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**The articulation of social capital in entrepreneurial networks: a glue or a lubricant?**

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## **The articulation of social capital in entrepreneurial networks: a glue or a lubricant?**

### **Abstract**

Whilst social capital has been applied in a variety of contexts the nature, role and application of social capital in an entrepreneurial context have not been extensively explored. The nature of social capital presents a conceptual puzzle in that it is said to be both glue, which forms the structure of networks, and at the same time a lubricant that facilitates the operation of networks. Using techniques of participant observation and interviews this paper attempts to resolve this enigma. It finds that social capital is not a thing, but a process that creates a condition of social capital. The structural and relational aspects are found to be dimensions of this process. Interestingly the data also demonstrates that there are successful etiquettes of social capital formation. These etiquettes provide the rules and framework for the interactions.

**Keywords** - social capital, social interaction, entrepreneurship, networks, the entrepreneurial process

## **The articulation of social capital in entrepreneurial networks: A glue or a lubricant?**

### **1. Introduction**

This paper is an exploration of the nature of social capital in entrepreneurial networks. It establishes that social capital is a relational artefact that plays an important role in facilitating interaction. Although research has provided us with a useful description of the importance of social capital, these accounts raise the enigma that social capital seems to have two contradictory roles. Social capital has been taken to be structure (Coleman 1990) but it also includes many aspects of the social context, such as social interaction, social ties, trusting relationships and value systems which facilitate the actions of individuals located in a particular social context (Nahapiet and Ghoshal 1997, Tsai and Ghoshal 1998). Furthermore, social capital is said to be both the origin, and the expression of successful network interactions (Cooke and Wills 1999).

Paradoxically social capital is described as both the glue that binds to create a network and also the lubricant that eases and energises network interaction (Powell and Smith-Doerr 1994). Powell and Smith Doerr (1994: 368) comment: *“sociologists and anthropologists have long been concerned with how individuals are linked to one another and how these bonds of affiliation serve as both a lubricant for getting things done and a glue that provides order and meaning to social life.”* This duality puzzle provides the theoretical focus of the paper, which the authors tackle through the inductive analysis of a range of qualitative data. The empirical framework for the fieldwork is entrepreneurial network formation which, as an activity, provides the

opportunity to observe the creation and use of social capital. The techniques of participant observation and in-depth interviews allowed the authors to examine the rules or etiquettes of social capital formation and to construct a tentative model of the social capital process.

## **2. Social capital, networks and entrepreneurship**

### *2.1 Networks and entrepreneurship*

In recent years the entrepreneurship literature has highlighted the significance of social networks in the creation and sustaining of new ventures (Aldrich, Rosen and Woodward 1987, Carsrud and Johnson 1989, Huggins 2000). The social network approach has been used in two ways. Firstly, to demonstrate that the personal network of the owner-manager of a new venture allows access to resources which are not possessed internally (Ostgaard and Birley 1994); secondly, to illustrate the influence of social embeddedness and the associated dynamics of economic exchange (Johannisson 1997, Portes and Sensenbrenner 1993). Whilst both perspectives complement our understanding about the contribution of social networks to entrepreneurship, they do so in different ways. At one level social networks are perceived to be important because they open up entrepreneurial possibilities, provide access to useful, reliable, exclusive, less redundant information (Brüderl and Preisendörfer 1998). However, at another level social networks provide a mechanism for enacting the environment (Johannisson 1988, Weick 1969,1987), in other words re-create by embedding so that networks become the medium of exchange.

Whilst the social network literature is informative about the role of networks, little research has considered how people become located within a network and how the network is operated (what Burt (1997) calls the process element of studies). In part, this is explained by the fact that networks are dynamic relationships (Chell and Baines 2000), changing and processual, consequently difficult to comprehend except as a "snapshot" (Mønsted 1995). Moreover, Johannisson (1986) notes that network linkages are elusive, and the network entity has "fuzzy" boundaries. This creates a research difficulty in that networks only exist as a relational artefact; their objectification only becomes real as a product of relational interaction. Yet, in spite of this condition, networks are a "thing in themselves". They have a reality which has effects, in that being part of a network impacts upon the entrepreneurial process. Nonetheless, Cooke and Wills (1999) note that although the literature on networking has become voluminous, little attention has been paid to the broader theoretical construct to which it relates. Social capital provides such a construct.

## *2.2 Social Capital and Networks*

The actual term social capital is credited to Jacobs (1961) (although it was discussed by Hanifan (1920)), whilst Loury (1977) developed the individualistic and economic conception (Cooke and Wills 1999). Broadly, analysts of social capital are centrally concerned with the significance of relationships as a resource for social action (Nahapiet and Ghoshal 1998). This reflects the emerging concern about the role of social relationships in explanations of business activity. This is not to say that social

capital is only about the instrumental use of social structures (Coleman 1988). A richer view is that an actor's embeddedness in social structures endows him with social capital (Oinas 1999, Portes and Sensenbrenner 1993). In the literature, social capital is broadly defined as an asset that inheres in social relations and networks (Leana and Van Buren 1999, Burt, 1997). Flora (1998: 488), for example, notes that a feature of networks is social capital, which facilitates the co-ordination and co-operation of the network for mutual benefit. Hence it seems that an explanatory element of networks is social capital. This is because the central proposition of social capital theory is that networks of relationships constitute a valuable resource for the conduct of affairs (Nahapiet and Ghoshal 1998). Social capital is embedded within networks of mutual acquaintances and based on mutual recognition. It may take the form of obligations arising within group membership (Bourdieu 1986), or obtaining resources through the contacts within a network (Leana and Van Buren 1999). Such links (friends of friends, Boissevain 1974; strong and weak ties, Granovetter 1985) can provide privileged information or access to opportunities.

It is increasingly recognised that interpersonal relationships have a crucial role to play in the success of individuals (Coleman 1988, Putnam, Leonardi and Nanetti 1993). In particular we note that economic exchanges are influenced by the level of trust and familiarity between economic agents (Dibben 2000, Fukuyama 1995, Gambetta 1988). Social capital might be described as the operation of a social process, where non-co-operative action would lead to a reduction in information and resources flows. In contrast an interaction within a rich endowment of social capital is likely to enhance information and resource flows. Furthermore, the possession of social capital may reduce transaction costs (Putnam 1993), or as Dosi (1988) puts it, reduces transaction

costs because of untraded interdependencies. Social capital may even reduce uncertainty (Fafchamps 2000).

