

Article



From Trust Convergence to Trust Divergence: Trust Development in Conflictual Interorganizational Relationships

Organization Studies
2019, Vol. 40(11) 1685–1711
© The Author(s) 2018
Article reuse guidelines:
sagepub.com/journals-permissions
DOI: 10.1177/0170840618789195
www.egosnet.org/os



Anna Brattström

Lund University, School of Economics and Management, Sweden

Dries Faems

WHU - Otto Beisheim School of Management, Vallendar, Germany



Stockholm School of Economics, Sweden

Abstract

Whereas extant research on trust in interorganizational relationships tends to focus on trust convergence – i.e. members of one focal firm developing similar trust perceptions toward a partner firm – we shift focus to trust divergence – i.e. members of one focal firm developing different trust perceptions toward a partner firm. To explore trust divergence, we conduct an inductive, longitudinal study of one interorganizational relationship characterized by mutual transgressions. We identify shifts in attentional perspectives and referent categorizations as two novel mechanisms for theorizing trust development in interorganizational relationships. In particular, we develop a process model illuminating how these two mechanisms can contribute to trust development patterns in interorganizational relationships that are more discontinuous than existing models would predict. Moreover, we highlight the constructive implications of trust divergence for interorganizational collaboration in the presence of transgression and conflict.

Keywords

attentional perspective, distrust, interorganizational relationships, referent social categorization, trust, trust divergence

Corresponding author:

Anna Brattström, Department of Business Administration, School of Economics and Management, Lund University, Box 7080, 220 07 Sweden.

Email: anna.brattstrom@fek.lu.se

Introduction

In interorganizational relationships, trust between partners is a key driver of governance decisions, collaborative processes and performance (e.g. Zaheer, McEvily, & Perrone, 1998). In extant literature, the trust of one firm toward its partner is predominantly conceptualized as 'the extent to which organizational members have a collectively-held trust orientation towards the partner firm' (Zaheer et al., 1998, p. 143). Interorganizational trust scholars (Kroeger, 2012; Schilke & Cook, 2013) have therefore generated important insights into the mechanisms that explain how collectively held trust perceptions emerge. In particular, they point to objectification and habitualization as core institutionalization mechanisms, allowing for trust perceptions of different organizational members to converge over time.

Whereas most research on trust in interorganizational relationships tends to focus on trust convergence, conceptual studies (Klein, Palmer, & Conn, 2000; Currall & Inkpen, 2002; Zaheer, Lofstrom, & George, 2002) have pointed to the possibility of trust divergence, meaning that members of one focal firm develop different trust perceptions toward the partner firm.\(^1\) In particular, these studies emphasize that different individuals at different hierarchical levels are involved in the management of an interorganizational relationship, implying that these different individuals do not necessarily share the same trust perception toward the partner. In this paper, we aim to further increase our understanding of trust divergence in interorganizational relationships by empirically exploring its emergence and performance implications. Understanding how trust divergence emerges is important as the core underlying mechanisms are likely to be different from the institutional mechanisms that have been identified as drivers of trust convergence. Moreover, we expect that trust divergence can have consequences for the stability and performance of interorganizational relationships that are inherently different from trust convergence.

To explore the emergence and implications of trust divergence, we leverage insights from a longitudinal analysis of one interorganizational relationship between two multinational organizations: Machine and Cooler. We followed this case over 12 years, spanning three consecutive R&D projects, combining longitudinal and retrospective data. We observed several alternations between time periods of distrust convergence – i.e. when members of Machine developed convergent, negative trust perceptions toward the Cooler organization – and time periods of trust divergence – i.e. when Machine members diverged in their trust perceptions toward the Cooler organization. Based on our observations, we develop a grounded process model of trust development in a setting of domain-specific transgressions – i.e. transgressions that impact a particular activity domain of the relationship.

Our study offers two core implications for research on interorganizational trust. First, we uncover a novel set of mechanisms – attentional perspective and referent social categorization – that can underlie trust development in interorganizational relationships. We show how these mechanisms can produce a different pattern of trust development than what is predicted by the institutionalization model. In particular, we illuminate their importance for understanding trust development in a context of transgressions and conflict. Second, we find that trust divergence can have important constructive implications for interorganizational relationship. We show how trust divergence can enable relationship continuation after transgressions have caused distrust to emerge among senior decision makers. Moreover, we explain how trust divergence, over time, can facilitate full restoration of trust.

Theoretical Background

Trust refers to 'a psychological state comprising the intention to accept vulnerability based on positive expectations of the intentions and behavior of another' (Rousseau, Sitkin, Burt, & Camerer, 1998, p. 395). In the context of interorganizational relationships, scholars predominantly studied

trust as a collectively held perception among organizational members of one focal organization toward the partner organization (Klein, Palmer, & Conn, 2000; Zaheer et al., 1998). Numerous studies have explored the consequences of such collectively held trust perceptions for the governance and outcomes of interorganizational relationships (e.g. Poppo, Zhou, & Li, 2016; Stevens, MacDuffie, & Helper, 2015; Zaheer et al., 1998).

Yet, a few conceptual studies have pointed out that trust perceptions do not necessarily converge among members of a focal firm (Klein et al., 2000; Currall & Inkpen, 2002; Zaheer et al., 2002). These studies emphasize that interorganizational relationships involve multiple boundary-spanning individuals, which may differ in the type, frequency and quality of their interactions with the partner firm and therefore also are likely to develop divergent perceptions of the partner firm's trustworthiness. Klein et al. (2000), for instance, propose that organizational members that interact frequently with a partner firm may develop trust perceptions that diverge from those that interact less frequently, especially if the nature of the relationship changes over time. They also propose that in more complex interorganizational relationship, multiple individuals may be involved to solve different types of tasks with uncertain outcomes. This complexity, they argue, increases the likelihood that different boundary-spanning individuals perceive the relationship and the partner in qualitatively different ways. Correspondingly, Lumineau and Oliveira (2018) point out that interorganizational relationships encompass elements of both conflict and cooperation, which may not necessarily be similarly manifested in interactions among interorganizational boundary spanners at different levels. They therefore call for empirical research that takes a more pluralistic perspective, explicitly recognizing these kinds of dissimilarities.

We bring forward two particular reasons why empirical exploration of trust divergence in the context of interorganizational relationships is important. First, whereas extant theorizing provides rich insights into the process of trust convergence, we expect that trust divergence is based on a different set of mechanisms, situated outside the scope of current models. In the context of interorganizational relationships, the process of trust convergence has been conceptualized as an institutionalization process (Zaheer et al., 1998). Two mechanisms are highlighted: objectification and habitualization (Kroeger, 2012; Schilke & Cook, 2013). Objectification denotes the development of a universally shared social meaning by a set of social actors (Tolbert & Zucker, 1996). In a process of trust objectification, 'boundary spanners build a common understanding with their fellow organizational members regarding the trustworthiness of the partner organization' (Schilke & Cook, 2013, p. 290) through conscious or unconscious communication. Subsequently, such a common understanding can become habitualized (Tolbert & Zucker, 1996), meaning that it becomes embedded in taken-for-granted organizational structures and routines. Once a collectively held perception of the partner as trustworthy has been habitualized, such interorganizational trust can further stimulate the building of interpersonal trust (Kroeger, 2012; Zaheer et al., 1998). Therefore, it is argued that 'trust perceptions within an organization eventually converge into a set of institutionalized organizational rules of action that are relatively resistant to change initiated by specific individuals' (Schilke & Cook, 2013, p. 292). However, while the institutionalization model and associated empirical work is well developed for explaining how organizational members form a collectively held trust perception, it does not explain the emergence of divergent trust perceptions. Identifying the specific mechanisms underlying trust divergence could therefore contribute to a richer understanding of how trust develops in the context of interorganizational relationships.

Second, we expect that trust divergence can have performance implications that are distinct from those of trust convergence. Studying teams, De Jong and Dirks (2012) show that, when members within a team have diverging trust perceptions toward each other, this negatively impacts team performance. In their conceptual article, Klein et al. (2000) also propose that trust divergence has negative consequences, such as individual dissatisfaction and poor organizational decision

implementation, leading to more ineffective interorganizational relationships. At the same time, they conclude that the lack of empirical research on trust divergence is an important deficit in research on interorganizational relationships. This aligns with recent calls in research on trust in teams (Costa, Fulmer, & Anderson, 2018) as well as with calls in the broader literature on collective constructs to 'carefully consider ... the conditions under which divergence is desirable or undesirable' (Fulmer & Ostroff, 2016, p. 319).

In sum, we expect that, within interorganizational relationships, trust divergence is an important phenomenon that entails mechanisms and implications that are different from those of trust convergence. The core objective of this study is therefore to explore the emergence and implications of trust divergence. In the next section, we discuss our inductive approach to address this objective.

