

6-1-2007

Relational Space: Creating a Context for Innovation in Collaborative Consortia

Hilary Bradbury

University of Southern California, Hilary.Bradbury@usc.edu

Benyamin B. Lichtenstein

University of Massachusetts Boston, b.lichtenstein@umb.edu

John S. Carroll

Massachusetts Institute of Technology, jcarroll@mit.edu

Peter M. Senge

Massachusetts Institute of Technology, psenge@mit.edu

Edward H. Powley

Case Western Reserve University, powley@case.edu

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Recommended Citation

Bradbury, Hilary; Lichtenstein, Benyamin B.; Carroll, John S.; Senge, Peter M.; and Powley, Edward H., "Relational Space: Creating a Context for Innovation in Collaborative Consortia" (2007). *College of Management Working Papers and Reports*. Paper 16.

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Creating a Context for Innovation in Collaborative Consortia**

HILARY BRADBURY^{1,2}
University of Southern California
Hilary.Bradbury@usc.edu

BENYAMIN LICHTENSTEIN
University of Massachusetts - Boston
B.Lichtenstein@umb.edu

JOHN S. CARROLL
MIT Sloan School of Management
jcarroll@mit.edu

PETER M. SENGE
Society for Organizational Learning and MIT Sloan School of Management
Psenge@mit.edu

EDWARD H. POWLEY
CASE | Weatherhead School of Management
powley@case.edu

UMBCMWP 1027

June 2007



¹ This manuscript has been developed, in part, with funding from a National Science Foundation grant # SES NSF 0080643.

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HILARY BRADBURY^{3,4}
University of Southern California
Hilary.Bradbury@usc.edu

BENYAMIN LICHTENSTEIN
University of Massachusetts - Boston
B.Lichtenstein@umb.edu

JOHN S. CARROLL
MIT Sloan School of Management
jcarroll@mit.edu

PETER M. SENGE
Society for Organizational Learning and MIT Sloan School of Management
Psenge@mit.edu

EDWARD H. POWLEY
CASE | Weatherhead School of Management
powley@case.edu

Key words: organizational learning, innovation, knowledge, inter-organizational relationships, alliances, consortia, multi-party collaboration, sustainability.

Citation: Bradbury, H., Lichtenstein, B., Carroll, J., Senge, P. & Powley, E., 2007. “relational space: Creating a context for innovation in collaborative consortia.” Working Paper, College of Management, U-Mass Boston

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ABSTRACT

Corporations are collaborating to meet complex global challenges heretofore considered beyond the mandate of business leaders. These multi organizational consortia are not philanthropic efforts but operate within market parameters with limited input from Non Governmental Organizations. In order to examine some dynamics of successful collaborative processes, we pursue an in-depth multi-method case study of “The Sustainability Consortium,” which has convened numerous Fortune 50 senior managers since 1999. We uncover the primacy of “relational space” – a rich context of trust and inquiry – within which participants create innovative projects for doing business in a sustainable way. Our analysis uncovers the dynamics among relational space and the action projects that ensue. We also account for the stakeholder influences and governance that form the architecture of collaboration. We develop a process model and propositions for further research. (135).

INTRODUCTION

A new organizational form – voluntary, cross-sector consortia that convene multiple and diverse organizations – is emerging, through which “business can be a leading force in eradicating poverty, enhancing the environment, and advancing peace—while still prospering financially” (BAWB/AOM Global Forum, 2006). The issues being addressed are unprecedented in scope, requiring innovations of enormous complexity (Roth & Senge, 1996) that go well beyond existing business mandates and market boundaries (Gray, 1989; Austin, 2000). For example, consortia such as the World Business Council for Sustainable Development (WBCSD) or the UN Global Compact are exploring their role in making societies more sustainable. Although some participant companies may be “greenwashing” or otherwise buffering their business from external pressures with symbolic gestures, these consortia provide unique opportunities to create system-wide change that reflects deeply held organizational and personal values.

We use the term “market system collaborations” [MSCs] to draw attention to how these consortia convene market-based organizations with representatives of civil society to address systemic challenges. Unlike corporate philanthropy, MSCs are aimed at fostering long-term strategic benefits for their organizations, while institutionalizing innovations that may have far-reaching social and environmental benefit (Lawrence, Hardy & Phillips, 2002). However, unlike more common examples of inter-organizational collaborations (Barringer & Harrison, 2000) or even of multi-sector collaborations designed to solve societal problems (Rondinelli & London, 2003; Rangan, Samii & van Wassenhove, 2006), MSC’s face complex, ill-structured problems for which articulating a shared problem definition would be an important accomplishment.

We study in depth one example of an MSC – the Sustainability Consortium – a voluntary association of about a dozen member organizations that have an interest in tackling sustainability. Most members are large corporations including Ford, GM, Nike, Shell, BP, and Unilever, in addition to others such as Plug Power (a small fuel-cell company) and the World Bank. As an inter-organizational learning alliance of organization leaders, it has applied principles of organizational learning and dialogue (Senge et al, 1994) to develop and institute new business practices that incorporate concern for broader social and

environmental issues.

Our particular focus is the special character of interpersonal relationships developed in the Consortium and how that relational context, what we call “relational space,” influenced the process and outcomes of collaborations among participants. Although research has explored process dynamics within multi-sector R&D collaborations (Doz, 1996; Arino & de la Torre, 1998; Doz, Olk & Ring, 2000), most of these studies assume that the participating organizations share an industry or product market (Doz, et al., 2000), or minimally have chosen specific projects to work on at the outset (Rondinelli & London, 2003). These studies have a commercial flavor of goals, contracts, and results rather than a close description of the processes and dynamics of working together. Doz et al. (2000) found a minority of R&D consortia that formed without a shared sense of interdependencies and common interests; these were more successful when convened by a legitimate third party and focused initially on exploratory learning. Such consortia, based around trustful relationships, develop over time shared goals and activities, which we call “action space.” Our participant observation of the Sustainability Consortium and our interviews with its participants reveal the importance of the micro-dynamics of the relational space. We propose a model of these processes and draw important theoretical and practical implications for interorganizational collaborations, particularly for MSCs addressing complex and undefined issues such as sustainability.

RELATIONSHIPS AND LEARNING IN MARKET SYSTEM COLLABORATIONS

Research has recognized the important role that process plays in the success of strategic alliances (Ring & Van de Ven, 1994; Arino & de la Torre, 1998). Process models of multi-party collaborations have focused on their formation (Doz, et al., 2000), evolution (Doz, 1996), co-evolution (Inkpen & Currall, 2004), and dissolution (Arino & de la Torre, 1998). These studies suggest that a formation process involving negotiation and commitment to shared goals and objectives generates initial conditions for the collaboration, which then evolves through iterative cycles of execution, re-evaluation, readjustment, and revision of conditions over time (Arino & de la Torre, 1998). Doz et al (2000) distinguish between emergent and engineered consortia depending on the degree to which potential

participants have pre-existing relationships or shared goals and interdependency that allow them to simply emerge to address shared issues rather than to be triggered or nurtured by a third party.

The process by which consortia form and develop is influenced strongly by the initial conditions during formation. Doz et al. (2000) summarize their review of initial conditions into three categories: (1) environmental interdependence or the shared sense of threat and opportunity from market forces, regulation, etc., (2) interest similarity from other commonalities or prior successful relationships that creates trust and willingness to collaborate, and (3) the actions of “triggering entities” that champion the formation of the consortium. Inkpen and Currall (2004) have shown how initial conditions are affected by initial levels of interfirm trust and by the type and level of controls that are contracted at the outset of the collaboration; these initial levels are then affected by the changing levels of trust, learning, and controls that evolve over time within the collaboration.

There are also, however, some important differences between MSCs and the cooperative alliances described by process models of collaboration. First, research on R&D collaborations has assumed that business firms enter into collaboration primarily for economic benefit (Ring & Van de Ven, 1994; Rangan, et al, 2006) or the long-term benefit of their industry (Garud, Sanjay & Kumaraswamy, 2002). These expected benefits and their associated risks are reflected in the negotiation of initial goals and controls that play a crucial role in creating conditions for the consortium (Inkpen & Currall, 2004). In an MSC, however, the value of working together may not be evident initially. Motivations of MSC participants may include traditional financial as well as non-economic goals — e.g., for sustainable development, the construct of the “triple bottom line” (Elkington, 2002) balances concern for profit with concern for social and environmental impact. But such a diverse set of general goals makes it difficult to negotiate specific objectives and projects up front. In addition, the degree of social innovation implied in MSCs might lead participants to focus on supporting organizational learning, rather than on control mechanisms (trust, governance) in the early stages of an MSC (Nonaka & Konno, 1998; Lubatkin, Florin & Lane, 2001). Doz et al (2000) also propose that engineered consortia will have a stronger focus on creating new relationships and exploratory learning.