The idea of social capital has been applied in a variety of contexts and to a wide range of social levels. Studies have pointed out that social capital is a productive resource facilitating individual action (Lin and Dumin 1986, Lin, Ensel and Vaughn 1981, Marsden and Hurlbert 1988, Tsai and Ghoshal 1998), business operation (Baker 1990, Bates 1997, Burt 1992, Coleman 1990) and that it creates value (Tsai and Ghoshal 1998). Although social capital was originally described as a relational resource of personal ties which individuals use for development (Jacobs 1961, Loury 1971, Tsai and Ghoshal 1998), more recently a broader conceptualisation presents social capital as sets of resources embedded in relationships (Burt 1992). This notion of a resource fits neatly with the concept of entrepreneurial networks because although entrepreneurship is a creative process, it operates in constrained circumstances. However, one way to overcome some of the constraints the entrepreneur may face is to acquire knowledge and resources by tapping into an extended pool, which exists outside the business. This reservoir, or network of resources and information, may represent and offer a rich source of explicit and implicit knowledge, experience and privileged access to physical resources. Such networks may offer an alternative, perhaps even a superior option, to the limitations of the finite supply of internal resources for the new or growing venture.

The possession of social capital could be described as a catalyst to beneficial social or economic inter-action. Since the concept of social capital is rooted in the structure and content of relationships its benefits have been analysed at a number of different levels of relationships, ranging from individuals (Bellivue, O'Reilly and Wade

1996), individual firms to societies (Putnam 1995), to even nations (Fukuyama 1995). At the firm level, Pennings, Lee and Witteloostuijn (1998), Uzzi (1996) and Cooke and Wills (1999) all note some beneficial implications of social capital and embeddedness for organisations. Similarly, Fafchamps (2000) found small manufacturers obtained credit more easily when they had a rich endowment of social capital. In essence then the idea of social capital offers a way of comprehending the operation of networks.

### *2.3 Understanding social capital*

An alternative terminology for this phenomena of social capital, and perhaps more helpful descriptive, might be “networking” capital, not least in that it captures the essence of a relational phenomena. A community, whether a business community or a more general notion of society, is in fact a series or set of relationships. It is formed by the creation of ties between individuals, so that a society is, in the abstract, a series of connected or "tied" nodes (Narayan and Pritchett 1999). Given that social capital is the bond that cements these individual ties (Putnam 1993), the idea of "a capital" is a sound reflection of the structural aspect of social capital. Like financial capital the asset of social capital becomes a necessary part of the structure, shaping the structure and influencing outcomes. Moreover, as a capital, it is locked into the network and becomes an integral part of that structure. The income generated from this social capital is, however, of a different nature. The earnings of social capital are access; the income's form (the transformation in Levi's 1996 terms) is as a lubricant to facilitate the flow of information and resources through the network. Therefore, we argue that, for analytic

purposes, the structural capital aspect (the structural role) or the income flow (process role) derived from the capital need to be carefully distinguished.

Capital and the associated "isms", such as capitalism, are argued to provide a robust and useful metaphor for social capital (Narayan and Pritchett 1999). It captures the idea of something which augments a stock of incomes without being consumed directly in the process of use and, like most capitals, more is better than less (Leana and Van Buren 1999). Unlike other forms of capital, social capital inheres in the structure of relations between and among actors (Coleman 1990). Social capital is a productive asset, making certain ends possible which, in the absence of social capital, would not be possible, or more difficult (Coleman 1988). In this perspective social capital is created within the embedding process; hence an "end" (a product of networks) as well as a means (of enabling). Embedding involves becoming part of the social structure. Peterson (1995) provides an excellent example in his account of Cuban-American migrants. He explains (1995: 1194), *"this social structure simultaneously provided the glue for a major, largely ethnic community and a framework for relating to an established, indigenous U.S. business and financial community"*. One interesting consequence of this interpretation is that social embeddedness can also have negative effects because of group expectations (Anderson and Jack 2000). Networks may, for example, provide a mechanism for the development of trust and legitimacy; but networks may also serve to exclude and to include (Chell and Baines 2000); to consolidate power or to share power (Bourdieu 1986, Flora 1998).

From this conceptualisation of social positioning two contrasting propositions about social capital can be identified, namely rational choice and embeddedness. The

rational choice perspective views social capital as a basic resource which individuals use for their own self-interested ends without recognising any need for more than self-interested behaviour (Flora 1998). Whilst the concept of embeddedness also connotes individual freedom of action, in addition it implies some form of reciprocity or mutuality. In embedded contexts entrepreneurial agency would be shaped or nudged in certain directions because of implicit rules and social mores (Flora 1998). This point raises interesting issues from the entrepreneurial applications of social capital, in particular - is social capital about exploiting others and what are the contextual rules, if any, for the formation of social capital?

From an entrepreneurial perspective, Cooke and Wills (1999) argue that Putnam's (1993) work on regional economic development is particularly interesting. This is because it goes against the grain of entrepreneurship as an individualistic process by drawing attention to the link between a northern Italian region's prosperity and the high incidence of social capital. They further argue that if risk and uncertainty are barriers to successful enterprise, then the provision of risk spreading and knowledge enhancing conditions of social capital should be examined. In counterpoint to Putnam's emphasis on civil society, Cohen and Fields (1999) argue that whilst social capital helps explain Silicon Valley's success, the social capital has to be understood in terms of the local institutions and entities, such as the universities and business networks. Moreover, Cook and Wills (1999) argue that insights of considerable value can be generated by reference to the ways in which SME's attempt to create social capital. The examination of this process is the objective of this research, although the unit of analysis will be the entrepreneur, rather than the SME. According to Johannisson (2000: 368), whilst management needs structure, entrepreneurship thrives on process, ambiguity and action

rationality. This leads entrepreneurs to continuously network as they pursue and react to new realities (Johannisson 2000).

#### *2.4 Aspects of social capital*

Thus far we have identified two distinct dimensions of social capital - the structural and the relational. Granovetter (1992) originally made the distinction between structural and relational embeddedness (Hakansson and Snehona 1995, Lindenberg 1996). In his view the structural dimension of social capital is about social interactions, the sum of relationships within a social structure. The relational dimension refers to direct relationships of the entrepreneur to others and the assets rooted in these relationships, such as trust and trustworthiness (Tsai and Ghoshal 1998). Trust acts as a governance mechanism (Dibben 2000), it is an attribute of the relationship, but trustworthiness remains an attribute of the actors involved (Barney and Hansen 1994). Trust is both an outcome of, and an antecedent to, successful collective action (Leana and Van Buren 1999).

Nahapiet and Ghoshal, (1997, 1998) argue for a third distinct dimension; the cognitive dimension which is about shared values or paradigms that allow a common understanding of appropriate ways of acting, "value interjection" in their terms. Thus, cognitive social capital provides a set of norms of acceptable behaviour. Ostrom (1990) provides a useful example of this normalising of individual selfish behaviour to prevent a "Tragedy of the Commons", or what Burt (1997) calls the "public goods" aspect. In contrast to this view the cognitive can be envisaged as part of the embedding aspect, discussed earlier. Our view is that that the social rules and mores of appropriate

behaviour are part of the context in which one becomes embedded. Nonetheless, the recognition of this conditioning aspect has implications for understanding the processes of social capital (Jack and Anderson 2001).