Method

The focus of our analysis is on how individual members within one focal organization (Machine) developed similar or different integrity-based trust perceptions toward a partner organization (Cooler). Both Machine and Cooler are multinational organizations and leading players within their respective fields; Machine is about twice the size of Cooler. We follow this relationship over 12 years, 2003 to 2015. This time period encompasses three sequential product development projects – Alpha, Beta and Gamma – during which Machine and Cooler jointly developed a new generation of cooler components for Machine's products. Table 1 provides an overview of the collected data.

Data collection

We received access to Machine's intranet and identified 66 documents that were particularly helpful for gaining a better understanding of the chronology of our case. We also conducted multiple rounds of interviews with key informants at Machine and Cooler. In total, we conducted 37 interviews with boundary-spanning individuals. Following prior case study research on interorganizational relationships (Faems, Janssens, Madhok, & Van Looy, 2008; Swärd & Lunnan, 2011), we interviewed relevant informants at different levels – i.e. managerial and operational. We were able to interview all members that had worked actively with this relationship, with the exception of two managers, one project manager and two R&D engineers, who had all left the company at the time of our research. Interviews lasted on average one hour and the majority of our interviews were audio-recorded and transcribed.²

The first two interview rounds were conducted in 2009 and 2010. Being part of a broader research project, these interviews focused on understanding the governance of the interorganizational relationship. During these first rounds of interviews, we noted that trust perceptions among Machine members towards Cooler did not always converge. Instead, we observed particular points in time where different Machine members developed inherently different trust perceptions toward Cooler. To further explore this intriguing notion of trust divergence, we conducted additional rounds of interviews each year between 2011 and 2015, with two interview rounds in 2012. In the interviews, we asked informants to identify and reflect on current and past events in the interorganizational relationship, as well as on their perceptions of Cooler in relation to these events. In this way, we were able to take into account both longitudinal and retrospective data for our analyses (Golden, 1992; Miller, Cardinal, & Glick, 1997).

To remedy potential recollection biases in the retrospective accounts, we followed the recommendations of Miller et al. (1997). First, as we relied on multiple informants, we were able to triangulate responses across different informants. Moreover, six of our informants were interviewed multiple

Table I. Sources of data.

	Informants (years of interviews) ^a	Project in which he/she was actively involved
Informants Machine	Manager A (2013; 14)	Alpha
	Manager B (2012)	Alpha
	Manager C (2012)	Alpha, Beta
	Manager D (2014)	Alpha, Gamma (not involved in Beta)
	Manager E (2013)	Alpha, Beta, Gamma
	Manager F (2014)	Beta
	Manager G (2014)	Beta, Gamma
	Project mgr. A (2012)	Alpha
	Project mgr. B (2011; 14)	Alpha
	Project mgr. C (2009)	Beta
	Project mgr. D (2009; 10; 11; 12)	Beta, Gamma
	Engineer A (2009; 10; 11; Mar. 12; Nov. 12; 14; Mar. 15; Apr. 15)	Alpha, Beta, Gamma
	Engineer B – promoted to Mgr. H (2012; 14; 15)	Engineer in Alpha, Manager in Beta and Gamma Beta
	Engineer C (2010)	Beta, Gamma
	Engineer D (2015)	Gamma
	Engineer E (2015)	Beta
	Procurement mgr. A (2009; 10) Procurement mgr. B (2015)	Gamma
Informants Cooler	Manager A (2009) Manager B (2010) Project Mgr. A (2010) Engineer A (2010)	
Total interviews	37	
Documents (66) ^b	Contracts (3) Post-project review documents, Alpha Meeting minutes and presentations (5)	, ,
Supplementary data	Ice Storm: 4 interviews (2009 and 201 Machine general: plant tours, informal	0)

^aEngineers were responsible for the day-to-day engineering activities. Managers encompass senior directors and midlevel managers actively involved in decision-making committees related to Project Alpha, Project Beta and/or Project Gamma. At every stage, Machine also dedicated a project manager, co-located with engineers. Moreover, as Table 3 indicates, a third category of Machine members (i.e. procurers) became temporarily involved in the interorganizational relationship at the beginning of Project Beta. In this paper, we focus on managers and engineers, since members from these categories were continuously involved throughout the three projects.

^bWe had access to a total of 450 documents, including copies of email conversations; *Excel* spreadsheets, *PowerPoint* presentations, and *Word* documents. The content of these documents included technical and commercial specifications (70); project planning and organization, risk analysis, budgets and cost follow-ups (314); contracts (3); meeting minutes (52); and post-project review documentations (11). In the table, we list the documents we found to be critical to the focus of our study.

times between 2009 and 2015, enabling us to compare and contrast information provided from the same informants at different points in time. Second, we organized our interview questions around facts and event sequences (Glick, Huber, Miller, Doty, & Sutcliffe, 1990), instead of abstract concepts such as trust. In particular, we asked respondents to reflect on past and ongoing events in the

interorganizational relationship. In this way, we aimed to get rich descriptions of how interviewees experienced the interorganizational collaboration over time. Third, we relied on archival documents to triangulate informants' descriptions of key events. For example, the post-project review documentation on Project Alpha provided rich detail on the conflict between Machine and Cooler.

Data analysis

Identifying critical events and patterns of trust development. We started our analysis by identifying critical events, or 'critical incidents when parties engaged in actions related to the development of their relationship' (Ring & van de Ven, 1994, p. 112). Specifically, we looked for events that Machine informants saw as important for their trust perceptions toward Cooler. To capture trust perceptions, we used extant definitions of trust in a sensitizing way (Graebner, 2009; Miles & Huberman, 1994). First, we followed Lewicki, McAllister and Bies's (1998) definition of trust and distrust. We looked for statements that described positive trust perceptions, or 'belief in, a propensity to attribute virtuous intentions to, and a willingness to act on the basis of another's conduct' and statements describing negative trust perceptions, or 'a fear of, a propensity to attribute sinister intentions to, and a desire to buffer oneself from the effects of another's conduct' (Lewicki et al. (1998, p. 439). Second, we followed Mayer, Davis and Schoorman (1995) by making a conceptual distinction between integrity, benevolence and ability-based trust perceptions. Since transgressions in our case were mainly framed in terms of integrity violations, this was the dimension where we observed most variation over time and we decided to focus our analysis on the integrity dimension of trust perceptions toward Cooler.³ Third, we followed Currall and Inkpen's (2002) distinction between different trusted referents, i.e. trust perceptions toward Cooler as an organization, toward particular Cooler groups, and toward individual Cooler members. All interviewees provided statements describing positive or negative trust perceptions toward Cooler as an organization. Machine managers sometimes provided statements related to individual Cooler managers, but never about Cooler engineers. Engineers, on the other hand, sometimes provided statements about Cooler's group engineers,4 but never about Cooler managers. We therefore decided to focus on Cooler as the trusted referent, since this allowed consistent assessment of the extent to which individuals (engineers and managers) of the focal firm expressed similar or dissimilar trust perceptions toward a common trust referent (Cooler as an organization). In sum, the specific focus of our analysis is on individual Machine members' perceptions of Cooler's integrity as an organization. For reasons of simplicity, we refer to this as trust perceptions.

Comparing statements of different Machine members, we found three time periods of trust divergence in our case, meaning that the individual Machine managers we interviewed expressed negative trust perceptions toward Cooler,⁵ while the individual Machine engineers expressed positive trust perceptions. Applying a temporal bracketing approach (Langley, Smallman, Tsoukas, & van de Ven, 2013), we used this insight as a starting point for the identification of trust development stages in our case, labelled stages A to F. As illustrated in Table 2, stages A, C and E denote time periods of trust divergence; stages B and D denote time periods of distrust convergence, meaning that both managers and engineers maintained negative trust perceptions toward Cooler. Finally, stage F denotes a time period of trust convergence, meaning that not only engineers, but also managers, developed positive trust perceptions toward Cooler.

Theme analysis and development of a grounded process model. In our theme analysis, we looked into how our informants described and interpreted events in order to understand how and why these events drove trust perceptions within each stage. To do so, we first engaged in open coding of our data, relying on informants' own words as much as possible (Strauss & Corbin, 1998), leading to

 Table 2.
 Data structure, showing the link between first-order findings, second-order concepts and aggregate themes.

