2004). This is because project partners face two major challenges in their effort to leverage longer-term project-based relationships: the interruption of these relationships by periods of idleness or latency, and the partial uniqueness and novelty of particular projects (see Table 1).

On the one hand, business relationships in project businesses are typically characterized by ‘discontinuity’, for they are often interrupted by shorter or longer periods of idleness or latency between particular projects (Söderlund & Andersson, 1998; Hadjikhani, 1996; Starkey et al., 2000; Sydow & Staber, 2002). Since projects are limited in time, the very future of project-based relationships is often highly uncertain; many relationships do not even exceed one single project. This implies that investing in longer-term project-based relationships can be a very risky endeavor. Against this background, the project marketing literature (e.g. Cova & Salle, 2000; Hadjikhani, 1996) has emphasized the importance of maintaining ‘sleeping’ relationships, thereby referring to ideas and concepts from relationship marketing (e.g. Heide, 1994; see Table 1). Although this aspect of sustaining project-based relationships is highly relevant, we still lack an understanding of how project partners repeatedly enter discrete episodes of collaboration over time and how they deal with the uncertainty involved in sustaining project-based relationships.

On the other hand, project researchers have emphasized that every project is, at least partially, unique and novel in terms of its goals, task structures and team requirements (e.g. Lundin

& Söderholm, 1995). While projects contain routine elements (e.g. Davies & Brady, 2000), they are typically not repeatable as a whole. Therefore, the notion that prior project experience and success facilitates future collaboration requires much more thought (for a more nuanced view, see Schwab & Miner, 2008). As contexts of project collaboration typically change over time, the question of why, how and under what conditions previous projects actually facilitate future collaboration becomes evident. The finding that partner selection based on past successes may lead to lower performance (Sorenson and Waguespack, 2006) may not be surprising after all, if the same partners team up for significantly different project tasks. Schwab and Miner (2008) therefore argue that perceived relevance of prior collaborative success for future projects may affect repeat partner selection. Other studies suggest that project partners might rely less on ‘economies of repetition’ than on ‘economies of recombination’ (Grabher, 2002), derived from their ability to recombine, rather than simply reapply established skills and resources (Kogut & Zander, 1992; see also Burt, 2004; Uzzi & Spiro, 2005; Ferriani et al., 2009).

These findings urge for a more fine-grained and processual understanding of how project partners sustain project-based relationships and how they develop and leverage on partner resources and collaborative capabilities over time. Based on data from two in-depth case studies in the TV movie industry, we develop the notion that successful longer-term project-based relationships may depend on the partners' ability to build ‘collaborative paths’, i.e. sequences of projects that allow partners to exploit established, but also explore new resources and capabilities over time. To sustain these paths, partners engage in ‘connecting practices’, i.e. practices of enacting team and task similarities between particular past, present and potential future projects.

METHODOLOGY AND DATA

We take a multiple, inductive case study approach (Yin, 2003) to examine how project partners sustain and leverage longer-term project-based relationships. Case studies are ideal for studying complex social processes that cannot be easily tracked with survey-based designs. Multiple case

studies help generate stronger evidence for theoretical constructs and hypotheses built from case studies (Eisenhardt, 1989; Yin, 2003). Ideally, they follow a replication logic. The first case serves to provide preliminary results, whereas the following cases are used to replicate, or question and reinterpret initial findings. This allows for a ‘generalization in small steps’ (Diesing, 1971), which also involves the definition and further differentiation of types of cases for which the findings are representative. However, case studies are not representative in a statistical sense. Rather, they allow for analytical generalization (Yin, 2003). That is, they serve to develop and refine theories and analytical categories to inform future studies (Eisenhardt, 1989). These categories should be crafted in such a way that they balance the need for concreteness and closeness to the particular case, and for abstractness and applicability in other empirical contexts (Siggelkow, 2007).

The selection of suitable cases is therefore critical. First, we defined the case population to control for extraneous variation (Eisenhardt, 1989). In this study, the German TV movie industry serves as the empirical field. The film and TV industry have often been selected for studying project-based relationships (e.g. Jones, 1996; DeFillippi & Arthur, 1998; Faulkner & Anderson, 1987; Windeler & Sydow, 2001; Manning, 2005; Ferriani et al., 2005, 2009). The production of TV movies, which usually have a feature length of 90 minutes, is project-based, whereby every movie is relatively unique. Because TV movie production is a financially risky endeavour, TV production firms seek to maintain longer-term relationships with client TV channels to sustain profitability. At the same time, production firms maintain flexible pools of creative and technical service providers to serve their clients (Windeler & Sydow, 2001; Starkey et al., 2000).

From the population of production firms, whose project-based relationships we study here, we selected two cases. The first company – Hood Productions (HP)² – is a typical medium-size TV production firm. It has maintained long-term relationships with one state-owned television channel and particular creative artists. HP was therefore a suitable pilot case for studying longer-term project-based relationships; its selection was also facilitated by prior contacts to the CEO. The

² All names have been changed.

second company – Beach Productions (BP) – was selected to replicate the findings of the first case, either literally or theoretically (Yin, 2003). That is, either the second case supports findings of the first case, or it provides different results but helps identify reasons why results differ, allowing for a better theoretical interpretation of both cases. Following this approach, BP was selected for its similarity to HP (Diesing, 1971). Like HP, BP is a medium-size TV production firm maintaining long-term relationships with particular television channels and creative artists, while maintaining a large pool of affiliated service providers.

Beside case selection, the unit of analysis is equally important (Yin, 2003). Rather than just analyzing the production firms, our unit of analysis are the project-based relationships these firms have maintained with particular clients and service providers. To understand how sustainability is generated in these relationships, we look at both ‘longer-term’ mechanisms and ‘micro’ processes. We thereby make use of multiple sources of evidence, in particular archival data and semi-structured interviews (see Table 2). This allows us to triangulate empirical findings and increase internal validity (Yin, 2003; Eisenhardt, 1989). Archival data also helped us to craft interview questions and assess the validity of interview statements (Yin, 2003).

Insert Table 2 here

To understand longer-term mechanisms involved in sustaining project-based relationships, we examine the history of project collaborations between producers, particular clients and service providers. To do so, we analyzed archival data of film projects as well as data from semi-structured interviews with producers, channels editors and service providers (see Table 2). As for archival data, we collected relevant information about all TV movie projects the companies HP (62 projects) and BP (73 projects) had carried out between 1997 and 2003, including film title, format, genre, production year, executive producer, editor, script writer(s), director, camera operator, cutter and the top three listed film actors. The data was taken primarily from publicly available online film

archives of the two production firms and an industry database (www.filmevona-z.de). 1997 was chosen as the starting year because HP started TV movie production in that year. To keep changing industry conditions ‘constant’, we picked the same starting year for BP. Since interviews were conducted in 2003/4, we collected film project data up to this year accordingly. Using industry film archives for collecting project data has been a common practice for studies in the film industry (see e.g. Soda et al., 2004; Sorenson & Waguespack, 2006). It helps generate project-actor affiliation matrices, which can be used to identify longer-term project-based relationships and teams (see e.g. Breiger, 1974; Wasserman & Faust, 1994; Delmestri et al., 2005). In particular, we analyze relationships between producers, client channels and key creative service providers (CSPs), i.e. directors, script writers and film actors, who have been identified as critical project partners for producers in the film business (Christopherson & Storper, 1989).

To capture micro processes of sustaining project-based relationships, we selected particular film projects as ‘embedded cases’ – *Tough Guy* (HP, 2003) and *Black Rose* (BP, 2003). Project selection was based on the criteria of timeliness and relevance. As for timeliness, both film projects were still being implemented when the decision was made to select these projects. This corresponds with Yin’s (2003) suggestion to focus on contemporary rather than past phenomena. The relevance of both film projects relates to their history and their potential impact on longer-term project-based relationships. The CEOs of both companies supported us in selecting these projects, for they saw them as interesting and strategically important for the longer-term development of relationships with particular clients and service providers. The analysis of these embedded cases is based primarily on interviews, but also supported by archival data (see above).