Related to this dimension is an additional characteristic of social capital described by Leana and Van Buren (1999) as associability. This includes trust but also elements of sociability, which is the ability to act socially with others, and a willingness to subordinate individual desires to group objectives. Of course this willingness to subordinate individual desires may also involve a longer-term view, or indirect view, whereby longer-term individual desires are achieved by the groups success. Trust in social capital has several aspects (Gambetta 1988, Korsgaard, Brewer and Hanna 1996) of which the most significant is as a social lubricant. Definitions of trust vary, but in general, trust appears to be about a willingness to be vulnerable (Leana and Van Buren 1999, Rousseau, Sitkin, Burt and Camerer 1998). We appreciate that this may be a relatively simplistic presentation of trust but the complexities inherent in the notion of trust are beyond the scope of this paper. However, the structural and the relational dimensions of social interactive ties may stimulate trust and trustworthiness (Granovetter 1985, Gulati 1995) as increasing interaction between individuals leads to increased perceptions of trustworthiness (Gabarro 1978, Krackhardt 1992). Consequently trust may be an outcome of social capital endowment.

In terms of the entrepreneurial context for social capital, Fafchamps and Minten, (1999) argue that if network capital is essential for firm growth, which is a point confirmed in their study, then smart entrepreneurs must accumulate in just the same way as they must accumulate physical resources. Consequently, Fafchamps and

Minten's (1999) view is that social capital is a necessary pre-cursor to enterprise. In a similar vein, but on a grander scale, Putnam (1995) argues that individuals do not form bowling leagues as a result of economic prosperity; rather they are prosperous because they form bowling leagues. Fafchamps and Minten (1999) dismiss the idea that a well-developed network is merely a by-product of entrepreneurship. They argue that good entrepreneurs invest in social interaction. This is in contrast to the views of Leana and Van Buren (1999) and Coleman (1990) who argue that social capital is a by-product of other organisational activities. Fafchamps and Minten (1999) are convinced about the direction of causality, as well as the correlation, of "good" entrepreneurship and social capital.

From the discussion of the literature, the following table highlights the conceptual issues, to draw out the analytical categories to develop what appear to be the key questions related to these issues.

*Insert Table 1 about here*

Fukuyama (1995) suggests that the accumulation of social capital is a complicated, even mysterious, process. Certainly the literature suggests that it is complicated, not least because it is a human process. However, since the literature also indicates the importance of social capital for entrepreneurial activity, it seems worthwhile investigating the entrepreneurial micro process of social capital formation. Moreover, as Levi (1996) notes a more complete theory of the origins, maintenance and transformation of social capital are required. These areas represent the objectives of this paper and are addressed in two ways: 1) the question of how, and if, entrepreneurs form or create social capital is considered and 2) the nature of this social capital is explored.

This leads to a series of related subordinate questions, at a theoretical level how can social capital be both glue and lubricant; can social capital be both an end and a means? At a more practical level, how is social capital beneficial and finally how does trust and associability fit in the creation of social capital?

### **3. Methodology**

The research questions developed from the literature review had two elements. Firstly, the practical questions and secondly the more theoretical issue about the nature of social capital. The complex nature of this enquiry required the use of a range of qualitative techniques for data gathering and analysis. As Curran and Blackburn (2001) suggest qualitative methods are most suited to exploring process. Moreover, a qualitative approach was used because soft issues were being dealt with which are not amenable to quantification; meanings which lie behind actions (Hammersley 1992), and the objectives of the research were related to understanding, rather than measuring (Oinas 1999).

A particular difficulty was that the literature indicated that social capital only existed as a relational artefact and hence could not be observed directly. So, to deal with these problems, the authors concentrated on gathering qualitative data about the practical issues and relied upon analytic induction to deal with the conceptual issue. In addition to the new data this research generated, the authors had a pool of ethnographic data previously gathered as case studies of rural entrepreneurial activity. This material represented a resource for comparison with and triangulation of the emerging research themes. The authors felt that if they could reach an understanding of the "how"

question, analysis would allow us to address the theoretical issues. Consequently, the techniques of participant observation and in-depth interviews were employed, followed by analysis of the data using the constant comparative method (Silverman 2000) and analytic induction (Glaser and Strauss 1967). The constant comparison method involves comparing contrasting emergent themes in the data to develop explanation. Our initial design was, in conjunction with the literature, to first identify possible explanatory themes from the interviews; refine these with further interviews, then to observe the process of social capitalisation.

### *3.1 Practical research process problems and their resolution*

In reality our research process became more extemporaneous and opportunistic than our research plan. Whilst the initial interviews were useful in developing our appreciation of the role of social capital, they failed to provide any clear account of the process. Our first round of entrepreneurial respondents seemed to engage in social capital production implicitly or instinctively. They knew about the outcomes and valued the significance of social capital (although not expressed in this terminology) but seemed to be unaware of any process or at least could not explain it. In retrospect it is now clear that we had failed to operationalize the concept of social capital. To try to overcome this we sought out opportunities to observe what happened at meetings. This involved attending social and business group functions to watch the actions of people meeting for the first time. This was more helpful in determining that there was clearly "something going on". Different actors appeared to work in different ways, but no clear pattern emerged. The data seemed too general for meaningful analysis and the specific

context of the meetings and the variety of people meeting was too confusing. We were unable to trace out any explanatory themes at this stage. Eventually the authors turned to engineering situations where they could, in effect, eavesdrop, using participant observation with the emphasis on observation. Using the academic context, entrepreneurial strangers were brought together, introduced and left to get on with getting to know each other. These "strangers" were listened to carefully and the process that took place was closely observed. This technique provided a rich source of process data for comparative analysis and provided the basis for a tentative model. The researchers compared observations to test that their grasp of what had happened was reasonably reliable. Emergent themes were then used as frameworks for the next rounds of interviews. The points and findings were also compared with the existing ethnographic data, primarily to check for inconsistencies but also for the purpose of triangulation.

### *3.2 Data collection*

Three respondents who were known to the researchers as being "well networked" were then interviewed in-depth. Purposeful sampling was used to identify respondents. This sampling method enables researchers to use their judgement to select respondents to address the research questions and who will help the objectives of the research to be achieved (Saunders, Lewis and Thornhill 1997). It is often used when working with small samples and when researchers wish to select cases that are particularly informative (Neuman 1991). Guided by the literature, this purposeful sample was thought to present respondents who, because of their established network, would have

developed social capital. These in-depth interviews provided some descriptive material, but proved less helpful for indicating any explanatory themes. We noted that these respondents saw their networking activities as a fundamental element of their entrepreneurial activity. So, the development of network contacts came "naturally" to them. Because of this, these respondents could not describe the process. As explained earlier, the authors then turned to engineer three successful "observation" events and finally interviewed another four respondents to confirm and refine the emergent theory. Finally, a model was developed and shown to two of the original respondents who were asked to refute or confirm the findings. Throughout the research the authors were informed by the literature and by comparison with our existing database of 50 entrepreneurial ethnographies<sup>1</sup>, which we have developed over the last decade. Table 2 indicates the various stages to the research.