Stages of trust development	A. Trust divergence: Managers develop negative, engineers maintain positive trust perceptions (Spring 04-Autumn 04)	B. Distrust convergence: Engineers develop negative trust perceptions (Autumn 04-Spring 06)	C. Trust divergence: Engineers develop positive trust perceptions (Spring 06-Spring 08)	D. Distrust convergence: Engineers develop negative trust perceptions (Spring 08–Summer 09)	E. Trust divergence: Engineers develop positive trust perceptions (Summer 09-Spring 10)	F. Trust convergence: Managers develop positive trust perceptions (Spring 10-Spring 12)
Relational context	Domain-specific transgressions: Cooler's unwillingness to transp share commercial information is seen as a transgression, leading to intensive conflict in the commercial activity domain.	fic transgressions: Cooler's unwillingness to transparently ial information is seen as a transgression, leading to tin the commercial activity domain.	ness to transparently ion, leading to	Domain-specific transgressions: Price increase perceived as abuse of dependence.	Absence of transgressions: Detailed structural design lessens commercial conflict.	After transgressions remain absent, engineers have established positive
Activity exposure	Shielding: Engineers are not involved in commercial negotiations.	Collective exposure: Initiation of crisis meetings imply that Engineers become exposed to the commercial domain.	Shielding: Engineers are excluded from crisis meetings.	Collective exposure: Engineers take part in commercial negotiations and become co-located with procurers.	Shielding: Because of detailed contract and relocation of procurers, engineers are no longer exposed to the commercial domain.	trust perceptions, and one engineer is promoted to a managerial position, positive trust perceptions
Attentional perspectives	Local disregarding of transgressed activity domain: Engineers pay no attention to commercial conflict, managers considers it an important issue.	Convergent attention to transgressed activity domain: Engineers see the commercial conflict as a focal problem.	Local disregarding of transgressed activity domain: Engineers ignore the commercial conflict while focusing on problem solving in the technical domain.	Convergent attention to transgressed activity domain: Engineers once more start to think about the conflicts in the commercial domain as an important concern.	Local disregarding of transgressed activity domain: Engineers disregard the commercial domain of the relationship.	increasingly become institutionalized among Machine members.
Referent social categorizations	Local, cooperative referent categorization: Managers perceive Cooler as a competitive counterpart, engineers see Cooler as a partner.	Congruent, competitive referent categorizations: Engineers see Machine and Coolers as enemies.	Local, cooperative referent categorization: Engineer's perceive Machine and Cooler as being in the same boat.	Congruent, competitive referent categorizations: Engineers start to perceive the relationship as a win-lose game.	Local, cooperative referent categorization: Engineers perceive that Cooler and Machine work together, toward a common goal.	

identification and refinement of first-order findings. Comparing across different stages allowed us to identify themes that consistently emerged in the different stages of distrust convergence (stages B and D) and trust divergence (stages A, C and E). Subsequently, we used second-order coding to transform our first-order themes into higher-order categories (Glaser & Strauss, 1967). We compared and contrasted our first-order codes, seeking to ground constructs that reflected our actual observations but abstracted away from the particular context (Gioia, Corley, & Hamilton, 2013).

In this process, we searched for similarities and dissimilarities between our emergent constructs and the extant models (Kroeger, 2012; Schilke & Cook, 2013; Zaheer et al., 1998). Doing so, we found that the last stage – i.e. F – of trust development in our case resembled the process of gradual institutionalization as described by prior process models of how members within a focal firm form trust perceptions toward a partner firm. However, for the other stages – i.e. A to E – we could not see mechanisms of institutionalization in our findings. We therefore started to read literature outside existing models to make sense of our data. In particular, the literature on attentional perspectives (Ocasio, 1997, 2011) and research on social identification and referent categorizations (Tajfel & Turner, 1986) were helpful.

Eventually, we developed a data structure consisting of five aggregate themes (Gioia et al., 2013). In Table 2, aggregate themes are illustrated in the far-left column, text in bold. Second-order, theoretical concepts are summarized in bold italics, showing how concepts consistently reoccurred across the different stages of our case. First-order findings are summarized in normal text. Empirical quotes illustrating these first-order findings are provided throughout the Findings section and summarized in Tables 3 to 7. Finally, informed by the event chronology and the theme analysis, we engaged in building a process model (Figure 1) that captures the dynamic relationships among our emergent concepts (Gioia et al., 2013).

Findings

Prologue: Initial trust perceptions toward Cooler (Spring 2003-Spring 2004)

In May 2003, Machine selected Cooler as the principal supplier for Project Alpha, while another supplier, Ice Storm, was contracted for the remaining 20%. Both engineers and managers emphasized that they initially had positive trust perceptions toward Cooler. Explaining why, they mentioned Cooler's strong reputation in the market and the recent successful completion of a small collaborative project. A contractual agreement was signed, but interviewees noted that it was not very detailed, and 'more like a letter of intent' (manager B). In addition, the partners agreed that they would apply an open-book approach in the project, sharing information transparently. The following quotes illustrate the presence of positive trust perceptions:

Cooler was considered a very good company ... We establish a positive attitude, to ensure ethical behaviour. This was to build initial trust and I think that it worked out. (manager A)

My view of their integrity, it started on a high level. I trusted them more than other suppliers. In terms of sharing data, for instance. (engineer A)

Stage A: Trust divergence (Spring 2004—Autumn 2004)

During stage A, we observe trust divergence, meaning that Machine managers came to develop negative trust perceptions toward Cooler, while Machine engineers maintained positive trust perceptions. Below, we describe this development. For additional quotes, see Table 3.

case findings.
derling case
support underling
Illustrative
divergence: i
A, trust
3. Stage
Table

,		F
Empirical manifestations	Concepts and illustrative quotes	I hemes
Lack of transparency is seen as a transgression in the commercial domain	Domain-specific transgression Costs escalated, and we were in disagreement about how to deal with that. The part we were missing was the full overview of costs. They refused to provide that information they referred to their internal know-how, internal policies, [and] did not want to give us the cost estimates. (manager C) It was very painful [and] there was disappointment We realized that this 'open book' was not completely open from the side of CS We had agreed to use this approach, but there was a lot of resistance from CS management to have this approach They were conservative in terms of what they wanted to say and wanted to show. (manager A)	Relational turbulence
Engineers are not involved in commercial negotiations	Shielding Engineers are located in Northern Europe, managers in Central Europe. Technical work activities were kept separate from commercial activities.	Activity exposure
Engineers pay no attention to the transgressed, commercial domain,	Local disregarding of the transgressed activity domain We saw no reason not to expect a good outcome the problems we had, we could solve. (engineer A)	Attentional perspectives
managers considers transgressions as an important issue	We were able to keep those [commercial] discussions out of the technical debate. (engineer B) It was very engaging and very intensive at the management level, you know, for me it was important. (manager A) There were a lot of hard discussions it required intensive fighting [i.e. with Cooler] on my part. (manager C)	
Engineers see Cooler as a partner, managers start to perceive Cooler as a competitive counterpart	Local, cooperative referent categorization It somehow felt like we did this together. [with Cooler] (engineer A) We had started to get to know their people, developed a more informal way of working with Cooler. (engineer B) We were expecting supplier engagement Then the supplier becomes part of your project, becomes one of the members of your team but we realized that it became more of a standard approach, not this engagement approach. (manager A) Our opinion was that they were not listening to what their customer was saying, they were	Referent social categorizations
Engineers maintain positive trust perceptions, managers develop negative trust perceptions toward Cooler	Trust divergence I saw them as competent and I had really good contact with many of them; I'd say that I had a pretty good level of trust in them. (engineer A) We were not worried that CS would not fulfil its obligations to us. (engineer B) You need to have mutual trust We realized that this cooperation was not the best when it comes to having this type of [trust-based] relationship. (manager A) Trust evaporated we started with a fair amount of trust But then when we started to sort of ramp up the project, we lost trust. (manager E)	Trust perceptions

In the spring of 2004, costs for testing and verification increased far beyond what either Machine or Cooler had budgeted. Therefore, according to manager B: 'there were a lot of tough discussions' and according to manager A: 'a great deal of conflict [emerged] ... and the major conflict was associated with the costs'. Given this situation, managers demanded that Cooler showed the rationale behind their cost estimates, citing the open-book approach originally agreed upon. Cooler's managers, however, refused to open their books, claiming that this was proprietary information. As a result, Machine managers came to think that 'they were not so open and not so truthful' (manager E). We conceptualize this as an instance of a *domain-specific transgression*, meaning a transgression that impacts a particular activity domain of the relationship, which in this case was the commercial domain.

During Spring 2004, the conflict with Cooler became a focal concern for managers. This we conceptualize as an instance of *attention to conflict*. Seeing Cooler's lack of transparency and the associated conflict as an important issue, managers came to develop a different understanding of the relationship to Cooler than before. Instead of a collaborative partner, pursuing joint problem solving, they now came to think of Cooler as a competitive counterpart and the relationship as one where each partner focused primarily on its own objectives. This, we conceptualize as an instance of *competitive referent re-categorization* among managers. As manager A explained:

The supplier should have become like a part of Machine, where she is not an external supplier but more similar to an internal supplier ... [But] this dialogue did not go in the right direction ... we had some [sort of] 'game' to play. (manager A)

Together, the integrity violation, attention to conflict and competitive categorization of Cooler made Machine managers gain negative trust perceptions toward Cooler. Manager C, for instance, stressed: 'We started out on a neutral level, but then trust went down ... we were optimistic to begin with, but we discovered issues, one after another.' Cooler's management was of the opinion that Machine should bear the costs for testing and verification. As Machine refused to do so, while at the same time, one division of Machine started to engage in informal conversation with a competing supplier, Cooler's managers also experienced trust violations. This setting of mutual transgressions triggered intensive conflict in the commercial activity domain.

