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Roel Rutten and Hans Westlund and Frans Boekema

Tilburg University, Royal Institute of Technology, Sweden, Tilburg University

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## THE SPATIAL DIMENSION OF SOCIAL CAPITAL

Roel Rutten, Hans Westlund, Frans Boekema

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Social capital pertains to the social relations between humans, and since these social relations have a spatial dimension, so too does social capital. However, the spatial dimension of social capital has received little attention in the literature so far. Even in a globalizing world where electronic and virtual communication have the potential to defeat the need for geographical proximity, it is still relevant to consider the spatial dimension of social capital. After all, human beings exist most prominently in real rather than in virtual space. This special issue undertakes an inquiry into the spatial dimension of social capital from an explorative perspective. It aims to further theoretical and empirical understanding of the spatial dimension of social capital. As editors we recognize that the debate on social capital is still ongoing in the literature and that it is fed from different, sometimes conflicting perspectives. Therefore, the spatial dimension of social capital can only be conceptualized in the light of these different perspectives, which necessitates an explorative approach. Nonetheless, the various contributions of this special issue allow several conclusions that are valuable to the ongoing discussion on social capital and its spatial dimension.

In the first part of this introductory paper, we discuss social capital from a conceptual angle, as we distinguish between two key approaches (the “structuralist” and “interactionist” approaches). We then argue how these approaches may be helpful to the understanding of the spatial dimension of social capital. In the second part, we introduce the various contributions and explain how they contribute to the aim of this special issue.

### CONCEPTUALIZING SOCIAL CAPITAL

From the Polynesian definitions on social capital, two main schools of thought can be distinguished in the literature that are connected to two of the most important advocates of the concept: Bourdieu and Coleman. Though agreeing that social capital is connected to social networks, “Bourdieu regards social capital as a resource that is *produced* via the links to the *nodes* (individual/group), whereas Coleman’s standpoint is that social capital *consists of* the links within and between networks/groups (Westlund 2006: 1, emphases in original). This distinction captures a divide between “structuralists” (e.g., social network analysis, SNA), who equal social capital to the connections that an individual has to others, on the one hand, and “interactionists”, who emphasize that social capital is produced in social interactions, on the other hand. To structuralists, a person with many connections has more social capital than a person with few connections, because the connections provide access to resources and opportunities. Since connections are a characteristic of individuals, in this view, individuals can “own” social capital. This view connects nicely to mainstream economics’ conceptualization of human agents, where it enjoys considerable popularity. Interactionists, on the other hand, emphasize that social capital is the result of social interaction between individuals. Having connections as such is not enough; what goes on within these connections is what makes them valuable. In this view, individuals cannot own social capital because it is the outcome of social interaction. The interactionist view draws attention to norms, values, trust, etc. that shape social interactions. Certain intangible qualities of relations make them either more or less conducive for social interactions and hence for the production of social capital. As norms and values differ from one relation, network, or group to another, social capital will also differ between them – something that the structuralist

perspective has more difficulties with to explain, since it chiefly looks at the number of links. That is also why the interactionist view seems better placed to explain negative social capital, which yields detrimental outcomes for individuals and groups.

Although most definitions of social capital have (implicit) preferences for either one of the perspectives, they generally account for both. SNA, perhaps, forms the notable exception, since it represents an essentially structuralist perspective. Yet, most definitions recognize the value of both perspectives in that the structure of a network provides the context within which social interactions take place. As, for example, Field (2003) argues in his successful synopsis of the field:

[Social capital] “is a complex account of people’s relationships and their value” [it focuses on] “the ways in which social ties can be activated to produce particular types of benefit ... [or] negative outcomes” (Field 2003: 136).

### **The structuralist perspective**

The association of social capital to networks has inspired an entire literature on social network analysis (SNA) that investigates how network structures affect the performance of whole networks and of individuals within those networks. The social network literature is divided into two equally problematic perspectives on social capital: bridging vs. bonding. According to, for example, Burt (1992), the most advantageous position to hold in a social network is one where the focal actor has many direct ties to other actors who are not themselves connected to each other. This places the focal actor in the position of broker between the other actors in the network, which yields significant benefits for the focal actor. (cf. Burt 2005, Moran 2005). Bridging social capital thus results from an individual’s ability to act as a “bridge” between otherwise unrelated actors in his network. Bonding social capital, on the other hand, arises in networks where every individual is connected to most or all other individuals in the network. In such a “dense” network structure, shared norms and values and trust are likely to arise since interactions in the network are likely to be frequent. Shared norms and values and trust, in turn, represent social capital because they facilitate interaction between network members. Bonding social capital thus allows network members to perform more complex and risky tasks. (Burt 2005, Moran 2005).