*Insert Table 2 about here*

#### **4. Findings**

Developing social capital was more than everyday interaction; it went beyond the basics of a commercial transaction. The interactions ran deeper than simply completing the formalities of business or even the conventions of introductions. The interchange that took place did not appear to have any explicit end purpose. However, the idea of purposefulness shone through the interactions. This purpose was not an exploitative objective, in that the respondents did not seem to be solely seeking out advantage. Instead, they appeared to be genuinely interested in learning about the other; they wanted to find out who they were and seek out their opinions. In essence, they built up a picture of each other and used this to locate each other in some wider scheme of things.

The relationship developed on the basis of knowing each other. Social capital was seen to be created by an empathy for, and understanding of the other. It was generated within the interaction, but as a by-product of the association. This seems to confirm that social capital is indeed a relational artefact but can be described as a quality of a relationship. Social capital seemed to be developed by accumulating knowledge about each other, and by creating space for an appreciation of each other. The interactions that took place were highly iterative and reciprocal; full of polite probes and counter probes. It was not about boasting, but about demonstrating credentials. Indeed, some of the respondents were self-effacing, making light of their achievements. The exchanges were a very open version of - you show me yours and I'll show you mine - exchange. It seemed that these respondents valued the other; evidenced by the opportunities they created to learn more about each other. Again this was general, rather than specific, perhaps best summarised as gathering knowledge about the other. What was observed had to be social capital, there seems no other way to describe the artefact created. Therefore, it seems then that social capital is indeed a relational production. Consequently, social capital formation is a process of negotiating to embed the self into an appreciative relationship with another.

One respondent explained that he "was his business" and only by knowing about him, could his customers rely upon the service provided by the business. We also noted from respondents' comments that they saw social capital formation as providing a robust relationship. That is, one likely to endure the passage of time and which could be picked up at some later date. These findings do seem to mirror the "relational" aspect discussed in the literature. Moreover, rather than emphasising the use of these networks, the respondents emphasised that having networks was important. Again, this reinforced the idea that "means", social capital, is recognised to be the "end" in itself. Consequently,

the acquisition of social capital is an entrepreneurial activity in its own right. Whilst it might create a potential store of values, the process of creation is about building a durable relational asset.

What is striking about the formation of social capital is the emphasis on process rather than outcomes. None of our entrepreneurs initially specified the benefits of using other people, but all emphasised the importance of developing contacts. It was only with prompting that they told us about the benefits and were able to itemise numerous examples. Consequently, developing entrepreneurial social capital should be understood more in terms of building potential rather than harvesting specific benefits. From the data a "correct", or acceptable, form for developing social capital could be determined. The respondents all pointed out that, whilst contacts were vital for business, it was not enough to simply try to impose oneself on another. There was an etiquette that had to be followed to enable the process. Therefore, the key was to understand the process of becoming part of the network. That is to say that it was an organic process of sharing where no one respondent could dominate, nor could he or she appear self-seeking. The process was seen as iterative and mutual.

Nonetheless, we noted from our respondents that entrepreneurial social capital was a crucial element of entrepreneurial activity. They used the process as ways of generating information sources, developing resources and as a mechanism for acquiring business potentials. Figure 1 illustrates some of the respondents' points about process and content.

*Insert Figure 1 about here*

Since the entrepreneurs saw social capital formation as a natural part of being entrepreneurial, the formation process was viewed as a basic element of developing their business. This seems to support the point made in the literature that social capital is also a capital "stock" or business asset and that entrepreneurial interaction was about building social capital. It is interesting to reflect upon the points made by Gartner (1988) and Hornsby, Naffziger, Kuratko and Montango (1993) that entrepreneurship is about the creation of organisations. In the context of social capital it may be that this creation process is simply extending the organisation. In this light the entrepreneurial organisation is much broader than the entrepreneurial business *per se*, it can be taken to include the additional dimensions created by social capital formation.

#### *4.1 The etiquettes of social capital*

The social capital formation process seemed to be very constrained by "rules" in building social capital. Indeed, respondents commented that "forcing" the process, by ignoring these rules, was not only unsuccessful, but also likely to sour the possibility of a long-term relationship. Thus, what has been described as the etiquettes of social capital seemed to be an important part of the process. As an exemplar, respondents were asked to describe the exchange of visiting cards, because we noted that all respondents only exchanged cards towards the end of meetings. Interestingly they saw the exchange as an invitation to continue the relationship. Contrastingly, handing out cards at the beginning of a meeting was seen to indicate an end to the development, rather than a

beginning. Card exchange seemed to be symbolic of intent to continue the relationship and could be seen to characterise the formation of social capital. This element seems to reinforce and extend the idea of the cognitive dimension of social capital. The "way" to develop social capital is to conform to the etiquettes, which appear to both guide and constrain the process. This dimension of appropriate etiquette's can be extended by borrowing Adam Smith's (1776) idea of the "hidden hand". Smith argued that the hidden hand of capitalism fulfilled a co-ordinating function whereby the enlightened self-interest of economic actors was shaped towards a general economic improvement. This view seems to echo the findings and notion of etiquettes of self-interest, in that by not openly pursuing selfish objectives in social capital formation, the entire social network is likely to be enriched. It should also be noted that possible short-term benefits are forgone to further the long-term relationship.

Figure 2 is a synthesis of points made by respondents and our observations to contrast this "natural" process of becoming, with a hypothesised mechanistic attempt to form social capital which is how it can be portrayed. Its purpose is to emphasise the mutuality of the process.

*Insert Figure 2 about here*

#### *4.2 Example of the process*

To demonstrate how social capital is created the following example is presented from the observations of the "engineered situations". Whilst the authors are well aware of the problem of "anecdotalism" (Bryman 1988), and the inherent challenge to validity,

telling stories can provide and share insights (Steyart and Bouwen 1997), as well as improving the technical reliability of the data and analysis. A context was arranged, a social meeting immediately after a formal business meeting, and two entrepreneurs were introduced, Alan and Steven, who had not previously met but who were known to the authors quite well. Their backgrounds were very dissimilar, Steven had just sold out his internet business and Alan was heavily engaged in a business turnaround. Both, however, were experienced entrepreneurs and had been involved in a variety of businesses. They were introduced and their backgrounds briefly explained. The authors then stood back to observe events unfolding.

Alan opened up the conversation by asking about Steven's business. This seemed to signal a genuine interest in what Steven had done and was positively received. Steven went on to discuss how his original business plan had not worked out, he then explained how he had adapted the plan to suit the emerging circumstances. Alan responded by commenting that this was often the case. This was interpreted as encountering another. Both Alan and Steven were demonstrating who they were and showing that they had real entrepreneurial experiences.

