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Organizational Memory: From Expectations Memory to Procedural Memory

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> Organizational memory is not just the stock of knowledge about how to do things, but also of expectations of organizational members vis-a-vis each other and the organization as a whole. The central argument of this paper is that this second type of organizational memory – organizational expectations memory – is a necessary precondition for successfully creating and maintaining organizational procedural memory, which is at the basis of organizational performance. If members of organizations have fewer expectations of being rewarded beyond what is stipulated in formal contracts, these individuals are less likely to risk investing in collective tacit and firm-specific knowledge resources and more likely to focus on building individual and mobile knowledge resources that have value outside the boundaries of the organization. A case study of latent organizations in the Dutch film industry is presented to support the central argument and suggests further avenues of research, in particular concerning the effects of labour mobility on organizational expectations memory.

Introduction

The organizational memory literature concerns itself mainly with the stock of knowledge in an organization that can be put to use to improve performance of the production process or any other supporting task (Moorman and Miner, 1998; Walsh and Ungson, 1991). This literature fits in very well with the resource-based view (Barney, 1991; Barney, Wright and Ketchen, 2001; Wernerfelt, 1984) and even better with the resource-based view variant that focuses on knowledge, the knowledge-based view of the firm (Conner and Prahalad, 1996; Kogut and Zander, 1992; Liebeskind, 1996; Nonaka, 1994; Nonaka, Krogh and Voelpel, 2006). In this view, performance differentials between organizations result from certain organizations being more successful in creating, retaining and transferring knowledge resources. Organizations add value by effectively and efficiently managing existing knowledge within the boundaries of the firm, while at the same creating new knowledge or creatively combining existing knowledge into new innovative products.

Knowledge comes in many forms, but the more knowledge is either organization-specific or tacit (Polanyi, 1962) and collective, distributed over a group of people (Walsh and Ungson, 1991), the more difficult it is to transfer or imitate, and the more value such knowledge as a resource will have to the organization. Organization-specific and collective tacit knowledge resources about how to do things in an organization, stored in socalled *organizational procedural memory* (Cohen and Bacdayan, 1994), are therefore prime candidates if one is looking for resources through

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which an organization can build a sustainable competitive advantage. However, organizationspecific knowledge often has little value outside of the organization and collective tacit knowledge is by its very nature never the property of any individual. To be successful at creating and maintaining a stock of such knowledge, an organization must be able to convince individuals to invest time and effort in building resources they cannot individually appropriate.

The central argument of this paper is that another type of organizational memory, organizational expectations memory, is a precondition for the protection and development of organizational procedural memory that, in turn, leads to competitive advantage. We define organizational expectations memory as the stock of explicit and implicit expectations of rewards of organizational members. vis-à-vis each other and the organization as a whole. If they are not rewarded immediately, individuals expect other members of the organization, as well as the organization as a whole, to remember behaviour that benefited the organization and remember to reward them accordingly at a later date, especially if this behaviour contributed to the growth of a resource such as collective knowledge that they cannot individually appropriate. Individuals need to be able to trust that somewhere in the future individual rewards will follow and for this to happen there is a need for these expectations to be stored. The idea that organizational procedural memory leads to competitive advantage is widely acknowledged (Cohen and Bacdayan, 1994; Kogut and Zander, 1992). The first step from organizational expectations memory to procedural memory, however, is not, and this will be the focus of our theoretical argument and case.

We will briefly revisit the basics of organizational theory, especially in connection with knowledge and memory. Next theoretical perspectives on incomplete contracts, implicit contracts and psychological contracts and how these contracts interact within the boundaries of the organization will be discussed. This will be followed by what we think is our main contribution, arguing how individual expectations of rewards stored in organizational expectations memory support the creation of collective tacit knowledge stored in organizational procedural memory. Next, a case study of producers and directors in the Dutch film industry will show how their behaviour can be explained by their expectations. A discussion section will round off the argument and present two further propositions concerning the effects of labour mobility, in and out as well as within the organization, on organizational expectations memory and therefore on organizational procedural memory and performance.

Knowledge-based view of the firm and organizational memory

Transaction cost economics originates in the insight that markets are costly and that organizations provide an alternative means of coordination (Coase, 1937: Williamson, 1991) that allows the cost of market transactions to be avoided or minimized. This approach entails a somewhat negative view of the organization, primarily as a remedy to a problem. This contrasts with the approach taken by certain authors (Ghoshal and Moran, 1996; Simon, 1976) who stress the advantages of the organization as such, the opportunities offered by the organization to do more than the market is able to, not just the same more efficiently. People in organizations are willing to cooperate, share resources, and worry less about personal appropriability because of their loyalty to the organization, their capacity to identify with the organization, and their greater willingness to accept the authority of others in organizations (Simon, 1991).

In the strategic management literature, the resource-based view of the firm emphasizes the benefits of organizations over markets. According to the resource-based view of the firm. organization-specific resources explain performance differentials (Barney, 1991; Simon, 1991; Wernerfelt, 1984). More specifically, proponents of the knowledge-based view of the firm (Conner and Prahalad, 1996; Kogut, 2000; Liebeskind, 1996; Nonaka, 1994; Polanyi, 1962) identify knowledge resources as the crucial source of competitive advantage of organizations. Theoretical perspectives on what type of knowledge is crucial and how proper management of it leads to a competitive advantage diverge. Whereas some researchers propose that knowledge resides in the individual and it is the organization's task to integrate it in the organization (Grant, 1996), in

this paper we will especially focus on knowledge that is either organization-specific or collective (Liebeskind, 1996; Walsh and Ungson, 1991) and tacit (Nonaka, 1994; Polanyi, 1962). Knowledge of both these types cannot be easily transferred out of the firm and, if valuable, will result in an important, because highly sustainable, competitive advantage (Barney, 1991).

