Territorial social innovation: a symbol–based eco–genetic perspective

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ABSTRACT

This paper presents a multidisciplinary conceptual framework which proposes the symbolic-based eco-genetic process for dealing with complex patterns characterized by multilevel and fuzzy territorial governance, and interrelatedness between the physical world and the symbolic and socially-culturally constructed world.

Drawn on theoretical contributions and historical analysis of cases, the symbolic-based eco-genetic perspective aims to reinterpret firm-territorial stakeholders relationships and analyze the factors that affect the embedded governance for a Coexistence Strategy design. Specific consideration is given to the extent by which the symbolic-based eco-genetic branding process can transfer value between the brand of firms and a city brand to develop a record in social innovation activity, first, for coexistence strategy in the poly-inclusive spatial model, second, for applying knowledge in new ‘local’ products and services and, third, for defining shift in market structure which gives affordance to joint-value creative strategies and social innovation. It draws conclusions on both the affordances and limitations of research on social innovation and presents implications for potential future research.

Key words: territorially-based social innovation, symbol, firm-city relationship, eco-genesis, networks, historical analysis
1. Progress: Promise and Perils

Innovation is considered to be the primary driving force of progress and prosperity. There is evidence that successful innovation is not just the result of technological inventions, but also heavily dependent on what has been called “social innovation”. Nelson and Sampat, for instance, introduced the concept of ‘social’ technologies that contains the standardized pattern of behavior, information on how the activity is done, habits of action and human interaction besides the ‘physical’ technologies themselves. They think of the language of routines as a “useful vehicle for characterizing social technologies” (Nelson and Sampat 2001, p. 42). In fact, they focus on to coordinating routines, that relate primary activities in different ways such as standardizing, planning and feedback. Chandler (1992, p. 86) considers the “routines…to coordinate …several functional routines even as more important than…functional routines (themselves)”. Examples are the M-form, but also working with hired management, founding laboratories and training young chemists. These social elements of innovation render physical technologies their productive successes.

Therefore, the question arises: Why are large firms and SMEs putting more effort in developing new technical knowledge, new process technologies and products, than in fostering territorial social innovations and activating co-evolutionary process between firms and city/territory? The efforts that are put in developing new technical knowledge suggests a strong belief in the promise of progress, perhaps without taking context specific perils into account in the wake of a new industrial order.

Gary Hamel (2000) claims, that the Age of Progress is over. First, he pinpoints how the discipline of reason and the deductive routines of science are at the roots of our present belief system, which drives the efforts in developing new technical knowledge, new process technologies. He states:
“Then came the unshakable belief that progress was not only possible, it was inevitable. Life spans would increase. Material comforts would multiply. Knowledge would grow. There was nothing that could not be improved upon. The discipline of reason and the deductive routines of science could be applied to every problem, from designing a more perfect political union to unpacking the atom to producing semiconductors of mind-boggling complexity and unerring quality (p. 3).

In relation to the perils of progress Hamel (2000) recalls the following events and their ultimate consequence on business and society:

There is a gnawing sense that while humankind continues to improve its means, it does not always improve its purposes. Two world wars made infinitely more brutal by modern weaponry, the threat of biological and nuclear terrorism, dead rivers and butchered forests, mega-cities teeming with displaced peasants, workaholics from Tokyo to San Jose who have sacrificed health and family on the altar of prosperity: progress has exacted a price. The age of progress began in hope—it is ending in anxiety (p. 3).

Finally, he addresses the seductive power of the promise of progress, thus:

‘The age of progress has been a stern taskmaster – and never more so than in recent times. Employees have found themselves working harder and harder to achieve less and less. That’s the reward for surviving the downsizing, outsourcing and re-structuring that have so dramatically thinned the ranks of industrial-age companies […] And the late twentieth-century version of progress has made us cynical. We were promised relief from tedium; we got the white-collar factory. We were promised a degree of autonomy; we got binders full of corporate policy. We were promised a sense of true purpose; we got the tyranny of quarterly returns. We were promised the chance to contribute; we got endless meetings where form regularly beat substance to a pulp (p. 4).

Following on from Hamel’s comments, which reflects Sennett’s observations in the Corrosion of Character” (1998), we nowadays can observe in many Western economies an excellent record in knowledge creation, but a mediocre record in innovation activity. Innovation, considered as the primary driving force of progress and prosperity, is currently an aspiration rather than an accomplishment. In framing, addressing and synthesizing the debates in the
field of innovation, we identify its existing boundaries. However, in addressing the issues of the future shape and development of the field of innovation we must also cross the current boundaries to explore further the relevance of non-technological determinants of innovation, such as new management practices, new business models or new managerial capabilities, which several studies have underscored, and last but not least new features of territorial governance.

2. Conceptual design and methodology

The purpose of this paper is to break the ‘scholarly silence’ posited by this conference as a relevant debate, by presenting an unconventional angle to the innovation represented by the territorial social innovation. Under conditions of non-linear and contextual development, the social innovation process puts the importance of ICT innovations into a broader perspective by situating the co-creation process of new environments as result of interaction between various firm-urban/territorial stakeholders. It seeks to contribute to advancing insight with regard to the significance of embedded governance model (Go and Trunfio, 2011a) to facilitate the building process of the symbolic-based eco-genetic brand for, first, spawning balanced-centric interactive processes, second deriving social capital and knowledge transfer, which are, third, needed for mobilizing the value in context (Chandler and Vargo, 2011).

It is the authors’ belief that progress in advancing theory and practice of social innovation is more likely to happen through inclusiveness than exclusiveness. Social innovation is defined in this paper as changing firm’s organization, management, labor and firm-city/place relationship in a way that is new to the organization and/or the industry and territory, with the
effect of leveraging the firm’s knowledge base and improving organizational performance and place sustainable development.

We argue that overcoming the linear relationship between firm-urban network environment – embedded in the Fordist approach, a subject we return to later – requires a rethink of the contemporary complexity and re-interpretation of the conception of the firm-urban network relationship. More specifically, reciprocal linkages give affordance to social innovation activity and the respective, complementary roles and responsibilities that flow from their relationship on the micro, meso and macro scales.

The firm-urban network environment provides a so-called ‘Third Space’ for a dialectic interaction between 'hard' technology/infrastructure and 'soft' concepts. Eco-genesis is framed in a non-linear context, which serves for embedding and cross-fertilizing the ‘inside-in’ perspective and the ‘outside-in’ perspective with the aim of co-creating genuine (authentic) prosperity through new product and services which source knowledge and resources locally, where appropriate.