The discussion continued around business plans, each respondent told about "planning incidents", mainly about the divergence between intended and realised strategies. This was seen as exploring affinities. Firstly, seeking out similarities at an attitudinal level, in this case about the real nature of business plans. Secondly, at a broader level, looking for areas of mutuality, or of similar business attitudes. This seemed to be about showing that they had the credentials to be respected as experienced businessmen.

The conversation then led to identifying people and organisations that each knew. Two individuals were identified, and anecdotes about them were exchanged. This exchange seemed to be about identifying communality. By identifying people whom the other knew, and especially by telling stories about them, each of our respondents was showing that there was common ground. Moreover, by identifying some third party known to them both, an opportunity to confirm, contradict or simply amplify the knowledge of each other was created.

They then talked about specific business problems they were experiencing. Alan was having some difficulty raising additional capital for a venture. Interestingly, he related it to a "mistake" he had made in the plan. (In fact this was a minor error of judgement.) Steven responded with a similar story, but explained how he had managed the problem. This seemed to represent a deepening of the confidence (and confidences) they had for one another. They admitted problems and mistakes, showing vulnerability but used this frame and a way of finding a possible solution. This was understood to represent an establishing congruence, whereby the respondents clarified their interests and experience and showed each other their level of competence.

Finally, the conversation turned to each others future plans. They discussed what Steven would do, even what he might do. Steven expressed an interest in investing in hi-tech, rather than internet based business. Alan commented on the risks associated with the apparent inflated valuations of internet business and agreed that technology based business seemed to have more substance. At this point they exchanged business

cards, whilst neither made any firm commitment to meet, it was apparent that they would share any mutually interesting opportunity if such arose.

Separately asking each of them later what they had thought about the meeting, both commented on how they had enjoyed it and found it interesting. When asked directly if it had been useful, again both affirmed the value of meeting someone "as interesting" as each other. When asked why it was useful, they said they learned a little and saw the "potential to learn a lot more". It was clear that by the end of the exchange, something new had been created, and that something seemed to represent social capital. Future interactions were likely to be more fruitful, understanding of each other was richer and, most importantly, a foundation had been built for future exchanges.

We have attempted to chart the development of social capital as a process. The following model is based upon the observations and interview data. The model depicts the stages noted. Whilst there was some variation in the order of stages in different settings, the stages seem representative of the increasing rapport that symbolised social capital. (One caveat is that these were all "equal" entrepreneurs, in that they were all experienced in business. It is possible that nascent entrepreneurs may have to adopt different techniques.)

*Insert Figure 3 about here*

## **5. Analysis- Conceptualising Entrepreneurial Social Capital**

A conceptual difficulty noted in the literature review was that social capital was described in two contradictory dimensions, as both the glue and the lubricant of social interaction. The former was argued to be the structural component that united individuals and in many ways this is the most easily recognisable component of the data. The manifestation of connecting could be identified; how allegiance was created could be described and the composition of stages of the process identified. The data demonstrated that whilst there were distinctive patterns, the process was also characterised by contingency and discontinuity. Hence, the process depicted was open ended, flexible and with a variety of possible outcomes. Nonetheless, the process of constructing the ties of social capital, as used by the respondents, could be identified. Accordingly this process appears to characterise the "glue" dimension of social capital.

More problematic, however, was the lubricating dimension. The literature indicated that the possession of social capital, or rather the existence of a condition of social capitalisation, would lead to a richer relationship between respondents. This aspect has elements of contradiction, how can a glue which binds become a relational artefact? If it is a glue, it is to be anticipated as fixed rather than fluid; stasis rather than process; a bond rather than a conduit. Indeed, during the process of setting, one might expect the bond to be "sticky", weak and even inhibiting exchange. Once set, the glue becomes a rigid element of the bonded pair. Yet, the literature suggests that social capital fulfils both roles. The data from this study certainly demonstrated that once relationships were established they often became fruitful and productive. However, the data suggests that social capital is both glue and lubricant, in that social structures are formed and bound by social capital yet social capital also facilitated the interactions and

flows within the structure. Both aspects operated simultaneously so that social capital both created and developed networks.

It could be hypothesised that somehow social capital metamorphoses from a thing (bond) to an agent (catalyst or friction reducer) of interaction and exchange. If this is the case social capital would have two separate and distinct forms. Two alternative perspectives arise from this hypothetical dichotomy. First that it is a morphological change; like a caterpillar becoming a butterfly, social bonding, once formed, develops into a dynamic. Alternatively it is evolutionary progress, that the catalytic state is a higher form of social capital. In this metamorphic conceptualisation, social capital has to be one thing or the other. However, neither hypothesis is very helpful because the fundamental issue remains unanswered, are the two forms, glue and lubricant, different things?

The alternative conception is that they are similar, related but different expressions of social capital that co-exist simultaneously. This seems more plausible because our respondents nurtured and maintained their bonds. Consequently, the glue is not immutable but changeable, even organic (in that it is contingent upon the relationship). It is adjusted and adapted to suit circumstances. It may lie dormant for periods but becomes enacted when circumstances require its use. The glue of the relationship operates in a form of dynamic equilibrium. Hence the "gluing" is processual, a continuing process of becoming bonded. Similarly, and more obviously, the facilitation of interaction is also processual. Interactions are facilitated by the degree of extant social capital. It too is relational and depends upon the condition of social capitalisation. Accordingly, this processual conception opens up the likelihood of a

dualism, which allows the co-existence of both expressions. Hence social capital is both medium and outcome. Social capitalising is about creating a condition that allows both a structural expression and enables a relational catalyst.

## **6. Conclusions - conceptualising social capital**

The conceptual problem arose because the expression of social capital, as glue or lubricant, was attempting to define the phenomenon in terms of one another. In fact both dimensions are merely *expressions* of social capital, whilst social capital itself is a process. Clearly the two expressions of social capital (outcomes) are mutually constituted from the process (medium) but exist on different planes.

So, social capital is not a "thing" but a process. It is the process of creating a condition for the effective exchange of information and resources. It can only exist between people; accordingly it is a relational artefact which we can only observe as one or other of its dimensional manifestations. From this perspective social capital can be envisaged as a bridge building process linking individuals, so that networks are a series of bridges which link numerous individuals. This account seems to explain the structural element of social capital; the processing of social capital is the constructing of bridges. Bridges come in a variety of forms, some are sturdy and capable of carrying heavy traffic; others are relatively flimsy, like a rope bridge and can carry only the lightest of traffic. In a similar fashion the bridges of social capital link two individuals but with ranges of carrying capacity. However, the structure of the bridge is an organic one, requiring nurture and maintenance to suit the traffic. This analogy explains the

structural component of social capital because the bridge can be envisaged as the link that bonds and unites individuals. Therefore, building a social capital bridge is simply a linking of individuals but the strength of the bridge's construction serves as an indicator of the amount of traffic carrying capability. So, a robust social capital bridge will allow better access to a richer range of resources and information. In this way the analogy also accounts for the catalytic lubricating effect of social capital, because a robust bridge becomes a more effective channel for easier exchanges. Moreover, if a bridge is to be built quickly it is required to be built from each side of the gap. This captures the essence of mutuality in social capital.