Altogether, we conducted 19 semi-structured interviews with producers, editors of TV channels, script writers, directors, and technical service providers (see Table 2). The focus of these interviews was on project-based relationships between the TV producers, TV channels and key CSPs – both at the level of particular projects and on a longer-term basis. All interview partners were involved in the development of the two selected projects. Interviews focused on the history of

project partnerships, the development of ideas for the selected projects, and the involvement of project partners in these projects. Follow-up interviews with the producers of HP after the end of the production of *Tough Guy* further contributed to our understanding of the impact of projects on longer-term project-based relationships. Interviews with producers and editors were scheduled for about 1 ½ hours each. Interviews with the mostly self-employed service providers were kept more flexible, accounting for the greater difficulties in getting hold of them. They lasted about 1 hour on average. To increase the reliability of findings, the interviews were transcribed verbatim, and discussed not only among authors, but with selected industry experts and firm representatives. The first author was also invited to the production set of one project which allowed him to sense the project atmosphere and engage in informal talks with participants (Bechky, 2006).

We start our inductive analysis by identifying longer-term project-based relationships between core teams of production firms, particular clients and service providers, based on archival project data and interview information. Then, we explore how core project teams have built up what we call collaborative paths and what properties these paths have. Finally, we identify certain connecting practices, based on two projects in particular, that have helped partners sustain collaborative paths across different contexts of collaboration.

CORE PROJECT TEAMS AND FLEXIBLE PARTNER POOLS

Prior research shows that TV production firms act as project entrepreneurs in the TV industry, by repeatedly initiating and organizing film projects for client TV channels. Building and maintaining longer-term client relationships therefore is a key concern for TV producers (Windeler & Sydow, 2001). Historically, TV channels produced their own fictional content. Over time, flexible specialization has led to the emergence of independent TV producers, such as HP and BP, who now develop fictional content for TV channels in collaboration with creative service providers (CSPs). Thereby, client channels may take a more or less creative role in co-developing this content (see also Prahalad & Ramaswamy, 2004; Grabher et al., 2008). HP and BP mainly serve two channels –

Channel A and B. HP's main client channel is Channel A. Between 1997 and 2003, HP produced 53 out of 62 TV movies for HP. BP serves both public Channels A and B. For Channel A, BP made 51 movies, for Channel B 19 movies. Both channels are public channels; that is, they are regulated by the state and financed by viewers' fees. Nevertheless, they are the market leaders in German television. Private channels, for which HP and BP have produced as well, but not nearly as much, finance themselves through advertising.

In contrast to their client relationships, HP's and BP's relationships with most CSPs, i.e. script writers, directors, and film actors, are much less permanent, sometimes even rather ad hoc. In fact, most CSPs, who are typically self-employed in the TV movie industry (e.g. Blair, 2001), were recruited for only one project within the time period in question. In total, HP recruited 58 writers, 38 directors and 59 top three listed film actors for 62 movies; BP hired 70 writers, 45 directors and 154 top three listed film actors for 73 movies. Interestingly, *some* CSPs were reselected repeatedly for projects. Together with particular clients and the production firm, they form what we call *core project teams* who co-develop projects on a regular basis. Their strategic importance derives from the fact that they develop collaborative capabilities and longer-term interdependencies within and across collaborative contexts.

In the case of HP, core project teams have formed between this production firm, Channel A and certain film actors. In particular, five film actors were recruited for ten or more movies between 1997 and 2003. Over time, HP has specialized in developing film projects for those actors whose characters appeal to viewers of its most important client channel – Channel A. In network terminology, HP thereby bridges a “structural hole” (Burt, 2004): Channel A depends on the continuous delivery of creative and popular content that is characterized in part by variety, in part by enduring features that are associated with the channel. By repeatedly employing certain popular film actors, the channel can build up and maintain a certain image and bind its viewers. HP has developed the ability to maintain close relationships with those film actors, and to develop products that utilize their creative potential. The CEO of HP explains:

”[...] Actors have a label-creating quality for a broadcaster. [...] TV channels, such as Channel A, have begun to realize that. [...] Hence, [...] they try to retain the actors for the channel.”

In a similar fashion, BP has formed core teams with Channel A and B on the one hand and certain novel writers on the other hand. Over time, BP has in particular specialized in developing film projects based on popular novels, which appeal to a certain age group of viewers who regularly watch Channel A and B. The channels, in turn, have benefited from the opportunity to have BP produce TV movies that particularly address the viewing preferences of some of their core viewers.. An executive producer of BP explains:

“Many books do not result in films, because having the idea is one thing, placing the film on TV is another. Therefore it can be very interesting for a book author to work again with a production firm that has the right contacts to a TV channel which is extremely oriented towards the audience age group of the story protagonists. This makes BP so much prepared for it.”

The stabilizing effect of multi-party interdependencies has been stressed by a number of network researchers (e.g. Gulati & Gargiulo, 1999; Provan, 1993; Gargiulo & Benassi, 2000). For example, Gargiulo and Benassi (2000) argue, in line with Coleman’s (1990) work on cohesive ties, that stable multi-party constellations ‘amplify the pressure to reciprocate past favors’ (p.185). Other studies further suggest that the stability of core teams in dynamic project industries is promoted by their embeddedness in so-called project networks – flexible network forms that are built up and coordinated strategically by project entrepreneurs (Starkey et al., 2000; Windeler & Sydow, 2001; Sydow & Staber, 2002; Manning, 2010). Project networks consist of *both* stable, frequently activated sets of ties – core project teams – and more flexible pools of potential project partners with similar skill sets. As project partners get selected from partner pools for particular projects, their creative potential gets enacted and utilized in particular ways, which, in turn, reproduces their potential to be reselected for similar future projects (see Figure 1). Partner pools help project entrepreneurs manage uncertainty in dynamic environments (Pfeffer & Salancik, 1978); they reduce dependency on particular partners, help generate creative variety in developing projects, and finally help sustain core project teams with particular clients and service providers. Figures 2 and 3 show how HP’s and BP’s core project teams connect to these pool structures.

Insert Figures 1, 2, 3 here

Whereas the role of network structures in sustaining project-based relationships has been well captured in prior research, we still lack understanding of how partner resources and capabilities are enacted and leveraged across changing collaborative contexts. In the following, we introduce and discuss the concept of collaborative paths, thereby taking a more processual perspective on the sustainability of project-based relationships in general and core project teams in particular.

THE CONSTITUTION OF COLLABORATIVE PATHS

In order to sustain and leverage project-based relationships over time, core project teams initiate and pursue what we call collaborative paths. These are sequences of projects that are connected through task and team properties, allowing core teams to exploit partner resources and collaborative capabilities within and across collaborative contexts. Next, we discuss the main properties and constituting features of collaborative paths, as well as forms and mechanisms of path change, by examining the history of HP's and BPs' core project-based relationships.

HP's long-term collaboration with Channel A and serial film actors demonstrates the basic constitution of collaborative paths. HP was founded in 1997 as a spin-off of a larger production firm involved with the development of a TV movie series called *Police* for Channel A. After spinning off, HP managed to take over part of the series, marking the beginning of HP's collaborative path with Channel A and serial protagonists. The main connection between *Police* movies have been the genre and the main cast – the *Police* officers; otherwise, episodes may have different plots, employ distinct camera techniques, and take place in distinct settings. Accordingly, the composition of teams, including director and script writers, typically changes project by project. Altogether, HP hired 29 script writers, 17 directors and 9 actors in main roles for 29 *Police* episodes between 1997 and 2003 (see Figure 4). Some writers and directors were recruited

repeatedly for different *Police* episodes based on their engagement in prior projects (see in more detail below). They form the core pool of creative partners HP and Channel A regularly draw from when building project teams. In order to form this pool, HP and Channel A needed to test *new* partners for particular projects over time, thereby *deviating* from previous projects. Deviation in partner selection from project to project helped partners build up network resources that could be exploited in the longer term – both within and beyond the context of this particular series. Following up on previous projects, thereby slightly deviating from task and team features of prior projects, therefore is a basic constituting mechanism of collaborative paths.

Insert Figures 4, 5 around here

Over time, the range of collaborative paths may expand, that is the variety of projects for which ‘economies of repetition and recombination’ (Grabher, 2002; Brady & Davies, 2004) can be generated. When the first episodes of *Police* became a major success, HP and Channel A jointly decided to launch a second series – *Police II* – which started in late 1997, featuring new main protagonists acting in a slightly different setting. For this series, HP and Channel A were able, on the one hand, to utilize their joint capability of producing a detective series. In particular, similar to *Police I*, they formed serial content development teams pairing a creative producer and a channel editor, which also illustrates how TV content is co-developed by producers and their clients (see in general Grabher et al., 2008). On the other hand, partners were able to employ network resources, in particular 1 director and 6 script writers from *Police I*, while also expanding their resource pool (see Figure 4). In economic terms, *Police II* helped HP and Channel A generate increasing returns by exploiting established project resources and capabilities (Arthur, 1994; Beckman et al, 2004; Brady & Davies, 2004). This very ability further rests on the principle of what Grabher (2002) calls ‘economies of recombination’, i.e. economies generated from recombining established and new creative resources (see in general Kogut & Zander, 1992).

