

# ORGANISATIONAL LEARNING ACROSS GROUPS: THE CONSEQUENCES OF STRUCTURAL EMBEDDEDNESS

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## ABSTRACT

*In this paper, first, two types of social capital are analysed. The two types are particularly different with respect to their view on social relationships: a balanced type of relationship versus an unbalanced type. The effects of both types on organizational learning are discussed. This will lead to a view of social capital that is known in the literature as ‘the dark side of social capital’ also with respect to organisational learning. I will turn to the analysis of processes that are responsible for the development of the dark side. Especially the behaviour of third party and forms of structural embeddedness are discussed. Consequently, I develop alternative proposals that could further organisational learning. These alternatives are illustrated in a case with various types of learning groups.*

## **1. INTRODUCTION**

Recently, the role of social capital in facilitating knowledge exchange for organizational learning is discussed. Nahapiet and Ghoshal (1998) describe three types of social capital influencing organisational learning or intellectual capital. The influences are indirectly as social capital influences information flow, motivation, and anticipation of value and combination capability. Intellectual capital and innovation can be facilitated through influencing these variables by various dimensions of social capital. They define social capital as “the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit.” (Nahapiet and Ghoshal 1998:243). Nahapiet and Ghoshal (1998) try to combine the two approaches of social capital as the above definition indicates. In this paper, I also use both notions of social capital and I show their interdependence.

## **2. TYPES OF SOCIAL CAPITAL AND ORGANIZATIONAL LEARNING**

Social capital has its source in an exchange relationship. As capital, it cannot be owned by one person. It has its source in the relation between actors (Coleman 1998). This constitutes the main distinction with other types of capital (Bourdieu 1985, Adler and Kwon 2002).

The mechanisms along which social capital is created in the relations are mechanisms of creating expectations and obligations. In this way ‘credit slips’ are gained that can be made solvable at a later moment. Furthermore, social capital becomes a capital only when it has a function in an exchange relationship (Coleman 1988). Getting useless information would not be considered as capital. “The function identified by the concept of ‘social capital’ is the value of these aspects of social structure to actors as resources that they can use to achieve their interests.” (Coleman 1988:101). Thus, although social capital lies in a relation, it can be used instrumentally for an actor’s interests. Social capital implies those social structures that enable the formation of norms. “As all these examples suggest, effective norms can constitute a powerful form of social capital. This social capital, however, like the forms described earlier, not only facilitates certain actions; it constrains others.” (Coleman 1988: 105). An important condition for this type of social capital is closure. Closure of the group and the development of shared norms lead to an ‘embedded logic of exchange’ (Uzzi 1996:675) that is different from market exchange. Furthermore, this logic enables the transfer of fine-grained information (Uzzi 1996) inclusive tacit knowledge. “Social relations make information credible and interpretable, imbuing it with qualities and value beyond what is at hand.” (Uzzi 1996: 678). This is consistent with the findings of Hansen (1999) that strong ties are beneficial for the transfer of uncodified, complex knowledge. Hansen explains this with motivational effects: “In a strong interunit tie, the source unit is likely to spend more time

articulating the complex knowledge” (Hansen 1999:88). The notion of communities of practice makes clear that whatever the reasons may be, the effect of mutuality is the development of a shared language that facilitates shared interpretation and problem-solving (Brown and Duguid 1996, Wenger 2000)

Next to the facilitation of individual action by norms, there is another function of social capital as information channel. Although Coleman, does not consider the function of information channel as social capital in the strict sense, because there is no ‘credit slip’ involved, others especially network researchers have put this view of social capital in the foreground (Granovetter 1992). Especially, ‘the strength of weak ties’ bring in advantages for organizational learning. Weak ties have advantages in searching for diverse information for innovation (Hansen 1999). The individual gains benefits by its position in the social network structure. Advantages consist of access to information, power and solidarity (Adler and Kwon 2002).