Returning to the literature, Putnam's (1995) "bowling together" discussion is a bridge building process, and economic progress is an expression of the process. It represents both the unity of individuals and the effectiveness of mutuality. Granovetter's (1985) strong ties are represented by sturdy bridges, and weak ties by flimsy, more delicate bridges into less familiar areas. Burt's structural holes are not "bridged" directly, but by an oblique route perhaps involving several bridges. Moreover, just as a bridge needs maintenance and repair, a social capital bridge needs attention. Over time the bond may deteriorate unless it is attended to. Human bonds are more complex than concrete or stone; possibly more fragile too, hence the relational aspect is further explained as the building and maintenance of organic structures. The production of social capital represents a useful investment because social capital endures beyond the transaction and indeed beyond the life of the firm. So, investment in social capital may, in the long run, be more beneficial than the sunk costs of firm specific investment. In future research we would like to compare this Western social capital formation with the Chinese concept of *guanxi* which provides some interesting socio-economic contrasts.

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## Notes

<sup>1</sup> A decade of research into various aspects of entrepreneurship has provided the researchers with a database of 50 ethnographies. This database provides triangulation of the data used for this research.

## References

- Aldrich H., Rosen, B. and Woodward, W. 1987 The impact of social networks on business foundings and profit: a longitudinal study, *Frontiers of Entrepreneurial Research*. Wellesley, MA: Babson College.
- Anderson, A.R. and Jack, S.L. 2000 The production of prestige: an entrepreneurial viagra, *International Journal of Entrepreneurship and Innovation*, **1**(1): 45-56.
- Baker, W. 1990 Market networks and corporate behavior, *American Journal of Sociology*, **96**: 589-625.
- Barney, J. B. and Hansen, M. H. 1994 Trustworthiness as a source of competitive advantage, *Strategic Management Journal*, **15**: 175-190.
- Bates, T. 1997 Financing small business creation: the case of Chinese and Korean immigrant entrepreneurs, *Journal of Business Venturing*, **12**: 109-124.
- Belliveau, M.A., O'Reilly, C.A. and Wade, J.B. 1996 Social capital at the top; effects of social similarity and status on CEO compensation, *Academy of Management Journal*, **39**: 1568-1593.
- Brüderl, J. and Preisendörfer, P. 1998 Network support and the success of newly founded businesses, *Small Business Economics*, **10**: 213-225.
- Bryman, A. 1988 *Quantity and Quality in Social Research* (London: Unwin Hyman.)

- Boissevain, J. 1974 *Friends of Friends* (Oxford: Basil Blackwell)
- Bourdieu, P. 1986 The forms of capital, in Richardson, J.G. (ed), *Handbook of Theory and Research for the Sociology of Education* (New York: Greenwood)
- Burt, R. S. 1992 *Structural Holes* (Cambridge, MA: Harvard University Press.)
- Burt, R. S. 1997 The contingent value of social capital, *Administrative Science Quarterly*, **42**(2): 339-365.
- Carsrud, A.L. and Johnson, R.W. 1989 Entrepreneurship: a social psychological perspective, *Entrepreneurship and Regional Development*, **1**: 21-31.
- Chell, E. and Baines, S. 2000 Networking, entrepreneurship and microbusiness behaviour, *Entrepreneurship and Regional Development*, **12**: 195-215.
- Cohen, S.S. and Fields, S. 1999 Social capital and capital gains in silicon valley, *California Management Review*, **41**(2): 108-130.
- Coleman, J. S. 1990 *Foundations of Social Theory* (Cambridge, MA: Harvard University Press)
- Coleman, J.S. 1988 Social capital in the creation of human capital, *American Journal of Sociology*, **94**: s95-s120.

Cooke, P., Wills, D. 1999 Small firms, social capital and the enhancement of business performance through innovation programmes, *Small Business Economics*, **13**: 219-234.

Curran, J. and Blackburn, R.A. 2001 *Researching the Small Enterprise* (London: Sage Publications).

Dibben, M. 2000 *Exploring Interpersonal Trust in the Entrepreneurial Venture* (Basingstoke: Macmillan).

Dosi, G. 1988 Sources, procedures and microeconomic effects of innovation, *Journal of Economic Literature*, **36**: 1126-1171.

Fafchamps, M. 2000 Ethnicity and credit in African manufacturing, *Journal of Development Economics*, **61**: 205-235.

Flora, J.L. 1998 Social capital and communities of place, *Rural Sociology*, **63**(4): 481-506.

Fukuyama, F. 1995 *Trust: The Social Virtues and the Creation of Prosperity* (New York: Free Press).

- Gabarro, J.J. 1978 The development of trust, influence and expectations, in Athos, G.G. and Gabarro, J.J. (eds), *Interpersonal Behaviors; Communication and Understanding in Relationships* (Prentice-Hall, Englewood Cliffs).
- Gambetta, D. 1988 *Trust: Making and Breaking Co-operative Relations* (New York: Blackwell).
- Gartner, W.B. 1988 Who is an entrepreneur? is the wrong question, *American Journal of Small Business*, Spring, **12**(1): 11-32.
- Glaser, B. and Strauss, A. 1967 *The discovery of Grounded Theory* (Chicago: Aldine).
- Granovetter, M.S. 1985 Economic action and social structure: the problem of embeddedness, *American Journal of Sociology*, **91**: 85-112.
- Granovetter, M. S. 1992 Problems of explanation in economic sociology, in Nohria, N. and Eccles, R. (eds), *Networks and Organizations: Structure, Form and Action* (Harvard: Harvard Business School Press).
- Gulati, R. 1995 Does familiarity breed trust? the implications of repeated ties for contractual choice in alliances, *Academy of Management Journal*, **39**: 471-501.
- Hammersley, M. 1992 *What's Wrong with Ethnography? Methodological Explorations*, (London: Longmans).