How did we lose track of the relevance of place, the significance of the location theory in relation to the firm? Nineteenth century thinkers such as Darwin and Marx prioritized time over space and both of these over place, albeit in quite different ways. Their writing emphasized evolution, change and historical inevitability, and their perspective was one of a world in which progress, i.e., the process of becoming was more relevant than the process of ‘being’. The solidification of place-transcending ideologies of progress and evolution continues to shape the globalization narrative. The same has become evident, for example, in the dramatic increase of the dispersal of work activities across global networks, through outsourcing and remote project-team work. A trend that is likely to continue as modern firms push for costs reduction, get closer to their customers, themselves with partner firms and engage the best talent wherever it may be. The outsourcing debate adds to advance innovation
in host countries, but what, if anything, does it add to boost the record in innovation activity in one’s home country?

In organizing the sections of this paper we have set four challenges for a historical-based analysis that determine the structure of our arguments. The co-evolution of the firm within territorial/urban networks, our first challenge, seeks to map contemporary networks by examining the role of their institutional context, discussing how networks structures develop, and sustain themselves through their linkages to knowledge-generation, transfer and application. It examines how the Fordist perspective affords incumbents’ cohesive industrial systems, but simultaneously acts as a constraining force on institutional change, including territorial social innovation. Within this framework it is important to underscore that successful innovation is not just the result of technological inventions. Instead, empirical evidence shows that innovation is also heavily dependent on what has been called “social innovation” embedded in territorial context. Unfortunately, most management scholars are silent in the debate on the urgent need to re-interpret the firm-urban network relationship. Social scientists have much to offer to the debate focused on efforts to re-think competitiveness from a social innovation perspective.

Setting the agenda ‘Toward an Eco-genesis based Theoretical Construct for Social Innovation’, is the second challenge aimed at giving specific consideration to the extent by which the symbolic-based eco-genetic branding process can transfer value between the brand of selected firms and a particular city brand to develop a record in social innovation activity designed, first, for applying knowledge in new ‘local’ products and services, and, second, for triggering a defining shift in market structure which gives affordance to joint-value creative strategies and processes aimed at driving social innovation activity forward.

Our approach is geared toward a historical analysis consequent to the shifting centre of gravity on the ‘built environment’ bound together through (national) ‘collective memories’
towards a concern for the emerging nature and development of mental images and symbols within a globalized culture. The latter is characterized by an accelerated, interactive set of flows consisting of ideas, information, values, and tastes mediated through mobile individuals, symbolic tokens and increasingly, electronic media simulations (Waters, 1995). This section also attempts to assess to which extent a dialectic interaction of flows take place in contemporary network structures. More specifically, in culturally constructed 'soft' concepts which interface with 'hard' technology/infrastructure to bring about the eco-genetic process and how a place brand may serve as a catalyst to trigger actions leading to physical manifestations and trigger concepts – with the support of technology and infrastructures in a growing spiral (Normann, 2001, p. 86). Finally, in a specific section, we give consideration to the extent by which the conception of the eco-genetic symbolic brand may be applied to trigger territorial social innovation within the embedded governance for Coexistence Strategy design (Go and Trunfio, 2011a). The third challenge is to explain three cases studies framing our research within an evolutionary approach that follows the developments of organizational routines embedded in a wider institutional environment (Nelson and Winter, 1982). Kieser (1994) proposes several ways of using historical data in the field of organization studies. We apply the references strategy that uses a theoretical model as a “lens” to “highlight the particular features of each case” (Skocpol, 1984, p. 370) in order to explain the data. We chose this latter strategy because we intend to determine the historical relevance of the location by comparing the development of contemporary network constellations and the aligning communication though various media channels (see also Booth and Rowlinson, 2006).

Our final challenge in this paper is to draw conclusions, based on the cross analysis of three cases studies that shed light on both the affordances and limitations of research on social
innovation, from a symbol-based eco-genetic perspective, and its implications for potential future research.

3. The co-evolution of the Firm within Territorial/Urban Networks

Historically, networks have played a very significant role in the progress of firms, industry and territorial systems. This can be illustrated by pointing to the road network designed to link the farthest outpost with the Roman Empire with its capital. Also, the case of first major North-South production line in preindustrial Europe, namely the textile industry between Flanders and Northern Italy (Hunt and Murray, 1999) serves to illustrate the relevance of networks in relation to the specific developments of nodes, i.e., those places along the route where entrepreneurial activities and industry would arise remain intact for centuries. The Industrial age offers a similar network pattern of places of entrepreneurial activities, which shows a dependency on specific geographic place driven by the availability of raw materials, energy sources and transport facilities.

In general, the network theory is applied using distinct approaches that can result in five categories, namely: the social network approach, inter-organizational approach, industrial network approach, entrepreneurial network and policymaking network.

In the regional studies perspective, networks have served to converge the horizontal ties between actors and stimulated social innovation, thereby becoming an instrument to substitute the hierarchical top-down approach of governance (reinforcing the horizontal interrelation between actors and favouring innovations).

In the field of Organization Studies, authors (Langlois, 2003; Miles and Snow, 1994) have paid attention to the rise of networks for more than a decade. They recognized the major role of Chandler’s ‘coordinative reach’ across the boundaries of business organizations.
Independent firms cooperate via organizational devices (planning, managerial decisions) although the price mechanism allocates their resources (as if the context was market driven). The resulting networks cover major parts of the production system as the result of the demand for high quality demands and the supply of improved technologies (transport, information diffusion) and new organizational forms (e.g., modular designs, standardization).

According to Baumol (1990) and North (1990) the context defines the incentives for specific entrepreneurial behavior, and need be taken into account to study the economic behavior of firms. The institutional context may support entrepreneurs to reap sufficient private returns. If this is the case, entrepreneurs are stimulated to perform (social) productive activities, especially if societies set up institutions such as public control to deal with entrepreneurial-perceived, high risks. In Europe for instance, the entrepreneurial climate has favored productivity. This Western climate was the results of a suitable institutional setting, with especially the market as main institution to resolve conflicts between entrepreneurs, consumers and employees (Rosenberg and Birdzell, 1974).