The difficulty in specifying projects up front suggests that the ultimate success of MSCs is likely to be refracted through perceptions of the success of any resulting projects. Scholars (Ring & Van de Ven, 1994; Arino & de la Torre, 1998) have argued that judgments about success are assessed (re-evaluated) in terms of the efficiency and equity that partners experience. However, given that MSCs may spend a significant amount of time in understanding the challenges they face before executing pre-defined projects (Bouwen & Taillieu, 2004), and given that the broader and less clear goals of MSCs may make it difficult to assess progress (Seltzky & Parker, 2005), the process dynamics of MSCs may be as much or more concentrated on relationship-building than on focused action, particularly in their formation and early development. Indeed, Doz et al (2000) propose that engineered consortia will transition over time to exhibit properties of emergent consortia as interdependencies and shared interests are revealed or developed. For these reasons we focus attention on the initial sequence of dynamics in collaboration process models, namely the interactions preceding and leading to the creation and execution of projects in MSCs. As a consequence we bring attention to the learning efforts of these efforts, in keeping with the recognition that collaboration is increasing in the business world (Crossan & Guatto, 1996) because it results in competitive advantage from inter-organizational learning (Powell, Koput, & Smith-Doerr, 1996).

Two interrelated types of learning in joint venture collaborations were summarized by Inkpen and Currall (2004) as “learning about” and “learning from” partners. Learning about a partner “facilitates relational understanding and can provide the foundation for trust development” as the parties share knowledge that can be applied to the exploratory project venture (Inkpen & Currall, 2004: 593). In contrast, learning from generates knowledge that can be applied by one of the partners to better exploit their own operations, thus constituting “the private benefits that a firm can earn unilaterally by picking up skills from its partner” (ibid; see also Holmqvist, 2004). This tension inherent in strategic alliances’ learning process is also felt within multi-party and multi-sector alliances (Lawrence, et al., 2003; London, Rondinelli & O’Neill, 2004).

The complexity of social problems being addressed by MSCs may require a third kind of learning that

Carlisle (2004) described as “transformative learning.” Such learning can engender significant institutional innovations that go beyond the knowledge boundaries of all participants (Roth & Senge, 1996; Waddell, 2005). Lubatkin and colleagues (2001: 1362) refer to this as reciprocal learning, a new form of collaborative relationship “whose primary intent is to co-experiment and leverage each others’ unique, but complementary, knowledge structures.” This process of “learning with” partners from multiple industries with sometimes conflicting interests may be far more complex than learning in commercial collaborations yet with the potential to generate outcomes that go beyond the expectations and knowledge bases of the participants (Waddell, 2005).

Supportive, respectful, learning-based interactions play an important role in producing uncommon innovations. The term “relationality” (Bradbury & Lichtenstein, 2000) emphasizes how such high-quality innovations may be generated in this “space between” individuals and organizations. Nonaka and Konno (1998) use the term “ba” to describe “a shared space that serves as a foundation for knowledge creation.” This shared space includes qualities of care, trust and commitment, interaction and reflection, reconciling mental models, and enacting these qualities in action with others (Nonaka & Konno, 1998: 46-48). Similar qualities are reflected in the construct of psychological safety – a “climate characterized by interpersonal trust and mutual respect in which people are comfortable being themselves” (Edmondson, 1999: 354). In organizations, the presence of psychological safety has been related to levels of innovation and performance (Baer & Frese, 2003). Scholars of collaboration have framed this quality of cooperative interaction in terms of “affective trust” which is based on individuals’ emotional connections, reflecting a “genuine care and concern for the welfare of partners” (McAllister, 1995: 26).

Collaboration in the face of complexity is likely to increase given the interest in the business world in responding to complex challenges (E.g., see Useem, [2006] on WalMart). The issues we discuss are therefore at the forefront of an unfolding phenomenon. Our research question on the influence of relational context on interorganizational collaboration and learning in a multisectoral collaboration concerned with complex social, economic, and environmental issues is one that relational researchers

have suggested requires deeper qualitative study (Baker, Jensen, & Kolb, 2002, Fletcher, 1999; Dutton & Dukerich, 2006; Dutton, Worline, Forst & Lilius, 2006).

METHODS

Setting

The setting for our study is The Sustainability Consortium, founded in 1999 as a part of the Society for Organizational Learning. The Consortium purpose statement articulates its goal “to nurture the desire and capacity ... to build knowledge for achieving ... sustainability [through] engaging people committed to leadership and learning to collectively [redirect] commerce, education, and technology” (Laur & Schley, 2004).

Over time, the Consortium members have established structures and routines including a steering committee, a set of goals, membership fees, and an evolving set of practices around meetings and projects. Two of the founders act as paid coordinators/facilitators, funded by annual fees of participant companies. Member organizations rotate responsibility to host the semi-annual meetings, typically choosing a site at or near the host company’s corporate headquarters. Non-member attendees must be invited by a member organization or by the facilitators, ensuring a balance of experienced and new participants. Meetings include opportunities to create new projects, which have grown over time in numbers and size. Not all organizations participate in all projects, but the organizers encourage such participation. One of the distinctive characteristics of the Consortium is that projects are carried out by volunteers from the member organizations rather than by staff hired from member fees, as in most other consortia.

Sample and Data Collection

A central feature of the Consortium’s work is its semi annual meeting to which approximately 50 participants come for two or three days, about one-third of whom are new to each meeting. Roughly 200 individuals from the member companies have participated in meetings between 1999 and 2004, including executives, line managers, internal consultants, and engineers and other individual contributors. It is important to note that the diversity of companies makes it difficult for peers from other companies to

easily assess the relative importance of another's role, e.g., the 'general manager' title of one company turns out to be the equivalent of a 'Senior VP' in another. Meetings include only those researchers, representatives from NGOs and consultants who are invited by the member companies.

Four researchers attended Consortium meetings between 1999 and 2004. Individual field notes were discussed post hoc in regular teleconferences. Communal observational data were double checked with facilitators and, where appropriate, with participants. Additionally, a total of 42 interviews were conducted with a sample of participants on the topic of collaboration. 29 interviewees were from 14 companies; 12 of the interviewees were frequent attendees of the meetings and 18 were senior managers. Five of the interviewees were consultants, all of whom were infrequent attendees. Six interviewees were from NGOs, four of them frequent attendees. Finally, there were one researcher and three facilitators, all of whom were frequent attendees. All the interviews were transcribed, except in one case where audio equipment malfunctioned. The mean number of transcription pages for all interviews is 15 (single-spaced).

We asked each interviewee to describe the characteristics of a successful collaboration they were involved in through the Consortium, and then an unsuccessful collaborative event (Motowidlo & Carter, 1992). Our approach is similar to the "critical events" method utilized by other researchers of learning dynamics in collaboratives (Arino & de la Torre, 1998). The interview questions elicited a high level of detail using a combination of semi-structured questions that allowed the interviewees to emphasize various aspects of the collaborative events, and directive probes about who was involved, how they were involved, what seemed to work well, and what things the participant could have done differently.

Coding and Analysis

Our unit of analysis for the interviews was the collaborative event, defined as a series of interactions between two or more participants focusing on a specific task-oriented project, endeavor, or context – similar to Bouwen & Taillieu's definition of "relational practices" (2004: 144). Excluding interviews with the 3 facilitators, the 39 remaining interviewees reported 102 collaborative events, of which 87 were discussed in enough detail to allow for quantitative coding. The vast majority of these

collaborative events were enacted in specific projects that emerged in the Consortium. A list of those projects and a timeline of their emergence is presented in Table 1.

