

**THE GOVERNANCE OF DESIGN ALLIANCES IN ‘EMBEDDED’
SETTINGS: EVIDENCE FROM THE ITALIAN DESIGN-INTENSIVE
FURNISHINGS INDUSTRY**

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Introduction

Economic activity does not occur in a social vacuum. Instead, it is embedded in dyadic social relationships and structures of relationships. Starting from this assumption, several scholars have examined modes of organizing economic activities (i.e., organizational forms) based on social networks (Powell, 1990; Podolny and Page, 1998). Where such ‘network governance’ (Jones, Hesterly, and Borgatti, 1997) occurs, coordination is achieved through *social mechanisms*. Therefore, these mechanisms – individual attachments, trust, reciprocity, and reputation, in particular– emerge as major research issues for scholars interested in the relationships between economic action and social structures. Given that the role of social networks and mechanisms turns out to be especially relevant where economic activities need to be coordinated across the boundaries of partner organizations (Powell, 1990; Larson, 1992; Liebeskind, Oliver, Zucker, and Brewer, 1996), interorganizational relationships, and in particular strategic alliances, are an ideal field for studying new organizational forms based on networks and the underlying social mechanisms. This is especially true for interfirm alliances that emerge and develop in business settings where the logics of embeddedness (Granovetter, 1985; Uzzi, 1997) are particularly salient.

Whereas an extensive body of research has investigated a number of social mechanisms individually and discussed their influence on the governance of economic activity in (inter)organizational contexts (e.g., Ring and Van de Ven, 1994; Larson, 1992; McEvily, Zaheer and Perrone, 2003), we still lack a thorough understanding of the overall ‘system’ of social mechanisms that operate in ‘embedded’ settings. Drawing on case study research, the present paper tries to overcome this shortcoming in the extant literature on social networks and network forms of organization by examining the system of social mechanisms that characterize the governance of a number of interorganizational relationships that are embedded in the surrounding social and economic context. It does so by capitalizing on recent dialogue between economics and sociology (Baron and Hannan, 1994; Baum and Dobbin, 2000) to deepen the role of social variables in explaining economic behavior. Indeed, a theoretical stance that acknowledges the ‘problem’ of embeddedness may help overcome the prevailing rhetorics of rationality and efficiency, offering instead an explanation of economic behavior that emphasizes the social determinants of purposive action.

The paper is organized as follows. After discussing the relevant literature on the embeddedness perspective and the role of social networks in the governance of economic activity, I set out methods and

some preliminary results of an ongoing study of four joint-design dyadic alliances between Italian design-intensive furnishings manufacturers and consulting industrial design firms. The final section contains concluding remarks and implications for those who manage design alliances in embedded settings.

Embeddedness, social networks, and the governance of economic activity

The theory of embeddedness acknowledges that economic action is embedded within the larger social system in which it occurs and develops (Barber, 1995). The cornerstones of this approach were placed by Mark Granovetter (1985) in his much-cited paper on the ‘problem of embeddedness’. Starting from a close criticism of the atomization of actors from immediate social context that is typical of both ‘undersocialized’ and ‘oversocialized’ views of economic action, Granovetter (1985) emphasized instead the need to contextualize that action.

Thus, breaking with both neoclassical orthodoxy and revisionists approaches like, among others, Transaction Costs Economics (Williamson, 1975), the theory of embeddedness makes a powerful case for closer integration between economics and sociology, and in particular for relevant contribution of modern structural sociology to understanding economic phenomena. In fact, like any other category of social action, economic action and the ensuing outcomes are affected by the social networks within which economic behavior occurs and develops. The resulting embeddedness constrains economic actors (Romo and Schwartz, 1995; Afuah, 2000), at the same time as it provides them with opportunities and resources (Gulati, 1999; Jensen, 2003).

Since the seminal paper by Granovetter (1985), a number of studies have emphasized the role of social networks for understanding economic action and processes, on multiple levels of analysis. Within this research domain, scholars differentiate between ‘relational’ and ‘structural’ embeddedness (Granovetter, 1992; Moran, 2005). While relational embeddedness underscores how dyadic social relationships and their qualities and histories influence economic behaviors and outcomes, the structural aspect of embeddedness emphasizes the impact of the social structures (social networks, in particular) in which economic action occurs and dyadic relationships are themselves embedded.