Two different types of social capital are distinguished above. Their advantages for organisational learning are indicated. Social capital as private goods focuses on social capital as external links. Social capital considered as norms that facilitate action is located within the group – thus internal links (Adler and Kwon 2002). Similar distinctions are found at Leana and van Buren (1999). Burt (1999) provides a third, but also similar distinction between the two types of social capital. Along with Adler and Kwon (2002), the internal link approach will be called the bonding perspective of social capital; the external link perspective of social capital will be called the bridging approach. Both offer different benefits for organizational learning.

Although Nahapiet and Ghoshal (1998) think that the two types of social capitals – bonding and bridging – have influence on enabling variables for intellectual capital or organizational learning, they do not look at the interrelationship between the two. Although in theory the two types of social capital can be distinguished, they are interrelated. There are quite consistent findings in the literature, that both types of social capital cannot simultaneously be realized (Uzzi 1996, Janis 1981, Gargiulo and Benassi 1999). A highly closed group with strong norms and high closure and therefore outstanding social bonding capital does not feel a necessity for looking for diverse information outside. Social bonding capital has as an effect “sealing off firms in the network from new information or opportunities that exist outside the network” (Uzzi 1996:675). At the end, according to Uzzi, social capital turns into social liability, as the self-interest of the actors might be compromised. However, under this form of structural embeddedness, meaning is commonly constructed and thus, knowledge exchange is easily realized. Knowledge is embedded in the structure of the group as collective knowledge (Spender 1994). This type of network and social capital is used in communities for practice in organizational learning (Wenger 1998). Here, social capital for organizational learning can be located, however, this goes at the costs of the diversity.

The other way round, social capital as bridging does not lead to the formation of cohesive groups with a shared language. This leads to transfer problems especially in the case of uncodified knowledge (Hansen 1999). In fact, this is the old story about the 'strength of weak ties' versus the 'strength of strong ties'.

Here, a dilemma in using social capital with regard to organizational learning exists. Especially, the case that people stay within a cohesive group that counteracts their interests, is mentioned as the dark side of social capital (Gargiulo and Benassi 1999, Uzzi 1996). For organizational learning, both types of social capital offer different benefits. All the benefits are considered necessary for learning but both cannot be realized simultaneously. Nahapiet and Ghoshal (1998) do not acknowledge this dilemma, as they juxtapose both types of social capital without considering the different types of social relationships behind it. I use the word dilemma in order to indicate that it seems as if a choice has always to be made between the two types of social capital. However, a certain choice for one type of capital always excludes the other side of the coin. For organizational learning, one would need both sides of the coin.

### **3. TYPES OF STRUCTURAL EMBEDDEDNESS AND ITS CONSEQUENCES**

The two types of social capital do not only differ in the identification of the locus of the benefits. They also assume different types of relationships. The distinction between weak and strong ties is much too imprecise in order to characterize these relationships. Therefore, I deepen the analysis of the structure of the relationships in both types of social capital. Especially, the form of structural embeddedness gives important insight why both types of social capital cannot be realized at once.

#### *3.1. Third party as structurally embedded between two groups is most constrained; it does not provide benefits for organizational learning*

Whereas Burt describes the third party as not involved in any cluster, Krackhardt (1999) analyzes the position of the third under the condition of membership in various (cohesive) groups or dense clusters in a network. (In the following, I will use the word 'group' in order to indicate a cohesive, dense cluster within a network; leaving apart the classical definition of a group as having a common goal). Groups in network analysis are conceptualized as structurally embedded 'balanced' relationships (see also the 'bonding' argument above). In case of double membership in two different groups, two cases can take place. Either the two groups do not have contacts with each other, then the third party has a strategical position in passing information. However, the quality of this information for organizational learning may not be assumed of high quality. In the other case, the two groups are related to each other, in this case the third party find himself structurally embedded. In this case, the third party must fulfill the norms of both groups.