Table 1 of Consortium Action Projects

Our qualitative research process unfolded in five successive phases. The first author content analyzed each interview doing a phrase by phrase coding of important themes and issues (Strauss & Corbin, 1998). Second, she folded the phrase by phrase coding into four overarching categories that most efficiently grouped all the individual themes. Separately the second author read a subset of the interviews and developed an overlapping set of categories and themes/issues. The two authors then explored the similarities and differences in their coding schemes; together they worked out a parsimonious set of 18 dimensions or subcategories within the four major categories. These 18 dimensions therefore summarized all the issues which both authors had identified from the data set (Miles & Huberman, 1994). Next, in order to heighten coding validity, a research assistant who until then had not been connected with the project was enlisted to re-code the interviews using the final coding scheme. Those coded interviews were then tested for inter-rater reliability. Overall the coders' averaged 81.8% agreement; the second author and the research assistant then worked together to resolve differences, resulting in 100% agreement. The final corrected coding of all transcripts was used in the analysis reported below. Table 2 provides definitions of the 4 categories and the 18 dimensions, which we describe later in detail. Although these dimensions are conceptually distinct to us, we found that participants often mentioned two or more of them within the same sentence; some paragraphs in our transcripts had more than half a dozen codes. Our sense is that participants did not make the same conceptual distinctions that we did; in practice these dimensions are highly interdependent and mutually constitutive. Thus, although we present them as distinct constructs for the purposes of our analysis, we recognize that they often arise together. This interconnection between dimensions and constructs is described more fully in the discussion and in Proposition 6, below.

To evaluate the salience of each dimension to each participant, the second author analyzed the 39 coded interviews using the “coding-mentions” technique originally developed for longitudinal studies of innovation (Van de Ven & Poole, 1990). In this approach, each paragraph of each interview is scanned for distinct, identifiable *mentions* of each of the 18 specific dimensions. These mentions (codes) are then tallied in a spreadsheet, allowing for simple quantitative and visual analysis (Monge, 1990). There was a total of 2369 mentions, which on average was 27 codes per collaborative event report. Since each interviewee spent different amounts of time talking about each collaborative event, we divided the sum of mentions of each dimension by the total number of mentions for that collaborative event; this generated a “ratio” of mentions of each dimension, which indicates its salience to the interviewees (Lichtenstein & Brush, 2001). The averages of these ratios across interviewees are presented in Table 2.

Finally, we focused on identifying any processes and sequences of interactions that were embedded in the data. Specifically we performed a more broad-based qualitative analysis of the data set, exploring sequences of interactions to understand how these sequences varied in response to changing conditions. We reviewed and integrated data from all sources (including observation notes, authorized for use by participants) to describe the interorganizational learning process. We asked ourselves questions as recommended by Strauss and Corbin (1998) for uncovering processes, including: What conditions have contributed to the context in which the participants learn together? What conditions or activities connect the categories? How do the consequences of one set of behaviors and interactions influence project implementation? Both analyses revealed a very similar set of primary interactions. These interactions are at the core of our process model of learning in market-system collaborations, which is presented in Figure 1 below, and drawn out in the discussion section.

RESULTS

Most salient to participants, as reflected in quantity of mentions captured by our coding, were the elements collectively called *Relational Space* (38.5% of all mentions) and *Action Projects* (35.0% of all mentions) respectively. The two other categories were *Stakeholder Influences* (13.4% of all mentions) and *Governance* (12.7% of all mentions). Our analysis revealed sequential links between these four

categories, generating a process model of Relational Space Dynamics in this MSC, shown in Figure 1. As one might expect, the primary interactions were between the two most salient categories, Relational Space and Action Space. The other interactions we highlight reflect ways that Stakeholder Influences and Governance gave rise to and interacted with Relational Space and Action Space.

Figure 1 – Dynamics of Interaction in the Sustainability Consortium

Before discussing these dynamics, we present the definitions and data for each of these categories and the 18 dimensions associated with them, which are summarized in Table 2.

Creating Relational Space

Interviewees consistently mentioned the rare quality of relationships they experienced inside the Consortium, using descriptors such as safety, openness, respect, inspiration, support, proximity, and friendship. We identified five dimensions of relational space in the data: Peer-Trust; Inquiry-based Learning; Helping; Process over time; and Connecting Face-to-Face.

Peer-Trust. By far the most important element of the Consortium experience that was mentioned by interviewees was their sense of connection developed through trusting, peer-like relationships (12.3% of all mentions). Participants referred to “strong personal connections” and the “interweaving...of personal and organizational issues” in these collaborations. Trust in this context has a personal flavor, more than being based on professional norms: “I think so much of it rests on trust, [which is] so much dependent on a willingness to be candid and frank about experiences and desires.” Additional quotes for this and other dimensions are given in Table 2.

Inquiry-based Learning. Participants spoke often about an openness to sharing ideas, respecting the others’ perspectives, and engaging “dialogically” by carefully checking assumptions and building upon others’ ideas (Isaacs, 1993; Schein, 1992). As one executive acknowledged, “I didn’t understand before the Sustainability Consortium the real power of getting in the room with other folks and actually speaking the truth rather than trying to bullshit each other like we do at conventional business meetings.” Open inquiry also references a willingness to embrace complex issues: “This is a special group of people with

high capacity for telling the truth, thinking about complexities without oversimplifying. They can see the big picture."

Helping. The sense of emotional connection in the Sustainability Consortium was also deeper and more personal than one might commonly ascribe to business relationships. One participant said, "I derive encouragement and inspiration from people...I get support, both psychological [and] practical advice." Another described Consortium colleagues as: "Well-intentioned, vulnerable, willing to be vulnerable to some extent. Willing to sort of let their hearts out and be real. And I really do like most of them very much."

Process over time. Participants highlighted aspects of the process through which strong relationships were being built at the Consortium. As one executive said, "It's the process that really builds the trust." Another emphasized subtle dynamics, including: "...self-organizing systems—don't push them too hard, you know, listen to the system, see what it's giving you." More formally, in response to the challenge of integrating many newcomers into this dialogic mode of interaction, the facilitators designed a pre-meeting workshop aimed at familiarizing newcomers (and others) with a shared language to enhance the quality of dialogue and specifically participants' ability to balance inquiry with advocacy (Argyris, Putnam, & Smith, 1985).

Connecting Face-to-Face. Interviewees referred to the importance of spending time together, particularly as the same individuals returned to meet their colleagues in subsequent meetings. As one reflected, "I don't think you can underestimate still the sort of personal connections that are made at these meetings...when you actually meet someone, the chemistry that takes place is completely different to what happens over the phone, [and] that's incredibly important."

Table 2 – Four Categories, 18 Dimensions, and their Salience

Creating Action Space

As important as personal relationships are to the success of the MSC, of roughly equal salience is the creation of innovation projects that enact the goals of sustainability in multiple markets. As one executive

explained: “We are not just hoping, we are also engaging in concrete projects.” In fact, although action projects make up a slightly lower ratio of all mentions than relational space, 60% of all individuals talked about action projects more often than they discussed relationships. The most salient action projects were listed above in Table 2. The six dimensions of action projects we found, listed in order of their salience, are: Tangible goals; Outcomes; Aligning Interests; Project Structuring; Resources; and Risk.

Tangible goals. Overall, the most important quality in action projects was a sense of their concreteness and lack of fuzziness. Tangibility often was mentioned in terms of creating value for the home organization, solving relevant problems, and generating measurable outcomes. As one executive summarized:

We’ve got to get value, and one way to do that is to provide value through developing projects that address business concerns while evolving some of the social and environmental issues ... On-the-ground type projects, real things that you can touch, feel, show results.

Outcomes. Nearly as important to participants as the tangibility of projects were the outcomes that might be generated through those projects. Outcomes ranged from learning and innovation, to new business formation, to the useful expansion of a company’s social network. As one example:

We were really looking for...basically, we wanted to learn...we were really concerned about having a product at the end of the day. Our product or what we thought we were going to take away from that was the knowledge we gave and the deeper understanding that we gave.

Goal alignment. In a context of high relational quality, where inquiry facilitates trust and helping behaviors, the specificity of goal alignment acts as a catalyst for projects to unfold into action. As one participant explained, “I did a lot of trying to come back to, again, what are the goals of the project, which in turn bring back to what are the goals of the Consortium.” At the same time, goals become aligned as projects evolve: “I think you can have fairly fuzzy objectives to start with, and then as the conversation evolves you have to probably make the ultimate objectives more and more clear.”