The potential to expand collaborative paths is paralleled by the pressure to exploit existing project capabilities and network resources which may result in path dependencies. In HP's case, the very success of the company in producing detective movies with Channel A repeatedly triggered failures in exploring new, unrelated project capabilities.

“We have become, to a large extent, a victim of our own success in [serial] detective movies. We have actually produced and marketed a lot in other sectors, but the greatest successes have always been in [serial] detective movies. [...] We can't get rid of this.” (CEO of HP)

One major reason is what Ghemawat (1991) calls the ‘lock-out’ effect (see also Gulati et al., 2000). Projects that are not connected to previous successful ones, by sharing task and team features, are likely to be categorized as illegitimate. For example, when HP's CEO tried to sell projects to new client channels, based on new plots, in a new genre, with a new cast etc., he was very often rejected because of his established reputation as a detective series producer. This categorization effect in selection practices has also been called ‘typecasting’ (Zuckerman et al., 2003):

“I was rejected several times [with the statement]: ‘What you suggested to us was very interesting, you really observed what your colleagues are doing, but you can only do detective films, can't you?’” (CEO of HP)

While hindering unrelated projects, paths can be ‘stretched’ beyond their immediate exploitative potential. ‘Stretching’ denotes a rather radical deviation, while maintaining a loose connection to previous projects. O'Mahony and Bechky (2006) use the term ‘stretchwork’ to describe how professionals apply their skills throughout their careers across changing contexts. In our case, stretching allows partners to explore new project contexts for utilizing existing project resources and capabilities, in order to expand but also to potentially break from established paths.

In HP's case, stretching happened through the initiation of *Police* ‘spin-off’ projects. HP and Channel A decided in 1998 to experiment with a single rather than serial TV movie featuring one *Police II* protagonist. This film became a major success and demonstrated the ability of HP and Channel A to use a serial actor in a new context – a single TV drama. Based on this success, HP and Channel A decided to produce further spin-offs tailored for serial actors. Overall, six spin-offs for protagonists of *Police I and II* were produced between 1997 and 2003 (see Figure 4).

“You should not use up an actor’s potential in a series. [...] So we agreed with Channel A that for every main protagonist we need to develop single TV movies. Not every year, but regularly, and possibly with the same channel.” (CEO of HP)

Unlike other single movies, these spin-offs connected with HP’s core serial productions (see Figure 4), since they were developed around established core teams. Thereby, core team members – HP, Channel A and serial actors – stretched their joint project capability beyond the serial context. As a result, they were – at least temporarily – able to further expand their collaborative path.

This example also shows that, as collaborative paths expand, the way projects are connected along collaborative paths also changes. When HP primarily produced *Police* episodes, particular projects were tightly connected, sharing a bundle of task and team features, e.g. format, genre, capital spent, and cast. By contrast, connections between the *Police* series and occasional spin-offs have been rather loose and partial. As we see below, the tightness of connections between projects at a particular time has important implications for path maintenance and change.

Unlike HP, BP has developed a range of TV movies in particular for public television most of which have been rather loosely connected, as they differ quite substantially in terms of genre, cast, and format (e.g. event, regular single TV movie, serial movie). They are connected merely by the fact that they are based on successful novels. BP has thereby maintained core project teams with certain TV channel editors and successful novel writers (see Figure 3). Initially, BP produced primarily single novel-based TV movies for both Channel A and B. For these movies, which ranged from love stories to dramas and historical movies etc., BP employed a large number of script writers, directors and main actors over time. Between 1997 and 2003, BP produced 40 single movies for Channel A and B, using 40 script writers, 26 directors, and 91 actors in main roles (see Figure 5). As a result, BP built up a large pool of creative artists in its project network.

Despite BP's established capability of producing these novel-based movies, maintaining this collaborative path with public television turned out to be quite a challenge. Unlike HP, who managed to create series of projects re-utilizing a bundle of resources and generating economies of repetition to some degree, BP's ability to repeatedly exploit network resources, e.g. directors and

script writers, across rather loosely connected single movie projects was more limited. BP's CEO therefore decided to establish small series of TV movies for Channels A and B to better exploit collaborative capabilities and network resources.

In 1998, BP and Channel A co-developed the serial label *Beautiful Women* focusing on stories around female protagonists. Between 1998 and 2003, BP and Channel A jointly produced 22 TV movies under this label. Thereby, BP was able to make abundant use of creative network resources: Between 1998 and 2002, 8 writers, 7 directors and 20 actors were hired both for *Beautiful Women* episodes and BP movies outside this series (see Figure 5):

“This is what has made BP so successful: the fact that the CEO was able to develop series and labels together with Channel A. [...] BP was the first company to launch such a serial label [*Beautiful Women*] with Channel A. ‘Beautiful Women’ started when there was so much published on the ‘female’ [book] market. [...] The first franchise was successful, so a sequel was launched. [...] This has definitely led to an expansion of BP.” (BP executive producer)

In parallel, BP launched another series for Channel B based on novels by the best-selling author *Kathleen Welch*. Over time, BP and its clients developed the capability to produce not only novel-based movies, but serial TV productions. Unlike HP's *Police* series, however, both the *Beautiful Women* and the *Kathleen Welch* series connect serial movies rather loosely. For example, BP would typically employ a new cast for each serial movie. Similarities include a common theme, the targeted time slot and audience, and the format. The continuation of these series, therefore, is less dependent on particular CSPs than the *Police* series. On the contrary, BP has drawn from the large pool of CSPs which it has developed over time through single movies, and which has allowed BP – more than HP – to expand its collaborative path and to repeatedly initiate a wide range of TV movies for public television both under and outside serial labels (see Figure 5).

Importantly, despite its wide range, BP's collaborative path has also resulted in path dependencies. In particular, BP – similar to HP – has not managed to successfully develop business relationships with private TV channels:

“This is not something you can do just like that. [...] BP is doing what it is strong in, where its core is defined, and parallel to that you need to innovate. [...] 60% of our time is used up for producing films for public TV, which is a lot of work, and the rest is invested in developing new formats, new content.” (BP executive producer)

However, as we show next, loose rather than tight connections between projects along collaborative paths ease the initiation of deviating projects and hence increase the potential for path expansion and renewal. To better understand processes of path maintenance and change, we now discuss the initiation of particular projects along the collaborative paths of HP and BP with public television. We argue that collaborative paths, though resulting partially from unintended actions (Sydow et al., 2009), do not unfold, persist or change automatically, but only through the use of 'connecting practices' that core teams apply to relate projects to each other over time.

THE ROLE OF CONNECTING PRACTICES IN MAINTAINING AND CHANGING COLLABORATIVE PATHS

Our findings suggest that project partners apply 'connecting practices' to initiate and pursue collaborative paths. Connecting practices are recurrent activities that project partners engage in to link team and task properties of particular projects to past and potential future collaborations. Connecting practices promote the pursuit of collaborative paths across project contexts and times of latency, yet they are also constrained by properties of established paths. Taking the example of two TV movie projects – *Tough Guy* and *Black Rose* – produced by HP and BP respectively, we discuss key connecting practices and their effectiveness in maintaining and changing collaborative paths, along two key project dimensions: teams and tasks (Lundin & Söderholm, 1995; Manning, 2008): Team-related connecting practices establish linkages between team properties of project collaborations; task-related practices focus on the task property.

Connecting Team Properties

TV project teams typically include the producer; the TV channel editor; creative and technical service providers. As indicated above, some team members may form core project teams that repeatedly collaborate in different projects, thereby pursuing collaborative paths. To do so, they establish linkages between team properties of collaborative projects.

One basic connecting practice is the repeated enactment of the core project team itself. Projects along collaborative paths involve the commitment of core team members to developing and implementing projects that follow up on previous successful collaborations. This commitment may both facilitate and constrain project development. It is facilitating as it establishes a ‘going concern’ among interdependent partners, which can direct attention through often highly contingent development processes (Lundin & Söderholm, 1995). It is also constraining as the imperative to leverage established resources may exclude radically deviant project ideas.