Krackhardt (1999) has found that under the condition of public behaviour (the two groups are connected to each other, there exists structural embeddedness) the third party is maximally constrained in his behaviour, as the third party has to cope with the demands of two different groups. Behind this most constraining effect of structural embeddedness lies the assumption that the two groups differ in their norms etc. Thus, the relationships between the two groups and the third are not balanced but imbalanced. Then, it takes place, what Simmel (1950) has already recognized: "The favorable position of the *tertius* disappears quite generally the moment the two others become a unit – the moment, that is, the group in question changes from a combination of three elements back into that of two." (Simmel 1950:160).

### *3.2. Third party as member of two groups (with each structural embeddedness) hinders organizational learning*

Now I consider the case of un-balanced triadic relationships between members of a group. In this case, the third party is member of two groups. The groups are not connected to each other. The function of the third party as providing access to diverse information for organizational learning is relevant in this case.

In principle, in an unbalanced triad various combinations of coalition possible in the triad depending on the content: "A and B may stress and harmoniously feel their  $m$ , because the  $n$  which A does not share with B, and the  $x$  which B does not share with A, are at once spontaneously conceded to be individual prerogatives located, as it were, on another plane. If, however, C joins the company, who shares  $n$  with A and  $x$  with B, the result is that (even under this scheme, which is the one most favorable to the unity of the whole) harmony of feeling is made completely impossible. Two may actually be one party, or may stand entirely beyond any question of party. But it is usual for just such finely tuned combinations of three at once to result in three parties of two persons each, and thus to destroy the unequivocal character of the relations between each two of them." (Simmel 1950:136). Simmel's view on a triad has two implications: First, it depends on the content, which coalition is formed between whom and, secondly, agreement on a content  $x$  between two has consequences for the third (in the above quotation A). The harmony is vanished.

This view on a triad that can easily change into un-balanced relationships has important implications for organizational learning in several ways. Especially the function of the third party, as he is member of two un-linked groups is at stake. As a third party, he may gather information from the other group and thus provides access to diverse information. However, as the concept of a triad as indicated above, the new content will disturb the triadic relationship between the three altogether. Several cases are thinkable, the two others will not accept this information, or only one will accept the information. In any case, if there was a balanced relationship before, the third party has disturbed this cohesion. The same will happen when members are afraid that information will be transferred to the other group by the third party, independently whether this really happens.

It gets clear, that the third party as member of two groups could provide the benefits of access to diverse information. However, when doing so, this has a backwards effect on the triadic relationships within one group. The behaviour of one person, when being a member of two groups, has indirect effects on the triadic relationship. The behavior of one person has consequences for the whole triad. There is a backwards effect of the behavior of the third on the other two.

This backwards effect in a triad is the main reason, why both forms of social capital cannot simultaneously realized. Either, the social bonding capital is the primary goal, then the triad closes itself from outside and changes into a balanced, cohesive group. Or, the bridging capital is prioritized then triadic relationships will be, at least, temporarily, disturbed and, at worst, will change into unconnected dyads. This is only the case, when the third person is member of (at least) two groups simultaneously. In fact, the third is a constant threat to the cohesion in the group.

#### **4. ALTERNATIVE PATHWAYS FOR USING SOCIAL CAPITAL**

In the following, alternative pathways are proposed that could show ways out of the negative effects of the third party and nevertheless, keep the benefit of access to diverse information.

##### *4.1. The third party as neutral go-between*

One way out of the disturbing effects of the third party, is to give a different role to the third party. Instead of being an entrepreneur adding value to the network by transferring information, he might become a go-between with a neutral function in the transfer of information. The go-between as mediator is described as “a relationship counselor for the development and maintenance of social capital” (Nooteboom 1999: 342). The above analyses indicated that the third party/non-partisan mediator in the role of being concerned with both, has a backwards-effect on the group or has no value for organizational learning at all because of the constraints he has to fulfill (Krackhardt 1999). The non-partisan mediator, however, has a role in organizational learning as he can help assessing the value of information – the revelation function of the go-between (Nooteboom 1999) and as he can help to open potential outside sources of knowledge – the boundary spanning function (Nooteboom 1999). These functions can only be realized when the third-party is really non-partisan. “Indeed, some of the roles require an independence that is served by *not* having a direct stake in the relations that need to be developed.” (Nooteboom 1999:342).