This particular knowledge-based view of the firm implies that there is a certain degree of stability in an organization's human resource base in order to protect collective tacit knowledge. This type of knowledge can be considered to form a major part of the stock of resources stored in so-called organizational memory. Although Walsh and Ungson's (1991) seminal paper set out a new research agenda concerning organizational memory, before that March and Simon (1958) as well as March and Olsen (1976) used the term organizational memory to refer to either the narrower set of procedures used in the firm or the broader set of past events, promises, goals, assumptions and behaviours. Later memory research has distinguished between *declarative* memory (Singley and Anderson, 1989) of factual knowledge and organizational procedural memory of know-how or skills (Cohen and Bacdayan, 1994). The latter type of memory is particularly important to store organization-specific or collective tacit knowledge, on which we focus our argument. If such knowledge is important to the firm, it is important to know how it can be created, preserved and managed effectively, precisely because one cannot (easily) codify or store it in manuals, standard operating procedures or formal training.

At the level of organizations or groups, organizational social capital theory offers suggestions how this could work, linking the incentives of individual members to eventual organizational benefits resulting from the creation and preservation of organization-specific and collective tacit knowledge. Organizational social capital theory argues that organizations that are good at developing social capital will in turn be able to create more intellectual capital (Leana and Van Buren, 1999; Nahapiet and Ghoshal, 1998). Leana and Van Buren (1999) define it as 'a resource reflecting the character of social relations within the organization'. If the members of an organization possess a high level of collective goal orientation and shared trust, this will

individuals as obligations can be conceived of as

credit slips (Coleman, 1988). Repeat exchange facilitates the creation of organizational procedural memory where social credit slips provide an incentive for individuals to invest in organization-specific or collective tacit knowledge. Individuals in organizations constantly generate obligations, between themselves and between them and the organization as a whole. In analogy to investment risk in regular markets, individuals run the risk that other individuals or organizations will default on their obligations and not meet their expectations. If individuals cannot assume that their behaviour towards each other and towards the organization is remembered, they will not be able to entertain expectations of being rewarded. In turn this will de-motivate them to invest in acquiring or investing in organization-specific or collective tacit knowledge that, according to the knowledge-based view of the firm, will benefit the firm in the long run. This is reinforced by the notion that employees run the risk of asset specificity (Williamson, 1991) or high switching costs (Shapiro and Varian, 1999) when investing in skills and knowledge that are likely to have relatively low value outside the specific organizational setting.

At the level of the individual, organizational citizenship behaviour shows that individual employees demonstrate behaviour that benefits the organization but which is not part of an employee's formal explicit contract or role description, and for which no official reward system exists (Organ, 1988). In support of Simon (1991), it was found that being able to identify with the organization is an important antecedent to organizational citizenship behaviour (Van Dick et al., 2006). Furthermore, organizational identification can explain turnover intentions, which is partly mediated by job satisfaction (Van Dick et al., 2004), while job satisfaction will normally increase when the employee feels properly rewarded for his/her efforts. Employees that invest in organization-specific or collective tacit knowledge expect to be rewarded for this behaviour. Job dissatisfaction and turnover intentions arise, however, when there is a gap between the expected rewards and actual rewards. Rewards and expectations of rewards, therefore, need to be managed carefully to build an organizational expectations memory that is beneficial to the firm. The usual way to manage reciprocal expectations is by contracts.

Organizations and contracts

The property rights approach, which sees an organization as a nexus of contracts, is an alternative to the transaction costs or resourcebased view of the firm, although not necessarily incompatible with either of them. Individual rights of the members of an organization have to be specified in order to determine how rights and rewards are to be allocated among those members. These are affected through contracts that in turn influence the behaviour of its members (Jensen and Meckling, 1976). Additionally, the ownership of assets or resources is at the basis of the claim to the residual rights or all rights that have not been explicitly treated in these contracts (Grossman and Hart, 1986; Hart and Moore, 1990). In these studies the assets under consideration are normally physical assets, such as machines and factories.

The property rights approach becomes complicated, however, when this approach is applied to knowledge resources, precisely because much knowledge is difficult to separate from the individuals or groups using the knowledge to the benefit of the firm. First, it may not be in the interest of the organization to try and control knowledge centrally, because it may be more efficient to stimulate decision-making at lower hierarchical levels (Hayek, 1945). Second, it is difficult to contractually control knowledge resources (Liebeskind, 1996). It can be argued, however, that this is only an apparent difficulty, caused by too narrow a focus on formal contracts. It seems helpful for the purposes of this paper to look closer at knowledge resources in connection with incomplete contracts, implicit contracts and psychological contracts.

First, all contracts are in an absolute sense *incomplete*, because of imperfect knowledge, bounded rationality and the resulting impossi-

bility of taking all possible scenarios into account (Simon, 1976). Labour contracts, however, are usually more incomplete than most other contracts. The more an employee has to use knowledge resources and make his/her own decisions to do his/her job optimally, the less it is possible to specify beforehand exactly what is expected of this employee. These incomplete contracts may pose a risk to the employees as they may be asked to perform tasks that do not meet their expectations and may not be as rewarding as anticipated or promised when signing the labour contract (Simon, 1951). The same holds true for the employer who runs the risk that employees will not perform, or will perform unwillingly and inefficiently, when asked to do what is not specified in the contract. Employees, however, accept incomplete contracts because they expect that their manager or the organization will not abuse their tolerance for ambiguity (McEvily, Perrone and Zaheer, 2003), while the employer similarly expects a cooperative attitude from the employees.