The HP project *Tough Guy* is a good example of this dynamic. It was developed as a single movie in 2003 by the core project team of HP, Channel A and Joe Kramer – a popular serial actor. It was initiated right after *Honor and Glory* – the first *Police I* spin-off movie with serial actor Joe Kramer. *Tough Guy* was expected to follow up on the success of the first spin-off, featuring again the serial actor in a non-serial role. Repeated success would help establish a series of spin-offs and also attract new viewers to the *Police* series, thereby strengthening the collaborative path with Channel A. The commitment to do another Joe Kramer spin-off directed project development, yet it also excluded other alternative projects. Channel A’s editor remembers:

“[...] I believe [if the development of *Tough Guy* had failed] we would have implemented other projects with other production firms. Together with HP, we would have *continued working on this project* together with Joe.”

Similarly, the BP project *Black Rose* was initiated in 2003 by an existing core project team – BP, Channel B and the writer Kathleen Welch, whose novels had been the basis for previous BP movies. Long before the movie was shot, the writer signalled to Channel B and BP her interest in this movie and, hence, in the continuation of movie productions based on her novels:

“*Black Rose* is not the first *Kathleen Welch* production for our channel. [...] The interest in making follow-up productions, after *Wind of Change* was mutually shared. In fact, Kathleen Welch had told us about *Black Rose* even before her book was finished, and, therefore, an interest in making the film [with BP] arose very early.” (Editor of Channel B)

“BP has been implementing works by Kathleen Welch for TV for many years. As a result, a certain *continuity* has developed between BP, the stories and the book author Kathleen Welch.” (Executive Producer of BP)

Once the core project team is committed to a particular project, another team-related connecting practice becomes relevant: the recruitment of affiliated creative partners – either from previous projects or the larger network pool. Important here is the familiarity of partners with the core project team, and with typical features of projects developed by the core team. This helps exploit and reproduce joint capabilities and creative network resources of the core project team.

In the HP case, the script writer and director were initially recruited from the predecessor project *Honor and Glory*, following the industry rule ‘Never change a winning team!’:

“The editor of *Honor and Glory* had the idea in 2000 to make a similar film, and most preferably again with Joe Kramer. [...] He came to me, and I brainstormed with the director of *Honor and Glory*. We met with HP, and we decided to ask the script writer of *Honor and Glory* to develop a new script around Joe Kramer.” (Editor Channel A)

The directive to produce ‘another project around Joe’ helped direct attention and legitimize the recruitment of CSPs from the predecessor movie. It created a team-based link between the two movies, carrying a certain collaborative experience; however, as we discuss later on, creating a task link to facilitate idea generation and implementation proved more difficult for HP.

Unlike HP, BP recruited most CSPs from its larger network pool for the movie *Black Rose*. The script writer, for example, got his training from Channel B and had experience in writing novel-based scripts, including novels by Kathleen Welch. As such, he was skilled in translating an existing story rather than creating a ‘new’ script, which made him suitable for this particular film. With his successful participation, this script writer would strengthen his position in the pool of affiliated writers for this particular series as well as similar TV movie projects for BP:

“I just find it a bit easier, because you got a central theme, you know how the author wants to have it done; of course it always depends on the novel. [...] I think if you believe what you write is something special, something big, literature, then novel-based script writing is like hell.” (Script writer, BP)

Next, we discuss task-related connecting practices which in conjunction with team-related practices help link up particular projects with ongoing collaborative paths. Also we show how the nature of collaborative paths facilitates and constrains the engagement in certain connecting practices, and how, in turn, these practices may promote changes to existing paths.

Connecting Task Properties

Each TV movie project is characterized by some level of uniqueness, e.g. in terms of story, format, genre, or other features. Exploiting established project capabilities in future projects is therefore a managerial challenge. Our findings suggest that *labelling* is a key practice project partners engage in to communicate similarities between more or less different projects. Labels have been discussed as important means of context framing (Ashforth & Humphrey, 1997). Framing means encoding projects in a way to simplify and condense the interpretation of otherwise complex undertakings and to contextualize activities in consistent ways (Goffman, 1974). Project labels signify certain project elements in accordance with other projects and activate sets of cognitions about these elements. Both BP and HP framed their projects by the use of particular labels, characterizing established paths, and, to some degree, paving the way for path change.

The HP project *Tough Guy* was mainly given the label *Joe Kramer film*. *Joe Kramer* stood for HP's and Channel A's main collaborative capability – producing films around serial actors. The label was expected to connect the project not only with its predecessor spin-off *Honor and Glory*, but also with the series *Police* in which Joe Kramer plays a key role. Using this label both enabled and constrained project development. The script writer remembers:

“It was not like: ‘We have an idea and we’ll see which actors fit in’. No, from the beginning I was told we are making a film for Joe Kramer. For me as a script writer this was a precise instruction, a part of the assignment.”

As the project progressed, this label became a serious burden: the script writer of the predecessor project failed to convince HP and Channel A of his new script. Part of the difficulty was the very expectation of developing another film tailored for Joe Kramer, yet outside the role he is most popular in – the police officer. Whereas creative processes are always to some extent contingent and hard to predict, the failure to create another *Joe Kramer* spin-off indicates the actor's limited resource potential – or: ‘resource rigidity’ (Gilbert, 2005) – outside the series. In the end, the movie performed below expectations. As a result, the expansion of BP's collaborative path with Channel

A might be short-lived, and the partners may refocus on developing serial content. This example indicates that major deviations from established collaborative paths may be difficult to sustain if the existing path – like in the case of BP and Channel A – is rather narrow and based on rather tight task and team connections – here: genre, format and actor profiles.

By contrast, BP's collaborative path with public channels has been for a long time rather broad and connections between particular projects rather loose. This characteristic is reflected in BP's practice of framing particular projects, such as *Black Rose*. Rather than associating a project with a single label combining task and team features, the BP project was associated with *multiple* labels, connecting it to multiple more or less related previous projects and thereby combining more or less established project capabilities. Labels include the genre (novel-based movie), the author (Kathleen Welch) and the format (event movie). The executive producer explains:

“*Black Rose* totally connects to the tradition of making films based on best-selling literature [Label 1] and very much fits the profile of BP. [...] There are certain novels which are used for these films. There have been films based on Kathleen Welch [Label 2] before, and there will be ones after that. [...] It is also an event film [Label 3]. There are some experiences with events for Channel B. [...].”

More than HP, BP has relied on economies of recombination rather than economies of repetition in sustaining its rather broad collaborative path with public TV. Exploiting established capabilities and network resources has been challenging, since these connections do not 'exist' by default. Rather, they have to be enacted and combined every time a new project is launched. However, the use of multiple labels to frame a project also embodies a potential for path expansion and renewal, as it allows partners to gradually establish new project features as part of existing collaborative paths. In the case of BP, the format ‘event movie’ – typically a multi-part movie production – was only used occasionally before *Black Rose* was produced. Through the enactment of this feature for this movie, it may gradually become a more established feature – and label – of potential future productions. Thereby, BP may not only further expand its portfolio, but also lessen dependency on novel-based productions in case they become more difficult to sell in the future.

DISCUSSION AND LIMITATIONS

This paper has explored how project entrepreneurs sustain and leverage project-based relationships with clients and service providers in volatile project businesses over time. Based on the case of TV production firms and their project-based relationships, we examined how core teams of producers, client channel editors and creative service providers pursue 'collaborative paths' that help partners exploit and explore project-related resources and capabilities across project contexts over time. Next, we identify basic properties and key constituting mechanisms of these collaborative paths, as well as the role of 'connecting practices' in maintaining and changing these paths. Following that discussion, we identify implications for future research as well as limitations of this study.

Insert Table 3, Figure 6 here

As for *basic properties*, we defined collaborative paths as sequences of collaborative projects that are partially unique, partially connected by task and team features (see Table 3). They are pursued by core project teams who repeatedly collaborate in different projects. In our cases, these teams included the TV production firm, major client TV channels, and key creative service providers – novel authors in one case (BP), and serial actors in the other (HP). Collaborative paths facilitate projects that allow partners to leverage partner resources and collaborative capabilities related to recurrent task and team properties. However, due to the pressure to exploit established resources and capabilities, paths also hinder – or ‘lock out’ – projects that show little or no task or team connections with previous projects (see Table 3, Figure 6).