Although seemingly opposites, the bridging and bonding positions have in common that they conflate network structure and social capital. The structure of a social network as such says very little about the ability of the network to produce any kind of outcome. By focusing chiefly on the structure of social networks, that is the number of connections between the network members, the bridging and bonding positions both assume what must be explained. Neither position is very much concerned with what happens in those connections and how that creates social capital. In other words, whilst the nature and quality of the interactions that take place in a social network must be considered in the explanation of social capital, they remain largely a black box in social network analysis. Of course, being a bridge implies some dependence of other network members on the bridge, and dense networks are more likely to develop shared norms and values. However, this says very little about the nature and quality of the interactions in those networks and, therefore, says very little about the amount of social capital that is present within them. Network structures thus provide a context for social interactions, and as such, they are relevant for the study of social capital. However, it is what happens within that context that is crucial for the explanation of social capital.

## **The interactionist perspective**

When the nature and quality of social relations is discussed, reference is often made to the work of French sociologist Emile Durkheim (cf. Field 2003). According to Durkheim:

“It is impossible for men to ... be in regular contact with one another without their acquiring some feeling for the group ... without their becoming attached to it ... And this attachment to something that transcends the individual ... is the very well-spring of moral activity” (Durkheim 1893/1997: xliii).

Durkheim pointed at the connection between association and obligation and the implication this has for how individuals behave (cf. Stedman Jones 2001). Being associated to others implies taking account of some form of “morality”, i.e., of norms, values, trust, rules, beliefs, codes, and a sense of shared identity and purpose. In other words, Durkheimian morality refers to a range of intangible characteristics of relations that help regulate social interactions. Morality, thus, does not refer to universal laws of good and bad, nor is it necessarily beneficial to all individual members of a group or society. Instead, morality is what emerges within a group to regulate social interactions between group members. It is closely related to another one of Durkheim’s concepts: social solidarity. This refers to “... everything that forces a man to take account of other people to regulate his action by something other than the promptings of his own egoism, and the more numerous and stronger these ties, the more solid is the morality (Durkheim 1893/1997: 331). Contemporary sociology talks about embeddedness and community rather than morality and solidarity, but it essentially refers to the same long-term and reciprocal social relations that Durkheim speaks of (cf. Granovetter 1985; Etzioni 1995; Day 2006). Those kinds of relations have a real impact on human behavior – for better or for worse – because the norms and values underlying them are played out within them through social interaction. In other words, the interactionist perspective seems much better placed than the structuralist perspective to explain the behavioral aspect of social capital.

## **The function of social capital**

To capture both perspectives, it may be argued that the essential quality of social capital lies in the fact that it is a relational concept. Social capital is about social relations between individuals and about what happens within these linkages. Social capital may thus be fulfilling two crucial functions: It acts as both a glue and a lubricant in social relations (Anderson and Jack 2002). It is a glue in that it binds people together and a lubricant in that it makes social interaction easier. The lubricant quality of social capital is best explained by the interactionist perspective, since it refers to the norms and values underlying social interactions (cf. Durkheim 1893/1997). The glue quality may be explained by both perspectives. The structure of a social network may explain dependency relations between individuals but also shared norms and values (the interactionist perspective) may provide a powerful glue.

Surprisingly, the literature on social capital has chiefly focused on what it *is* but remains vague on what it *does*. Put differently, neither the structuralist nor the interactionist perspective has a detailed account of the effect of social capital, of its function. Which social domain is affected by the structure of relations, on the one hand, and the nature and quality of those relations, on the other hand? Borrowing from the (economic) sociology literature on embeddedness, social capital seems to have an affect on human behavior. According to Granovetter, “the behavior and institutions to be analyzed are so constrained by ongoing social relations that to construe them as independent is a grievous misunderstanding (Granovetter 1985: 482). Institutions, in this argument, refer to social norms and values. The core argument of the embeddedness literature is

that social norms and values do not exist objectively and independently in society but are developed, maintained and effectuated in on-going webs of social relations (Granovetter 1985, 1992). Put differently; “Actors do not behave or decide as atoms outside a social context, nor do they adhere slavishly to a script written for them by the particular intersection of the sociocultural categories they happen to occupy. Their attempts at purposeful action are instead embedded in a concrete, ongoing system of social relations” (Granovetter 1992: 32). Granovetter advocated the embeddedness perspective as an alternative explanation of human action to the one provided by Williamsonian transaction cost economics. The key to this alternative perspective lies in the recognition of the value of social networks for human behavior. Drawing on this parallel, social capital should have an effect on human behavior through social interaction in networks.

In this light, the structuralist perspective of social capital seems poorly equipped to give a satisfactory explanation of human behavior. As argued, the structure of networks merely provides a context for social interaction, it does not say much on the nature and quality of these relations and what goes on inside them. The interactionist perspective, with its emphasis on norms and values comes much closer to explaining human behavior in the light of the social networks they are part of. Yet, the combination of both perspectives may be most promising.