Second, besides being incomplete, contracts are to a large extent implicit (Bull, 1987; McEvily, Perrone and Zaheer, 2003). The difference between what is incomplete or merely implicit in a contract is that the implicit part refers to what both parties to the contract assume to have agreed between each other, while incompleteness also refers to the much broader category of matters about which no agreement has been reached because they have not, or could not have, been considered beforehand. There are both obligations and rewards, which are considered by both parties to be part of the contract and could have been made explicit in the formal contract, but are not. There might, for instance, be an obligation to turn up at the weekly social event or the monthly unit meeting. Employees can be given rewards that have not been formally agreed upon ex ante, for instance that the size of their office increases with promotions. How much can be left implicit depends on the level of trust between the contracting parties (Bull, 1987; McEvily, Perrone and Zaheer, 2003). This is especially delicate for the reward of promotion, the allocation of which has a subjective component and therefore contains an evaluation risk. An employee may expect to be promoted but is not.

Third, there are *psychological contracts* (Argyris, 1960; Herriot and Pemberton, 1995; Kotter, 1973).

Rousseau (1989) refers to a psychological contract as 'an individual's beliefs regarding the terms and conditions of a reciprocal exchange agreement between that focal person and another party. Key issues here include the belief that a promise has been made and a consideration offered in exchange for it, binding the parties to some set of reciprocal obligations' (Rousseau, 1989).

Rousseau's view of psychological contracts has been said to move away from the original idea of a psychological contract as a two-way employeeorganization reciprocal relation (Guest, 1998). From an organizational memory perspective. however, it is precisely this one-way individual's conception of the reciprocal relationship with the larger organization that makes the psychological contract according to Rousseau's interpretation a useful concept. Instead of being a contract in the usual legal sense, something to which two parties agree or may be assumed to have agreed, the psychological contract unilaterally describes expectations in the mind of the employee. However, this does not mean that within the organization there is no interaction between individual psychological contracts. The behaviour and attitudes of colleagues, also based on their own psychological contracts, will have an effect on what each individual employee will expect, and thus will affect the content of the psychological contract in his/her mind and his/her resulting behaviour. There is no need for explicit interaction between colleagues about their expectations for this to take place, for instance when colleagues work overtime on a regular basis and other colleagues may expect that this will increase their chances of making a promotion and therefore do the same.

The organizational climate or culture (Schneider, Brief and Guzzo, 1996) could make these implicit interactions more likely or stronger, while the strength of expectations memory could have an effect on the development of an organizational climate. However, it should be clear that organizational climate is a different and much broader concept than organizational expectations memory. Rephrasing some of the above in the terminology of the property rights approach, it can be expected that the internal nexus of psychological contracts or interlocking expectations of all employees together can have a significant impact on the organization in general and, more specifically, on the creation of collective tacit knowledge.

Rewards, mobility and organizational memory

Contracts incorporate obligations and rewards. The supply of rewards organizations can offer to their members is not unlimited, which means that there will be an internal competitive process. This competitive process among members of the organization is similar to the external competitive process in a market. However, the ways in which one can be successful in the one or the other process may be dissimilar. Building on Simon (1991). Wiinberg (2004) proposed that precisely this dissimilarity contributes to organizational performance. The argument underlying this suggestion is that when employees are constantly comparing their rewards to the present market value of their contributions to the organization. this will greatly impede the effectiveness of organizational mechanisms - such as acceptance of authority, lovalty to the unit etc. - mentioned by Simon (1991) that create organizational benefits. This argument is particularly relevant in regard to organization-specific knowledge and especially collective tacit knowledge that is stored in organizational procedural memory. When employees feel the need to constantly monitor their personal investment in time and effort, and to balance it with the rewards they receive in proportion to their relative contributions to organizational performance, it becomes rather unlikely that tacit collective knowledge will be created at all (Osterloh and Frey, 2000).

Especially when it concerns collective tacit knowledge it is evidently impossible to reward all contributors instantaneously. Even if it were possible, it would greatly hamper the easy collaboration and communication that is essential to the growth of organizational procedural memory if the process were stopped regularly to determine everyone's contributions and reward them accordingly. Here, the importance of implicit and especially psychological contracts manifests itself. The more the employee is able to rely on his/her expectations of being rewarded, the more likely he/she will be to accept postponement of rewards for his/her contributions to the organization. Employees may be willing to put up with an obnoxious or incompetent boss in the expectation that he or she will be replaced sometime in the future and a new boss will better recognize one's qualities. Employees may agree to temporarily perform a task they dislike in the hope of more rewarding work in the future. Employees may accept a lower salary or work longer hours if they expect that this will help them qualify for a promotion. These future rewards can be monetary, but also non-monetary in nature.

The fact that some of these rewards are specific to organizational structures already contributes to distancing the competitive process in the organization from that outside of it. Psychological contracts that flourish inside of the organization further increase the dissimilarity, as they lead to toleration of ongoing ambiguity and postponement of rewards. As expectations and obligations are not made clear and qualification for promotion is subjective, employees do what they expect that the organization needs and what they think will help them qualify for a promotion (Vroom, 1964). More specifically, an employee will accept more and longer postponement of rewards within the organization, compared to what he or she would accept in a temporary or market relationship, precisely in so far as he/she assumes that the organizational relationship will be of sufficiently long duration to be fully compensated at the end (Riketta, Van Dick and Rousseau, 2006). In this sense, an organization can operate like an open-ended pyramid scheme. New employees are willing to accept conditions far below what they would be able to find outside the organization and even farther below what they know more senior members of the organization enjoy because they expect to be in the position of the senior members later on and profit from their underpaid juniors. This is the idea behind deferred compensation (Prendergast, 1999).