However, in this role as non-partisan mediator, the third party also does not have the detailed, high quality information or knowledge as it exists within a group. In the function of the boundary spanner, the original role of third party as bridging device arises again. The difference, is however, that the third party has only 'knowledge about' or location knowledge (Wegner 1991) that he can transfer.

#### *4.2. The third party as member of two groups with highly diverse knowledge*

Another pathway out of the problems, especially when the third party is member of two groups, is to increase the 'cognitive distance' between the knowledge treated in both groups. Although cognitive distance is still not operationalized, the concept gives intuitively important insights: "Such outside sources of complementary cognition require a 'cognitive distance' which is sufficiently small to allow for understanding but sufficiently large to yield non-redundant, novel knowledge." (Nooteboom 2000:72). Cognitive distance means for the third party that knowledge acquired in one group cannot directly be used in the other group. The other group cannot make use out of the 'transferred' knowledge. The cognitive distance should be sufficiently large. Nevertheless, there should be some understanding that this knowledge might be valuable.

A potential way to establish cognitive distance is the use of near histories and/or hypothetical histories (March et al. 1996). Both are events "which have not really happened but which could have plausibly happened or which almost happened. Such simulated conditions are sometimes more prone for learning than real historical events" (March et al. 1996:7). In these cases, knowledge acquired in one group cannot readily transferred to the other group as it is unclear whether near histories can readily be applied. Nevertheless, there is some cognitive proximity between the real histories and the near histories.

Another potential way for increasing cognitive distance is dealing with knowledge with a different 'realities' in both groups. As Lawrence and Lorsch (1960) indicate, groups can differ in their time horizon and in their orientation toward diffuse or concentrated goals.

Such differences in knowledge between two groups make that the third party cannot readily transfer knowledge from one group to the other. Therefore, cohesion is not disturbed in a group by a third party. Nevertheless, there is also cognitive proximity as knowledge is not so different that the groups could not understand each other. Thus, the third party can provide diverse information but this cannot readily be used in a group. The group must make efforts of its own to construct the meaningful knowledge out of the information. This implies that an interactionist paradigm of organizational learning must be added to the exchange perspective.

Thus concluding, under the condition of cognitive distance, the third party is not constrained by himself and is not constraining knowledge development within a group.

## 5. ILLUSTRATIVE CASE

In this illustrative case, two types of groups are described that are intended by the organization to support organizational learning. This research took place in a consultancy firm with about 500 people. The two types of groups where learning takes place are described here as ‘professional development group’ and ‘project development group’. Management and members of the organization agreed that the two groups should help to support organizational learning. Organizational learning was de facto defined as supporting work in the primary process of consultancy. The primary process takes place in project teams that are composed depending on the client’s request, availability of personnel and career ambitions of the personnel.

The interesting aspect in this case is that two types of learning groups can be distinguished, although, the original assignment by management was the same: learning in order to improve work in the project teams. The groups were allowed to find their own way to establish organizational learning. Both groups consist of about 15 people who come together more or less regularly in order to discuss various themes that the participants considered important for improving their work in the project groups. Both groups have adopted another approach how they thought that the participants’ work in project teams could be improved. One group (‘Professional development group’) decided to take their own professional development as starting point. The other group (‘Project development group’) decided to take the participants’ current client-projects as material for learning.

### Professional development group

This group discussed *generic* themes of professional development, such as the norms and values of a consultant, conflict resolution with a client, giving unsolicited advice to a client etc. Members often could not achieve full treatment or final answers to a question during the meeting, and there was no pressure and no attempt to reach consensus, either on the general issue or on the personal experience that was brought in. The individual member decided whether and how to utilize the comments. Members used the group as working space and not just to narrate their experiences. Through discussion, feedback, and critical questions by colleagues, members were invited to explicate some of their implicit assumptions.