It is not a triviality that the institution of market emerged (North, 1990). The Western economy is a special case where productive activities are rewarded, although oligopolistic behavior still has many examples in the last century. Fligstein (1990) explains the move and countermove cycles of path dependency. Therefore, we apply an evolutionary perspective to describe firm behavior (Nelson and Winter, 1982) to explain that organizational development is not only a matter of logic, but also shaped by history. A perspective known as path dependency (David, 1990).

In order to do justice to the analysis of the dimensions of heritage business networks we should reject a homogeneous concept of culture and adopt at the theoretical level the central issues of heterogeneity and hybridity. Simply because such networks spun a range of connected decisions and affiliated activities, which were embedded in different cultural
contexts, values, organizational styles and procedures and symbols, and somehow had to be assembled and recombined.

In fact, networks do not operate in avoid, but rather function in a wider institutional environment, that defines the rules of the game (laws, culture, labor market and so on: see Exhibit 1 – Lewin et al., 1999) for the large cast of players involved, directly and indirectly, in the process of organizational development.

This diagram can be used to represent a 'snapshot' of the external and internal environment of the firm in the Fordist capitalism perspective driven production perspective and the consumption perspective.

Exhibit 1 explains the relationship between industry and firm by both a traditional and static approach based on the causal relation, a linear perspective proper to describe the Fordist society, in contrast with the complexity and liquidity of society and places (Bauman, 2000; Go and Trunfio, 2011c). Dematerialization, liquification, unbundleability, rebundleability, and the resulting potential for increased density, change the market landscape and create new forms for value-creation (Michel, Vargo and Lush, 2008, p. 154).

**Figure 1** Co-evolution of the firm, its Industry and Environment

In the era of complexity the linear approach of Fordist perspective is outsmarted by some proposal of dynamic theoretical frameworks. First of all the Resource-Based View introduces firm uniqueness and not replication of resources and knowledge creation for the competitive advantage (Barney, 1991; Peteraf, 1993; Barney et al., 2001) improving the analysis of firm environmental (internal and external). The awareness of importance of interdependency between firm and context is expressed by the Triple Helix model of Innovations (Leydesdorff, 2005) which affirms the local co-evolution of different stakeholders by way of a spiral of
innovation and knowledge transfer between networks of universities, firms, countries, through relations exchange, wherein e.g. (social) media platforms play an increasingly important role to facilitate communication processes.

4. Toward the Symbolic based Eco-genesis Theoretical Construct for Territorial Social Innovation

The use of linkages, in both the past and present, clearly influenced the network to co-create a sense of community that influence members to participate in the process of defining, critical events and, subsequently, their representation and symbolization. Where, if any, and to what extent are these representations and symbolizations of the present landscape applied? Dietvorst (2001, p. 12) citing Lefebvre suggests that the visual and power are inextricably linked, in such a way that a specific, spatial code emerges, i.e., a uniform language for theory and practice, a ‘language’ for citizens, architects as scientists. Ultimately this lead to the absolute space of twentieth century capitalism:

‘The eye, however, tends to relegate objects to the distance, to render them passive. That which is merely seen is reduced to an image – and to an icy coldness. The mirror effect thus tends to become general. Inasmuch as the act of seeing and what is seen are confused, both become impotent. By the time this process is complete, space has no social existence independently of an intense, aggressive and repressive visualization. It is thus – not symbolically but in fact – a purely visual space. The rise of the visual realm entails a series of substitutions and displacements by means of which it overwhelms the whole body and usurps its role. That which is merely seen (and merely visible) is hard to see – but it is spoken of more and more eloquently and written of more and more eloquently’ (Lefebvre 1991, p. 286)

A paradigm shift, based on Kuhn’s seminal work The Structure of Scientific Revolutions (1962) relates to the theme of paradigm change, particularly in regard to our fundamental assumptions about the world. As an enduring institution, change of the human condition lies
within the overlap between three fields of knowledge. These are, first, knowledge about place and space, their historical mapping and analysis, in order to comprehend ‘why and where matters’ with regard to the firm – the territorial actor historical relationship; second, the knowledge domain of mobility and how it progressed from moving people and goods to connecting minds in space knowledge to comprehend more systematically where the firm – territorial actor historical relationship has been, where it is and where it appears to be heading; third, the knowledge domain of media and communication sciences. The synthesis of these three angles provides a framework to capture the creative destruction process, to bring about social innovation and use the relics, memories, place associations from the past memories to generate symbol-based eco-genetic brand value and the process of building a theory of place branding.

This discussion has been framed by different scholars and their rethinking of the contemporary complexity of places. The reinterpretation of the heterogeneous nature of context as a set of unique actors with the reciprocal links among them (Giddens, 1979; Wasserman and Faust, 1994; Carrington et al., 2005, Sheth and Uslay, 2007) and the proposed layer of meta-context, named service ecosystem (Chandler and Vargo, 2011), which represents the theoretical framework of eco-genetic perspective applied in this paper.

In order to do justice to the analysis of the dimensions of heritage business networks we should reject a homogeneous concept of culture and adopt at the theoretical level the central issues of heterogeneity and hybridity. Simply because such networks spun a range of connected decisions and affiliated activities, which were embedded in different cultural contexts, values, organizational styles and procedures and symbols, and somehow had to be assembled and re-combined.

Normann (2001) states: ‘eco genesis tends to come about as a dialectic interaction between 'hard' technology/infrastructure and 'soft' concepts. It may start with either one or the other,
but the eco-genetic process is likely to lose momentum unless concepts can trigger actions leading to physical manifestations, and unless technology and infrastructures can trigger concepts - and so in a growing spiral’ (Normann 2001, p. 86). By applying the eco-genesis approach the first movers change the world around them, the business landscape, and create the “birth of a context for co-dwelling” (Normann 2001, p. 86).

The emerging naissance of co-dwelling Normann refers to, coincides with the multidimensional reinterpretation of the concept of place (or geographic location) as an eco-genetic system. Placed on a continuum of dependency relations, the position of a contemporary network, involving e.g., intra-corporate networks, strategic alliances and the industrial district, may be categorized as interdependent in nature. This implies that the actors are continuously in search of ways to exert influence on their counterparts, however without disturbing the balance in their interactive processes aimed at deriving the social capital and knowledge transfer needed for joint value-creation (Inkpen and Tsang, 2005).