Furthermore, psychological contracts allow employees to overestimate their contributions to the organization without being corrected. Given the common tendency to do so, employees will be willing on average to overestimate future rewards and accept even lower present rewards in consequence (Benabou and Tirole, 2002; Taylor and Brown, 1988). Both types of considerations, which can be the subject of psychological contracts and the content of organizational expectations memory, will motivate employees to invest in organization-specific or collective tacit knowledge resources, to the benefit of the firm. This line of reasoning suggests that there might be a relationship between the characteristics of the rewards system within the organization and the relative importance of psychological contracts.

A factor that even more obviously can affect the step from organizational expectations memory to organizational procedural memory – the first step of the two-step relationship from expectations to performance – is mobility. The mobility of employees in and out of the organization, as well as the mobility within it, will have an impact on the willingness of employees to tolerate ambiguity in their labour contracts and delay of rewards. By leaving the firm an employee gives up the greater part or all of his/her expectations vis- \hat{a} -vis other members of the organization and the organization as a whole. The employee also takes with him/her or destroys part of the knowledge resources of the organization. Alternatively, if *other* employees leave the organization this also can reduce the value of the sum of expectations his/her colleagues have, if only because the ex-colleague will not be likely to reciprocate anymore. Also, collective tacit knowledge may suffer from others leaving the group. This is further reinforced when a high proportion of colleagues leaving and a high influx of new ones give the average employee the idea that he/ she is relatively easy to replace. On the other hand, some external mobility most often is healthy for an organization, as it permits the inflow of new information and new ideas (Janis, 1972).

Methodology and case

In the following case study we will explore the ideas discussed above, focusing on the core of our theoretical argument that organizational expectations memory is positively related to organizational procedural memory, the first step of the sequence from expectations to performance. The second step, from procedural memory to performance, is relatively well established in earlier studies (Kogut and Zander, 1992; Liebeskind, 1996; Nonaka, 1994). However, we also present evidence of the second step showing that organi-

zational procedural memory leads to performance in the sense of efficiency in the production process.

Because the objective of this study is to build rather than test theory we performed a case study (Yin, 2003). We chose an extreme case, the latent organization in the film industry, because it is especially illuminating in gaining insight on a phenomenon (Siggelkow, 2007). Understanding processes in an extreme case will strengthen our argument that this process also plays an important role in more regular organizations. At first sight, the film industry is organized around individual projects and networks of freelancers and small companies that temporarily align themselves through short-term (labour) contracts. Closer inspection reveals the existence of so-called latent organizations, groups of individuals that regularly collaborate in a series of short-term projects and in the process create continuity as a result of which organizationspecific collective tacit knowledge can be protected (Starkey, Barnatt and Tempest, 2000). Whereas the isolated projects are governed by the project-based organizations using explicit short-term contracts, the latent organization is governed by obligations and expectations in longterm implicit contracts. Precisely because there are no formal contracts binding the members of the latent organization to each other or to the organization as a whole, the importance of implicit and psychological contracts should be maximal, as will be the impact of reciprocal expectations on the behaviour of organizational members. If we find evidence in organizations that are built almost completely on implicit contracts, the chances are higher that the same phenomenon is also relevant in organizations that do exist formally and where contracts, and therefore expectations, are more explicit. More specifically we study latent organizations in the Dutch film industry.

We performed face-to-face, semi-structured interviews with 24 film producers between February 2007 and February 2008. Interviews, as opposed to questionnaires, render fewer incomplete responses, fewer misunderstood questions, and a generally higher response rate (Yin, 2003). The negative impacts of both interviewer and informant bias were tackled by tape-recording the interviews. All informants were granted confidentiality in the reporting of the results. This also served to reduce the negative impact of socially desirable answers (Kumar, Stern and Anderson, 1993). The total population of producers consisted of 34 producers of fiction films with a length of at least 60 minutes and a theatre release in the past 10 years. The response rate was therefore 70%. In addition we interviewed 15 film directors to triangulate our findings. We conducted roughly 90-minute interviews with 39 (n = 39) informants. All the names of persons and companies have been made anonymous or changed.

Case study

In the film industry, high competitive uncertainty in the market has led to flexible production (DeFillippi and Arthur, 1998; Jones, 1996). Flexibility, however, has negative side-effects because access to human resources or, alternatively, access to work becomes uncertain. Latent organizations of serially collaborating freelancers can be seen as a counter reaction to this flexibility in search of more stable relations (Starkey, Barnatt and Tempest, 2000). Through being a member of an informal latent organization, freelancers expect to benefit from more job security, for which they are willing to accept a lower monetary reward or salary. Producers, in turn, benefit from lower labour costs of these freelancers in exchange for an informal or implicit agreement that he or she will employ these same freelancers in future projects.

When a project participant works below his normal fee in a low-budget project, I make a promise without putting it in black and white that I hope and strive to re-contract that individual for the next project, because that specific individual also made an investment. That is how you treat them and how you negotiate. (Producer C)

Producers that have a strong relationship with a director expect that the salary for a subsequent project will not increase much, even when the market value of this director has increased as a result of their earlier shared success. Past contracts and salary agreements between them form the basis of this implicit contract. 'When you have a strong relationship [with a producer] I think it is more difficult to say "our last film was such a success, I want a higher salary" ... because their starting point in the negotiations is our last contract' (Director M). Directors can earn a higher salary when they switch producers after they made a successful film but there are good reasons not to do so. When a director with a strong relationship with a producer delivers a flop this does not necessarily mean that his or her lower market value results in a lower salary in the next project. Additionally, a director also retains the trust, credit and a second chance in a next project.