We also showed that collaborative paths may vary by range; that is, by the variety or scope of collaborative projects along the team and task dimension for which established partner resources and collaborative capabilities can be re-utilized. Narrow paths are characterized by rather tight connections between projects, meaning that projects typically share a bundle of team and task features. The pursuit of such paths is primarily based on 'economies of repetition' (Grabher, 2002;

Davies & Brady, 2004). HP's collaborative path with Channel A and serial actors is an example of this. By contrast, collaborative paths with a broad range of projects are characterized by rather loose connections between projects, i.e. any two projects typically share only a few task and team features. Maintaining such paths primarily generates 'economies of recombination' (Grabher, 2002). Our case example was BP's collaborative path with public television and novel authors.

We further identified two *basic constituting mechanisms* of collaborative paths. On the one hand, paths emerge from follow-up projects that share similarities with, yet also deviate from previous projects, and thereby reutilize and expand project-related resources and capabilities. For example, BP developed a range of novel-based movies for public TV using different formats, e.g. single movie, event film, serial production, which became templates for future collaborations. On the other hand, collaborative paths seem to co-evolve with project networks in terms of longer-term sets of both stable and more flexible project-based relationships (Windeler & Sydow, 2001; Manning, 2005, 2010). Flexible partner pools allow core project teams to repeatedly develop joint projects using both 'old' and 'new' partners that can be reselected for future collaborations, while reducing dependency on any particular partner.

Our analysis also reveals *forms of path change*, including expansion and renewal (see Table 3). Collaborative paths are – despite significant rigidities – inherently dynamic. The ability to utilize and 'stretch' existing resources and capabilities in novel project contexts embodies the potential for *path expansion*. This means that the range of projects exploiting established partner resources and collaborative capabilities may increase, thus allowing partners to diversify 'project portfolios' (De Reyck et al., 2005). For example, HP's single spin-off movies with serial actors allowed HP to expand its collaborative path with Channel A beyond serial productions. However, lacking the ability to re-utilize new partner resources and capabilities in a sustainable way may decrease the range of collaborative paths again, as we have shown in the case of HP's limited ability to reutilize a serial actor in non-serial roles. The notion of *path renewal* refers to the potential of breaking from established dominant practices by further developing certain task and

team features rather than others. In the case of BP, for example, we argued that the increasing use of event film formats to implement novels may nurture a capability that can be utilized beyond the context of novel-based movies. We further showed that rather broad paths featuring loosely connected projects facilitate path expansion and renewal, whereas narrow paths with tight connections rather facilitate the continuation of established paths.

We further investigated the role of *connecting practices* in maintaining and changing collaborative paths (see Table 3). Connecting practices denote regularized activities project partners engage in to more or less intentionally link task and team properties of past, present and potential future projects. Connecting practices are guided by the objective to exploit project-based resources and capabilities, and to thereby sustain and leverage project-based relationships. Team-related connecting practices in particular include the mobilization of core project teams and affiliated partners from network pools. For example the industry rule ‘Never change a winning team’ builds on the principle of repeating prior team success (Sorenson & Waguespack, 2006; Schwab & Miner, 2008). Task-related connecting practices involve practices of framing and labelling task features of present projects in accordance with past projects. Single labels to characterize a movie, such as *Joe Kramer* film in the case of HP, are used to convey a bundle of related expectations, whereas the use of multiple labels, e.g. *Kathleen Welch* film, novel-based film and event film in the case of BP, helps (re-)combine and exploit different project capabilities.

Connecting practices support the constitution, maintenance, expansion and renewal of collaborative paths by embedding projects into sequences of related projects. Thereby, they help bridge latent time between projects, and connect novel projects to project traditions. For the former, connecting practices help (re-) activate resources and capabilities that might have been latent or unused for a long time period. For example, BP projects based on novels by *Kathleen Welch* are spread across time and do not follow each other immediately. However, the unifying label *Kathleen Welch* helps activate even projects in the distant past as relevant templates or orientations for present projects. The ability to associate novel, partially unique projects with familiar features from

– more or less related – past projects through connecting practices was again demonstrated by the BP project *Black Rose* which was communicated as a combination of ‘project traditions’, e.g. novel-based film and an event movie. Yet, the effective application of connecting practices is also facilitated and constrained by characteristics of established paths (see Figure 6), in particular the way and extent to which previous projects are interconnected. The cases indicate that narrow collaborative paths with tight connections between projects ease the initiation of related projects through single, unifying labels, thereby potentially exploiting economies of repetition. Broader collaborative paths promote (and require) the use of multiple labels relating to different, loosely connected past collaborations, thereby potentially generating economies of recombination. The case of BP further indicates that the use and combination of multiple labels may promote path expansion and renewal. However, further research is needed to fully understand these dynamics.

To promote ‘analytical generalization’ (Yin, 2003), we invite future studies to further examine the dynamics of collaborative paths and connecting practices across project businesses. We expect that developing and leveraging project-based capabilities and business relationships under high uncertainty are managerial challenges in most project businesses (see e.g. Davies & Brady, 2000; Grabher, 2002, 2004; Lampel & Shamsie, 2003). In research, for example, longer-term research partners often face the challenge of applying for follow-up project funding under changing funding conditions (Powell et al., 2005; Manning, 2010). To collaborate continuously, project coordinators need to relate past to present project objectives and partners’ expertise to satisfy funding criteria. In construction, contractors are interested in sustaining project-based relationships with particular sub-contractors, architects and project management consultants (Eccles, 1981; Berggren et al., 2001). Although construction is often described as a more routine-based project business (see e.g. Shenhar, 2001), the very ability of partners to re-utilize their collaborative expertise, e.g. in contract management, seems to rely on their ability to enact past project experiences with a wide range of clients. In the development of complex industrial products and systems, system integrators typically collaborate repeatedly with specialized component

suppliers (Hobday, 2000). Client projects are often complex and customized, and entail longer-term service relationships and follow-up projects on the same or related systems (Gann & Salter, 2000; Geyer & Davies, 2000). Over time, clients, integrators and sub-suppliers may therefore develop collaborative paths connecting both singular projects and routine-based service collaborations. The constructs collaborative paths and connecting practices may therefore help analyze project-based relationships in these and other project industries.

Our findings may also stimulate future research based on a more processual and relational understanding of *project-based organizing and learning* (Hobday, 2000; Prencipe & Tell, 2001; Brady & Davies, 2004; Whitley, 2006). First of all, our findings urge for a shift of focus from project-based firms (PBF) to project-based relationships. For example, rather than relating project properties and portfolios solely to characteristics of PBFs (Whitley, 2006), we find that the range of projects undertaken by PBFs further relates to properties of collaborative paths with clients and suppliers. Similarly, rather than just focusing on knowledge management and learning in PBFs (Prencipe & Tell, 2001; Brady & Davies, 2004), we need to understand how inter-organizational project teams engage in learning processes supporting project-based relationships. For example, reflecting the trend of co-development of creative projects by production firms and clients (Grabher et al., 2008), our findings point to the importance of complementary partner resources and capabilities developed through longer-term project-based relationships. In addition, we urge for a better understanding of how project-based capabilities may also promote path dependencies and eventually turn into ‘core rigidities’ (Leonard-Barton, 1992), which have been largely neglected by project scholars. Finally, our findings confirm the importance of project networks as organizational forms in project businesses besides PBFs (Windeler & Sydow, 2001; Manning, 2010). We show that collaborative paths of core project teams co-evolve with network pools of potential project partners that help exploit and develop project capabilities and future opportunities.

Our findings may also inspire a more context-sensitive and processual understanding of *ties and network relationships* in general (Kilduff et al., 2006) and in project businesses in particular.