5. **Enhancing social capital and knowledge transfer by embedded governance platform**

The network-centric organization format (Ford et al., 2003), where firms and customers co-produce value (Normann and Ramirez, 1993), is a new business model in the light of knowledge management (Breukel and Go, 2010) emerging at the dawn of the digital age (Magretta, 2002).

Enter the city and civil society interests as observed by Normann: ‘another type of territorial organization is becoming increasingly important, namely cities and regions. They tend to represent much more of natural value creating networks - an interesting ecology of value creation than nation - states. They are small enough to ensure the physical closeness that is crucial for today's knowledge economy. Yet, they have to live in the global economy, and
they have even fewer formal means than the nation – state to exercise vertical power and are therefore extremely to the dominating horizontal logic' (Normann, 2001 p. 44).

The dominant horizontal logic Normann refers to is the information space. Whilst closely linked in remit and areas of conduct, the latter often lacks effective integration with the material space, mental space and social space identified by Go and Fenema (2006). It can lead to malfunctioning born from a managerial and political-institutional perspective, which tends to separate the various spaces and treat each in isolation of one another. Consequently, this often results in potential contradictions and conflicts, which bear the risk of incapacitating the institutions that support trustworthy firm-city relationships.

Instead network structures demand that organizations function beyond a singular spatial context or learn to function in a multiple-inclusive manner as reflected in the poly-inclusion model by Go and Fenema (2006). It analyzes the different spaces (spatial, mind, information and social) that affords, first, the connection, potentially, for a ‘physical-digital fusion’; second, the reshaping of human-machine relationships and, third, stretching the innovative edges of organizations, individuals and places. This approach is in line with the concept of shared spaces, which Nonaka (1998) refers to as “ba”.

The poly-inclusive model allows a ‘rethink’ of the concept of space from a socio-relational perspective to comprehend the dynamics of the urban and regional growth as a space of consumption and place of 'production' with distinctly symbolic overtones.

**Table 1:** Connecting spaces

Table 1 (Go and Fenema 2006) comprises:

- the material space, including production sites and physical buildings;
- the information space, including data transfer and communications explicated in reputation and branding – related with the past, are there only tourism activities or are historical endeavors totally forgotten;
- the social space: the degree to which patterns can be discerned in the interactivity between stakeholders, including citizens, employees and customers;
- the mental space, including values, symbolism and its interpretation processes.

It gives affordance to an analysis of the changing nature of work, which is relevant to comprehend the dynamics of the urban and regional growth as a space of consumption and place of 'production' with distinctly symbolic overtones. These are evident e.g., in the categories of (a) routine production services and in (b) person services encountered e.g., in urban entertainment, tourism and hospitality facilities than in the sector of (c) symbolic analytic services which characterize intellectual and non-routine work of e.g., scientists, engineers, lawyers, artists and academics (Reich, 1991).

Reich's analysis of the changing nature of work towards engaging workers as symbolic agents is relevant to comprehend how the city branding process and urban space mutually constitute and shape each other, and to which extent city brands may represent new semiotic spaces around which to re-configure urban growth dynamics.

The question arises to what extent the role of location and different spaces is important for the productive efforts of networks and knowledge transfer. Cairncross (1997) declared the ‘death of distance,’ by which she meant to say that work could be performed anywhere in a standardized way.

The ‘death of distance’ view, however, denies the value of historical developments. Consider the following quote by Winston Churchill: “We shape our buildings; thereafter they shape us”. It counters the latter and explicates the importance of path dependency. Moreover, Churchill’s observation suggests that a dynamic interaction exist between humans and their
environment. In this regard the everyday may serve as empirical evidence in support of the significance of the human-place relation as a mechanism for the maintaining of trustworthy relations in face of the forces information technologies and globalization.

The dimensions afford the space for nurturing the knowledge development and transfer processes, which Nonaka and Takeuchi (1995) interpreted as a structure composed of four phases. These are: socialization, externalization, combination and internalization. It is important to note that, firstly, socialization and externalization represent a ‘flow’ concerned with the transformation of inter-personal relations to codified knowledge through artifacts for (potentially) worldwide diffusion. In contrast, and secondly, the dimensions ‘combination’ and ‘internalization’ may be seen as a flow triggering the transfer of worldwide knowledge into ‘tacit knowledge and local practices’.

Accordingly, from the knowledge management perspective, Lemmetyinen and Go (2008) identify some key success factors of networks, particularly their capacity to develop and implement informational, interpersonal and/or decisional roles; the ability to create joint knowledge and absorptive capacity strong partnering capability; orchestrating and visioning the network in a way that strengthens the actors’ commitment to the brand ideology. Also, knowledge management affords a relevant perspective to understand the evolution of New Public Management and hybrid public-private alliances that are built to cooperate and achieve mutual knowledge sharing and learning agenda (Hamel, 1991; Teece, 1992).

Also, this analysis offers a scheme for the introduction of social capital theory (Inkpen and Tsang, 2005) to explain the role of place (context) in the co-evolution of stakeholders in a community of practice (Wenger, 1998). From Inkpen and Tsang’s perspective social capital is embedded in the local contexts or networks (also if local dispersed), because knowledge (and creativity) are made in place and network building, amongst others on the collective memory. The embeddness of social capital (Inkpen and Tsang, 2005) and governance (Go and Trunfio,
2011a) confirms the fluid spatiality (Law and Mol, 2003) and the dematerialization, liquification, unbundleability, rebundleability (Michel, Vargo and Lush, 2008, p. 154) underlining both shifts: first of all from science in theory (universalism) to the science in practice (Law and Mol, 2003) and in the second way from global to regional and networks. In this evolutionary theoretical framework, the multilevel social capital, based on the knowledge transfer process proposed by Inkpen and Tsang (2005), reinforces the role of places (contexts) and the networks in the firms evolution. The Inkpen and Tsang’ matrix, based on both dimensions of social capital (structural, cognitive and relational) and networks types (intra-corporate network, strategic alliance and industrial district), introduces different knowledge transfer typologies and the conditions which may facilitate such transfer directed at improving the knowledge body, which is relevant to comprehend the mutual relationships and, in turn, determine, to a significant extent, the performance in the realm of regional and firm development. Such diversity of spaces renders the control of the actors who participate in the value-creation process rather complex. It raises a fundamental issue that decision makers face: how to enable the co-presence of actors, in a manner which contributes to a community of practice (CoP) along selected standards, norms and values among the members of a social network? The embedded governance model, aimed at the formation of a Coexistence Strategy Design (Go and Trunfio, 2011a), can support the symbolic-based eco-genesis process under conditions of multilevel, multi-sector, poly-inclusive networks (Go and Fenema, 2006). Consequent to the liquid society (Bauman, 2000) networks have mushroomed. Their formal and informal features necessitate the adoption of a double qualification of embedded governance: the ‘hard’ meaning of embedded, interpreted as ‘fixed firmly’ and deeply in surrounding solid mass to explain the visible connection with the territorial infrastructure;
and, the ‘softer’ more flexible knowledge in practice that is typically embedded in culture and retained in mind for recall and application in everyday routines.