Machine engineers were not exposed to this commercial conflict. Whereas most managers were located at Machine's headquarter in Central Europe, Project Alpha was operationally run by the engineering organization, which was located at Machine's facility in Northern Europe. Engineers were not part of the commercial discussion at the managerial level. Conceptually, we see this as an instance of *shielding*. Because they were not exposed to the conflict, engineers did not really see the commercial side as an issue that they needed to be concerned about. Conceptually, we see this as *local disregarding of the transgressed activity domain*. In this way, engineers maintained a more *cooperative categorization* of Cooler, meaning that they saw the relationship as a partnership, where Cooler and Machine were working together, toward the same goal. According to engineer A: 'It somehow felt like we did this together [with Cooler].' In this cooperative framing, the positive trust perceptions that had initially been established prevailed. As project manager A recalled: 'there was a general feeling of trust [among engineers]'.

Stage B: Distrust convergence (Autumn 2004–Spring 2006)

During stage B, we observe distrust convergence, meaning that not only Machine managers, but also Machine engineers, expressed negative trust perceptions toward Cooler. Below, we describe this development. For additional quotes, see Table 4.

Š.
ii
ij
ing
-E
pun
upport u
d
e su
ative
Str
≣
nce
Pg Bg
nve
8
rusı
Dist
ä
3ge
Sta
4.
able
Ħ

Empirical manifestations Columbiation of crisis meetings Columbly that also engineers become exposed to the commercial activity domain tally W	Concepts and illustrative quotes Collective exposure I took part in some of these meetings in which we quickly came to discuss the commercial issues which were much more conflict-laden than when we were talking about technical stuff so clearly that affected us. (engineer B) We had some intensive meetings. Twenty people sat around the table, everyone from top management to operational staff [in both Machine and Cooler] until nine	Themes
	iollective exposure took part in some of these meetings in which we quickly came to discuss the commercial issues which were much more conflict-laden than when we were alking about technical stuff so clearly that affected us. (engineer B) We had some intensive meetings. Twenty people sat around the table, everyone om top management to operational staff [in both Machine and Cooler] until nine	
	ommercial issues which were much more conflict-laden than when we were ilking about technical stuff so clearly that affected us. (engineer B) Ve had some intensive meetings. Twenty people sat around the table, everyone om top management to operational staff [in both Machine and Cooler] until nine	Activity exposure
. T	om top management to operational staff [in both Machine and Cooler] until nine	-
	in the evening. This happened frequently and it is just not normal. (engineer A)	
Engineers see the	Convergent attention to transgressed activity domain	Attentional
commercial conflict as a The focal problem	The closer you got to such [commercial] issues, the more conflict there was, compared to when you were discussing technical issues A problem was not just	perspectives
	technical, it became a combination of technical aspects and commercial aspects. And when we did not get the commercial side to work, then the technical side	
ns	suffered. (engineer B)	
>	We were nagging each other about who should bear which costs The closer	
ok sip	you got to such issues, the more conflict there was, compared to when you were discussing technical issues. (engineer A)	
Engineers see Machine and Co	Congruent, competitive referent categorizations	Referent social
Coolers as enemies	It was like a boxing ring or something like that Including the 5-min breaks,	categorizations
np ·	during which we were each in our separate corners, strategizing. (engineer A)	
At	At our level, we became increasingly negative toward the 'bastards on the other side'. (engineer B)	
Engineers develop negative Di	Distrust convergence	Trust
trust perceptions toward Th	There was distrust we might not have hit rock bottom, but it was definitely	perceptions
- •	regarder, (engined by Frust went down, it became negative. Not in terms of the individuals, but I realized	
th	that this organization, this organization would take any opportunity to earn an	
ex	extra dime. (engineer A)	

An important triggering condition for distrust convergence was a series of cross-functional crisis meetings, during which the commercial conflict was being discussed. Crisis meetings were organized on a monthly basis and they involved both managers and engineers from Cooler and Machine. Through the meetings, not only managers, but also engineers, became exposed to the conflict-laden, commercial domain of the relationship. The initiation of meetings thereby implied a *collective exposure* to the transgressed activity domain.

When exposed to the commercial domain, engineers also became attentive to the conflict, implying that both managers and engineers converged their attention to the conflict in the commercial domain. Engineer A said: 'I realized that there was a larger problem ... it was part of the bigger picture. ... It was these discussions and debates, which were just so painful; it felt like everything started to go wrong at that time.' This shift in attentional perspective made engineers see Cooler as a difficult and uncooperative partner. Engineer A further explained: 'We got the feeling that Cooler was very difficult to work with ... That feeling grew bigger and bigger when we had these [commercial] discussions.' This development resulted in engineers stereotyping Cooler as the enemy. As engineer B maintained: 'All of a sudden, you start to think that you have an enemy somewhere.' Conceptually, we see this process, where Cooler is seen as an 'enemy' instead of a collaborative partner, as a competitive referent re-categorization among engineers, which was congruent with that of managers. In this competitive framing, new trust perceptions toward Cooler emerged. Engineer B, for instance said, 'trust became negative' and engineer A further explained:

I began to have doubts. I thought that 'this is not going so well'. I was thinking, 'Cooler is f—ing difficult to deal with at the moment'... so, you know, we lost it [i.e. the good relationship]. It became really awkward; it felt like we were pulling in opposite directions ... They were trying to save their own skin, trying to offload costs on to us. (engineer A)

Together, the organization of crisis meetings during stage B implied a collective exposure of both engineers and managers to the conflict in the commercial domain. This led to a situation where the attention of these different members converged to the conflict-laden domain, and they came to develop a congruent categorization of Cooler as a competitive partner, whose objectives where in conflict to those of Machine. In this framing, these different members of Machine also came to converge in their negative trust perceptions toward Cooler. At the same time, it needs to be emphasized that the negative trust perceptions were mainly related to Cooler as an organization. Machine engineers did not express negative perceptions toward Cooler's engineers.

Stage C: Trust divergence (Spring 2006–Spring 2008)

During stage C, we again observe trust divergence, meaning that Machine managers maintained negative trust perceptions, while Machine engineers regained positive trust perceptions toward Cooler. Below, we describe this development. Table 5 provides additional illustrative quotes.

In Spring 2006, Machine recruited a new project manager, project manager B. Describing the relationship, she emphasized: 'It was like entering a battlefield just after a battle; everyone was carrying wounds and traumas.' To move forward with the operational work, the new project manager decided to exclude engineers from the crisis meetings, which we see as an instance of *shielding*. Manager B, for instance, emphasized: 'It's like in a family: some of the discussions, parents need to take without involving the children', while project manager B further explained:

Š
≃
÷
e support underling case findings
a
Š
ၓ
50
≟
5
ŏ
=
Ĕ
×
ä
고
۵)
llustrative
Ξ.
13
z
_
-
į
2
ē
ivergence:
ø
疟
ŭ
S
trust
٠,
Ú
tage
쩛
χ̈
٠,
able 5. S
Table 5
亙
.ď
\vdash

Empirical manifestations	Concepts and illustrative quotes	Themes
Engineers are excluded from crisis meetings	After she lie. the new project manager] came, it became less of that 'shuttle-bus traffic' back and forth to Cooler [crisis meetings]. (engineer A) Project manager B was more involved in those type of meetings. I was focusing on the technical side. There were business review meetings, where I was not invited at that point in time. (engineer B) This I realized over time, that I needed to avoid that the functional organization, the people that are more in the line, that need to cooperate day to day, that they had conflict because of misunderstandings, miscommunication and misinterpretations [at the management level]. (manager A)	Activity exposure
Engineers ignore the ongoing, commercial conflict while focusing on problem solving in the technical activity domain	Local disregarding of transgressed activity domain You heard, of course, if there was an issue or something like that, but we said: yeah, yeah, they have their problems, on their side. (engineer A) We had very clear deadlines in our work that we just needed to meet. I guess this fi.e. a focus on technical deadlines is also what she [project manager B] tried to accomplish; we just needed to make things happen. (engineer B) The engineers, they wanted to make this work. They could avoid being drawn into the conflict, because they also	Attentional perspectives
Engineers perceive Machine and Cooler as being in the same boat	Local, cooperative referent categorization What had happened had happened and then we just had to fix it. We were in the same boat in the end. (engineer A) It felt like we were doing it together, in a way (engineer A) We were in this together, we had made a shared bed together. (engineer B)	Referent social categorizations
Engineers develop positive trust perceptions toward Cooler Managers maintain negative trust perceptions toward Cooler	Trust divergence. I would say there was trust I think part of it is that there is respect for each other the trust starts building. (engineer B) It was primarily trust in Cooler engineers, but I mean, if they don't have backup from the organization, if they don't get management priority, then it doesn't matter that the engineers are competent. Without a doubt, it must have been the entire organization as well. (engineer B) In that short time, we [engineers] went from wariness to thinking, "Working with Cooler is not an issue." (project manager B) I think our view of [Cooler's] integrity really improved. (engineer A) I became convinced that they would not pass on information or anything like that. Earlier on, I wasn't so sure. (engineer A) They knew we weren't really in a position to switch to another supplier—so they took advantage of that. (manager F). There was a lack of trust in Cooler during this time. (manager A) There was a lack of trust in Cooler during this time. (manager A)	Trust perceptions