Project structuring. Getting down to the details is a crucial element of these projects: “For an effective collaboration to happen, logistics need to be very clean, very concise, high quality. Because

when that doesn't happen, trust breaks down quickly." At the same time, we saw that senior people pulled in more junior people from their organization as projects began to take off: "Oh well, first of all, you've got to understand that I'm the President and the CEO and I'm not working on a lot of the operational details. There is someone by the name of ___ who has been doing. And she is in a far better position to comment on [project X] than I am."

Resources. In some cases, additional resources were required in order to pursue certain projects, e.g. "This [project] had been identified as an initiative that a number of companies had felt was...sufficiently important to justify some additional resource [which] they were willing to identify and recruit." On the other hand, sometimes this created internal challenges:

There's an issue around how much budget people can commit to these....they profess to be really interested in the starter projects...but they say "Well, I just can't justify that internally and we're going to have to make a choice here..."

Risk. Some saw the Consortium as a risk reduction effort in that it shared risk across companies seeking to embrace new ideas of how to be sustainable. Said one, "I see us also as trying to mitigate that risk by trying to pull together a wider coalition of companies..." Risk was also bound up with resources: "Sustainability [is] extremely important but somewhat risky because there isn't a great deal of resource that we can throw at it in terms of our own time."

Stakeholder Influences

Although relational space and projects make up nearly 3/4 of all comments in the data, participants did highlight the importance of their personal and professional context in the Market-System Collaboration. Specifically, the values, goals and aspirations of participants and their home organizations set the stage and shaped much of the activity that occurred in the Consortium. We identified three dimensions of Stakeholder Influences: Organizational Context, Organizational Goals, and Personal Aspirations.

Organizational context. Participant's perceptions and efforts around the Sustainability Consortium were often reflections of values, knowledge and networks within their home company. For example, one

executive said, “This is a subject that [our company has] been thinking about—sustainability—for some time.” Later, referring to one of his biggest competitors who is also a member of the Consortium he suggested:

We are very different companies. I think that if you look culturally however we also share some cultural values that I think are important to both of us and that make us more willing [to] be more open with each other than we might be with a company that didn’t share those values.

Organizational Goals. In order to actively participate in the Sustainability Consortium, each company pays \$40,000 in annual fees. For this reason and others, participants are keenly aware of how their work in the Consortium is shaped by the goals that their company has for the Consortium. These include business goals, organizational learning, and pursuing commitments to corporate sustainability, among others. Said one participant, “And lately, [my] company has in fact invested a lot of resources in trying to understand this issue [of sustainability]. And so I think it’s becoming less a personal issue and more clearly a business issue.”

Personal Aspiration. Reflected in the last comment is a personal commitment that many interviewees expressed in the context of their participation. For many, their long-standing commitment to these ideals is partly responsible for arguing the business case of sustainability to their executive colleagues, and for putting in the many hours of personal and professional time to help make things happen within any given collaborative event. For example, one director explained:

I have great personal aspirations for this work and a sense of pride. It really got me when my son was born and more recently my fears for the health of my wife (diagnosed with cancer). I need to help sustain the employment that this huge corporation offers. Frankly, I think of this as doing God’s work.

Participants also noted the communality of personal commitment within the Consortium: “These people are committed, I mean really committed, beyond what I would have believed if I weren’t involved.”

Governance

Finally we present the category of Governance, which describes the routines and governance mechanisms that have emerged in the Sustainability Consortium. These are captured in four categories: Who is in the Room, Internal Control, Meeting Structure, and Leadership.

Who is in the Room. As mentioned earlier, the Consortium was designed to support executives and managers, with a limited number of participants from NGOs. The latter perceived themselves to be less valued than the corporate members: “I’m a non-profit organization. I’m sort of there as a guest, and sort of on the fringe....we’re not the real members.” In this regard one issue that became salient was the number of consultants who participated in meetings. Some senior managers expressed displeasure if the ratio of corporate members to consultants became unbalanced, fearing that they would be “sold to.” As one executive said: “When you get to have as many consultants as companies, I’m clear that they can’t all contribute... And that makes me really uncomfortable.”

Internal Control. In the main, participants recognized the lack of formal control mechanisms, in favor of a kind of personal integrity/professional accountability:

I think all of us know what is a trade-secret and what’s not. And obviously we won’t go across that line without getting some kind of appropriate assurances. But my sense is this is more of an individual...it’s what we’re supposed to know as opposed to setting out hard, fast roles.

According to our analysis of the data, the lack of controls played a noticeable role in the Consortium.

Meeting Structure. The quality of facilitation and flexibility of structures within each meeting were identified as factors that enabled relationships and projects. This openness created unique opportunities to collaborate around emerging topics, as one person related:

And during the [____] meeting, we were given the opportunity to kind of suggest subjects which we felt were topical and of interest to other members of the consortium. And this [topic was successful], and then a little working group kind of developed around that, during the meeting.
[Note: This topic has grown into one of the projects in Table 1]

Leadership. Since the founder of the Consortium is recognized for his influence in the field of organizational learning, we wondered how his presence would affect the Consortium. We found that interviewees said relatively little about his role as a leader of the Consortium. Most comments around leadership instead referred to participants taking a leadership role in the projects, often with some difficulty: “But I think people are just so distracted and so time poor that they don’t have the ability to, you know, just kind of run with these things without someone taking a very obvious leadership role.”

DISCUSSION

Our interpretation and discussion draws on the interview data and our observations during the years in which we were participants in the Consortium. We focus first on the importance and primacy of Relational Space in the development of the Consortium, and then on the conditions (Stakeholder influences and Governance) that facilitated its development, with a particular focus on trust. We then move to the Action Space that emerged only after some years of relationship building through conversation. Finally, we draw these observations and lessons together in a dynamic model of consortium development and process that we believe is broadly applicable, especially to Multi-Sector Collaborations.

The Primacy of Relational Space

Most of the research literature on inter-organizational consortia suggests that the founding conditions as well as the criteria for ongoing evaluation depend on identifying initial goals and project outcomes, including contracting for the roles and resources that members of the alliance will contribute to each project (Doz, 1996; Arino & de la Torre, 1998; Rondinalli & London, 2003). However, in the Sustainability Consortium, no collaborative projects nor any specific goals were identified up front; neither were there negotiations regarding roles, resources, governance, controls, and so on. As Table 1 shows, it was nearly 2 years before the first project was clearly articulated. During that time almost 200 executives and senior managers had met together in three three-day meetings. What was happening?

According to interviewees, the focus of attention was the formation of Relational Space: face-to-face personal interactions through which participants pursued open inquiry and learning, developed strong peer-based relationships, asked for and received help and support, and inspired each other in a variety of ways. Only after a strong relational space had been developed did action projects begin to emerge. Notably, it took 18 months before a self-organized group collaboratively articulated how sustainability might be operationalized inside companies (the Frameworks document – see Table 1); note the contrast between this long-term approach and comparable research on for-profit alliances (Arino & de la Torre, 1998; Inkpen & Currell, 2004).

We believe that the sheer breadth and intricacy of issues being confronted by the Sustainability Consortium, across multiple levels of organization and multiple industries (Brown, 1991), required attention to how problems could be articulated and framed. The initial attention on relationships created the space (literally and figuratively) within which participants could identify projects with the highest leverage for making change. These observations lead to our first proposition:

Proposition 1: MSCs oriented around complex, systemic issues (like sustainability) will be more successful when the creation of a “relational space” precedes the development of specific goals and projects.

Conditions for the Emergence of Trust

In a post-hoc analysis of the interviews we found that four of the eighteen dimensions were most important in distinguishing successful vs. less successful collaborations within the Sustainability Consortium, namely: (1) Organizational Context – value consensus within member organizations around sustainability rather than isolated individual participants struggling for legitimacy; (2) Inquiry-based Learning – norms and routines that encourage candid disclosure, feedback seeking, and feedback giving; (3) Internal Controls – governance emerging from shared norms and values and light-handed facilitation rather than rules and hierarchy; and (4) ‘Who is in the Room’ – practitioners who share the right values along with a small number of consultants, NGO representatives, and researchers who can enrich discussion and facilitate learning.