- Hanifan, L. 1920 *The Community Centre* (Boston: Silver Burdette and Co.).
- Hakansson, H. and Snehota, I. 1995 *Developing Relationships in Business Networks* (London: Routledge).
- Hornsby, J.S., Naffziger, D.W., Kuratko, D.K. and Montango, R.F. 1993 An interactive model of the entrepreneurial process, *Entrepreneurship Theory and Practice*, **17**(2): 29-38.
- Huggins, R 2000 The success and failure of policy-implemented inter-firm network initiatives: motivations, processes and structure, *Entrepreneurship and Regional Development*, **12**: 11-135.
- Jack, S.L. and Anderson, A.R. 2001 The effects of embeddedness upon the entrepreneurial process, *Journal of Business Venturing*, forthcoming.
- Jacobs, J. 1961 *The Death and Life of Great American Cities* (New York: Random House)
- Johannisson, B. 1988 Business formation - a network approach, *Scandinavian Journal of Management*, **49**(3/4): pp 83-99.
- Johannisson, B. 1986 Network strategies: management technology for entrepreneurship and change, *International Small Business Journal*, **5**(1): 19-30.

- Johannisson, B. and Landström, H., 1997 Research in entrepreneurship and small business- state of the art in Sweden, in Landström, H., Hermann F., Veciana, J.M. (eds), *Entrepreneurship and Small Business Research in Europe: An ECSB Survey* (Ashgate: Hants).
- Johannisson, B. 2000 Networking and Entrepreneurial Growth, in D.L. Sexton and H. Landström, (eds), *Handbook of Entrepreneurship* (Oxford: Blackwell Publishers, Limited).
- Korsgaard, M., Brewer, M. and Hanna, B. 1996 Collective trust and collective action, in Kramer, R. and Tyler, T. (eds), *Trust in Organisations: Foundations of Theory and Research* (Thousand Oaks, CA: Sage).
- Krackhardt, D. 1992 The strength of strong ties: the importance of philos in organisations, in Nohria, N. and Eccles, R.G. (eds), *Networks and Organizations: Structure, Form and Action* (Boston: Harvard Business School).
- Leana, C.R. and Van Buren, H.J. 1999 Organizational social capital and employment practices, *Academy of Management Review*, **24**(3): 538-554.
- Levi, M. 1996 Social capital and unsocial capital: a review essay of Robert Putnam's making democracy work, *Politics and Society*, **24**(1): 45-55.
- Lin, N. and Dumin, M. 1986 Access to occupations through social ties, *Social Networks*, **8**: 365-385.

- Lin, N., Ensel, W. M. and Vaughn, J. C. 1981 Social resources and strength of ties: structural factors in occupational status attainment, *American Sociological Review*, **46**: 393-405.
- Lindenberg, S. 1996 Constitutionalism versus relationalism: two views of rational choice sociology, in Clark, J. (ed), *James S. Coleman* (London: Falmer Press).
- Loury, G. 1977 A dynamic theory of racial income differences, in Wallace, P.A. and LaMonde, A.M. (eds), *Women, Minorities and Employment Discrimination* (Lexington, MA: Lexington Books).
- Putman, R. 1993 *Making Democracy Work* (Princeton: Princeton University Press).
- Marsden, P. V. and Hurlbert, J. S. 1988 Social resources and mobility outcomes: a replication and extension, *Social Forces*, **67**: 1038-1059.
- Mønsted, M. 1995 Process and structures of networks; reflections on methodology, *Entrepreneurship and Regional Development*, **7**: 193-213.
- Morrow, V. 1999 Conceptualising social capital in relation to the well-being of children and young people: a critical review, *The Sociological Review*, **47**(4): 744 –756.
- Nahapiet, J. and Ghoshal, S. 1998 Social capital, intellectual capital and the organizational advantage, *Academy of Management Review*, **23**(2): 242-267.

- Nahapiet, J. and Ghoshal, S. 1997 Social capital, intellectual capital and the creation of value in firms, *Academy of Management Best Paper Proceedings*.
- Narayan, D., Pritchett, L. 1999 Cents and sociability, *Economic Development and Cultural Change*, **47**(4): 871-889.
- Neuman, W.L. 1991 *Social Research Methods* (London: Allyn and Bacon).
- Oinas, P. 1999 Voices and silences: the problem of access to embeddedness, *Geoforum* **30**: 351-361.
- Ostgaard, T.A. and Birley, S. 1994 Personal networks and firm competitive strategy - a strategic or coincidental match? *Journal of Business Venturing*, **9**: 281-305.
- Ostrom, E. 1990 *Governing the commons: the evolution of institutions for collective action* (Cambridge: Cambridge University Press).
- Peterson, M.F. 1995 Leading Cuban-American entrepreneurs: the process of developing motives, abilities and resources, *Human Relations*, **28**(10): 1193-1215.
- Pennings, J.M., Lee, K. and Witteloostuijn, A. 1998 Human capital, social capital, and firm dissolution, *Academy of Management Journal*, **41**(4): 425-441.

- Portes, A. and Sensenbrenner, J. 1993 Embeddedness and immigration: notes on the social determinants, *American Journal of Sociology*, **98**: 1320-1350.
- Powell, W.W. and Smith-Doerr, L. 1994 Networks and economic life, in Smelser, N., Sweberg, R. (eds), *Handbook of Economic Sociology* (Princeton University Press: Princeton).
- Putnam, R.D. 1993 *Making Democracy Work: Civic Traditions in Modern Italy* (Princeton, NJ: Princeton University Press).
- Putnam, R.D. 1995 Bowling alone: America's declining social capital, *Journal of Democracy*, **6**:65-78.
- Rouseau, D., Sitkin, S., Burt, R. and Camerer, C. 1998 Not so different after all: a cross-discipline view of trust, *Academy of Management Review*, **23**: 393-404.
- Silverman, D. 2000 *Doing Qualitative Research* (London: Sage).
- Smith, A. 1776 (1980) *The Wealth of Nations* (Harmondsworth: Penguin).
- Saunders, M., Lewis, P. and Thornhill, A. 1997 *Research Methods for Business Students* (London: Pitman).
- Steyart, C. and Bouwen, R. 1997 Telling stories of entrepreneurship - towards a narrative-contextual epistemology for entrepreneurial studies, in Donkels, R. and

Mietten, A. (eds), *Entrepreneurship and SME Research: On its Way to the Next Millennium* (Aldershot: Ashgate).

Tsai, W. and Ghoshal, S. 1998 Social capital and value creation: the role of intrafirm networks, *Academy of Management Journal*, **4**: 464-477.

Uzzi, B. 1996 The sources and consequences of embeddedness for the economic performance of the organisation: the network effect, *American Sociological Review*, **61**: 674-698.

Weick, K. 1987 Substitutes for strategy, in Teece, D. (ed) *The Competitive Challenge* (Cambridge, MA: Balinger).

Weick, K.E. 1969 *The Social Psychology of Organizing* (USA: Addison-Wesley Publishing Company).

**Table 1. Issues in entrepreneurial social capital**

The Construction of Social Capital	Emphasis	Analytic category	Key questions
The nature of social capital	Process	Entrepreneurial Networks	What is it? How can we conceptualise it?
As a Glue	Bonding (Structure)	Creation of relationships	How is it formed? Ends or means?
As a Lubricant	Facilitating (Relational)	Interaction within relationships	How is it maintained? Is it purely exploitative? Are there rules?