Following the original intuition by Granovetter (1985: 504), significant research in the embeddedness tradition has been aimed at deepening how social relationships and structures affect the governance of

economic activity. Thus, although the network concept is inextricably tied to that of organization (Baker, 1992), the ‘network form’ has been identified as a specific mode of organizing economic activity (Powell, 1990), distinct from both ‘market’ and ‘hierarchy’ (Williamson, 1991), and therefore based on idiosyncratic governance mechanisms that emerge from overlapping economic and social motives in the behavior of economic actors. These social mechanisms have been investigated individually in a number of studies. This is the case for reciprocity (Gouldner, 1960; Larson, 1992) and trust (Zaheer and Venkatraman, 1995; McEvily, Perrone and Zaheer, 2003). However, we still lack more comprehensive analyses of the social mechanisms that characterize network forms of organization¹. This paper tries to address this void. It does so by focusing on a set of strategic alliances deeply embedded in networks of overlapping interpersonal and interorganizational relationships.

Research process and methods

I report some preliminary results of an ongoing research program on the relationships between design-intensive manufacturers and consulting industrial design firms (design firms, design consultants, or external designers, hereinafter). While the larger research program covers a number of design-intensive manufacturing and service industries, the study discussed in this paper was specifically focused on the top segment of the Italian furnishings industry. It includes the production of design-intensive furniture, lighting and complements of furnishings, and is composed of a small number of manufacturers that are major international players, whose success is largely dependent on their ability to leverage industrial design as a primary source of continuous product innovation. Instead of relying exclusively on internal design departments, the Italian manufacturers are used to drawing new product ideas and specialized technical skills from strategic alliances with design consultants from all over the world, which in turn would not be able to generate relevant design innovations without relying on their manufacturing counterparts’ technological know how and unique product development capabilities.

Given the above description, my attention was initially drawn to the knowledge contents of the relationships between manufacturing and designing firms in the selected setting. My fieldwork showed that

¹ A notable exception is the work by Jones, Hesterly, and Borgatti (1998), whose model of network governance includes the following social mechanisms: restricted access to exchanges in the network; macroculture, collective sanctions, and reputation.

these relationships are processes of knowledge-intensive interorganizational cooperation wherein partners transfer tangible and intangible knowledge across the organizational boundaries and combine significant aspects of their existing knowledge bases to jointly produce new knowledge (Capaldo, 1999). All this led me to ask what sustained such knowledge-intensive cooperation at the interorganizational level. This question is central to the governance of design alliances and is explored in the present paper.

In an attempt to address the above question, I conducted a two-phase study. In the first, groundwork phase I interviewed the CEOs and managers of several manufacturing firms, a number of industrial designers and industrial design scholars, and two industry experts. For the purposes of the present paper, these exploratory interviews portrayed the Italian design-intensive furnishings industry as an ‘embedded’ setting – that is, a business setting where the logics of embeddedness are particularly salient. I advanced the hypothesis that such quality of the selected setting influences positively the governance of the relationships between Italian design-intensive furnishings manufacturers and their designing counterparts, and in particular the proclivity of both parties to participate in the above knowledge-intensive collaborative activities.

Thus, in the second phase of the study I selected four dyads for in-depth analysis. Both manufacturers and design firms involved in the selected alliances are internationally renowned actors in the design-intensive furnishings industry, endowed with excellent reputations for technical competence and design innovation. Once on the field, I noticed that the way my respondents depicted the interorganizational relationships under examination recalled what other scholars have described as ‘network dyads’ (Larson, 1992) or ‘embedded ties’ (Uzzi, 1997). The interviewees also suggested that the proclivity of the partnered organizations to cooperate was significantly enhanced by social mechanisms such as personal attachments, trust, reciprocity, and the partners’ concern for reputation. Therefore, I focused my analysis on these mechanisms.

Following Yin (1994), the case study was deemed an appropriate research strategy to help understand the phenomena under investigation within their rich (inter)organizational contexts by relying on several sources of evidence, while the multiple-case approach guaranteed the robustness of the findings (Pettigrew, 1997). The unit of analysis was the overall interorganizational relationship between a design-intensive furnishings manufacturer and a design firm.