Values congruence appears to be a critical factor for all four of the above dimensions, particularly as it leads to trust. Although most Consortium members were not direct competitors, with exceptions such as Ford-GM and Shell- BP, through shared values (Organizational Context) even direct competitors became “more willing...to be more open with each other than we might be with a company that didn’t share those values.” Inquiry-based learning, in turn, created a “strong enough relationship where someone felt like, ‘...yeah, I’ll do this and you can be trusted.’” Likewise, when those values were not shared – as when too many consultants were involved in a specific meeting (Who is in the Room), business executives started “feeling low levels of trust.” Trust enabled governance through informal

norms and values (Internal Control) and the lack of formal controls enabled individuals to take more personal responsibility for generating trust through relationships rather than through formal contractual mechanisms: “I think that it has really to do with people taking responsibility for the relationship.” This leads to our second proposition:

Proposition 2: The more that MSC participants’ personal values are aligned with the values of their sponsoring organizations, the more invested they are in co-developing an MSC.

We found that controls and governance (“Governance”), usually considered critical aspects of a consortium’s initial conditions (Inkpen & Currell, 2004), were far less salient to participants than “Relational Space.” Controls and governance were light-handed “enabling” features in the background while the focus remained on learning through the free flow of ideas and interactions rather than economic benefits and their distribution among members. “At the end of the day, I think that the reason that this group...was more collaborative was that we were put in an environment where collaboration could occur and ...we all really wanted [it] to [happen], and we were all willing to contribute.” This strongly supports Doz et al.’s contention that “some consortia (or alliances) simply are over-engineered” (p. 254) by organizers who inadvertently inhibit the development of relational capabilities and learning outcomes among the members. Trust, based around shared organizational and executive values (Stakeholder influences), can operate as a surrogate for formal controls (cf., Inkpen & Currall, 2004). The above observations lead to our next proposition:

Proposition 3: MSCs based around shared values and trust, with light-handed governance, will build a stronger relational space than those built around financial contracts and specific project goals.

Action Projects

In the “Action Space,” Consortium participants focused on tangibility, outcomes, goal alignment, project structuring, resources and risk. According to our interviewees, each project transcended the immediate needs of any one Consortium participant to advance the broader goal of expanding the capacity of member organizations to do business in a sustainable way. For example, the first concrete

project (Proteus) explored the feasibility of distributed energy generation to socially disadvantaged areas of the world. The Materials Pooling project – which continues to gather momentum and resources – takes a market-level approach to eliminating toxins from each participant company’s value chain.

Action projects greatly accelerated innovation and learning by Consortium members, shaped by the depth of interaction in the Relational Space and supported by Governance and Supportive Context. The most significant innovations were developed out of meaningful face-to-face conversations with trusted colleagues within the Consortium, from which emerged projects of mutual interest. For example, one participant described the origin of the Materials Pooling project, which deals with supplier and product development issues that can be extremely sensitive and often highly confidential:

People were just saying “Gosh, you know, I can see you have an interest and passion around this. We’re struggling with that, is there anything you can help us with?” We and others shared information on our manufacturing processes, on our materials and how they were made and what they were made of. These were product development issues in a context of sustainability. That really got us going.

Generating innovations that move a company toward sustainable enterprise requires a high degree of inquiry-oriented learning that leads people to question their operating principles. The effort opens up heretofore undiscovered areas for investigation. In organizational contexts this reflective, interactive process has been termed “double-loop learning” (Argyris and Schoen, 1996) but its creative, out-of-the-box focus also resembles exploratory learning (March, 1991) and transformational learning (Carlisle, 2004). We articulate our third proposition as follows:

Proposition 4: In MSCs oriented around complex global issues, the experience of relational space encourages a higher degree of innovation in action projects.

A Dynamic Model of Multi-Sector Consortia

We integrate the above discussion of the major processes within the Sustainability Consortium into a dynamic model of collaborative innovation, shown in Figure 1. As yet, this is a rough framework or outline rather than a specific theory, but we find it helpful in organizing our results and propositions. We present five sequential links between relational space, action projects, organizational context, and governance in successful MSCs.

(1) *Relational Space* → *Action Projects*. The development of Relational Space lays the groundwork for collaborative Action Projects. Success was predicated on generating high-quality, personally meaningful relationships in a context of enduring commitment to address a complex challenge. Participants described how Relational Space became a platform for tangible projects to emerge: “[We] build on personal relationships, build our guiding principals through that, and then out of that comes a specific [project] like this, that we could do.”

(2) *Stakeholder Influences* → *Relational Space*. As Zilber (2002) reminds us, meaning attracts actors to action. Some forward-looking participants see the business mandate changing in ways that align more closely with their personal values, providing opportunities to redirect their corporations. As one participant explained, “My work is anchored in personal commitment. I need to align my personal values and express those in work.” Connecting personal values to workplace values expands intrinsic motivation, through an increasingly recognized mode of “ideological currency” (Thompson & Bunderson, 2003):

This [i.e. sustainability] is something very important to me personally, but it’s also, I think, very important to the company. And lately, the company has in fact invested a lot of resources in trying to understand this issue. [Overall this made me] extremely definitely passionate about going to the meeting.

(3) *Governance* → *Relational Space*. The quality of facilitation and the intensive yet open structure of each meeting enabled a stronger experience of Relational Space and development of trust and commitment. Participants described the role of meeting structure:

The first day was fairly regimented...And the next day was in fact loosely structured around dialogue. And I think it’s because we were so engaged the first day with actual [X-company] issues and successes and failures that the rest of the two days’ openness allowed us to engage in conversations that were meaningful.

Likewise, ineffective Governance compromised Relational Space: “And I was floored that there were more consultants in attendance than there were practitioners. All of a sudden, I was feeling very uncomfortable. And feeling low levels of trust.”

(4) *Governance* → *Action Projects*. Governance also help catalyze action projects. Participants appreciated the “tone set in place by the facilitators,” the flexibility gained by not having pre-set goals,

and the carefully designed meeting structure that included “Requests and Offers” that facilitated bottom-up organizing around shared interests.

I found that the small groups and the lunch meetings were actually the most productive for me, because it was an opportunity to really interact with a small group of people, really stop and say ‘What is it that you really, really do?’ and ‘What are some of the challenges that you face within your business?’

Overall, Governance helped create what one participant called “an environment where collaboration could occur.”

(5) *Action Projects* → *Relational Space*. The emergence of Action Projects further enhanced the quality and strength of Relational Space. According to participants, Action Projects sustain the Consortium by providing legitimacy to external stakeholders, sustenance to those inside the Consortium who want to change their business world, and further learning opportunities in overcoming multiple challenges. Thus these Action Projects become opportunities for further reflection and inquiry, a process that is amplified due to the strong emphasis within the Consortium on collaborative learning. In addition, these projects became avenues for inspiration and help, as one participant described of her project team: “I really felt like they were committed to helping. The project team was committed to helping, beyond the success of their product.” This leads to our next proposition:

Proposition 5: MSCs oriented around highly complex social issues will be more successful when the presence of action projects supports the continued development of relational space.

Placing these elements in a dynamic model allows us to see that there is co-emergence of relationships and action. In addition, Relational Space and Action Projects affect the Stakeholder Influences and Governance as well, such as when participants work to bring their company values and practices more in line with principles of sustainability and organizational learning championed by the Consortium. In short, we can frame a final proposition:

Proposition 6: Trust, Learning, Innovation and Governance (represented in the Relational Space, Action Projects, Stakeholder Influences, and Governance) co-emerge and mutually reinforce each other in successful MSCs.

Limitations and Extensions

Our study has a number of limitations. The data are based on interviews that are retrospective, although Druskat and Wheeler (2003) indicate that validity and reliability of retrospective self reports are stronger when events described have occurred within the past year, as ours did. We attempted to mitigate the potential problems with qualitative case-based analysis through the use of multiple coders across multiple stages of analysis (Strauss & Corbin, 1993; Yin, 1994), as well as through triangulation of the interviews with our longitudinal site-specific field notes (Kirk & Miler, 1986) and our quantitative analysis of the qualitative data (Miles & Huberman, 1984). Our research team meetings were often lively debates and it has taken a long time to process our data.