### **The geography of social networks**

Given the relational nature of social capital as a concept, the question to the spatial dimension of social capital is really a question to the geography of social networks. There are two basic explanations to the fact that human activities have a tendency to concentrate in space. The first is that shorter distances between actors in general mean *lower interaction costs* than longer distances (Westlund 1999). The second is that agglomerations mean a spatial concentration of potential “co-actors” (customers, employers, social partners, etc) which implies a potential for better matching on all possible markets, leading to *higher revenues*.

Just as human activities tend to concentrate in space, so do the outcomes of these activities: built environment (real capital), money (financial capital) and people/labor (human capital). Within agglomerations and between them, networks are created for distribution, exchange and use of real, financial and human capital. A substantial part of these networks are in themselves real capital (roads, bridges, powerlines, broadbands, etc.). Human networks make use of these physical networks, but human networks are in themselves intangible and non-material. These networks and what’s being distributed in them, i.e., the structuralist and interactionist perspectives, of course, constitute social capital.

#### ***The structuralist perspective***

From a *structuralist* perspective, a fundamental factor contributing to explaining the spatial distribution of social capital is thus the spatial distribution of people. For the abovementioned reasons, actors’ contacts with each other tend to be spatially concentrated to the functional regions they reside or work in. However, the spatial distribution and extension of peoples’ networks varies in *density* (number of links per node), *quality* (transmission capacity of the links) and *durability* due to a number of reasons. Actors’ qualities, capacities and resources, such as language capacity and other features of human capital, ethnicity, economic resources, etc. influence the spatial extensions of their networks. Also, there are the costs connected to interaction over distance and the expected revenues of this interaction. Normally we may assume that no interaction occurs if costs exceed revenues.

The enormous decreases in interaction costs that have occurred after World War II, as well as increased capacities and resources of actors, have meant spatial extensions of peoples’ social

capital. However, as long as there is a positive relation between distance and interaction costs, the density of social capital, defined as the number of links per node, decreases with distance. The same holds for the quality/capacity of social capital. As interaction costs increase with distance, so does the propensity to invest in the quality and capacity of a relationship.

A third aspect of networks is the weak vs. strong ties issue. Weak vs. strong ties refers to the durability of a tie, which is dependent on its maintenance costs and expected revenues. In line with the above, it may be assumed that the positive relation between distance and interaction costs is reflected in the willingness to maintain ties, and that the number of ties yielding positive net revenues decreases with distance. Thus, there should be a general tendency for the durability of social relations to decrease with distance. In other words; maintaining a dense network of strong relations is (much) easier to accomplish at close proximity. There are of course many examples of strong ties that are maintained over long distances (Amin and Cohendet 2004). Apparently, once a tie is strong, that is, when norms and values are felt and shared strongly, individuals seem quite capable of maintaining these ties over distance. However, strong ties over long distances are in general associated with higher costs for initial investment, usage and maintenance. Given that individuals' time and other resources are restricted, this sets a limit to the number of strong ties that can be maintained at distance. Also, it should be underscored that weak ties may benefit substantially from geographical proximity as well. Lacking a strong sense of shared norms and values, weak ties need frequent interaction to be sustained. Frequent interaction, in turn, is best achieved among individuals who occupy the same geographical area. Such networks of weak ties among many individuals may be an explanation behind the success of such regions as Silicon Valley or Third Italy (e.g. Storper 1993).

### ***The interactionist perspective***

Regarding the *interactionist* perspective of social capital, the norms and values being distributed in social networks function both as causes and effects of the process in which social capital is built. Norms and values vary considerably between groups and networks. However, the decisive question is whether norms and values are connected to space or not. There is much to be said on both sides. It can be argued that many groups/networks are found on a number of spatial levels, from local to international, and that the differences between the groups/networks are larger than differences between spatial units on the same level, e.g. regions. But it can similarly be argued – and shown empirically – that there are nevertheless differences in values, such as e.g. trust and tolerance, between places, regions and countries (cf. Beugelsdijk and Van Schaik 2005; Morgan 2004; Huntington and Harrison 2000).