I employed multiple data collection methods to exploit the synergistic effects of combining them via triangulation (Jick, 1979). I conducted 29 hours of semistructured in-person interviews with 13 individual respondents. At the customers' sites and at two trade fairs I interviewed the firms' CEOs and at least one top manager directly involved in collaborative activities with external designers. At the design consultants' sites I interviewed the chief designers (typically the firms' founders and owners) and selected staff. Interviews were tape-recorded and transcribed. Further, I gathered several materials produced by and about the organizations participating in the alliances. Previous studies, research reports, books edited by the organizations themselves, and a significant literature on the history of Italian design helped my understanding of the sample relationships and how they were influenced by the surrounding 'world of design'. Because of the confidential and sensitive nature of many issues for both my individual respondents and their companies, I present all illustrative material anonymously.

The embeddedness of the Italian design-intensive furnishings industry

As noted above, the Italian design-intensive furnishings industry is an embedded setting. For the purposes of this paper, two aspects are especially noteworthy. First, the industry exhibits a fairly dense network structure, where a relatively small number of manufacturers and design firms are tied by a large number of dyadic alliances. In part, this is due to concentration of top-level design-intensive manufacturers and design consultants in the small geographic area surrounding Milan, where a significant part of the furnishings design discourse worldwide has traditionally unfolded. In addition, and more important, while remaining alert to discovering emerging avant-garde designers and manufacturers, established manufacturers and design firms collaborate extensively with each other. In fact, "while [manufacturers] try to distinguish their products by commissioning industrial designers with great reputations, industrial designers, in turn, tend to establish or confirm their fame through working for firms that have earned a reputation for original, experimental design' (Gemser and Wijnberg, 2001: 575).

Second, these numerous and often repeated dyadic interorganizational relationships between restricted numbers of top-level manufacturers and design firms are in turn grounded in (and surrounded by) a complex web of interpersonal linkages among individuals who share cultural and economic interests in design-intensive furnishings. These individuals include key actors of the above organizations (mainly CEOs, senior

managers, R&D experts and consultants, on the one hand, and chief designers, on the other hand) and a larger community of, among others, materials suppliers, prototypists, architects, interior designers, retailers, critics, curators, and industrial design scholars who meet each other repeatedly and share information and experiences during the development process of design-intensive new products and/or at trade fairs, collection presentations, exhibitions, and cultural events. All this leads to an intricate pattern of interconnected interpersonal and interorganizational relationships that my interviewees labeled the 'world of design'. Being each single manufacturer-design firm alliance structurally embedded in this cohesive network has significant implications in terms of both opportunities for, and social constraints to, economic action.

A 'system' of social mechanisms

When we focus specifically on the interorganizational dyads sampled for this study, their governance appears to be based on a 'system' of four major social mechanisms that are well grounded in a small number of structural antecedents.

Personal Relationships

Personal relationships among individual members of the partnered organizations play a major role in the governance of the sample alliances. This is not surprising, given that the alliances tie small/medium-sized manufacturing firms to very small-sized design firms, which lead the key actors of both organizations to manage the resulting interorganizational relationships on a personal basis. In addition, the intrinsic nature of the design business, wherein economic interests are inextricably linked to emotional feelings, intellectual inclinations, and cultural motives of individuals, also increases the importance of interpersonal relationships among the key actors, and in particular their ability to influence significantly the proclivity of both those actors and their organizations to cooperate.

The impact of personal relationships can be traced along the entire development process of manufacturer-design firm alliances. First, the cohesiveness of the design world facilitates personal connections among chief designers and entrepreneurs and/or top managers. Moreover, it often happens that histories of personal esteem and business friendship among the key actors shape the context for creation and initial development of joint-design alliances between their organizations. Over time, repeated interpersonal

interactions, that occur both within the interorganizational relationships and beyond them, set down mutual, largely implicit obligations and expectations of fairness and honesty that not only influence individual behaviors but also become organizationally structured, thereby exerting a positive impact on the proclivity of the individual members of the partnered firms and their organizations to actively and openly participate in the development process of jointly-designed new products.