It is difficult to ask for a substantially higher compensation or salary when you always work with the same producer. It is better to do this when you start working for a different producer \dots . However, the moment things are not going very well it could work against you. At that moment you are better off with a producer with whom you have a strong relation because you are able to continue working under the same conditions. (Director E)

Rewards are not just monetary in nature. Besides or instead of a lower salary than their market value would permit, employees or members of a (latent) organization are more willing to perform tasks that they do not like in the expectation of doing more interesting work in the future. In our case, in the project-based film and television industry, feature films are regarded as more interesting than television series. but directors are willing to do television series in the expectation that eventually they can direct a feature film. When a (latent) organization suddenly splits up this will mean that the organizational expectations memory will disappear. This poses a serious risk of not being rewarded for having invested in the organization by having performed tasks that are below the reputation or standard of this individual.

It took years before it [the financing of film X] was completed and in the meantime I kept working for Production Company Y doing many television series I did not have a contract but they tried to make me do a number of television series – something I do not prefer doing – to make sure that I remained more or less tied to their company. At a certain point the film and television divisions of Stellar split up and they made more and more television series. At that moment I thought I could not expect much more and started spreading my risks again by approaching other producers. (Director E)

Contracts in the film industry are usually short term, for only a single project, while much in the contracts is left incomplete. The incompleteness of the contract leaves large parts of the agreement implicit. Mutual obligations are not spelled out and therefore difficult to enforce when not met. The existence of a latent organization mitigates these risks of incomplete contracts because the expectations of both parties that the collaboration will be re-enacted in the future increases the chance that obligations will be interpreted in a manner that is satisfactory to both of them. In the following quote this is illustrated in the context of a director's obligation to help promote a new film, for example through interviews for television and newspapers.

I know that if I do as much promotion [of the film] as possible, that they [the producers] will like to work with me again in the future It [the contract] is very vague: 'the director needs to promote the film'. It does not say how many hours, it is very vague: 'as good as he can'. (Director M)

Another important issue is that freelancers need to manage their agendas carefully in order to plan projects that might otherwise overlap. When there is loyalty between individuals that regularly collaborate – members of a latent organization – with mutual expectations of working together in future projects, freelance project members are more willing and able to align their agendas. In other words, they are more inclined to give each other preferential access. 'Project participants are willing to give us an option [on their services] until a certain date when we think that we have completed the financing of the film. They may have options at other production companies at the same time but I can ask them to stretch their negotiations' (Producer M). Other freelancers also extend such 'options' to directors, who usually have a strong vote, together with the producer, in the selection of project participants.

My editor always phones me: 'when will it start, because I have been asked to do this other project? What are the odds that your project will take off, because else I will do that other project?' Moreover when Dave [the editor] had the choice between editing a very large film or my small short film, he chose to do my small film. (Director F)

So far we have illustrated how organizational expectations memory aids in building long-term

relationships in latent organizations. Individuals invest in projects for which they expect to be rewarded in the future. In what follows we will show how organizational expectations memory serves creating and maintaining organizational procedural memory.

Although individual skills are a prerequisite, the ability to work in a team is very important in the film industry. 'The team has to be right. Sometimes you choose someone who is qualitatively not the best but who is the perfect person because he or she understands what the director wants' (Producer V). Collective tacit knowledge is generated by shared experience, both positive and negative. Shared memories and knowledge of one's tastes or habits in turn can provide strong efficiency gains. To the question why he preferred working with the same people a producer answered: 'Because I know what they are capable of and because they are pleasant to work with' (Producer O). Directors express a similar preference for strong relationships for similar reasons. 'I prefer a strong relationship because it produces the most benefits. You know each other and each other's strengths and weaknesses' (Director H).

The focus on knowledge about each other strongly suggests that organizational procedural memory is mostly tacit and organization-specific. This knowledge is not something one could easily codify or transfer to others. 'If you know what to expect from someone, and you collaborate often, you will work more efficiently' (Producer N). On the set during the production or shooting phase of a film, when there is a crew of 30 or more waiting for directions, this is especially relevant. If a director does not need to explain his vision or preferences, this will lead to more efficiency.

It is mainly about communication. It sounds strange but it is true. I only need to signal to make clear what I mean. That way you can communicate very fast. I can be in a situation where I only say 'John [his regular director of photography (DOP)], you know, right?' and he knows what I mean. He knows what I like and what I don't like. (Director F)

If you share a vision [with your editor] you can mutually enforce one another. If you both understand what you are doing you don't lose hours explaining things. If not, you will get a compromise of two visions. The moviegoer will feel this. Such a relationship has to grow. (Director H) In other words, there has to be a 'click' or mutual 'rapport' that is difficult to describe or define. It is especially noteworthy that it is easier to have arguments when there is such a rapport. Open arguments, between creative freelancers with relatively vague job descriptions, can significantly contribute to the eventual quality of the output, but if one did not know each other well, heated arguments could put the work relationship at risk.

I know that [anonymous DOP] has a tendency to do certain things that I do not like. I know this and therefore can take that into account. And because he is a friend we can have very fierce arguments. (Director F)

Furthermore, long-term collaboration also provides opportunities for evaluating earlier projects and benefiting from this in future projects. The continuity of the work relationship helps to enable the members of latent organizations to recognize each other's mistakes in a more considerate way and to look for solutions instead of playing a blame game. 'Of course, if you do not know each other, you cannot blame one another for the things that went wrong that first time' (Director G). Moreover, when there is a larger degree of trust based on past experiences. the problems that are encountered by the producer will be acknowledged more easily by the director. This is particularly important as these problems are often budgetary in nature and can affect the resources available to a director in realizing his vision for the film. Compromising his vision may seriously damage his reputation when the film turns out to be a flop.