This new perspective on governance analysis raises questions about the efficacy of ‘governance given its neo-liberal and ‘post-political character’ (Ekers et al 2012, p. 408). Hamel (2008) considers governance ‘a process involving state, market and civil society, which implies democratic deliberation and social conflict, while being social, spatial and political’ (cited by Ekers et al 2012, p. 408). Adds Harris (2003, cited by Ekers et al 2012, p. 408): ‘Firms, markets and the state are complementary and contested arenas of governance with fluid boundaries.’ In respect of the location of power and control over the decision making process, government structure on the supra national/national/regional scales differs per country.

This observation in combination with firms and markets in a variety of roles, from different backgrounds and conflicting agendas, often result in a lack of shared identity, a lack of common knowledge and contrasting values, which, in turn, impede the social conditions conducive for knowledge sharing and application as manifest in routines. Consequently, these realities necessitate the levering of a community-of-practice (CoP) to underpin the process of territorial social innovativeness. In particular, seen as a CoP political actors, business and civil society members possess knowledge, values and identity, but to what extent are these understood to be common knowledge, overlapping values and a shared identity in order to build a Coexistence Strategy Design (Go and Trunfio, 2011a).? The competing conceptions among stakeholders about what constitutes legitimate knowledge can occur due to the contestable nature of knowledge and the decision making emerging from ownership and the issues of power and politics (Foucault 1980). These also resonate with Bergson’s (1946) way of understanding our knowledge as a dialectic e.g., duration/space, life/entropy, openness/closure; the interaction of such contrasts not only makes ‘creativity possible, but
allows for a degree of coherence through the overcoming of mere opposition’ (Gunther, 2004, p. 29). In that organization development should be understood to occur through the interaction of contrasting factors, as opposed to result from hierarchical planning, we coined the term ‘embedded governance’ to reflect the idea that: ‘The basic features of creative and dialectical evolution’ are, Calori (2002, p. 130) holds, ‘becoming’ and ‘relating.’ These appear in Bergson’s philosophy (1946) and fundamental to the realities he espouses:

1. ‘The intuition of duration, the seeing of time as a continuous flow which allows present and of the past and the creation of the present, and;
2. A holistic conception of space, its unity and multiplicity’ (Calori 2002, p. 130).

6. Selected Case Illustrations

In this section we support our argumentations for the use of a symbolic based eco-genetic approach in the re-interpreted firm-urban network relationship context by way of selected historical case studies. It offers the opportunity to show how the spatial poly-inclusive model (Go and Fenema, 2006), the embedded governance (Go and Trunfio, 2011a) and social capital (Inkpen and Tsang, 2005) are part of the theoretical framework from where the symbol based eco-genetic place branding may be sourced. In this regard, the branding of territorial actors (e.g. cities, regions) plays a significant role within the globalizing society. With regard to the issue of global warming the question arises for instance why urban regions should demonstrate responsible policy implementation for smart growth infrastructure that would parallel and simultaneously complement the automotive industry’s production of (hybrid) electric cars. The Annals paper on Hybridity (Amoamo, 2011) renders an example how a coexistence design through hybridity can effectively contribute to the process of social innovation within territories.
We frame our research within an evolutionary approach based on the research strategy with a focus on history as a path-dependent process of change where specific local characteristics determine future developments. A comparison of these characteristics, visualized in different cases, illustrates their importance, also for contemporary situations because such historical analysis "can enrich our understanding of present-day organizations by reconstructing the human acts which created them in the course of history" (Kieser 1994, p. 619).

As stated before, Kieser (1994) proposes three ways of how historical analyses could be performed in the field of organization studies based on the work of Skocpol (1984).

A first strategy is the use of historical data to illustrate general, preconceived models. We do not apply this method because it serves foremost to understand and further elaborate general theory.

The second strategy is the inductive strategy as used by Chandler in “Strategy and Structure” and by many other business historians. The researcher looks for generalizations based upon regularities in history. The main difference with the first strategy is its emphasis on specific historical developments, for which theoretical generalizations are posited and tested. These hypotheses are however not seen as general, but limited to a certain context. We do not use this second strategy because it is not our intention to develop a new framework out of a specific historical case.

We apply the third strategy, which uses theoretical concepts to interpret the historical case. The model is not proved or tested, but used as a reference model to “highlight the particular features of each case” (Skocpol, 194, p. 370) in order to explain the data. It is a “positioning approach” that uses several cases to describe comparable developments in different circumstances and compares them by using conceptual models as a ‘lens’ or ideal type. An example is the cultural model of Calori, Lubatkin, Very and Veiga (1997) that explains differences in managerial behavior of British and French firms. With this method, a model is
first conceptualized and then utilized as an exploratory lens for viewing historical evidence (Skocpol 1984; Calori et al., 1997).

6.1 The Zeche Zollverein Case

The Zeche Zollverein case provides an illustration of the anchor points that are linked to the European Route of Industrial Heritage, which consists of a network including the most important industrial heritage sites in Europe. This network covers outstanding industrial monuments in the former heartlands of the Industrial Revolution, Great Britain, Belgium, Netherlands, Luxembourg and Germany. Today, these sites have mainly a touristic function – but to what extent do these heritage sites and relics support activities, the recall of place associations and memories from the past? More specifically, how is the meaning of the historic production capabilities, which once lend the Zeche Zollverein region significant economic power, interpreted at the symbolic scale?

In order to analyze the dimensions of heritage business networks we should reject a homogeneous concept of culture and adopt at the theoretical level the central issues of heterogeneity and hybridity, simply because such networks spun a range of affiliated activities, which were embedded in different cultures, values, organizational styles and procedures and symbols, and somehow had to be assembled and re-combined.