**Table 2. Research design and stages**

Stage	Methods used	Number
1	Preliminary interviews to clarify the topic	3 respondents
2	Attendance at meetings for observation	3 meetings
3	“Engineered” scenarios	3 scenarios
4	In-depth interviews	4 respondents
5	Model refinement	2 respondents
6	Triangulation with existing ethnographic case studies	50 ethnographies

**Figure 1. Elements and employment of social capital**

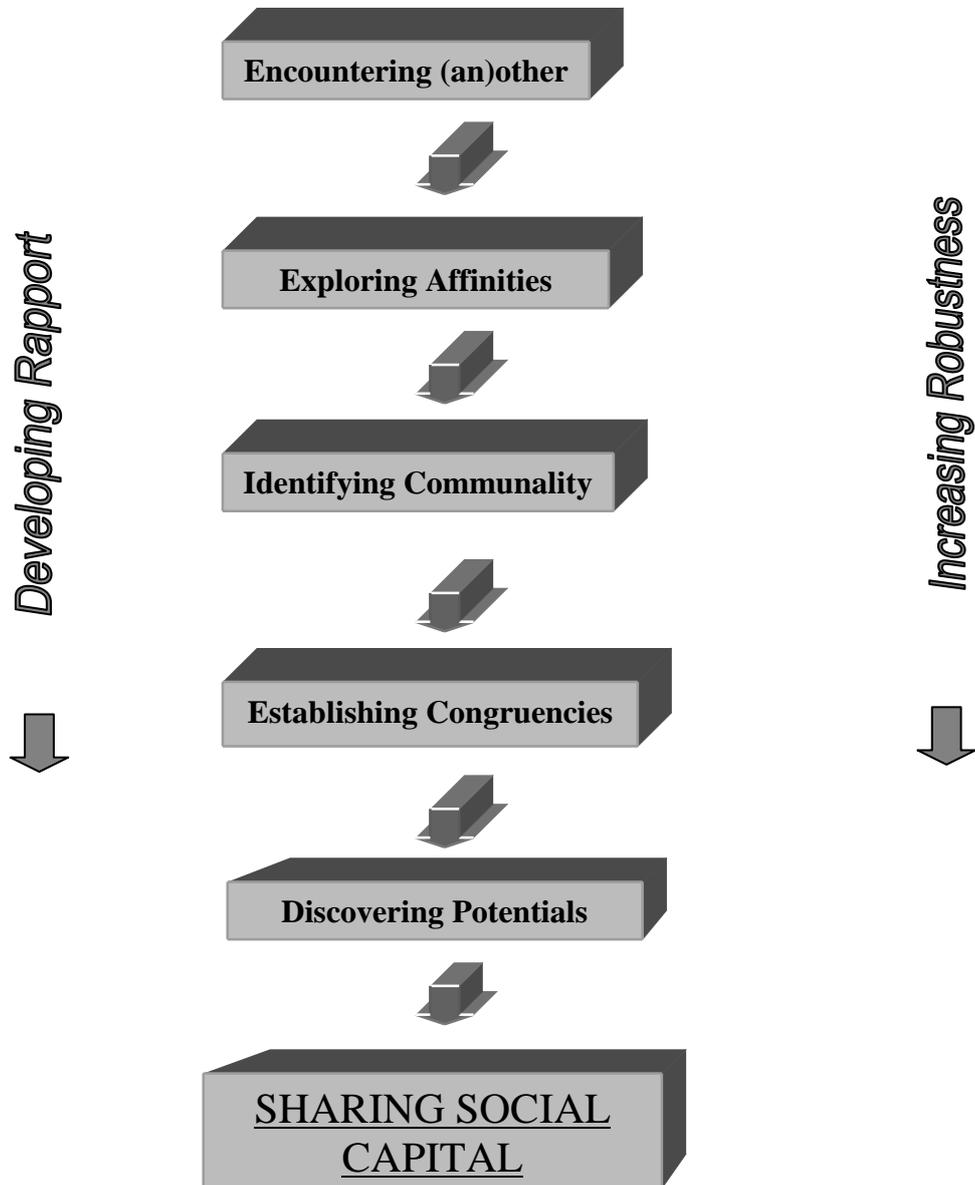
Making friends	<p><i>“most of my customers are personal friends. I don’t look to make them that though” (Dave)</i></p> <p><i>“people get to know you as an individual and on a personal level... because you develop a rapport, you develop a business association (Ian)</i></p>
Finding new business	<p><i>“my one lucky break was Billy because he more or less handed me his customers on a plate when he retired” (John)</i></p> <p><i>“you can see things from a different angle” (Peter)</i></p>
Maintaining existing business	<p><i>“you know he speaks up for me and I speak up for him” (John)</i></p> <p><i>“because of my health I lost hundreds of thousands of pounds. A year ago I had to start again. I had practically nothing. Most of my customers knew what I’d been through and they rallied round me” (Dave)</i></p>
Tapping into external resources	<p><i>“I find advertising (for staff) a waste of time. We do it through personal contacts. All I have to do is go to the factory and say to Alan or Martin I’m needing a couple of guys. They’ll come back to me in a few days. That’s the way we’ve done it and it always works” (Peter)</i></p>
Tapping into knowledge held by others	<p><i>“we try to solve things ourselves but there comes a point when you can’t do any more yourself and we have to turn to someone for help....he’s never fazed by anything” (Jane)</i></p> <p><i>“I still had a lot to learn and realised that this personal relationship was an asset to rebuilding the business” (Gary)</i></p> <p><i>“During the start-up everybody was working together, the farmers,</i></p>

	<i>researchers and institutions” (George)</i>
Becoming known	<p><i>“you’ve got to be able to mix with people, be able to speak to them about anything if you can” (John)</i></p> <p><i>“...very important, relationships. They feed into the wider environment. If you’re good at your job, your reputation goes with you” (Dave)</i></p> <p><i>“I do know a lot of people now and I’m known by a lot of people” (Bruce)</i></p>
Becoming informed	<p><i>“we have an underground....if there’s something happening someone will know about it. We have contacts in most places and most departments....but it’s a close net. I don’t think you’d get inside” (Peter)</i></p> <p><i>“I know what others are up to, like who is rumoured to be going under” (Ian)</i></p> <p><i>“if I ask my customers they tell me what my competitors are up to” (Gary)</i></p>

**Figure 2. Respondent's views of social capital formation in contrast to mechanistic**

<b>Natural/Organic Formation</b>	<b>Mechanistic Formation</b>
Symbiotic	Exploitative
Altruistic	Selfish/ manipulative
Creative	Extractive
Enabling	Limiting/qualifying
Long term view	Short termism
General benefits	Specific benefits

**Figure 3. Building Bonds - Progressions in generating social capital**



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