Of course, the Sustainability Consortium is only a single case, albeit based on well-known corporations observed over a seven year period. Indeed, the capacity of the participants to work together was considerably expanded by the attention to organizational learning practices (e.g., dialogic conversation) promoted by the Society for Organizational Learning and reinforced by the facilitators until they became more automatic. However, the data are highly consistent with other reports of particular types of consortia focused on complex and ambiguous issues and transformational learning (Ring, Doz & Olk, 2005). The difficulties in generalizing notwithstanding (Numagami, 1998), additional studies are required before more formal hypotheses may be developed.

We believe that our understanding of MSCs in general and the Sustainability Consortium in particular would benefit from a closer study of specific projects and collaborative events in the Consortium in addition to continued attendance at the semi-annual meetings. This approach can provide a unique view on post-formation developmental processes in MSCs, as well as more clarity on how successful projects are conceived and carried out. In addition it would be useful to explore to what degree similar MSCs share the dynamics we found, including the primacy of relational space and the other qualities that lead to success.

CONCLUSION

In summary, our findings suggest that the success of an MSC is due to the creation of “relational space,” which we define as an emotionally rich, inquiry-based environment in which participants can safely explore challenging issues. In addition, successful MSCs are characterized by a supportive organizational context, the right mix of participants in the room, and minimal formal controls. The three most common issues in successful market alliances (Inkpen & Currall, 2004) – trust, control, and learning – appear in the dynamic interplay among relational space, action projects, stakeholder influences and governance. Through their interplay, innovative project-based experiments emerge that provide long-term learning and value beyond the immediate needs of any of the MSC participants, thus potentially being the genesis of social and institutional change on a wider scale.

Our findings extend the scholarship of inter-organizational collaborations and the role of relational interactions within them. We articulate the micro-dynamics underlying the identification and enactment of multi-sector projects, providing a useful complement to previous studies of the founding (Doz et al., 2000), evolution (Inkpen & Currell, 2004) and dissolution (Arino & de la Torre, 1998) of inter-organizational collaborations. Although the relational context is central to the Sustainability Consortium and potentially to MSCs more generally, we believe it may be a useful framework for many other inter-organizational collaborations in which the relational dynamics have been overlooked or even ‘disappeared’ (Fletcher, 1999).

We also reinforce attention to the importance of affective relationships within organizations (McAllister, 1995; Nonaka & Konno, 1998; Edmondson, 1999). Our recognition of relational space expands current explanations of collaborative learning to include a person’s ability to connect to others in ways that foster mutual development and collaborative learning (Baker, Jensen, & Kolb, 2002). The creativity and innovation within the Sustainability Consortium depended on a context that generated positive affect and support for experiments without fear of reprisal (Amabile, Barsade, Mueller & Staw, 2005).

From a practical standpoint, an increasing number of corporations are recognizing that they can

gain traction in dealing with seemingly intractable system-wide problems through innovation-based collaborations with their business counterparts across multiple industries (e.g. World Council on Business Sustainable Development). Ours is one of the first studies of these collaborations aimed at generating system-wide change through market-based methods. These novel collaborations, exemplified by the Sustainability Consortium, have the potential to create a new organizational form; they also represent exploratory attempts to institutionalize a system change across industries. Corporations that allow for highly complex, assumption-challenging learning may find new ways to transform competitive relationships into sustainable partnerships across multiple stakeholders. In some measure, simply allowing for dialogue is itself an intervention, given the fast-paced workflow at the executive level and among line managers and contributors. Overall, our study provides one approach that may help corporations to become leaders of systemic change: large businesses have power to affect “the mindset or paradigm out of which the goals, rules, feedback structure arise” – the most high-leverage place to accelerate change (Meadows, 1997).

REFERENCES

- Amabile, T., Barsade, S., Mueller, J. & Staw, B., 2005. Affect and creativity at work. *Administrative Science Quarterly*, 50: 367-403.
- Argyris, C., Putnam, R., & Smith, D., 1985. *Action Science*. San Francisco: Jossey-Bass.
- Argyris, C. and Schön, D. (1996) *Organizational learning II: Theory, method and practice*, Reading, Mass: Addison Wesley.
- Arino, A. & de la Torre, J., 1998. Learning from failure: Towards an evolutionary model of collaborative ventures. *Organization Science*, 9: 306-325.
- Austin, J. E. 2000 "Principles for partnership: How cross-sector alliances work for business and communities." *Leader to Leader*: 44-50.
- Baer, M. & Frese, M., 2003. Innovation is not enough: Climates for initiative and psychological safety, process innovations, and firm performance. *Journal of Organizational Behavior*, 24: 45-69.
- BAWB - Business as an Agent of World Benefit, 2006. Global forum organized by the Academy of Management, the U.N. Global Compact, and Case Weatherhead School of Management.
<http://www.bawbglobalforum.org/>
- Baker, A. C., P. J. Jensen, and D. A. Kolb, 2002. *Conversational Learning: An Experiential Approach to Knowledge Creation*. Westport, CT: Quorum Books.
- Barringer, B. & Harrison, J., 2000. Walking a tightrope: Crating value through interorganizational relationships. *Journal of Management*, 26: 367-403.
- Bouwen, R. & Taillieu, T., 2004. Multi-party collaboration as social learning for interdependence: Developing relational knowing for sustainable natural resource management. *Journal of Community and Applied Social Psychology*, 14: 137-153.
- Bradbury, H. & Lichtenstein, B., 2000. Relationality in organizational research: Exploring the "space between." *Organization Science*, 11: 551-564.
- Brown, D., 1991. Bridging organizations and sustainable development. *Human Relations*, 44: 807-831.
- Carlisle, P., 2004. Transferring, Translating, and Transforming: An integrative framework for managing knowledge across boundaries. *Organization Science*, 15: 555-568.
- Crossan, M. M., and T. Guatto, 1996. Organizational learning research profile. *Journal of Organizational Change Management*, 9: 107-112.
- Doz, Y., 1996. The evolution of cooperation in strategic alliances: Initial conditions or learning processes? *Strategic Management Journal*, 17 – special summer issue: 55-83.
- Doz, Y.L., & Hamel, G., 1998. *Alliance Advantage*. Boston: Harvard Business School Press.
- Doz, Y.L., Olk, P., & Ring, K., 2000. Formation processes of R&D consortia: Which path to take? Where does it lead? *Strategic Management Journal*, 21: 239-266.

- Druskat, V. U., and J. V. Wheeler, J., 2003. Managing from the boundary: The effective leadership of self-managing work teams. *Academy of Management Journal*, 46: 435-457.
- Dutton, J., & Dukerich, J., 2006. The relational foundations of research: An underappreciated dimension of interesting research. *Academy of Management Journal*, 49: 21-26.
- Dutton, J., Worline, M., Forst, AP., & Lilius, J., 2006. Explaining compassion organizing. *Administrative Science Quarterly*, 51: 59-96.
- Edmondson, A., 1999. Psychological safety and learning behavior in work teams. *Administrative Science Quarterly*, 44: 350-383.
- Elkington, J. 2002. *Cannibals with Forks*. UK: Conscientious Commerce Paperbacks.
- Fletcher, J., 1999 *Disappearing Acts: Gender, Power, and Relational Practice at Work*. Cambridge, MA: MIT Press.
- Garud, R., Sanjay, J., & Kumaraswamy, A., 2002. Institutional entrepreneurship in the sponsorship of common technological standards: The case of Sun Microsystems and Java. *Academy of Management Journal*, 45: 196-214.
- Gray, B., 1989. *Collaborating: Finding Common Ground for Multiparty Problems*. San Francisco: Jossey-Bass.
- Holmqvist, M., 2004. Experiential learning processes of exploitation and exploratin within and between organizations: An empirical study of product development. *Organization Science*, 15: 70-81.
- Inkpen, A. & Currall, S., 2004. The coevolution of trust, control and learning in joint ventures. *Organization Science*, 15: 586-599.
- Isaacs, W., 1993 Taking flight: Dialogue, collective thinking, and organizational learning. *Organizational Dynamics*, 22(2): 24-39.
- Kirk, J. & Miller, M., 1986. *Reliability and Validity in Qualitative Research*. Qualitative Research Methods, vol. 1. Newbury Park, CA: SAGE Press.
- Laur, J., & Schley, S. 2004. The SoL Sustainability Consortium: Society for Organizational Learning. http://www.solonline.org/public_pages/comm_SustainabilityConsortiumCore.
- Lawrence, T. B., C. Hardy and N. Phillips, 2002. Institutional effects of interorganizational collaborations: The emergence of proto-institutions. *Academy of Management Journal*, 45: 281-290.
- Lichtenstein, B. & Brush, C., 2001. How do 'resource bundles' develop and change in new ventures? A dynamic model and longitudinal exploration. *Entrepreneurship Theory and Practice*, 25 (3): 37-58.
- London, T., Rondinelli, D. & O'Neill, H., 2004. Exploring uneasy learning alliances between corporations and non-profit organizations. *Academy of Management Best Paper Proceedings*, SIM Division: B1-B6.