Things were so aggressive up there [i.e. management level] ... I went to the [crisis] meetings on my own [i.e., without engineers] ... I pushed down a lot of decision making to the operational level ... I connected engineer-to-engineers ... Tried to keep it at a very technical level. (project manager B)

When shielded, engineers started to focus intensively on problem solving in the technological domain, while the commercial conflict was seen as something that they could just ignore. This we conceptualize as a *local disregarding of the transgressed activity domain*. Engineer A recalled: 'In the beginning, there were all these meetings ... I had to go to Cooler every third week ... there was an endless array of meetings in the beginning. But at that point, ... instructions became more, like "fix the technical problems" ... And then we could focus only on that.' In another interview, he further emphasized:

At the higher levels, they were at loggerheads and it was generally very distressing ... but we said: let's leave this for the others to deal with. (engineer A)

When disregarding the commercial domain, a more *cooperative categorization* of Cooler emerged among engineers. Instead of seeing Cooler as 'the enemy' with conflicting objectives, engineers again came to see Cooler and Machine as 'being in the same boat', sharing the same goal. This local, cooperative categorization was both noticed and appreciated by Machine managers. Manager A, for instance, said: 'on top of that [i.e. the management crisis meetings], there were a number of more local meetings, between engineers ... about the day-to-day operations. We tried to keep this [local] communication in place too. Just to have a normal relationship [at the operational level].' For Machine engineers, this cooperative categorization of Cooler influenced their judgements and led them to form positive perceptions of Cooler's integrity:

We thought of Cooler as a decent company to work with ... so trust went up, trust in Cooler by and large ... it felt as if it was all worth it, all this shit we had experienced. That feeling was in my head ... For example, I was not hesitant to share sensitive information with Cooler at that point. (engineer A)

Managers, in contrast, remained deeply involved in the commercial conflict with Cooler and maintained a competitive categorization and negative trust perceptions of the partner firm. Project manager B, for instance, said: 'for them [i.e. managers], it was all about making threats and being aggressive'. Manager F also emphasized: 'Our opinion was that they [Cooler] were not listening to what their customer was saying and they were completely focused on their internal objectives, which were profit-and-loss driven'. The shielding of engineers thus created a situation where different members of Machine attended to different issues, maintained incongruent categorizations of Cooler, and expressed divergent trust perceptions.

This trust divergence became particularly salient during Autumn 2006, when the Alpha project was about to be completed and Machine prepared to initiate Project Beta, a technical follow-on from Alpha. At this point in time, Cooler had made progress in the technological domain: they had solved the previous technical problems and presented test results that proved the high quality of the developed cooler component. At the same time, partly due to their distrust of Cooler, Machine managers did not consider Cooler as a first-choice supplier for Project Beta. Therefore, they decided to invite seven suppliers, including Cooler, to make proposals for the Beta contract. Engineers, on the other hand, clearly favoured Cooler as the core supplier for Project Beta, maintaining that they had positive trust perceptions, not only perceptions toward Cooler's engineers, but also toward the organization by and large. Below are two quotes that illustrate these divergent trust perceptions:

One of the reasons why we didn't have Cooler as a first-choice supplier [i.e. for Project Beta] was that they were in this 'low trust' domain. (manager F)

I would rather work with Cooler than with other suppliers ... it was all coming down to trust, I think. They had started understanding our needs and requirements, and we had started understanding them as a company, and the people there. (engineer A)

In their evaluation of the different proposals, engineers recommended Cooler as the dominant supplier for Project Beta. This recommendation was not well received by managers. As project manager B recalled: 'The engineers said "we want to work with Cooler". But this idea was rebuffed by NN [a Machine manager].' In the end, managers decided to split the work in Beta equally between Cooler and the main competing supplier, Ice Storm. Engineers' recommendation, as well as the technological progress, worked in favour of Cooler. At the same time, manager F said: 'We took business away from them ... to teach them a lesson', a statement underlining the competitive framing of the relationship among managers.

Stage D: Distrust convergence (Spring 2008–Summer 2009)

In stage D, Machine engineers regained negative trust perceptions, implying a second instance of distrust convergence. See Table 6 for illustrative quotes.

After being selected, but before the contract was signed, Cooler decided to increase the price of their component. Since it was then too late to change to another supplier, Machine managers saw the price increase as a transgression, and it triggered renewed conflict. Whereas in the previous stage, engineers had been able to disregard the conflict-laden, commercial domain of the relationship, in stage D, it again became a focal concern for them, implying an instance of *converging attention to the transgressed activity domain* among both managers and engineers. A renewed *exposure* of engineers to the commercial domain of the relationship triggered this shift in attentional perspective. First, the engineers now became co-located with a group of operational procurers, whose primary task was to monitor that Cooler fulfilled their commercial obligations toward Machine. Second, engineers now became involved in a conflict-laden negotiation about the contract for Project Beta, where Machine and Cooler were in disagreement over the price of Coolers' products, handling of intellectual property, as well as distribution of costs. Together, their daily interaction with Machine procurers and their involvement in the contractual negotiations made engineers think of the conflict as an important concern.

When the conflict-laden domain of the relationship could no longer be ignored, a *competitive* partner categorization of Cooler re-emerged among engineers. Again, Cooler was seen as an opponent, with objectives that stood in conflict to those of Machine. In this congruent competitive framing, the trust perceptions among engineers came to converge with the negative trust perceptions among managers. As engineer A said:

On the technical side, the problem is better defined, and then it is easier to be honest. But when the cost aspects come into the equation ... it's difficult to keep them apart [i.e. the commercial aspects from the technical aspects] ... It is not possible to have total honesty in commercial negotiations. (engineer A)

SS
ndin
,Ĕ
₩.
Ę
ੋ
ф
듬
upport u
201
₫
ร
.≥
rativ
llus.
<u>-</u>
JCe
ਨ
erg(
ž
ö
يز
rust
ų
۵
D: Dis
<u>-</u>
Stage
š
•
ē
<u> </u>
Ξ.
•

Engineers take part in commercial We needed to coordinate [with management] we needed to negotiate abou negotiations Collective exposure We needed to coordinate [with management] we needed to negotiate abou when it comes to writing framework agreements and all of that we take pa (engineer A) This is a special project, because the project manager A) Engineers become co-located with a procurement and engineers are co-located we work in a new way there co-located with a procurement and engineers are co-located we work in a new way there co-located with a becourement and engineers are co-located we work in a new way there co-located with a procurement and engineers are co-located we work in a new way there co-located with a becourement and engineers are co-located we work in a new way there co-located with a percurement and engineers are co-located we work in a new way there co-located with a percurement and engineers are co-located we work in a new way there co-located with a percurement and engineers are co-located we work in a new way there co-located we work more clocated .		
0	lustrative quotes	Themes
o.		
o.	Collective exposure We needed to coordinate [with management] we needed to negotiate about everything. (engineer A) When it comes to writing framework agreements and all of that we take part in those discussions.	Activity exposure
0	This is a special project, because the project managers are very involved in the negotiation process with the suppliers. (procurement manager A)	
0	Procurement and engineers are co-located we work in a new way there is a very close integration between engineers and procurement. (project manager D)	
ō F	We work very closely [with procurement] in this project, it is organized that way. (engineer A) We [i.e. the negotiators] are dependent on them [the technical people] normally, the project organization is not part of commercial negotiation, but now we work more closely together.	
, ,	ttention to transgressed activity domain	Attentional
Ļ	these old discussions. (engineer A)	perspectives
<u> </u>	All these old issues [i.e., the conflict on commercial issues] were relevant again; we needed to negotiate	
<u> </u>	about everything. (engineer A) There was a different level of follow-up on costs. compared to in Proiect Alpha. We had a focus on that.	
That was issues. (e Congrue We expe We were technical Distrust [During t roundabc It was thi	Because purchasing was also more involved. (engineer A)	
<u> </u>	the focus of the project at that time. There were just more questions related to commercial ngineer B)	
, ,	Congruent, competitive referent categorizations	Referent social
<u></u>	We expect them to try to get as much money out of the business as possible. (engineer A)	categorizations
	We were negotiating about everything, a lot of uncertainties; everyone was on guard. Because the technical side have commercial implications, and vice versa. (engineer A)	
	ergence	Trust perceptions
	[During the negotiations] I realized that what they lost out on the swings, they made up for on the	
ration the profession of the properties for the profession of the	the was this feeling of them 'money-grubbing'. They wanted us to pay for their product validation. We required a nontrive feeling of them the product of the	
i egained a negative reming about Coole	a negative ieeinig adout Cooiei as an oiganization. (engineer A)	

Stage E: Trust divergence (Summer 2009–Spring 2010)

Stage E represents a third instance of trust divergence, as Machine engineers regained positive trust perceptions toward Cooler, while managers maintained negative trust perceptions; see Table 7 for illustrative quotes.