Our findings suggest that the continuation of relationships can be dependent on the ability of partners to collaborate across collaborative contexts. We therefore suggest rethinking the common notion of ‘repeated collaboration’ or ‘repeated tie’ (Uzzi, 1997; Gulati, 1995), since in dynamic industries such as project businesses, collaborations are never ‘repeated’ in the literal sense. Only the knowledgeable effort taken by network partners in recognizing similarities with previous contexts/contents may promote ‘repeated’ collaboration and help exploit experience and relational trust. Every tie therefore tells a story (White, 1992) connecting different episodes of collaboration. In addition, we point to the importance of latency and the more or less realized collaborative potential of ties (see also Kilduff et al., 2006; Starkey et al., 2000). Our processual path perspective therefore allows, on the one hand, to reveal how collaborative domains emerge and change over time, thereby unfolding an enabling and constraining potential for collaboration. On the other hand, it helps unpack the notion of ‘ties’ as sequences of discrete episodes of collaboration and bridged periods of latency. In this regard, the notion of path dependencies in tie and network formation (e.g. Maurer & Ebers, 2006; Soda et al., 2004) should be reconceptualised in more dynamic terms. While we do find that collaborative paths may be driven by increasing returns (Arthur, 1989), triggering dependencies and lock-out effects (Ghemawat, 1991), we also recognize the potential for on-path change, not least promoted by the reflected effort of participants to re-construct and re-connect the history, present and potential future of collaborations (Sydow et al., 2009).

This study also has some notable limitations which need to be addressed in future studies. First of all, as indicated above, future studies need to go beyond the context of film or creative industries to promote analytical generalization of the concepts presented here. Secondly, future studies could pay more attention to the influences of the organizational field (DiMaggio & Powell, 1983) on project-based relationships and collaborative paths. For example, comparative studies indicate that economic conditions, e.g. buying power of clients, and institutional conditions, e.g. labor laws or industry norms, may influence the emergence of collaborative practices (e.g. Djelic & Ainamo, 1999; Whitley, 2006). We, therefore, invite multi-level studies to analyze collaborative

paths and their co-evolution with economic, institutional and technological conditions (Koza & Lewin, 1998; Hirsch & Gillespie, 2001; Jones, 2001; Burgelman, 2002). Such studies may reveal, for example, how particular industries or even countries have developed what Swan et al. (2007) call relational capabilities through collaborative paths between research organizations, industry participants and other players (see also Powell et al., 2005; Murmann, 2003). Also, the concept of collaborative path may be useful to better understand micro-dynamics of project development and innovation (see, e.g. Pitsis et al., 2003; Engwall & Westling, 2004; Larson & Wikström, 2007). To utilize the concepts of collaborative paths and connecting practices in different empirical settings, however, they need to be further operationalized, not just in terms of their basic properties, but also regarding their drivers of emergence and change.

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TABLES & FIGURES

Mechanism affecting the sustainability of project-based relationships	Tie and network research in general (examples)	Studies in project businesses (examples)
<i>Stabilizing mechanisms</i>		
Collaborative experience and prior successful partnerships: promotes trust, the development of capabilities, routines, norms, and loyalty between partners; reduces search costs	Gulati (1995), Uzzi (1997); Powell (1990); Hirschman (1970); Larson (1992); Morgan & Hunt (1994);	Sorenson & Waguespack (2006); Larson & Wikström (2007); Schwab & Miner (2008); Manning (2010)
Exploitation potential and path dependencies: Repeat partner selection helps exploit resources and capabilities, generate ‘economies of repetition and recombination’ and reduces search and transaction costs, but also leads to lock-in situations	Beckman et al. (2004); Koza & Lewin (1998); Lavie & Rosenkopf (2006); March (1991)	Davies & Brady (2000), Brady & Davies (2004), Grabher (2002); Soda et al. (2004); Sorenson & Waguespack (2006)
Team interdependencies: Embeddedness of project-based relationships in interdependent team structures affects the ways in which any one relationship can be sustained	Pfeffer & Salancik (1978); Gulati & Gargiulo (1999); Granovetter (1985, 1992); Uzzi (1997), Gulati (1995); Gargiulo & Benassi (2000)	Ferriani et al. (2005); Soda et al. (2004); Perretti & Negro (2006); Manning (2005); Delmestri et al. (2005)
<i>Contingencies and challenges</i>		
Interruption/latency of project-based relationships: Uncertainty of follow-up collaboration may affect longer-term investments and the potential to exploit on successful project experiences	Limited; but e.g. Heide (1994) and other marketing scholars on maintaining client relationships between transactions	Limited, mostly conceptual: Starkey et al. (2000); Hadjikhani (1996); Cova & Salle (2000)
Novelty/uniqueness of particular projects: Unique and novel task and team requirements affect the potential of generating ‘economies of repetition and recombination’ in project-based relationships	No particular	Only implicitly studied e.g. by e.g. Burt (2004); Uzzi & Spiro (2005); Brady & Davies (2004), Grabher (2002)

Table 1: Mechanisms and contingencies affecting the sustainability of project-based relationships

Case	Data Collection	Time
Hood Productions (HP) and Project Network	Attributes (title, format, genre, production year) and staff (producer, editor, script writers, director, actors, camera operators) of 62 TV movies [Source: Homepage of HP, database www.filmevona-z.de]	1997-2003
	10 interviews (about 1 to 1 ½ hours each) with key network and project partners (<i>Tough Guy</i>): CEO, executive producer, channel program editor, director, writer, camera operator, cutter, production assistant	2003-2004
Beach Productions (BP) and Project Network	Attributes (title, format, genre, production year) and staff (producer, editor, script writers, director, actors, camera operators) of 73 TV movies [Source: Homepage of BP, database www.filmevona-z.de]	1997-2003
	9 interviews (about 1 to 1 ½ hours each) with key network and project partners (<i>Black Rose</i>): film producer and creative producer, channel editor, director, writer, camera operator, cutter, two production assistants	2003-2004