Along this way, personal relationships among the key actors encourage interactions and set the basis for similar empathy among other actors of the partnered firms, especially for their active participation to the processes of knowledge-intensive interorganizational collaboration that take place within the alliance. In particular, I noticed that the truly emotional (not merely operational) nature of such participation, backed by a strong and explicit commitment on the part of the key actors, leads over time to developing a dense social fabric across the organizations' boundaries, which further sustains the parties' cooperative inclination at the interorganizational level.

Concern for Reputation

Another social mechanism shared across the four exchange structures is the partners' concern for reputation. Design-intensive furnishings is under many respects a reputation-based business, wherein several components of both individuals' and firms' reputations can be relevant, and different components of those reputations are salient to different audiences. Thus, the manufacturers' reputation for product quality, design innovation, and exclusivity is strongly rewarded by final customers, while the designers' reputation for creativity is especially important to manufacturers, and the manufacturers' reputation for competence in research and development and for flexible adjustment to the idiosyncratic routines of different designing partners is particularly salient to design firms.

For the purposes of this paper, *reputation for fair dealing* in the eyes of actual and potential partners is especially relevant for both customers and design consultants. In the examined context, fair dealing includes refraining from two major forms of opportunism: (a) profiting from the counterpart's open participation in knowledge-intensive collaborative activities within the alliance without reciprocating in kind; and (b) exploiting the counterpart's proprietary knowledge unilaterally outside the alliance or within different alliances.

The processes of joint-design are indeed rich in confidential information and proprietary, largely intangible (and hence difficult-to-protect) knowledge. In order to counter potential opportunistic behaviors on the other side, the examined manufacturers and designers rely heavily on their prospective partners' reputation for fair dealing when selecting their counterparts, and adjust their own cooperative posture against that reputation. At the same time, manufacturers and designers are equally concerned with their own reputation as a way to retain existing partners and to enter joint-design alliances with new partners, as well as to stay within the small circle of top-level manufacturers and design firms.

The effectiveness of the parties' concern for (their partners' and their own) reputation as a social mechanism in the examined alliances is supported decisively by the cohesive social network within which each single dyad is embedded. Indeed, the rapid dissemination of information across the world of design not only facilitates opportunistic behaviors to be discovered, but also allows unwritten norms to be established and enforced by social sanctions with substantial economic consequences. In particular, innovativeness and design boldness are major strategic goals for top-level manufacturers and designers. In addition, they are key values for participants to the wider world of design, and my fieldwork has showed that an informal ethical code of conduct is shared within that world, urging individuals to acknowledge and safeguard the other's endeavors to achieve them. Should that shared code of conduct be violated, information would soon be known to participants to the surrounding world of design, and negative reactions, ranging from disapproval to exclusion, are to be expected.

Trust

The third and most important governance mechanism is trust. The sample relationships shows two different types of trust – trust in the goodwill and fairness of the other party and trust in the other party's competence. Regarding the first type of trust, I have observed that my interviewees tend to interpret positively their counterparts' behaviors and to be confident that their partners will refrain from opportunism. Rather than being sustained by formal monitoring systems, the proclivity to develop trust in the goodwill and fairness of partners is rooted both in interpersonal relationships and in reputational mechanisms.

On the one hand, personal relationships allow individuals to observe their respective behaviors in multiple different contexts. Besides providing first-hand information about the partner's goodwill in business

situations, this also allows the key actors of both the customer and the design firm to accumulate over time valuable clues about the partner's behaviors in a variety of non-business situations, from which trustworthiness in business relationships is frequently inferred. In addition, that context of obligations and expectations with strong moral overtones that underlay personal relationships induces the parties to avoid opportunistic behaviors (Granovetter, 1985; Larson, 1992). Being aware of that, manufacturers and external designers tend to be confident in their counterpart's fairness.

On the other hand, the partners' concern for reputation discussed above induces customers to carefully avoid unilateral exploitations of new product ideas suggested by external designers, while also preventing designers from leaking their manufacturing partners' industrial secrets and strategic plans to competitors. Similarly to what Hagen and Choe (1998) reported in their study of buyer-seller relationships in the Japanese auto industry, the rapid spreading of reputation across the cohesive world of design and possible societal sanctioning discourage opportunistic behaviors on either side and promote mutual trust and hence open-ended and knowledge-intensive cooperation.