From the Summer of 2009, engineers were again *shielded* from the commercial domain of the relationship. One reason was the establishment of a more detailed contract, which put an end to the ongoing discussions around cost distribution. Another reason was a reorganization, which implied that engineers were no longer co-located with the procurers. This made engineers think of commercial discussions as something in the past, which they could now *disregard*. With this disregarding, a *cooperative categorization* resurfaced among engineers, implying the thought of Machine and Cooler as collaborators with a common goal, and the previous 'trust issues' faded. In the words of engineer A:

We used to have trust issues. In the beginning of the [Beta] project, there was a focus on the problems we used to have. But now, we are in the same boat and we just have to cooperate. (engineer A)

For managers, the presence of a more detailed contract and split of volumes between Cooler and the competing supplier put an end to the previous, conflict-laden discussions. However, managers saw this as interventions that curbed Cooler's opportunistic behaviour, rather than something that led to disappearance of negative trust perceptions. As manager F said: 'I think [their attitude changed] because they realized that we had alternatives ... they finally realized that this was serious and they changed their attitude.'

Stage F: Trust convergence (Spring 2010 and onwards)

During stage F, we observe trust convergence, meaning that not only engineers, but also managers, came to develop positive trust perceptions toward Cooler. Compared to the prior stages, trust development in this stage represented much more of a gradual institutionalization process. Several conditions contributed to this. First, the collaboration went from being turbulent and conflict-laden to one where conflicts were absent. An important event was the removal of one Cooler manager, who was thought of as particularly combative. In addition, the establishment of positive trust perceptions among engineers helped make Project Beta an operational success story. For example, several engineers described how, because of their positive trust perceptions, they could openly and informally share information, enabling them to quickly identify and solve problems as they emerged.

In this context of relational calm, the positive trust perceptions of engineers slowly came to diffuse to managers. An important event was the promotion of engineer B to a managerial position. In his communication with other managers, he often emphasized the trustworthiness of Cooler. In this way, he contributed to the objectification (Tolbert & Zucker, 1996; Zucker, 1977) of trust, meaning that Machine members started to form a shared and generalized social meaning. Manager D, for instance, said: 'I do not know them well [personally] ... but the feedback I get from my people [i.e. manager H, former engineer B] is that they like to work with this company.' The promoted engineer further explained:

Moving one step up in the organization, I carry with me the trust that I have from being part of the engineer level ... I am indirectly defending the supplier here [in management meetings], because we know that we can trust this supplier. (manager H, former engineer B)

dings.
险
∓
ĕ
∉
60
➣
도
뿌
ĕ
3
e support u
٥
×
ā
⋾
S
e
÷
ਸ਼
₽
ns
≝
=
a)
rgence
ē
þΩ
ō
<u>ĕ</u> .
Trust di
ų.
S
こ
\vdash
.::
ш
e,
Stag
ೱ
'n.
4
able
٩
w
\vdash

Empirical manifestations	Concepts and illustrative quotes	Themes
Because of a more detailed contract and a re-location of procurers, engineers are no longer exposed to the commercial side of the relationship	Shielding Because of the increased control over the process, there was not much room for commercial discussion. (project manager D) Procurement used to be more involved. But later on, I just don't know what happened to all of that. (engineer A) We don't have to deal with [commercial] issues between the sales side of Cooler and the purchasers at Machine. If there are issues, they [i.e. the procurers] handle that themselves. (engineer E) I cannot do anything about that [i.e. the commercial side]. And neither can my engineer counterpart at Cooler of course, there are price discussions ongoing, but they are going on in a separate meeting. So, we almost never notice them. (engineer E)	Activity exposure
Engineers disregard the commercial domain of the relationship	Local disregarding of transgressed activity domain We had a different focus, because we were no longer involved in supplier negotiation, there were no more commercial aspects to deal with. (project manager D) I don't involve myself in that [i.e., commercial discussions]; I do not deal with these discussions anymore. Those were discussions that we used to have. (engineer A) There was a focus on that [i.e. costs] when procurement was involved. But later on, I just don't know what happened to all that. (engineer A)	A ttentional perspectives
Engineers perceive that Cooler and Machine work together, toward a common goal	Local, cooperative referent categorization I think that working together creates this feeling that we want to do this together We know that if we don't help them, they can't help us, and the other way around. (engineer E) We solve problems together we have nothing to gain from making them suffer. If we help them, they will forgive us the next time we make a mistake. (engineer C) We really develop this new generation of engines together. It is not like we [i.e., Machine engineers only] are driving the development; we develop and drive the market together. (project manager D)	Referent social categorizations
Engineers develop positive trust perceptions	Trust divergence My opinion of their competence was really high and my opinion of their integrity was also high. It was just an absence of problems, and the few problems that we did have, we knew about, and it still worked out. (engineer A) I started to realize that I was wrong [i.e. about being suspicious in the prior stage] there were no major issues [Trust] just kept building up, that's for sure It was really high, both in the engineers and in the organization as such. (engineer A) They would never cover up bad information or do a sloppy job We have an open collaboration They are not hiding or withholding information. (engineer C)	Trust perceptions
Managers maintain negative trust perceptions	It became easier to do business with Cooler but it was more about hard facts than the relationship as such. (manager G) I would describe it [i.e. managers' perceptions of Coolers' trustworthiness] as negative. Nothing really changed People were still concerned. (engineer A)	

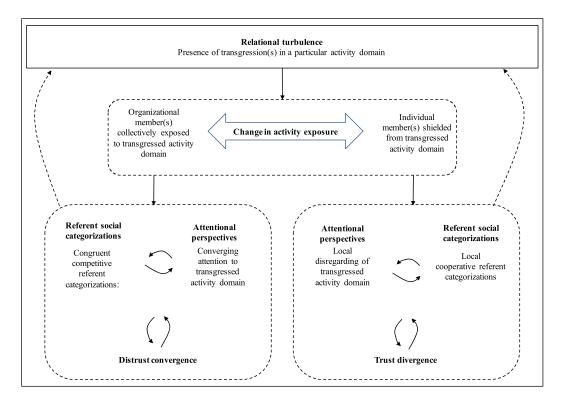


Figure 1. A process model of trust development in a setting of domain-specific transgressions.

As we continued to follow the relationship, we also observed how trust increasingly became habitualized, or taking for granted, among Machine members. Manager E, for instance, emphasized 'I guess it [i.e. negative trust perceptions] was a big deal then, now it seems to be small fry ... I guess it is because you have this period of familiarity, this longer time period, where we have gotten to know each other ... generally Cooler is sort of off the majority of our radars [meaning something that they did not have to focus their attention on].' We also observed how Cooler was awarded 80% of Project Gamma without having to go through the type of open supplier selection process as for Project Beta, demonstrating managers' willingness to be vulnerable to Cooler:

For Project Beta, we wanted to see what other suppliers had to offer, we wanted to 'call their cards' ... we were not certain we had the right partner, maybe there were better alternatives? ... but for Project Gamma, we just continued with Cooler, we did not bother about making a new open call. (manager C)

Discussion: Toward a Process Model of Trust Divergence

Based on our case findings, we develop a grounded process model of trust development in a setting of domain-specific transgressions (Figure 1). Our model describes how members of a focal firm come to converge in distrust perceptions towards the partner firm (left-hand side) as well as how they come to diverge in their trust perceptions (right-hand side).

Activity exposure

It is well-established that, when people from the same collective work together intensively, they will have similar experiences, contributing to converging opinions and perceptions (see Fulmer & Ostroff, 2016; Mason, 2006). In line with these insights, we position activity exposure as a structural condition that triggers alternation between trust divergence and distrust convergence in interorganizational relationships. Most interorganizational relationships encompass multiple activity domains, and not all individual organizational members are necessarily exposed to all activity domains (Zaheer et al., 2002). In our case, there was a technical domain and a commercial domain and transgressions occurred primarily in the commercial activity domain. We find that collective exposure to a transgressed activity domain increases the likelihood of distrust convergence (left-hand side of Figure 1), whereas shielding triggers a process of trust divergence (righthand side of Figure 1). In particular, we identify how activity exposure triggered two specific cognitive processes among members of Machine – their attentional perspectives and their social categorization of Cooler. Among Machine members, these two mechanisms, rather than a process of institutionalization, explained trust development toward Cooler during the first six years of our case. Below, we discuss these social mechanisms and how they underlie trust divergence and distrust convergence, respectively.