When you have a strong relationship, you are more inclined to accept this [budgetary problems]. You understand better and it is easier to accept what the problems are for the producer. You may be able to avoid this next time. (Director E)

When there is a strong collaboration you can share it when things do not work out, and try to find out the causes. 'How can we do it better next time? It was stupid to spend money on that. We made the wrong choice of actors.' (Director H)

The acknowledgement that repeated collaboration is related to better and more efficient production allows for more active management of these long-term relations. Mutual expectations about future collaboration will allow latent organizations to work towards a future goal. Learning can therefore be actively supported by designing a roadmap. This is especially relevant in the relation between producer and director.

Better cooperation and communication can develop between the two [producer and director]. You just know what to expect as a couple. As a producer you have a little more certainty. You can work on an oeuvre. You can make a roadmap stating what and when you want to accomplish something. (Producer O)

While in this example producer and director seem to have equivalent reputations, it is also possible for a more experienced producer to invest in a young director by providing him or her with the opportunity to make a short or lowbudget film. The reward to the producer will be collected in the future when the young director's talent has developed enough to make a large feature film that is much more lucrative. The director, in turn, is rewarded by the chance to both develop him or herself and build a reputation. The investment of the producer is protected when a person - in this particular case a director - voluntarily commits to, or is loyal to, a single latent organization in the absence of a long-term labour contract.

I help individuals plan their careers. I tell them that doing a particular project [with me] will be beneficial for their careers. Someone can be ready for a next step I am primarily focused on new talent. I often produce debut films for people that have been here [at my production company] for a while or with whom I made a short film here earlier. If all goes well and we [director or writer and me] can make a feature length film together, I am very happy. That is where my focus is. (Producer B)

Besides producers, directors also play an important role in the career development of other freelancers with whom they collaborate often. Most of the success of films is attributed to the director, but this director is also dependent on the rest of his team.

If you have a good collaboration and you are successful you will develop together. That applies to editor, production designer and DOP. They benefit from a good and successful collaboration. I play a role in their careers and they do in mine. I am completely dependent on them and vice versa. (Director E) We conclude our case with a final quote that explicitly links organizational expectations memory with organizational procedural memory. Project members that belong to a latent organization are willing to participate for a lower salary in the expectation that they will be part of the same team in future projects. Regular collaboration in latent organizations allows mutual expectations to arise and this provides the environment in which organization-specific collective and tacit knowledge develops that helps to produce films more efficiently. Knowledge of how things were done in past projects can be protected through re-enactment of the same project team.

I try to work with the same people until it goes wrong. In that way you can talk reasonably about these [salary] things. It is like: 'OK, this time it is a bit less ...'. It is not that I promise them anything; it is because you both know that there is a form of loyalty. And of course you built up important shared experience which is also very important, even when things go wrong. I prefer an organization where things go wrong in the first project and right in the next, than having to work with uncertain factors every time again. (Producer R)

Discussion

We have argued in this paper that *organizational* expectations memory, consisting of the web of reciprocal expectations within organizations, is the foundation on which organizational procedural memory is constructed, which in turn is at the basis of an organization's competitive advantage. Implicit and psychological contracts allow individuals to demonstrate organizational citizenship behaviour by initiating activities to the benefit of the organization of which it is uncertain whether they will result in personal rewards. Additionally, organizational members may agree to perform difficult or boring tasks on terms that are not optimal in the short run, expecting to be compensated with more challenging work in the future. Finally, they may accept a lower salary in the short run if they expect to be compensated in the long run. In this process members of the organization build and protect knowledge resources much of which are organization-specific, collective and tacit. This so-called organizational procedural memory, in turn, is an

important determinant of organizational performance (Kogut and Zander, 1992). It is precisely this type of knowledge that gives organizations a competitive advantage, as it is hard to transfer to others, tied to the organization, and its value is difficult to individually appropriate (Liebeskind, 1996).

The film industry is an ideal test case to study our thesis that is particularly relevant for - an increasing amount of - industries in which the relative importance of knowledge resources vis- \hat{a} -vis physical resources is particularly high, as is the case in the film industry (Miller and Shamsie. 1996). Additionally, it is an extreme industry case where explicit and long-term labour contracts. which in normal organizations at least partly serve as an insurance on which the expectations of future rewards for organizational citizenship behaviour can be based, are practically nonexistent. In the absence of formal long-term labour contracts in the film industry, there are latent organizations, the membership of which consists of the group of people who regularly work together in a series of project-based organizations (Starkey, Barnatt and Tempest, 2000). The continuity of these latent organizations is largely built around implicit or psychological contracts. Within these latent organizations, organization-specific and collective tacit knowledge can be built up, as members expect that their individual contributions and investments will be remembered and rewards will eventually follow. The continuity of the latent organization makes it capable of possessing both an organizational expectations and an organizational procedural memory, safeguarding the relationship between them, and in the process building a competitive advantage.

In the discussion of the theory the issue of mobility already came up and it was touched upon at several occasions in the case study. Rounding off the paper allows us to explore this relation further. In general, the two-step relation proposed in this paper presumes a certain degree of continuity in the human resource base of, either latent or normal, organizations. Life-long employment practices and a well-defined internal career path, however, are currently less pervasive. More flexible labour relations have led to larger turnover rates and careers and promotions taking place within a larger number of organizations (Arthur and Rousseau, 1996). According to the argument of this paper this could endanger the build-up and protection of organization-specific knowledge resources.

At the same time organizations and economies increasingly rely on knowledge-intensive activities, the complexity of which demands close interaction and collaboration by specialists. While our findings would not suggest a return to long-term labour contracts in the legal sense, we point out the strategic importance of building long-term commitment and engaging in more active expectations management.

Additionally, several authors studying specifically project-based industries have questioned whether long-term investments in human resources can be sustained when careers are more and more based on a series of projects (Inkson, Heising and Rousseau, 2001; Tempest and Starkey, 2004). Our case study suggests that in the film industry, in the absence of formal long-term labour contracts, relations between members of latent organizations are built on implicit and psychological contracts.