Analogously to the first type of trust, trust in the partner's competence is rooted not only in interpersonal and interorganizational relationships and their dynamics, but also in the larger social structure within which the dyads are embedded. First, mutual esteem between the key actors of a manufacturing and a designing firm set the basis for reciprocal trust in the capabilities of their respective organizations, and hence for creation of an interfirm alliance. As the alliance unfolds over time through repeated joint-design agreements, the interpersonal relationships between the key actors strengthen and the social fabric of the alliance become thicker. Thus, multiple, largely informal information channels emerge across the organizational boundaries. This allows partners to deepen their mutual knowledge of each other's resources, technical know-how, design skills, and organizational routines, which in turn lead them to improve (or question) their trust in their partner's competencies.

Second, the wider social and business context influences trust by conveying to both partners additional information about their counterpart's individual skills and organizational capabilities. In fact, third-party referrals the key actors of the two organizations collect across the world of design reinforce (or decrease) the level of trust in the capabilities of the other party that emerges from direct collaborative relationships. Moreover, my respondents have repeatedly underscored how both the relational capital and 'position'

occupied in the world of design act as signals of their partners' tangible and intangible resource base. This is particularly so for design firms, whose creative capabilities are especially difficult to evaluate, thus inducing manufacturers to rely on the designers' relational capital as a reliable indicator of their competence base. As a top manager of a manufacturing firm put it: "The first question I ask about a designer is with whom he has collaborated in the past – that is, [his/her] references".

Reciprocity

The fourth governance mechanism is reciprocity. Indeed, manufacturers and designers tend to reward their counterpart's cooperative behavior through equivalent efforts. For example, a manufacturer recalled that, after he had made a 'special effort to make come true a dream the designer had been cultivating for a long time', the designer responded by enthusiastically accepting to be involved in subsequent joint-design projects and by offering unsolicited insights into a new product line the company was designing in-house.

Reciprocity results from both utilitarian relational behavior and compliance to an internalized moral norm. On the one hand, as the design of innovative furnishings asks for close knowledge-intensive cooperation, both customers and designers tend to reciprocate purposely in order to encourage further cooperative behavior on the other side, and thus preserve the relationship and its future benefits.

On the other hand, the partners' proclivity to reciprocate also emerges spontaneously from the affective component of the interpersonal relationships that tie the key actors of the partnered organizations. Over time, as interpersonal attachments strengthen and the social fabric of the relationship become increasingly dense, reciprocity turns into an interorganizational routine. Thus, an informal 'norm of reciprocity' (Gouldner, 1960) grows out of repeated interactions within the relationship.

In addition, compliance to such norm is enhanced by the surrounding world of design, and my interviewees have suggested that, instead of growing out of repeated interactions with a specific partner, in some cases the norm of reciprocity is 'imposed' on the relationship by the wider social structure. In fact, the need to preserve interpersonal relationships in a social and business environment where personal connections are of the utmost importance, and the prospect of the reputational repercussions discussed above, are major explanations for reciprocity in the examined interfirm dyads.

Concluding remarks and implications for practitioners

Founding on four case studies of joint-design alliances between Italian design-intensive manufacturers and design firms, this study suggests that, in business settings where the logics of embeddedness are particularly salient, interorganizational cooperation is significantly enhanced by social mechanisms. I have argued that those mechanisms are well grounded in structural antecedents. Moreover, they make up a system in which they influence and reinforce each other.

The cohesiveness of the social structure in which the alliances are embedded facilitates personal relationships among the key actors of the partnered organizations and encourages partners to take care of their reputations. Both personal relationships and concern for reputation impact positively the parties' proclivity to reciprocate, which in turn produces a positive feedback effect on interpersonal relationships and trust. Indeed, compliance to the reciprocity norm provides partners with tangible proofs of the other party's fairness, thus sustaining interpersonal linkages across the organizations' boundaries and exerting a positive impact on individual and company reputations, while also laying the foundations for trust-based interorganizational relationships.