Trust divergence

Trust requires a 'leap of faith', which means the trustor needs to form trust perceptions as if vulnerability was not an issue (Lewis & Weigert, 1985; Möllering, 2006). Based on our findings, we propose that that shielding can make such a 'leap of faith' possible. It allows for a shift in attentional perspective, where shielded members of a focal collective disregard the presence of transgressions and conflict in a relationship, even though other members of the same collective see the transgressions as a focal concern.

As Simon (1947) argues, what an individual organizational member focuses her attention on defines what issues that individual considers to be important. This makes attention an important construct, defined as 'the noticing, encoding, interpreting, and focusing of time and effort by organizational decision makers on both (a) issues: the available repertoire of categories for making sense of the environment and (b) answers: the available repertoire of action alternatives' (Ocasio, 1997: 189). Our analysis reveals how shielding allows different organizational members to gain different attentional perspectives (Ocasio, 2011), or different cognitive and motivational structures, implying differences in attentional awareness and focus. Describing stage B, for instance, Machine managers maintained that the conflict was a focal issue of concern. Engineers, however, perceived commercial issues as less important. 'We had it at the back of our minds, but we could laugh about it' as engineer A said.

In this new attentional perspective, engineers could develop new categories for making sense of their situation. The attentional perspective thus fostered a more cooperative categorization of the partner firm, and in this cooperative framing, positive trust perceptions toward Cooler emerged. Our insights here build on a central premise of social identity theory, which is that individuals tend to categorize themselves and others into subgroups based on social categories (Tajfel, 1978; Tajfel & Turner, 1986). We know from prior work that individuals rely on category-based stereotypes when forming initial trust perceptions of others (McKnight, Cummings, & Chervany, 1998; Williams, 2001). When a referent group is categorized as a competitor to one's own group, the referent group is less likely to be perceived as trustworthy (Fiske & Ruscher, 1993). Analogously,

McKnight et al. (1998, p. 481) propose: 'In the initial relationship, categorization processes that place the other person in a positive grouping will tend to produce high levels of trusting beliefs.'

Our analysis extends this prior work in two important ways. First, whereas these prior studies show that initial categorization influences initial trust perceptions, our findings suggests that *re*-categorization allows for a *re*-evaluation of trust perceptions. In that way, we show how changes in social categorizations can explain discontinuous processes of trust development, where an individual trustor alternates between developing positive and developing negative trust perceptions over time. Most importantly for the purpose of our analysis, however, we show that within one focal collective, different members can maintain different categorizations, and thus also maintain divergent trust perceptions.

In sum, we conclude that, in a setting of domain-specific transgressions, local shielding triggers a situation, where some member(s) of a focal collective are exposed to a transgressed activity domain, see the conflict as a focal concern, maintain a competitive categorization of the referent, and have negative trust perceptions toward a referent. At the same time, it allows shielded members to disregard an ongoing conflict; develop a cooperative categorization of the referent – and thereby also develop positive trust perceptions. Together, this represents a process of trust divergence, illustrated in the right-hand side of Figure 1.

Distrust convergence

The left-hand side of Figure 1 illustrates a process of distrust convergence. Again, we position a change in activity exposure as the main triggering condition. In our case, exposure to the transgressed, commercial activity domain triggered a shift in attentional perspective for Machine engineers: they became attentive to transgressions. In this attentional perspective, Cooler was categorized in more competitive terms and more negative trust perceptions emerged. In sum, we argue that the collective exposure to a transgressed activity domain can trigger a situation, where members converge in their attention toward the conflict-laden activity domain, share a congruent competitive categorization of the referent, leading to converging, negative trust perceptions toward the referent.

Implications and Conclusions

Our findings complement extant theory building on interorganizational trust in two specific ways. First, we identify a novel set of mechanisms that can drive trust development in interorganizational relationships. Moreover, we show how these mechanisms can produce alternative trust development patterns than what the institutional model predicts. Second, whereas prior research mainly points to the dark side of trust divergence, our findings show how trust divergence can have a constructive role in dealing with transgressions in interorganizational relationships.

A novel set of mechanisms to explain trust development in interorganizational relationships

Focusing on trust convergence, scholars (Kroeger, 2012; Schilke & Cook, 2013; Zaheer et al., 1998) have emphasized institutionalization mechanisms, such as objectification and habitualization, to explain how members of a focal collective form a collectively held trust orientation toward a partner firm. However, as acknowledged in prior conceptual work (Currall & Inkpen, 2002; Klein et al., 2000; Zaheer et al., 2002) members of one organization can also have diverging trust

perceptions toward the partner firm. Exploring the emergence of trust divergence, we identify attentional perspective and social re-categorizations as two alternative mechanisms that can influence how trust develops in interorganizational relationships.

Moreover, these different social mechanisms may produce different patterns of trust development than what the institutionalization model predicts. Relying on institutional mechanisms, extant theorizing on trust development in interorganizational relationships tends to frame it as an incremental process, where trust perceptions among organizational members gradually converge and increasingly become taken for granted (Zaheer et al., 1998). With this perspective, once a positive, spiralling process has emerged, it takes a significant transgression to interrupt a process of trust building (Schilke & Cook, 2013). Conversely, once a negative process of trust development has been initiated, this produces a self-reinforcing, negative pattern, which increases the likelihood of unsuccessful relationship termination Ariño & de la Torre, 1998; (Doz, 1996). These reinforcing cycles are further fuelled by trust spillovers across different groups. Faems et al. (2008), for instance, described how, in two sequential alliances between the same pair of firms, negative/positive goodwill trust perceptions toward the partner firm at the management level triggered rigid/ flexible contract application, which subsequently contributed to negative/positive competence trust perceptions toward the partner firm at the operational level. In contrast, our analysis illuminates a trust development process, which was not characterized by reinforcing cycles, but rather represents a discontinuous pattern where members of one organization shifted multiple times between positive and negative trust perceptions toward the partner firm. We identified attention perspectives and social categorization as the underlying mechanisms driving this discontinuous pattern of trust development.

Our analysis further implies that the salience of particular trust development mechanisms might depend on the relational contexts. Our longitudinal approach allowed us to compare trust development in an interorganizational context of transgressions and conflict (2004 to 2010) with that of a context of operational progress and absence of transgressions (2010 to 2015). In the absence of transgressions, we saw empirical manifestations of both objectification and habitualization, suggesting that trust perceptions, over time, became institutionalized. When domain-specific transgressions were present, however, shifts in attentional perspectives and social referent re-categorizations were more conducive for explaining both trust divergence and distrust convergence in our case.

The constructive role of trust divergence in interorganizational relationships

Scholars who acknowledge the possibility of trust divergence in interorganizational relationships have either not addressed its implications (Currall & Inkpen, 2002; Zaheer et al., 2002) or have highlighted potential negative implications (Klein et al., 2000). Klein et al. (2000, p. 295) for instance, expect divergence to yield poor decision implementation, inadequate coordination, individual dissatisfaction and 'ultimately an ineffective inter-organizational alliance'. This latter argument is in line with existing empirical findings on the negative performance implications of trust divergence in teams (de Jong & Dirks, 2012).

Our findings, however, illustrate that trust divergence can also have positive implications. First, we posit that trust divergence might contribute to a relational context that is sufficient to continue the relationship despite rampant conflict at certain levels of the interorganizational relationship. This occurred in stage C of our case. At this point, engineers' recommendation of Cooler, which was partly based on their positive trust perceptions, enabled the two firms to extend their relationship to the Beta Project despite senior managers testifying to a lack of trust in Cooler. This is

important, since trust between senior decision makers is often seen as a prerequisite for relationship continuation (Dyer & Singh, 1998).

Second, we posit that trust divergence can serve as a catalyst for the restoration of positive trust and eventually lead to a full-blown repair of a transgressed interorganizational relationship. This occurred in stage F of our case. During this stage, the repair of positive trust perceptions among Machine engineers helped to initiate a context of relational calm at the managerial level. As one engineer was subsequently promoted to a managerial position, this triggered a process of gradual repair of trust perceptions among Machine managers. The situation of 'local' trust repair thus functioned as an intermediary step between a shared perception of distrust in the partner organization and a shared perception of trust in the partner organization.

A pivotal condition for this 'local' repair of trust was the implementation of a more detailed contract in stage E of our case. Extant trust repair literature (for recent reviews, see Bachmann, Gillespie, & Priem, 2015; Dirks, Lewicki, & Zaheer, 2009) has already stressed the importance of structural remedies in situations where transgressions have occurred. In particular, structural interventions have been identified as important tools to regulate distrust *or* promote the demonstration of trustworthiness (Gillespie & Dietz, 2009). We extend this work by showing how structural interventions can simultaneously regulate distrust *and* promote trust at different levels. In particular, we observed how, in stage E, one single contractual intervention simultaneously substituted for the lack of trust at the management level, while also creating conditions for trust development at the operational level. The implementation of a more detailed contract (i.e. stipulating more detailed rules on price and cost calculations) was seen by managers as a distrust regulator. For engineers, however, the contract was a shielding mechanism and, as such, a precondition for the emergence of positive trust perceptions during this stage.