Furthermore, if external mobility is high there will come a point when the average employee will be less and less likely to trade direct rewards for expectations of future rewards; organizational expectations memory will crumble and with it organizational procedural memory and, finally, organizational performance. The balance between the advantages of external mobility and the disadvantages will depend on the characteristics of the industry and product, especially how great a role organization-specific and collective tacit knowledge plays in efficient production. There are threshold values of external mobility below which and beyond which organizational expectations memory will decline and organizational procedural memory will decline as a result.

On the other hand, internal mobility or movement of employees within the organization can function as a reward, especially if it involves promotion. A high degree of such mobility will enable expectations (to be rewarded in this way) to grow. Also, high internal mobility will motivate individuals to invest in organizationspecific and collective tacit knowledge (Prendergast, 1999), enabling both to disperse further in the organization, and it increases the value of organization-specific knowledge to each employee. Again, there are potential disadvantages to high internal mobility too: people who have been disappointed in their expectations will find it

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harder to again rely on new expectations if their colleagues and managers form part of the same set of people with whom they had disappointing experiences. Also, too much internal mobility will close off opportunities to get new people in the organization, which can have deleterious effects, especially in fast-changing industries. Very high internal mobility has negative effects on the twostep process proposed in this paper, but so has very low internal mobility. The precise points at which the negative effects set in will again be dependent on the industry and product. This suggests two propositions:

- *P1*: There are industry-specific threshold values of internal mobility, below which and beyond which organizational expectations memory will decline and organizational procedural memory will decline as a result.
- *P2*: There are industry-specific threshold values of external mobility, below which and beyond which organizational expectations memory will decline and organizational procedural memory will decline as a result.

From the theoretical viewpoint of this paper it might be most interesting to focus on the upper threshold of external mobility, beyond which the organization loses the ability to transform expectations memory into procedural memory, and the lower threshold of internal mobility, below which expectations are not likely to be strong enough to motivate employees to invest in organization-specific and collective tacit knowledge resources.

References

- Argyris, C. (1960). Understanding Organizational Behaviour. London: Tavistock.
- Arthur, M. B. and D. M. Rousseau (1996). The Boundaryless Career: A New Employment Principle for a New Organizational era. New York: Oxford University Press.
- Barney, J. (1991). 'Firm resources and sustained competitive advantage', *Journal of Management*, 17, pp. 99–120.
- Barney, J., M. Wright and D. J. Ketchen Jr (2001). 'The resource-based view of the firm: ten years after 1991', *Journal* of Management, 27, pp. 625–641.
- Benabou, R. and J. Tirole (2002). 'Self-confidence and personal motivation', *Quarterly Journal of Economics*, **117**, pp. 871–915.
- Bull, C. (1987). 'The existence of self-enforcing implicit contracts', *Quarterly Journal of Economics*, **102**, pp. 147–159.

- Coase, R. H. (1937). 'The nature of the firm', *Economica*, **4**, pp. 386–405.
- Cohen, M. D. and P. Bacdayan (1994). 'Organizational routines are stored as procedural memory: evidence from a laboratory study', *Organization Science*, 5, pp. 554–568.
- Coleman, J. (1988). 'Social capital in the creation of human capital', American Journal of Sociology, 94, pp. S95-S120.
- Coleman, R. (1990). Foundations of Social Theory. Cambridge, MA: Harvard University Press.
- Conner, K. R. and C. K. Prahalad (1996). 'A resource-based theory of the firm: knowledge versus opportunism', *Organi*zation Science, 7, pp. 477–501.
- DeFillippi, R. J. and M. B. Arthur (1998). 'Paradox in projectbased enterprise: the case of film making', *California Management Review*, 40, pp. 1–15.
- Ghoshal, S. and P. Moran (1996). 'Bad for practice: a critique of the transaction cost theory', *Academy of Management Review*, 21, pp. 13–47.
- Grant, R. M. (1996). 'Toward a knowledge-based theory of the firm', *Strategic Management Journal*, **17**, pp. 109–122.
- Grossman, S. J. and O. D. Hart (1986). 'The costs and benefits of ownership: a theory of vertical and lateral integration', *Journal of Political Economy*, **94**, pp. 691–719.
- Guest, D. E. (1998). 'Is the psychological contract worth taking seriously?', *Journal of Organizational Behaviour*, **19**, pp. 649–664.
- Hart, O. and J. Moore (1990). 'Property rights and the nature of the firm', *Journal of Political Economy*, 98, pp. 1119–1158.
- Hayek, F. A. (1945). 'The use of knowledge in society', American Economic Review, 35, pp. 519–530.
- Herriot, P. and C. Pemberton (1995). New Deals: The Revolution in Managerial Careers. Chichester: Wiley.
- Inkson, K., A. Heising and D. Rousseau (2001). 'The interim manager: prototype of the 21st-century worker?', *Human Relations*, 54, pp. 259–284.
- Janis, I. L. (1972). Victims of Groupthink: A Psychological Study of Foreign-Policy Decisions and Fiascoes. Boston, MA: Houghton Mifflin.
- Jensen, M. C. and W. H. Meckling (1976). 'Theory of the firm: managerial behavior, agency costs and ownership structure', *Journal of Financial Economics*, 3, pp. 305–360.
- Jones, C. (1996). 'Careers in project networks: the case of the film industry'. In M. B. Arthur and D. M. Rousseau (eds), *The Boundaryless Career: A New Employment Principle for a New Organizational Era*, pp. 58–75. New York: Oxford University Press.
- Kogut, B. (2000). 'The network as knowledge: generative rules and the emergence of structure', *Strategic Management Journal*, 21, pp. 405–425.
- Kogut, B. and U. Zander (1992). 'Knowledge of the firm, combinative capabilities, and the replication of technology', *Organization Science*, **3**, pp. 383–397.
- Kotter, J. P. (1973). 'The psychological contract', *California Management Review*, **15**, pp. 91–99.
- Kumar, N., L. W. Stern and J. C. Anderson (1993). 'Conducting interorganizational research using key informants', Academy of Management Journal, 36, pp. 1633–1651.
- Leana, C. R. and H. J. I. Van Buren (1999). 'Organizational social capital and employment practices', *Academy of Management Review*, 24, pp. 538–555.
- Liebeskind, J. P. (1996). 'Knowledge, strategy, and the theory of the firm', *Strategic Management Journal*, 17, pp. 93–107.