The reason for these spatial differences in values is basically the same as already discussed. As the density, quality and durability of network links are affected by distance, so is the distribution and exchange of values, norms and other types of information within these links. The spatial agglomerations of networks are at the same time spatial agglomerations of value distribution and exchange. In these spatially concentrated and delimited distribution and exchange processes, values and norms do not remain completely unchanged. The repeated interactions that maintain values and norms are not wholly identical interactions. The networks' actors are replaced as time passes, which means new influences.<sup>1</sup> Based on the spatial concentration and delimitation of social networks, spatial units have over time developed social capitals that to certain extents deviate from each other. The Internet, increased traveling and all other forms of increased exchange across spatial boundaries have contributed to the reduction of differences in spatially based norms and values. However, as long as there is a positive relation between distance and

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<sup>1</sup> These arguments are connected to Giddens' (1979, 1984) structuration theory in which there is a dual relationship between the agents (actors) of society and the structures (social networks and norms) in which they participate. See Westlund and Nilsson (2005) for a more developed discussion.

interaction costs, there is a factor working for certain spatially based differences in norms and values. In other words, the social depth of relations must not be conflated with spatial reach (Morgan 2004: 5). As argued, even in the Internet era, human beings are connected to specific places, i.e., the places where they live, work, have their family and friends, the place they call home. Therefore, if human beings are spatially sticky, so are their social networks and the norms and values that are carried and developed within them.

In sum, the fact that human beings are spatially sticky and the fact that geographical proximity greatly enhances both the frequency and the depth of social interaction, makes that the norms and values aspect of social capital is spatially sticky as well. This aspect of social capital, therefore, is very difficult to tap into for outsiders, which makes it a powerful source of local competitive advantage (cf. Morgan 2004). Obviously, shared norms and values may be more profound in strong ties. But social interactions in spatially concentrated weak ties may also be governed by shared norms and values. To a large degree, these norms and values may originate from local culture (e.g., social and or ethnical sub cultures, business culture) rather than from interactions within these ties. That is, local preferences and expectations about public behavior may be an important force shaping social interactions in weak ties. Since these preferences and expectations may differ from one location to another, they are another example of the spatial stickiness of social capital.

## **Conclusion**

First of all, the spatial dimension of social capital seems to be a matter of the geography of human social networks. Since humans are spatially sticky, even in the Internet era, so is the social capital that is connected to their social networks. From the above discussion a number of conclusions may be drawn:

1. A dense network of social relations is easier to maintain at close proximity than at distance, since the cost of social interaction increase with distance while the benefits remain the same.
2. If the net revenues of a social relation are positive, this relation may be maintained over long distance. Since such strong ties develop over time, this suggests that “time” cannot be isolated from “space” in the discussion of the spatial dimension of social capital.
3. For weak ties, spatial proximity may be of crucial importance since it enables the frequent social interaction that is required to sustain them.

Conclusions 2 and 3 urge a pressing question: To what extent can social capital (in terms of strong ties, with strongly shared norms and values) substitute the need for geographical proximity in complex social interaction?

4. If norms and values (i.e., social capital) are developed and maintained in social relations, and to the extent that social relations are spatially sticky, so are norms and values (i.e., social capital). This implies that social capital can be researched at the level of locations as well as on the level of social relations. That is, social relations will benefit (or suffer) from the prevailing norms and values of the particular location of the human agents forming these relations.

The various answers to the spatial dimension of social capital seem to suggest that there may be several different mechanisms at work. Moreover, depending on the type of relation and the social interaction that goes on within that relation, there may be different forms of social capital. These different forms of social capital, in turn, may have different spatial dimensions. Exploring these mechanisms and types of relations, social interactions and social capital requires the application of both the structuralist and the interactionist perspectives. As seems to follow from points 1 and 2 (above), the relation between the structure of a social network, on the one hand, and the

geographical distribution of the individuals forming that network, on the other hand, seems to depend on the kind of social interactions that go on within that network, or expressed in a more economic way: the actors' net benefits from taking part in the network.

## STRUCTURE OF THE SPECIAL ISSUE

The five remaining contributions to this special issue discuss the various spatial levels on which social capital plays a role. In the next paper, Jan Lambooy revisits the concept of knowledge spillover in order to explain the role of social capital in the regional networks that carry it. His theoretical paper argues that knowledge flows, the spatial context of social networks, and social capital are strongly linked. Frane Adam and Hans Westlund perform a meta-analysis of 65 studies on the relation between social capital and economic performance. They address two levels of analysis in their study; individual firms and networks of firms. They find that empirical studies yield different outcomes for these levels. Roel Rutten and John Gelissen continue by researching the role of social capital to the economic development of European regions. They find that social capital matters, but on the level of subgroups within a regional population, rather than on the level of the region as a whole. Veronique Schutjens and Beate Völker look at the level of neighborhoods. They find that the performance of small, new firms is affected by the social capital of the entrepreneur. They also find that local social capital (social networks in the neighborhood) plays a different role than non-local social capital. Considering the substantial variety in levels of analysis and the different role played by social capital on each of these levels, Hans Westlund, Roel Rutten and Frans Boekema, in the final paper, suggest a conceptual framework for the study of spatial levels and social capital.

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