There was much interaction and feedback. The participants used their own experience in practice as material to work with. However, own experience is abstracted from its specific context, and becomes a hypothetical case: some details are highlighted, others are left out. Context-specific details need not be fully incorporated. Absenteeism is very low, and members were concerned when somebody was absent. Members reported that they learned a lot because their colleagues ask very critical questions that strike them personally as professionals and make them reflect.

### Project improvement group

Another group also intended to learn for the primary process in the projects made the choice to take the members' current projects as material to learn from. The intention was that every member should present (parts of) a current project and the group could help to improve this project by giving advice, hints and tricks.

The meetings took place once a month. Absenteeism was high and irregular. Absence was mostly explained in terms of the current project or a client, which got priority above the learning group. Other group members did not question the reasons for absence.

Generally, the meeting started by narrating about the projects every member was in. Often, when this round was finished, time was also gone and the group had a drink. Sometimes, the story about a project was interrupted by a question related to the project (and not related to the craftsmanship of the consultant as in the development group). However, there was no pressure from other group members to explain the detailed background and course of a current project. The diversity of projects reported was high. Members report that they could hardly give useful comments, as they did not know the details of a project. The group did not succeed to discuss projects in sufficient detail.

## **6. DISCUSSION**

The interesting aspect in these two groups is, that two groups starting with the same assignment but choosing different ways to realize the assignment also show different aspects on the usefulness of the groups for organizational learning. Members of the 'professional development group' report high learning results but could not pinpoint these results. Members of the 'project improvement group' report low learning results but question the usefulness of the learning results for the projects. Their success or failure for contributing to organizational learning can be explained by using the two types of social capital. More precisely, the failure of the 'project improvement group' can be explained by the impossibility to combine both types of social capital. The success of the 'professional development group' can be explained by their prudent separation of the two types of social capital and especially by excluding the possibility of a third party as a member of two groups. Nevertheless, they succeeded to keep motivation for sharing information high.

I will first discuss the unsuccessful story of the project improvement group in detail.

From the case description it became very clear that the project improvement group was not able to create social bonding capital. The group was not able to establish common norms that facilitate action. Even as far as absenteeism was concerned, common norms did not exist. Furthermore, there was a common code to just narrate the current projects and not critically discuss it.

Although every participant with his knowledge and experience could have been a valuable source of diverse knowledge, this was not brought in. Even more, participants did not even offer the opportunity to reflect on a project by using the diverse knowledge of other participants. The reasons for not offering the opportunity were the fear of negative consequences outside the group. Thus also social bridging capital was not used.

The reasons for not being able to use social capital lie in the backwards effect of the third party. As the case description indicates, every member of the project improvement group can be considered as a third party, as they are all simultaneously involved in project groups. For the simplicity of the argument, I will consider only the case of a single third party in the following.

Such a third party is involved in two groups that are connected to each other, namely the project group and the project improvement group. The two groups are connected to each other as information is exchanged via other members of the group. Thus the third party is maximally constrained in bringing in information from the project group into the project improvement group (see point 4 of learning problems).

In the following, I analyze the relative success-story of the professional development group. This group has developed a certain degree of social bonding capital. Participants have developed common norms that facilitate learning behavior. The material of learning, however, is different from the goal of the learning activities, namely project improvement. The group has decided to take generic themes as their learning material and not the current projects. This decision on the content of learning makes that the group has avoided the problem as described under point 4. As, again, every member of the professional development group can be considered as third party that is involved in two groups, the third party could be maximally constrained. This constraint, however, is abolished by the choice of the theme that induces a cognitive distance with their current project work. The cognitive distance is feasible in the choice of the theme but also in the different time horizon of this theme. The cognitive distance implies that knowledge cannot be directly transferred to the project group. Those who are not involved in the professional development group raise these critics.

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