Trust plays a leading role in the system of social mechanisms discussed in this paper. While it is influenced by third-party referrals and the position both individuals and their organizations occupy in the wider world of design, it is also fostered through personal relationships among the key actors and the ensuing social fabric that, backed by a strong and explicit commitment on the part of the key actors, develops over time across the boundaries of the partnered organizations as a result of repeated interactions. In addition, a diffused concern for reputation, together with mutual and repeated acts of reciprocity within the relationship, also contribute towards making partners more confident in the trustworthiness of their counterparts.

I conclude suggesting three major implications of this study for practicing design managers and design consultants. First, focusing on an embedded business setting, I have shown how the cohesiveness of the social structure in which design alliances are embedded impacts positively the social mechanisms that underlie network governance, thereby encouraging knowledge-intensive interorganizational cooperation. However, numerous repeated ties among restricted numbers of partners may also hamper innovation by preventing both manufacturers and external designers from accessing non-redundant knowledge (Burt,

2005). Therefore, practitioners should learn to capitalize on the benefits of embeddedness without suffering from its potential hazards.

An effective way to do that is to carefully manage the overall architecture of the firm's network of design alliances. This is the lesson I have drawn from a recent study of the relational behavior of three world-class Italian design-intensive furnishings manufacturers. Although these companies take advantage of the embeddedness of the Italian design-intensive furnishings industry along the lines discussed in this paper, they counter the risk of finding themselves closed in an inwardly focused network, composed of restricted numbers of long-lasting, repeated relationships with similar partners (strong ties), by continuously creating and disbanding large numbers of diverse relationships with 'distant' designers (weak ties). My research has demonstrated that the *relational capability* to leverage a 'dual' network architecture, wherein a narrow 'core' of strong ties is integrated with a larger 'periphery' of weak ties, allows these firms counter the risk of overembeddedness and avoid inertia by staying flexible toward innovative technologies, heterogeneous partners, and new market trends (Capaldo, 2007).

Second, this paper reminds us the importance of the interpersonal dimension of design alliances. In particular, personal relationships among the key actors of manufacturing and designing firms not only facilitate creation and development of design alliances but also enhance interfirm cooperation by sustaining the development over time of a dense social fabric at the interorganizational level. This has two major implications. On the one hand, the key actors of both manufacturing and designing firms should take care of their social capital through networking activities, and in particular through regular involvement in (and support to) the initiatives and events that take place within the 'world of design'. On the other hand, when structuring the processes of joint-design, partners should aim at developing interorganizational routines characterized by high levels of face-to-face interaction between individual members of the two organizations. This can indeed encourage the development of dense social networks and trust-based linkages across the organizations' boundaries, which have proved to be among the most effective ways to encourage knowledge sharing and coproduction in interfirm relationships.

Finally, this paper has confirmed the role of trust as a major organizing principle. While interorganizational trust has relevant antecedents in the structural factors discussed here, and emerges over time from repeated interactions, design managers and external designers can also help the processes of trust

development. Thus, my fieldwork has showed that the examined manufacturers tend to engender trust in their designing counterparts' fairness proactively through informal (and often tacit) agreements by which external designers agree to joint-design given products (e.g., sofas and/or tables), or more often an entire product category (e.g., upholstered furniture or outdoor lighting appliances), exclusively with specific customers. In so doing, they deliberately foster an atmosphere of trust in their alliances with external designers by leveraging the social relationships and structures in which their design alliances embedded. Indeed, rather than being sustained by written contracts, the above agreements are enforced both by moral obligations emerging from tight personal relationships among the two organizations' key actors and by the designers' need to maintain their hard-earned reputations and avoid the loss of reputational capital that a breach of such exclusive agreements would generate.

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resume

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- “Managing networks: The nature and roles of dynamic capabilities (with Lorenzoni G. and Ring PS.), to be presented at the 2008 EGOS Conference – July 10-12, Amsterdam;
- Knowledge bases of relational capabilities and their relation to the governance of inter-organizational collaboration” (with Lorenzoni G. and Ring PS), to be presented at the 2008 SMS Conference – October 12-15, Cologne;
- “Organizing industrial design: X-type vs. Y-type design” (with G. Lorenzoni);
- “How do social networks impact firm performance? Social mechanisms and knowledge benefits in joint-design alliances”.

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