- Lubatkin, M., Florin, J. & Lane, P., 2001. Learning together and apart: A model of reciprocal interfirm learning. *Human Relations*, 54: 1353-1382.
- March, J., 1991. Exploration and exploitation in organizational learning. *Organization Science*, 2: 71-87.
- McAllister, D., 1995. Affect- and cognition-based trust as foundations for interpersonal cooperation in organizations. *Academy of Management Journal*, 38: 24-59.
- Meadows, D. H., 1997. Places to intervene in a system. *Whole Earth*, Issue 91.
<http://www.wholeearthmag.com/ArticleBin/109.html>
- Miles, M. & Huberman, M., 1994. *Qualitative Data Analysis*. Newbury Park, CA: SAGE
- Monge, P., 1990. Theoretical and analytical issues in studying organizational processes. *Organization Science*, 1: 406-430.
- Motowidlo, S. J., and G. W. Carter, 1992. Studies of the structured behavioral interview. *Journal of Applied Psychology* 77: 571-588.
- Nonaka, I., & Konno, J., 1998. The concept of “Ba”: Building a foundation for knowledge creation. *California Management Review*, 40 (3): 40-54.
- Numagami, T., 1998. The infeasibility of invariant laws in management studies: A reflective dialogue in defense of case studies. *Organization Science*, 9: 2-15.
- Powell, W., Koput, K., & Smith-Doerr, L., 1996. Interorganizational collaboration and the locus of innovation: Nnetworks of learning in biotechnology. *Administrative Science quarterly*, 41: 116-145.
- Rangan, S., Samii, R., & Van Wassenhove, L., 2006. Constructive partnerships: When alliances between private firms and public actors can enable creative strategies. *Academy of Management Review*, 31: 738-751.
- Ring, P., Doz, Y. & Olk, P., 2005. Managing formation processes in R&D consortia. *California Management Review*, 47: 137-156.
- Ring, P. S. and A. H. Van de Ven, 1994. Developmental processes of cooperative interorganizational relationships. *Academy of Management Review*, 19: 90-118.
- Rondinelli, D. & London, T., 2003. How corporations and environmental groups cooperate: Assessing cross-sector alliances and collaborations. *Academy of Management Executive*, 17 (1): 61-76.
- Roth, G. & Senge, P., 1996. From theory to practice: research territory, processes and structure at an organizational learning centre. *Journal of Organizational Change Management*, 7 (5): 92-106.
- Schein, E., 1992. *Organizational Culture and Leadership*. San Francisco: Jossey-Bass.
- Selksy, J. & Parker, B., 2005. Cross-sector partnerships to address social issues: Challenges to theory and practice. *Journal of Management*, 31: 849-873.

- Senge, P., et al. 2004. *The Fifth Discipline Fieldbook*.
- Waddell, S., 2005. *Societal Learning and Change*. Greenleaf Publications.
- Strauss, A. L., and J. Corbin, 1998. *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. (2nd ed.). Thousand Oaks, CA: Sage.
- Thompson, J. & Bunderson, J.S., 2003. Violations of principle: Ideological currency in the psychological contract. *Academy of Management Review*, 28: 571-586.
- Useem, J. 2006. One Nation Under WalMart. *Fortune Magazine*. June 2006.
- Van de Ven, A. & Poole, M.S., 1990. Methods for studying innovation development in the Minnesota Innovation Research Program. *Organization Science*, 1: 313-335.
- Yin, R., 1994. *Case Study Research: Design and Methods*. 2nd Edition. Newbury Park, CA: SAGE Publications.
- Zilber, T. B, 2002. Institutionalization as an interplay between actions, meanings, and actors: The case of a rape crisis center in Israel. *Academy of Management Journal*, 45: 234-254.

Table 1: Consortium Action Projects most mentioned by Participants.

Project Name	Brief Description	DATE STARTED	STATUS in 2006
Origin of Consortium	Based on a white paper presented to the Society of Organizational Learning	1998, kick off meeting	Continues to meet, entertains regular requests to join
Semi annual meetings begin	First meeting hosted by a company (Xerox).	January, 1999	Most recent meeting: May '06, hosted by Ford Motors, Dearborn.
Frameworks	Conceptual model of how sustainability frameworks can be related and operationalized inside companies.	June, 2000	Frameworks document has been made public. It is referred to as a common document by participants in the consortium
Proteus	Distributed energy generation using fuel cells to improve economic/socially disadvantaged areas of the world.	December, 2000	The group disbanded in 2004, some of the ideas continue to percolate in the more discrete efforts of the customer design focus groups.
Cool Fuel	Partnership between energy and carpet company to establish energy use and to offset that use; carbon reduction certified by third party.	December, 2000	Expanded to other companies after initial success. Continues as a vibrant program between companies and uses a third party certification process.
Women Leading Sustainability	Dialogue group for women in the consortium.	December, 2000	Meets by teleconference every 6 weeks. Hosted its first international meeting April 2006 at Nike with 80 participants, 40 from the developing world.
Customer Design Focus Groups	Companies explore what institutional customers would like in a new product/service by convening them in exploration sessions.	2000 & 2002	Hosted on different issues by 2 separate companies, the customers are provided by up to 8 MSC companies. Strategy emphasizes short-duration projects.
Materials Pooling	Companies working together on eliminating toxins from their value chain by addressing their market needs to the chemical suppliers.	2002	Continues to evolve in regular meetings, teleconference and in person. Emphasis is limited to removal of 3 primary toxins from the shared materials streams.
Green Marketing	Companies exploring how to create more customer demand for green products.	2003	Group disbanded.

TABLE 2: Categories, their Dimensions, and their Saliency

Category/ Dimension	Saliency*	Definition and Example
RELATIONAL SPACE	38.9%	QUALITIES OF RELATIONAL INTERACTION IN PARTICIPANT’S EXPERIENCE OF THE CONSORTIUM
Peer Trust	12.3%	<p>An experience of trust, values similarity, and safety that transcends rank and is experienced as peer-like.</p> <p><i>I find the folks are innovative, creative, cooperative. They’ve tended to support each other. They’ve tended not to be judgmental and not overly demanding. It really has been, I would use the term, “collaborative” and that we’re all in this together, and there not a client-vendor relationship— which is where most of spend our lives— it’s more we’re on an equal level. We’re peers.</i></p> <p><i>[A participant] called me and he said “You know, I believe in you. We are going to be successful. I’m going to do my part.” So yeah, you feel trust and support by your peers. Validated, understood. And I don’t think there’s much more support than that that you can get.</i></p>
Inquiry-based Learning	9.5%	<p>A perception that participants are open to ideas they had not previously considered, developed through a balance of advocacy and inquiry.</p> <p><i>Particularly for a business like ours it’s very important for us to be part of interesting conversations ...because we are learning what other people are thinking and what other organizations are doing in this area.</i></p> <p><i>We spent time pulling together the learnings from the Consortium work, at least our learnings, for [Company X] to consider... And they came back and said “Okay, well, we’re ready to work through a kind of a working process, which we can present what we found back to you after we engage the sales people and the management of [Company X] in a discussion, to see if in fact there’s anything we need to learn or change about our business model and our sales approach.”</i></p>
Helping	8.0%	<p>People offering help, ideas, and a willingness to share their insights to support each other.</p> <p><i>And I think, my hope is anyway, that the next time someone wants to do a collaborative effort like we helped [Company Y] to do, that we’ll again be able to help them craft the design of their project and help them identify some pitfalls to watch out for and give them some advice.</i></p> <p><i>But I think because we have some history at least, we’re not foreign, we’re not strangers to one another. We get that we are here to help one another.</i></p>
Process over time	4.9%	<p>Processes through which positive relationships are formed and develop.</p> <p><i>I guess I was more sensitive to the actual process than I was the outcome.. And then the outcome almost becomes immaterial, as long as the process is done in a sort of straightforward and respectful way.</i></p> <p><i>[We] build on personal relationships, build our guiding principals through that, and then out of that comes a specific [project]like this, that we could do. Then... there’s a multiplier effect [as others] say “Oh, I want to do the same sort of thing.”</i></p>
Connecting Face-to-Face	4.2%	<p>The importance of close proximity in creating close relationships. <i>So when we were at [one particular meeting]...we virtually had the trusted space because we were all in the same room and over the course of the three days we got to know one another and have a beer together and all that kind of social interaction.</i></p>