6.2 The Olympic Games 1992 Case

Normann (2001) used the Olympic Games 1992 as an example of symbol based ecogenesis. It induced actors in Barcelona to begin to envision the city as a prime mover in a much larger region (which has come to encompass not only Barcelona but also Catalonia and cities in Southern France). The Olympic Games, including its brand symbol (the Rings),
became the catalyst for articulating- 'externalizing', to use the terms of Berger and Luckman (1966) - this concept, gradually giving it more content. The Games became an artifact 'transitional object'. As the vision of an identity for Barcelona emerged - a role in transforming and enhancing the region, in improving the transportation system of Europe, etc. - the physical manifestations of this identity were also invented and put in place: transportation infrastructures, urban planning projects, developments in industrial location schemes and in education systems, and so forth' (Normann, 2001, p. 86).

6.3 The 'Iconographic' Bilbao Guggenheim Brand Case

The 'Iconographic' Bilbao Guggenheim brand serves as our elaborate example of symbol based eco-genetic place branding. A museum is the space where the encounter between ‘hard’ and ‘soft’ properties occurs with the potential for co-dwelling. From a re-configuration perspective same raises the issue how to get mind and matter together within a symbol based eco-genetic model in a fashion designed to generated sustainable growth “effects” for the local community within wider (global and local) networks?

In 1997 the iconographic Guggenheim Museum of Bilbao opened its doors to worldwide and activated the Bilbao urban and symbolic regeneration transforming an industrial city into a new social, cultural and touristic landscape. During the years, Guggenheim Bilbao museum has become the symbol of the Guggenheim brand value and the effect of its global networking reshaping the city spaces (material, information, mind and social).

Here several questions arise such as: What does history tell us about the evolutionary process of Guggenheim Museum and Bilbao? Does the host community perceive the museum as an emblem of renovation based on possible territorial social innovation of co-evolving partners in urban spatial networks? Or is the museum merely publicly perceived as an expression of
top-down decisional processes, based in the combined power of the Basque government and Solomon R. Guggenheim Foundation?

At present, a more interconnected, more volatile and more unstable world (Go and Govers, 2010) gives pause for reflection in regard to the reputation-reality scale and the paradoxes that flow from it. In particular, Bilbao has been able to develop important links with consumers who hail from beyond the territory, but in the pursuit of attracting outsiders the territory’s population may have felt possibly somewhat neglected (Go and Trunfio, 2011c).

The international debates express multiple conflicting opinions and positions. Since its opening the Bilbao museum was initially considered the result of particular historical circumstances, born from local and regional political aspirations coupled with external negotiations with the Guggenheim Foundation. In fact, the project was defined by top-down approach without advocating the need for public participation mechanisms. Basque reaction to the agreement was immediate; much of it negative, pointing out the elemental sense of democracy.

Over the years, the Guggenheim Museum became the central node of the overall strategy to revitalize Bilbao generally, by commissioning the construction of a series of impressive buildings, designed by famous architects (Foster, Stirling, Calatrava, Pelli and Stark): a business centre, a conference and performing arts centre, a large transport interchange, a metro system, a new terminal for the city's airport, and new bridges over its river.

The Guggenheim effect activated urban regeneration, cultural and social changes and attracted tourists to the city. This process has modified not only the ‘hard’ parts of the city, by impressive building, but it has impacted on the ‘soft’ elements reshaping the symbolic meaning and cultural values.

But there is also a price to be paid for overcoming an uncompetitive regional position by concentrating public attention on an iconographic brand. In particular, the ongoing mass
commodity production in Bilbao’s central district, eschews meaning which alienates the citizens, who reside in the region’s periphery, from what is being produced (Go and Trunfio, 2011c).

Besides, if the urban space appears to balance innovation with tradition, there are a lot which contrasts the socio-cultural space of Bilbao: the art, present in different forms and in a climate of continuous intervention, “did not advance the citizens’ quality of life in its cultural context, because neither did it promote the local artistic spirit and creativity; on the contrary, it rather impeded them [...] Modern art, it seems, has long been associated with consumerism and publicity and is still divested with a considerable political power” (Baniotopoulou, 2000).

With Bilbao’s iconic museum brand as point of departure we take as our main unit of analysis the symbolic-based eco-genetic and the social innovation to define a co-evolution process between museum, networks, city and government.

The ‘Guggenheim effect’, when framed in the fundamental changes that institutions and society are undergoing call for reflection on the possible significance of the symbol based eco-genesis approach in relation to Bilbao iconographic museum brand as attribute of a larger distributive embedded governance for coexistence strategy. A leading question that might be raised here is: How might Bilbao re-configure its iconographic museum brand based on the sharing of different spaces to achieve inclusive innovation by confronting the comfort zone?

Bilbao could draw inspiration from the co-evolutionary firm-city process. In particular, the attributes that are part of the BMW-Guggenheim Lab - Confronting Comfort: The City and You - which aims to engage local community in the co-creative process developing citizens awareness and participation on the comfort and sustainability dilemma.

The first cycle of BMW-Guggenheim Lab started in New York on August to explore the theme of Confronting Comfort; it will continues in Berlin (Europe) and Mumbai (Asia) so as to allow the benchmarking of different ideas on comfortable city to emerge and take shape.
Within the global and local nexus the BMW-Guggenheim Lab focus on attracting an interdisciplinary group of architects, designers and creative – who with the support on new technologies – will stimulate the communication of emerging urban problems and possible solutions by “the exploration of new ideas, experimentation, and ultimately the creation of forward-thinking solutions for urban life” (www.bmwguggenheimlab.org).

This project can be seen as a social innovation contributing to the shaping of a new form for organizing decision making and introducing the embedded governance platform designed to raise community awareness and participation in matters that interest its members.

Such platform would consist of (Go and Trunfio, 2011c): a filter of information to reduce the external variety and converge toward city competitiveness, a facilitator bridge of knowledge sharing and communication transfer between single actors and network. The platform would be designed with a customer-service-oriented and relational view in mind and leverage, in the case of Bilbao, the dynamics triggered by the iconographic museum brand, for subsequent integration in a distributive institution based on trustworthy relationships and social innovation for bringing growth and prosperity, including Bilbao’s peripheral territorial society.