Table 2: Data Collected for the Two Case Studies

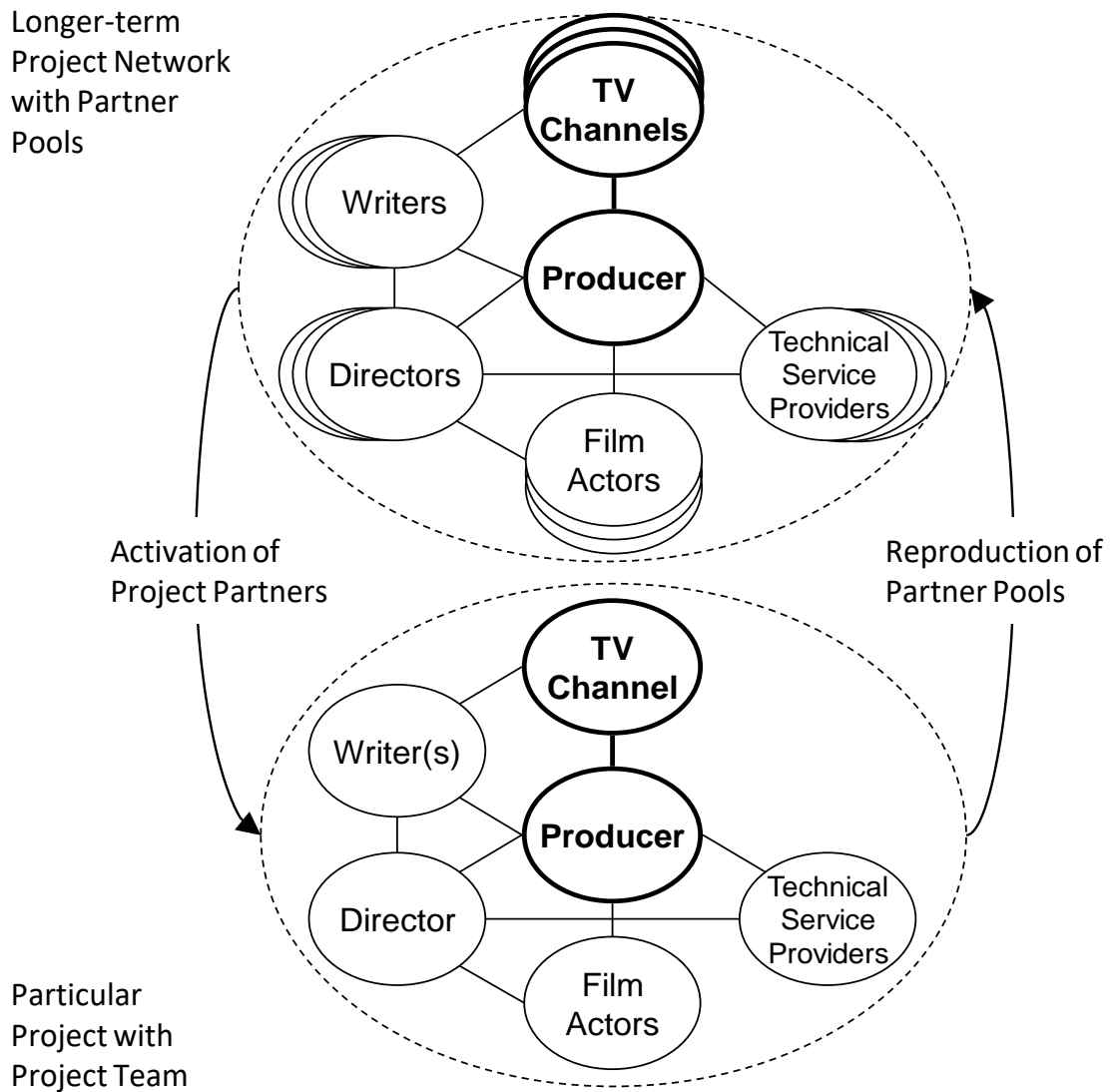


Figure 1: Prototypical Project Network in the TV Movie Industry

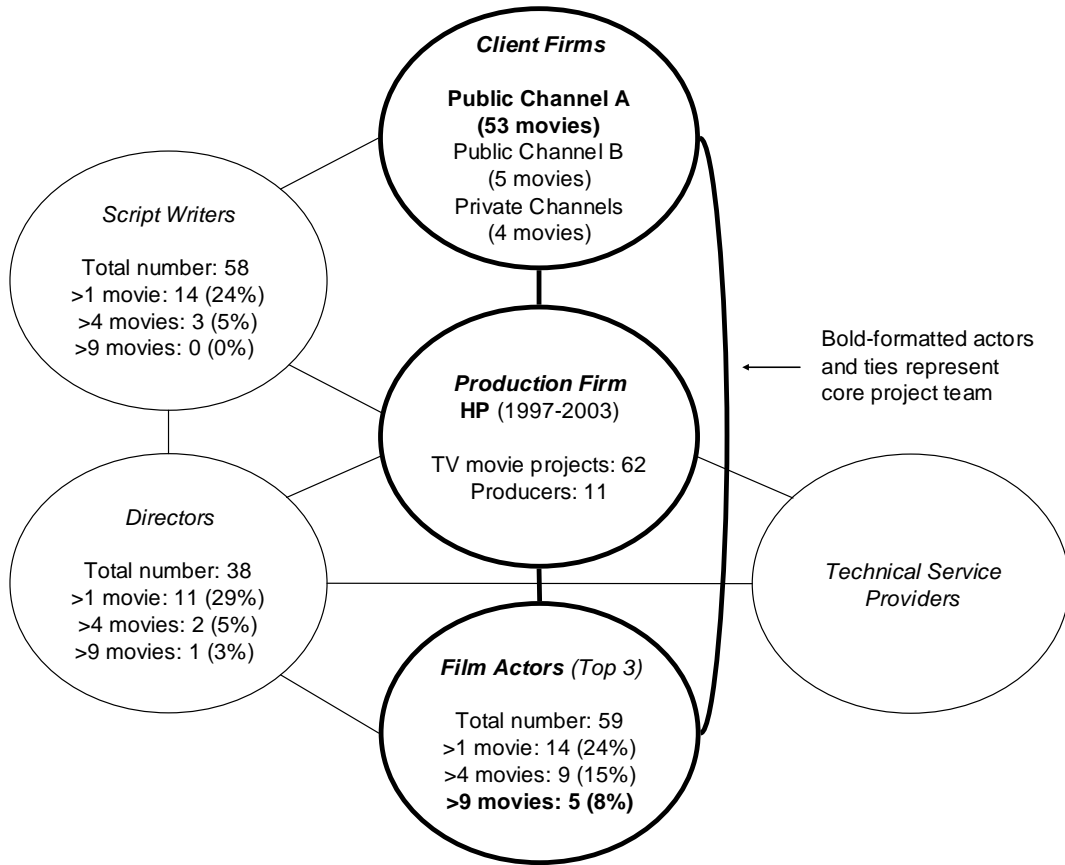


Figure 2: The Project Network of HP

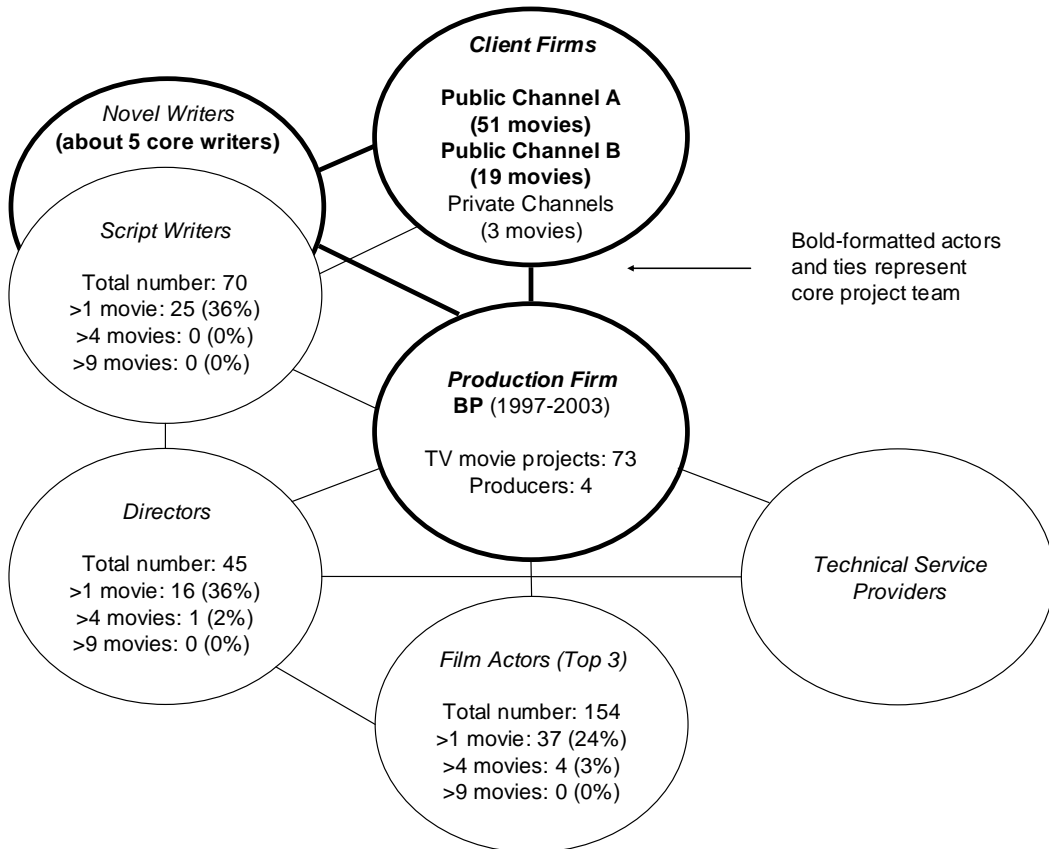


Figure 3: The Project Network of BP

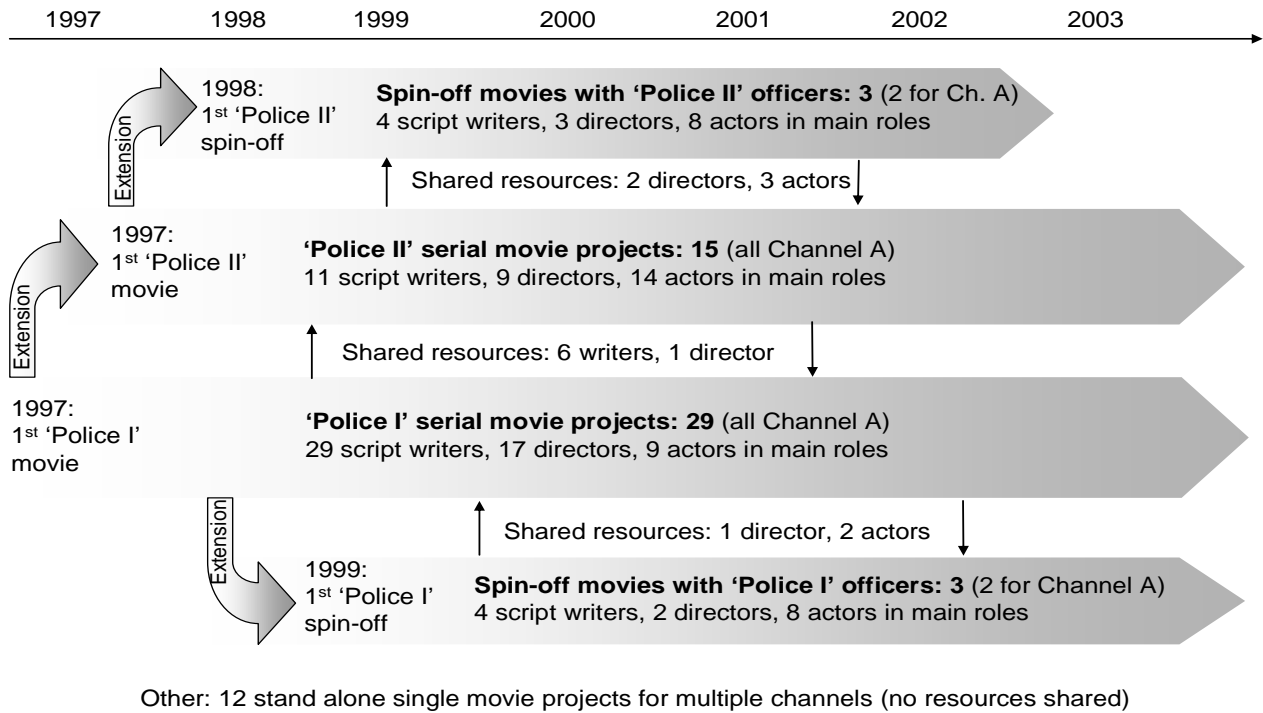


Figure 4: The History of HP's Collaborative Path with Channel A & Serial Actors

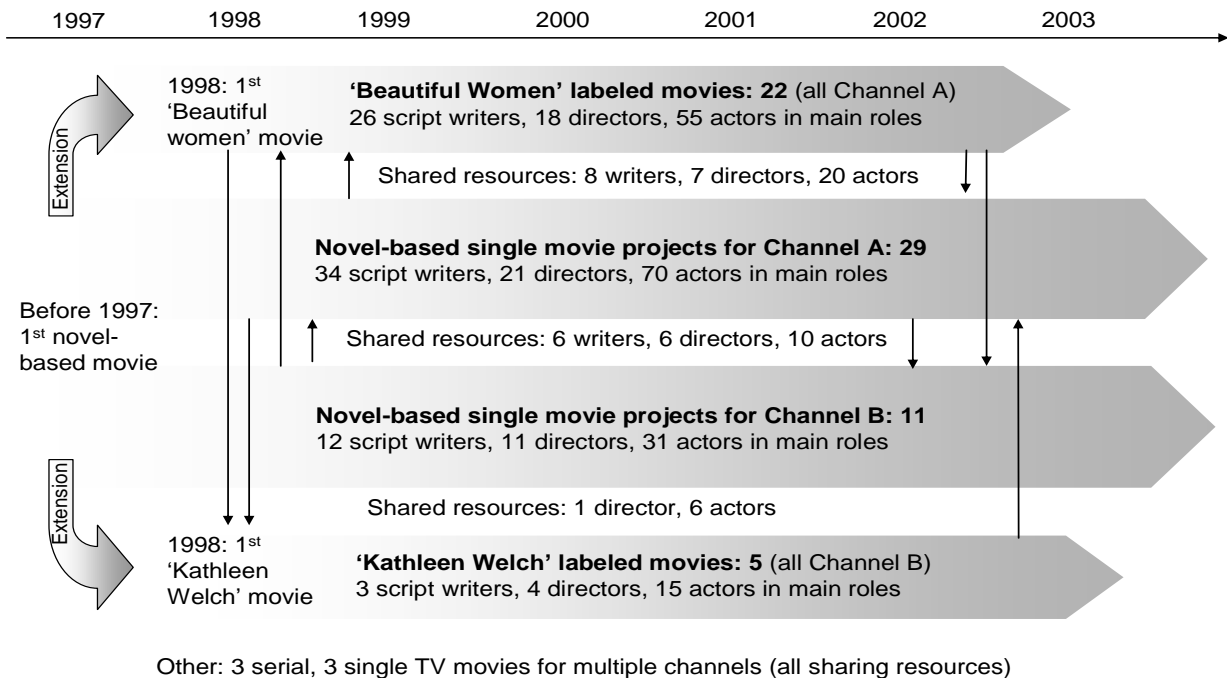


Figure 5: The History of BP's Collaborative Path with Channel A, B & Novel Writers

Dimension	Collaborative Paths	Connecting Practices
Basic features	Sequences of projects with related task and team features generating economies of repetition and recombination, and exploiting resources and capabilities of core project teams	Continued enactment of core project teams along with affiliated network partners / Embedding of past, present and future projects into project sequences by creating team and task links between projects
Path dependencies	Exploitative pressure of collaborative paths facilitating initiation of related, but hindering the initiation of unrelated projects	Tendency to initiate and frame new projects along team and task features they share with past projects through single or multiple project labels