- March, J. M. and J. P. Olsen (1976). Ambiguity and Choice in Organizations. Bergen: Universitetsforlaget.
- March, J. M. and H. A. Simon (1958). *Organizations*. New York: Wiley.
- McEvily, B., V. Perrone and A. Zaheer (2003). 'Trust as an organizing principle', *Organization Science*, **14**, pp. 91–103.
- Miller, D. and J. Shamsie (1996). 'The resource-based view of the firm in two environments: the Hollywood film studios from 1936 to 1965', Academy of Management Journal, 39, pp. 519–543.
- Moorman, C. and A. S. Miner (1998). 'Organizational improvisation and organizational memory', Academy of Management Review, 23, pp. 698–723.
- Nahapiet, J. and S. Ghoshal (1998). 'Social capital, intellectual capital, and the organizational advantage', Academy of Management Review, 23, pp. 242–266.
- Nonaka, I. (1994). 'A dynamic theory of organizational knowledge creation', *Organization Science*, 5, pp. 14–37.
- Nonaka, I., G. V. Krogh and S. Voelpel (2006). 'Organizational knowledge creation theory: evolutionary paths and future advances', *Organization Studies*, 27, pp. 1179–1208.
- Organ, D. W. (1988). Organizational Citizenship Behavior: The Good Soldier Syndrome. Lexington, MA: Lexington Books.
- Osterloh, M. and B. S. Frey (2000). 'Motivation, knowledge transfer, and organizational forms', *Organization Science*, 11, pp. 538–550.
- Polanyi, M. (1962). Personal Knowledge. Chicago, IL: University of Chicago Press.
- Prendergast, C. (1999). 'The provision of incentives in firms', Journal of Economic Literature, 37, pp. 7–63.
- Riketta, M., R. Van Dick and D. M. Rousseau (2006). 'Employee attachment in the short and long run: antecedents and consequences of situated and deep structure identification', *Zeitschrift fur Personalpsychologie*, 5, pp. 85–93.
- Rousseau, D. M. (1989). 'Psychological and implied contracts in organizations', *Employee Responsibilities and Rights Journal*, 2, pp. 121–139.
- Schneider, B., A. P. Brief and R. A. Guzzo (1996). 'Creating a climate and culture for sustainable organizational change', *Organizational Dynamics*, 24, pp. 7–19.
- Shapiro, C. and H. R. Varian (1999). Information Rules: A Strategic Guide to the Network Economy. Boston, MA: Harvard Business School Press.

- Siggelkow, N. (2007). 'Persuasion with case studies', Academy of Management Journal, 50, pp. 20–24.
- Simon, H. A. (1951). 'A formal theory of the employment relationship', *Econometrica*, **19**, pp. 293–305.
- Simon, H. A. (1976). Administrative Behavior. New York: Free Press.
- Simon, H. A. (1991). 'Organizations and markets', Journal of Economic Perspectives, 5, pp. 25–44.
- Singley, M. K. and J. R. Anderson (1989). The Transfer of Cognitive Skill. Cambridge, MA: Harvard University Press.
- Starkey, K., C. Barnatt and S. Tempest (2000). 'Beyond networks and hierarchies: latent organizations in the UK television industry', *Organization Science*, **11**, pp. 299– 305.
- Taylor, S. E. and J. D. Brown (1988). 'Illusion and well-being: a social psychological perspective on mental health', *Psychological Bulletin*, **103**, pp. 193–210.
- Tempest, S. and K. Starkey (2004). 'The effects of liminality on individual and organizational learning', *Organization Studies*, 25, pp. 507–527.
- Van Dick, R., O. Christ, J. Stellmacher, U. Wagner, O. Ahlswede, C. Grubba, M. Hauptmeier, C. Hoehfeld, K. Moltzen and P. A. Tissington (2004). 'Should I stay or should I go? Explaining turnover intentions with organizational identification and job satisfaction', *British Journal of Management*, **15**, pp. 351–360.
- Van Dick, R., M. W. Grojean, O. Christ and J. Wieseke (2006). 'Identity and the extra mile: relationships between organizational identification and organizational citizenship behaviour', *British Journal of Management*, **17**, pp. 283–301.
- Vroom, V. H. (1964). Work and Motivation. New York: Wiley.
- Walsh, J. P. and G. R. Ungson (1991). 'Organizational memory', Academy of Management Review, 16, pp. 57–91.
- Wernerfelt, B. (1984). 'A resource-based view of the firm', Strategic Management Journal, 5, pp. 171–180.
- Wijnberg, N. M. (2004). 'Innovation and organization: value and competition in selection systems', *Organization Studies*, 25, pp. 1413–1433.
- Williamson, O. E. (1991). 'Strategizing, economizing, and economic organization', *Strategic Management Journal*, **12**, pp. 75–94.
- Yin, R. K. (2003). Case Study Research: Design and Methods. Thousand Oaks, CA: Sage.

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