7. Conclusion, limits and implications for future research

This paper has drawn on selected theoretical contributions and the historical analysis of selected cases studies in an effort to break the ‘scholarly silence’ positioned by this conference. It presents multidisciplinary perspectives to rethink strategy under conditions of contemporary complexity and approaches the debate from an unconventional angle in hopes that it contributes to widening and deepening our knowledge of the social innovation domain. This paper hopes to stimulate the debate about the firm-territorial multi-stakeholder
relationship dynamic by positioning social innovation as an emerging and desired outcome from the symbolic-based eco-genetic branding process. Toward this end we have drawn on different theoretical frameworks (poly-inclusive model, embedded governance and social capital) and subsequently tried to reinterpret these in selected cases to decipher the attributes in a record to encourage social innovation within co-evolutionary network processes converging in a Coexistence Strategy Design.

7.1 Concluding Remarks
As an overall conclusion, this exploratory paper sought to use selected theoretical constructs to examine the symbol based eco-genetic perspective in the firm-territorial stakeholders relation context in an effort to advancing our understanding which factors affect the embedded governance aimed at a Co-existence design. In turn, the paper proposes how in the software of the mind culture, linked to a salient symbol (awareness and recall), can contribute toward the balanced convergence of poly-inclusiveness of mental, social, virtual and material spaces within a branded community of practice (CoP) approach aimed at fostering social innovation. We envision that, in due course, from the CoP would spring networked routines encapsulating the aforementioned four spaces. While the geographically delineated community continues to play an important social role simultaneously its physical, hard spatial features remain too dominant a factor thereby constraining, potentially, the quality of 'openness' to new ideas/ knowledge/creativity in response to a myriad of complex challenges. However, it is not the intention to address all these here. Instead we limit our observations to the four specific challenges that served at in the paper’s introduction as our departure points with the end goal in mind to achieve effective cooperation between co-evolving firms and territorial stakeholders, who in a globalizing, heterogeneous world, comprehend the urgency
for embedding governance in a poly-inclusive framework and methodology for Co-existence Strategy design and wherein the symbolic-based eco-genetic process serves to transfer value between the brands of firms and the territorial stakeholders, respectively. What motivates firms and territorial stakeholders to achieve effective cooperation? The fact that they must interact in networks and dependent on the specific institutional context must participate in a social innovation process in order to survive in a complex and an increasingly turbulent world. This heterogeneity results in the development of a non-linear research approach and the introduction of the symbolic based eco-genesis, or the dialectic flowing from hard and soft demonstrates the consequence of this and non-linearity. We see a co-genesis of urban and local actors (firms etc.) that co-dwell and together create value in a new context. The interplay of soft (symbolic, brand) and hard (infrastructure) factors is of high importance.

7.2 Specific Challenges and Future Agenda

The first challenge, ‘The co-evolution of the Firm within Territorial/Urban Networks’ examines the role of the institutional context wherein the Fordist perspective acts as a constraining force on institutional change; And how the rise of networks affords incumbents’ cohesive industrial systems and territorial social innovation. Following on from the poly-inclusive model, the firm-urban network environment gives afforded to the so-called Third Space designed for a dialectic interaction between 'hard' technology/infrastructure and 'soft' concepts. The increase and acceleration of the mobility - of people, capital, information, ideas and so on - have led to the geographic distribution of processes in the value chain, paradoxes arise consequent to the interaction of actors situated in multiple spaces and added to complexity, making it much harder to control and coordinate the network members. Accordingly, inclusive innovation within such mapped network structures calls for the
adoption of a poly-inclusive model (Go and Fenema, 2006) as a potential platform for the formation of historical, co-evolutionary processes aimed at knowledge sharing and awareness among members. Such actions would be appropriate within the network structure for purposes of regenerating material urban space and taking a balanced-centric approach to innovation by including the application of digital devices combined with the co-presence of people and material artefacts aimed at sustainable forms of development. explores heterogeneity and non-linearity result in the need for a co-genesis of urban and local actors (firms etc.) that co-dwell and together create value in a new context. In this regard, the interplay of soft (symbolic, brand) and hard (infrastructure) factors is of high importance.

Setting the research agenda ‘Toward an Eco-genesis based Theoretical Construct for Social Innovation’, give specific consideration to the extent by which the enhancing of social capital within a possible Coexistence Strategy Design with the use of embedded governance based on taking the poly-inclusion of the different hard and soft spaces into account. Subsequently, the levering of the symbolic-based eco-genetic branding process can aid the transfer of value-in-use between the brand of selected firms and a particular city brand as a carrier to develop a record in social innovation activity. This approach serves as a bridge for transferring knowledge between urban stakeholders (for example in a CoP) to develop social capital and effective cooperation and our contribution toward advancing the social innovation body of knowledge.

Following Normann (2001) we framed eco-genesis in a non-linear context, which serves for embedding and cross-fertilizing the ‘inside-in’ perspective and the ‘outside-in’ perspective with the aim of co-creating genuine (authentic) prosperity through new product and services which source knowledge and resources locally, where appropriate. In this regard, the historical uniqueness of a particular place could be leveraged for designing, first, the transfer and application of knowledge e.g., of new ‘local’ products and services, and, second, for
triggering and supporting a defining shift in market structure, founded on an embedded governance for a co-evolutionary Coexistent Strategy Design. In turn, this would give affordance to joint-value creative strategies and processes aimed at driving social innovation activity forward. This approach was tested in section 6 featuring three cases. The first two cases highlight only partial elements of our approach (i.e., network, memories-meaning, identity and physical manifestations). The third Bilbao case is our major case and demonstrates all the dimensions of the approach referred to in the present paper: ranging from the volatile world, the significance of using hard and soft concepts to bridging knowledge in order to achieve, ultimately, through a practice-based knowledge epistemology social innovation. The idea behind this approach is to highlight historical developments through our theoretical lens, thereby enabling a comparison between an ideal situation and each case, and also between the cases presented.