Range of paths	<p><i>Narrow range:</i> Projects are tightly connected; pursuit of path generates and depends on economies of repetition → eases initiation of related projects</p> <p><i>Broad range:</i> Projects are only loosely connected; pursuit of path generates and depends on economies of recombination → eases path expansion/renewal</p>	<p><i>Narrow range:</i> Projects are framed using single labels characterizing bundles of task and team features characterizing previous (and potential future) projects</p> <p><i>Broad range:</i> Projects are framed using multiple labels combining task/team features from different, even unrelated past (and potential future) projects</p>
Path Constitution and Change	<p><i>Constitution:</i> Paths emerge from related, partially deviating follow-up projects involving core project teams</p> <p><i>Expansion:</i> Widening range of projects exploiting established partner resources and capabilities</p> <p><i>Renewal:</i> Combinations of task and team features based on which paths are maintained change over time</p>	<p><i>Constitution:</i> Framing of projects as follow-ups, sharing labeled task and team features from previous projects</p> <p><i>Expansion:</i> Repeatedly recombining new project features with established task and team properties</p> <p><i>Renewal:</i> Certain task and team features are repeatedly referred to by labels replacing or dominating others</p>

Table 3: Features of Collaborative Paths and Related Connecting Practices

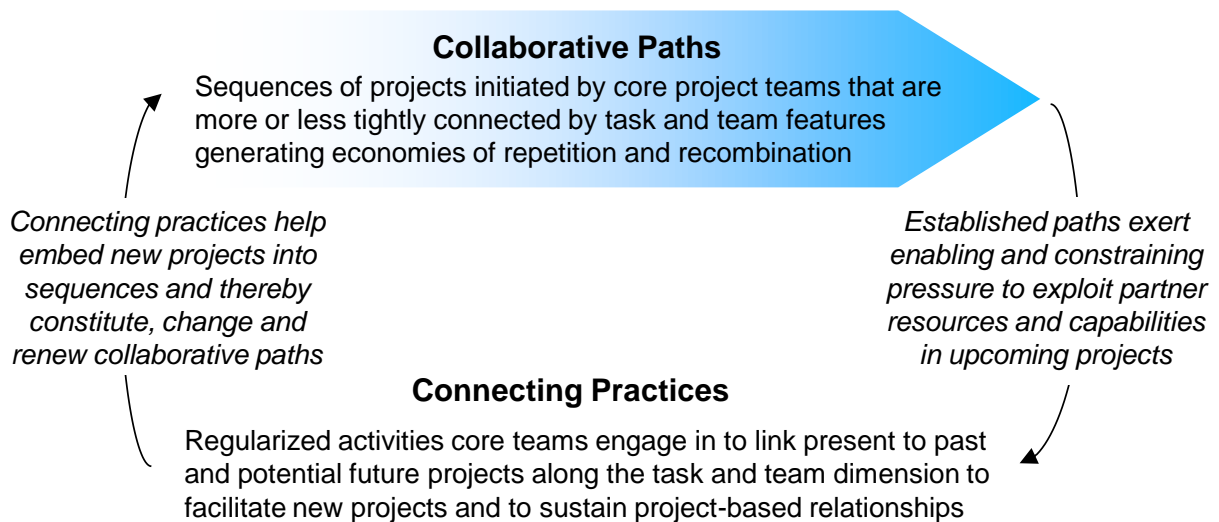


Figure 6: The Dynamics of Collaborative Paths and Connecting Practices