Category/ Dimension	Saliience*	Definition and Example
ACTION PROJECTS	35.5%	TANGIBLE, OUTCOME-ORIENTED ACTION THAT CONTRIBUTES TO CONSORTIUM-WIDE PROJECTS.
Tangible goals	9.6%	Interest in tangible goals, solving problems, and creating measurable value through projects. <i>And we see that in that kind of opportunity that I mentioned, where there's a clear win-win in terms of the business case and an environmental benefit for the company. I think one of the things that has not been as pronounced, is...saying "Okay, what are the goals and the desired outcomes of this activity and how do we measure those?" Again, I think that's tended to be more anecdotal or qualitative.</i>
Outcomes	8.9%	Any specific results that come from engagement in projects, including learning, innovation, relationships, new business opportunities, and so on. <i>So I think it's very important that you can demonstrate that there are benefits to each of the individual participants who are also wearing their corporate hats otherwise you're not going to make any progress. So it's been a strong... collaboration. As a matter of fact, we're going to be in (X-city) in about a month to sit down and debrief what's worked, what hasn't worked, what we've learned—all with a goal of trying to carry it forward next year either at the same scale or, potentially, I think ideally, on a larger scale. --See also specific project outcomes in Table 1--</i>
Aligning Interests	7.4%	The importance and the process of aligning on specific goal(s) of a project. <i>We found that people who have not been involved in the Consortium are just not aligned, so they hear us talk about wanting to learn like we're making a product pitch to them, and don't want to let you in the door. So we really had to learn how to navigate, to talk about this language of collaborative learning that the Consortium is aligned around and it's different from "We want to come try to sell you a project." I would say not only a lot, but the goals have to be common goals. I can't walk into a collaboration and say "Here are the goals of the collaboration." It's got to be common. And you don't have to have unanimous consent, but every person that's involved in the collaboration needs to understand and subscribe to and feel a part of those goals.</i>
Project structuring	3.3%	Specific organizing efforts to enact a project, as well as the development of routines and a strategic business model for the project. <i>I think we tried hard to structure tasks and to create [momentum]. If I was frustrated about anything, it's just that in the way of the structure it's hard to get work done between face to face meetings.</i>
Resources	3.1%	Financial and other resources that participants or their corporation would have to invest into these projects. <i>We need the funding to be able to move ahead with defining [these projects]. And the companies themselves, the people in the companies, they don't have time. Nothing's going to happen unless there's somebody like me who's pushing them along and scheduling conference calls and moving things ahead. But there needs to be funding to support that time for me.</i>
Risk	2.7%	Participants perceptions of risk for their business in undertaking a project or a collaborative event. <i>[X-company] - at the end of the day many of the things that they would need to do to make more sustainable [products] would actually put their whole franchise at risk. So, for them it was a matter of dealing with facts, how do I deal with sustainability</i>

		<p><i>but not destroy my business.</i></p> <p><i>We this as we're trying to mitigate risk by trying to pull together a wider coalition of companies who will share the risk—so it wouldn't just be [Company A] or [Company B] speaking out on global climate change, it would be all of us.</i></p>
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Category/ Dimension	Salience*	Definition and Example
<i>STAKE-HOLDER INFLUENCES</i>	<i>13.4%</i>	PRE-EXISTING ASPECTS OF PARTICIPANTS' HOME COMPANY AND THEIR OWN PERSONAL ASPIRATIONS, WHICH AFFECT BEHAVIOR WITHIN THE CONSORTIUM.
Organizational Context	6.0%	<p>Issues that are specific to the home organization, including the corporation's values, mentions of previously exiting network connections, utilization of pre-existing knowledge, absorptive capacity, and so on.</p> <p><i>I think that if you look culturally, [Z-Company]and [our company] were probably the biggest competitors in the room. And although we are very different companies...we also share some cultural values that I think are important to both of us and that make us more willing...to be more open with each other than we might be with a company that didn't share those values.</i></p> <p><i>If I go to the meeting and I feel like...the company doesn't support this, that really does influence sort of the quality of the collaboration.</i></p>
Organizational Goals	3.7%	<p>The goals of the home organization, including learning, innovation, corporate citizenship, building networks, enacting a commitment to sustainability, and so on.</p> <p><i>In the context of [the] consortium...the concerns that are raised are the concerns I have for [my company]... Me saying "this is something very important to...the company." And lately, the company has in fact invested a lot of resources in trying to understand the [sustainability] issue. And so I think it's becoming less a personal issue and more clearly a business issue.</i></p> <p><i>Frankly our goals are pretty modest compared to those of some other companies and so our goals were very much accommodated within the overall curve of the project as it got defined.</i></p>
Personal Aspirations	3.7%	<p>Individuals' personal drive, ambitions, aspirations, and reasons/passion for caring about sustainability issues and social change.</p> <p><i>My work is anchored in personal commitment. I need to align my personal values and express those in work.</i></p> <p><i>[Attending a special workshop on sustainability] was just something that I was going to do regardless of whether or not [my company] was going to pay for it.</i></p>

Category/ Dimension	Salience*	Definition and Example
GOVERN- ANCE	12.7%	CONTROL MECHANISMS AND STRUCTURES WITHIN THE CONSORTIUM, INCLUDING MEETINGS, MEMBERSHIP, AND THE MIX OF PARTICIPANTS AT ANY GIVEN MEETING
Who is in the Room	5.7%	<p>The mix of consultants, NGOs and business people at a meeting; potential conflicts with member-competitors; the overall structure of membership.</p> <p><i>There were times during the meeting where I felt like ...a paid commercial for consulting services. Because it was a very heavy mix, it felt like, of consultants that were in the room [who] were almost dominating the conversation. And the meeting, you know, my desire was to hear more from the businesses, not to hear from the consultants and the market research that they'd done.</i></p> <p><i>And I was floored that there were more consultants in attendance than there were practitioners. All of a sudden, I was feeling very uncomfortable. And feeling low levels of trust.</i></p>
Internal Control	2.7%	<p>Culture of informality; lack of formal (contractual) governance rules.</p> <p><i>It's hard to understand where you fit in the process. It's ambiguous and somewhat confusing. ... [and] at the moment [I] feel that that's somewhat the nature of the Consortium, the nature of the beast. And you just learn to live with it and you learn how to work within the context of that kind of an organization.</i></p>
Meeting Structure	2.4%	<p>The schedule, space, and specific practices used in the meetings.</p> <p><i>Well, there aren't a lot of environments where people truly collaborate. ...But at the end of the day, I think that the reason that this group...was more collaborative was that we were put in an environment where collaboration could occur and there weren't a lot of agendas going on and because we all really wanted to and we were all willing to contribute.</i></p> <p><i>I found that the small groups and the lunch meetings were actually the most productive for me, because it was an opportunity to really interact with a small group of people, really stop and say "What is it that you really, really do?" and "What are some of the challenges that you face within your business?"</i></p>
Leadership	2.0%	<p>Importance of specific people who take leadership role in projects, and mentions of the founder of SoL as a perceived leader.</p> <p><i>[The SoL Founder] was involved as a project design coach and he helped with a couple of the key interventions.</i></p> <p><i>Well, you have, at [C-company], you have [___] who is a key player. He has very enthusiastically picked this up.... And I think [___] has a similar amount of enthusiasm. So you have a senior manager [and] a junior manager at [C-company], that are really very responsive...and the impression that I got is that the [project] has been...terrific."</i></p>

*Salience = ratio of mentions across total N=2369

Figure 1
Relational Space Dynamics in an MSC