The authors have coined ‘embedded governance’, amongst others to reflect Bergson’s dialectical element of ‘a constant interplay between integration and differentiation, the former leading to wholeness and unity, the latter to individuation and independence, with a platform coalescing political actors, business and civil society members designed to co-create sustainable (economic, social, ecological) development. Within this context, embedded governance as represents (Go and Trunfio, 2011b) seeks to attain a ‘bridging’ function through a process of filtering information derived from decentralized supra national/national/regional institutions, market, lobby and power coalitions for knowledge sharing and transfer between stakeholders. Also, a ‘bonding’ process aimed at cultivating trust and coordinating social capital (Inkpen and Tsang, 2005). Embedded governance plays a multifaceted role in facilitating the place brand building process. But whether or not stakeholders feel a sense of embedded brand ‘belonging’ depends ultimately on various criteria, these are, first, understanding stakeholders aims, second, developing a local culture of
partnership, third, creating and supporting knowledge transfer, fourth, defining a participative/shared marketing strategy, fifth, developing organization and marketing tools, sixth, facilitating internal and external communication, seventh, managing to changes, eight, supporting innovations, ninth, coordinating relationships between different actors and, finally, controlling divergent processes.

In summary, and with an eye to development occurring through the interplay of contrasting factors in social life, embedded governance has an important ‘hosting’ function and serves to overcome the different perspectives which are manifest in place analysis which result in independence. The embedded governance approach proposed in our paper recognizes the dependency on cultural and environmental features that are difficult to reproduce. It is therefore no coincidence that attaining urban/regional coherence remains a complex issue. By bridging the gaps in the distributed knowledge system and leveraging social capital dimensions in a knowledge platform structure designed to engage stakeholders; it should be possible to analyze the latter to its very bone structure and for the integration of its essential component parts, leading to a sense of belonging, manifest in the wholeness of a symbolic based eco-genetic identity.

Our final challenge raised in this paper was to draw conclusions, based on the cross analysis of three case studies that shed light on both the affordances and limitations of research on social innovation, from a symbol-based eco-genetic perspective and its implications for potential future research. Evidence in this regard has been provided in selected case studies. Through a broad cross-case analysis of the three cases we presented several general observations emerge.

There exist, first, the clash between the globalizing society and the local results in paradoxes, which can lead to significant conflicts in social space. Fed by the Fordist' top-down approach, diffused by strategies and actions express government power (e.g. impressive building,
infrastructures) emphasizing the ‘hard’ aspects of the territory. If in such strategies ‘soft’
elements are introduced in Western society, they often refer to symbolic elements, which
draw on international celebrities, who act in the interest of sponsors, whose sole aim is geared
towards increasing consumption. But fail to address what matters to the local stakeholders and
citizens who therefore distance themselves from participation in territorial decision making.
The gap between the former and latter has contributed to the corrosion of vernacular character
and, by extension, a decline of the local spirit and artistic creativity. For example, these
fundamental changes in institutions and society are mirrored by the Guggenheim case. We
raised the question why shouldn’t Bilbao re-configure its iconographic museum brand with
the aid of the symbol based eco-genesis approach and part of a larger distributive embedded
governance model for coexistence strategy based on the sharing of different spaces aimed at
enhancing the common good by hybridization of separate (global-local) cultures?

7.3 Limitations

While this paper elaborates on multiple issues raised in its theoretical sections (3, 4 and 5)
these observations do not connect to the content of the three cases in a systematic manner, not
even in the more extensive Bilbao case. Nevertheless we decided to keep all the cases in the
text for purposes of illustrating the significant influence of the dialectic of ‘hard’ and ‘soft’
aspects in the firm –urban stakeholders’ relationship context. Successful integration between
material space, informational space, mental space and social space (Go and Fenema, 2006)
requires stakeholders and firms from different disciplinary and social backgrounds to connect
in networks, develop trustworthy relations, and share knowledge so as to generate the
capability to think and act in a Community of Practice effectively and efficiently.
Epistemological differences in the overlap of hard science and social science present a
daunting gap to working together and establish the critical mass needed for social innovation.
The was developed in this paper to provide a framework that both representatives of the hard science and social science community can work with for purposes of embedding in the CoP their respective, multi-discipline based knowledge. One special strength of applying the poly-inclusiveness approach is that it can provide a foundation for stakeholders who represent the hard and soft disciplines, respectively, to stretch the envelope, thereby reframing the context, i.e., ‘place (as node) in a world’ (wide network) and the dynamic flows as affordances to connect the various stakeholders both insiders and outsiders for co-dwelling in a particular place, negotiate a common language, understanding and routines. As a symbol-based eco-genetic perspective entails co-dwelling of hard and soft aspects, the former are necessary steps, involving, first, bridging gaps presented by the dialectics, towards second bonding i.e., the formation of coherent firm-stakeholders’ relationships aimed at strengthening a sense of trust amongst members for CoP belonging from which territorial social innovation may spring.

7.4 Suggested future research

This paper has addressed the dialectics that are likely to arise in the historical analysis of cases involving territorial social innovation, viewed from the symbolic-genetic perspective. The latter resides in the overlap between three fields of knowledge, first historical analysis; second, the contemporary industry that levers historical knowledge to comprehend more systematically where it has been, where it is and where it appears to be heeding; third, media and marketing knowledge, to provide a symbol-based eco-genetic perspective on place interpretation.

Our research aim is the critical studies perspective aimed at theorizing. However, there is a myriad of questions that remain unanswered, such as: What are the specific outcomes of symbol based eco-genetic brands? How to redefine the coexistence of different spaces
allowing a co-evolutionary process between firms and cities/places maintaining competitiveness and sustainability? How to develop embedded governance, which would afford interaction between knowledge, the interlocking project, various stakeholders’ interests, competences and actions? How to raise the key players’ sense of urgency to adopt a co-existence strategic design for co-creating higher levels of efficiency (cost), effectiveness (quality) and equality (social inclusion)? How can we create territorial social innovation based on the people coexistence, collective think and social networking? How balance the paradox between innovation and traditions? These and other issues will be tackled in future study.
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Source: Lewin et al., 1999
### Table 1: Connecting spaces

<table>
<thead>
<tr>
<th>Material space</th>
<th>Information space</th>
<th>Mind space</th>
<th>Social space</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co-presence of people and material artifacts</td>
<td>Capturing and representing material space (picture)</td>
<td>Executing the design of an artifact</td>
<td>Co-presence of people</td>
</tr>
<tr>
<td>Joining together information spaces (hyperlinked websites, web ring, picture-in-picture TV)</td>
<td>Articulating a mind space in information artifacts</td>
<td>Mediated co-presence of people</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Connecting mind spaces (people—people, people—machines, machines—machines)</td>
<td>Collective thinking</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Connecting social networks (boundary liaison (Burt 1993))</td>
</tr>
</tbody>
</table>

Source: Go and Fenema, 2006