This latter insight has implications for the ongoing debate on the interplay between contracts and trust in interorganizational relationships (for recent reviews, see Brattström & Bachmann, 2018; Schilke & Lumineau, 2017). Several scholars (e.g. Brattström & Richtnér, 2014; Faems et al., 2008) have pointed to the need to move away from conceiving the relationship between trust and contracts as simply substitutional or complementary. Our analysis supports this view by showing how one single contractual intervention can simultaneously substitute for the lack of trust at one level – managerial – while also creating conditions for trust development at another level – operational. In this way, our findings reinforce the need for multi-level research on the interaction between contracts and trust, examining to what extent and under which conditions particular formal governance mechanisms can have different trust implications for actors at different levels.

Limitations and boundary conditions

In our case, transgressions were framed as integrity violations. Machine engineers emphasize that they did not develop negative perceptions about Cooler's ability. Moreover, managers saw the successful operational results from the Alpha and Beta projects as an indication of Cooler's ability. We thus acknowledge the presence of positive trust perceptions in the ability domain as an important boundary condition for our analysis. The extent to which our findings are generalizable to a setting where the ability dimension of a referent is (also) subject to transgressions remains for future research to show. Analysing our data, we also considered whether the existence of positive ability perceptions could serve as an alternative explanation for the emergence of positive integrity perceptions in stages A, C and E. However, we found that this would only be an incomplete explanation for our findings. First, our data do not suggest that spillover of trust from the competence domain to the integrity domain occurred. Instead, the ignoring of conflict and cooperative categorizations were

more salient themes in our data. Moreover, because Machine engineers' perceptions of Cooler's competence remained fairly intact across the different stages, it does not seem to be the most relevant explanation for why integrity perceptions changed across stages.

The focus of our theory building is trust perceptions toward Cooler as an organization. As emphasized in the Findings section, Machine engineers did not express negative trust perceptions toward Cooler engineers as a group. We therefore cannot tell whether our findings are generalizable in the absence of such individual-to-group trust perceptions. As an alternative explanation for our findings, we considered whether it was the shielding of Machine engineers from interaction with Cooler managers that explained the emergence of positive trust perceptions, rather than the shielding from the commercial activity domain. This, however, is not a salient theme in our data. For instance, we do not have strong data to suggest that Machine engineers had negative trust perceptions toward Cooler managers. Their negative trust perceptions were predominantly oriented toward Cooler as an organizational entity.

Furthermore, the starting point of our case was a situation where the commercial and technological activity domains were clearly separated from each other, being executed by members that were geographically dispersed. In this way, the Machine engineers were shielded from the initial transgressions by design and only became exposed to the domain-specific transgressions by means of active interventions such as involvement in crisis meetings. We expect that, in a situation where commercial and technological activities are more interdependent or where managers and engineers are co-located (Brattström & Richtnér, 2014), exposure to domain-specific transgressions might happen more automatically and shielding from these transgressions might be more challenging.

The focus of our analysis is on how members within a focal firm (Machine) form trust perceptions toward a partner firm (Cooler). Beyond this focus, our data about how members of Cooler perceived the trustworthiness of Machine are limited. Our analysis of trust perceptions among Machine members was only possible because of this organization's continued and intensive engagement with our research group over a five-year time period, and Cooler was not willing to grant us the same access. Based on the interviews we made with Cooler, as well as the accounts of Machine members, Cooler members' trust perceptions seemed to have been symmetric those of Machine members. We hope that future research will explore implications of trust divergence in the partner firm in addition and in relation to trust asymmetry between firms (Graebner, 2009).

Acknowledgements

The authors gratefully acknowledge Martin Carlsson-Wall for his important contributions to early versions of this manuscript.

Funding

The first author gratefully acknowledges funding from VINNOVA and from the Jan Wallander and Tom Hedelius Foundation.

Notes

- Trust divergence should not be confused with trust asymmetry, i.e. when partnering firms have differing views of each other's trustworthiness. See Graebner (2009) for an empirical study focusing on trust asymmetry.
- The seven interviews from September 2010 and one interview from 2011 were not audio-recorded.
 However, the interviewer made extensive notes on computer during these interviews. Furthermore, we conducted audio-recorded follow-up interviews with all Machine informants at later stages of our data

collection; we engaged in data feedback and sent preliminary versions of our paper for verification by key Machine informants who had not been audio-recorded; we sent transcripts of our interview notes to one Cooler informant upon request; and all Cooler informants had the opportunity to read a preliminary version of our paper.

- 3. As evident from our case analysis, engineers never expressed negative perceptions about Cooler's ability. We see the presence of positive competence perceptions as an important boundary condition to our analysis; see Limitations. As common in the context of interorganizational relationships (Schoorman, Mayer, & Davis, 2007), benevolence perception was not a salient theme in our data.
- 4. As evident from our analysis below, engineers never expressed negative trust perceptions toward Cooler engineers. We see this as another important boundary condition for our analysis; see Limitations.
- 5. One exception was manager B (involved in stages A and B). Whereas all other managers emphasized negative trust perceptions toward Cooler during this time, his view was that 'there was a lot of friction but also a lot of trust' (manager B).

ORCID iD

Magnus Mähring https://orcid.org/0000-0002-9557-7974

References

- Ariño, A., & de la Torre, J. (1998). Learning from failure: Towards an evolutionary model of collaborative ventures. *Organization Science*, 9, 306–325.
- Bachmann, R., Gillespie, N., & Priem, R. (2015). Repairing trust in organizations and institutions: Toward a conceptual framework. *Organization Studies*, *36*, 1123–1142.
- Brattström, A., & Bachmann, R. (2018). Cooperation and coordination: The role of trust in inter-organizational relationships. In A.-M. I. N. Rosalind H. Searle & Sim B. Sitkin (Eds.), *The Routledge companion to trust* (pp. 129–142). London: Routledge.
- Brattström, A., & Richtnér, A. (2014). Good cop bad cop: Trust, control and the lure of integration. *Journal of Product Innovation Management*, 31, 584–598.
- Costa, A. C., Fulmer, C. A., & Anderson, N. R. (2018). Trust in work teams: An integrative review, multilevel model, and future directions. *Journal of Organizational Behavior*, 39, 169–184.
- Currall, S. C., & Inkpen, A. C. (2002). A multilevel approach to trust in joint ventures. *Journal of International Business Studies*, *33*, 479–495.
- De Jong, B. A., & Dirks, K. T. (2012). Beyond shared perceptions of trust and monitoring in teams: Implications of asymmetry and dissensus. *Journal of Applied Psychology*, 97, 391–406.
- Dirks, K. T., Lewicki, R. J., & Zaheer, A. (2009). Repairing relationships within and between organizations: Building a conceptual foundation. *Academy of Management Review*, *34*, 68–84.
- Doz, Y. L. (1996). The evolution of cooperation in strategic alliances: Initial conditions or learning processes? Strategic Management Journal, 17, 55–84.
- Dyer, J. H., & Singh, H. (1998). The relational view: cooperative strategy and sources of interorganizational competitive advantage. *Academy of Management Review*, 23, 660–679.
- Faems, D., Janssens, M., Madhok, A., & Van Looy, B. (2008). Toward an integrative perspective on alliance governance: Connecting contract design, trust dynamics, and contract application. *Academy of Management Journal*, 51, 1053–1078.
- Fiske, S. T., & Ruscher, J. B. (1993). Negative interdependence and prejudice: Whence the affect? In D. M. Mackie & D. L. Hamilton (Eds.), Affect, cognition, and stereotyping: Interactive processes in group perception (pp. 239–269). New York: Academic Press.
- Fulmer, C. A., & Ostroff, C. (2016). Convergence and emergence in organizations: an integrative framework and review. *Journal of Organizational Behavior*, 37(S1), S122–S145.
- Gillespie, N., & Dietz, G. (2009). Trust repair after an organization-level failure. *Academy of Management Review*, 34, 127–145.
- Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2013). Seeking qualitative rigor in inductive research: Notes on the Gioia methodology. *Organizational Research Methods*, 16, 15–31.

- Glaser, B., & Strauss, A. (1967). The discovery of grounded theory: Strategies for qualitative research. Chicago: Aldine.
- Glick, W. H., Huber, G. P., Miller, C. C., Doty, D. H., & Sutcliffe, K. M. (1990). Studying changes in organizational design and effectiveness: Retrospective event histories and periodic assessments. *Organization Science*, 1, 293–312.
- Golden, B. R. (1992). The past is the past—or is it? The use of retrospective accounts as indicators of past strategy. *Academy of Management Journal*, *35*, 848–860.
- Graebner, M. (2009). Caveat venditor: Trust asymmetries in acquisitions of entrepreneurial firms. *Academy of Management Journal*, 53, 435–472.
- Klein, K. J., Palmer, S. L., & Conn, A. B. (2000). Interorganizational relationships. A multilevel perspective. In K. Klein & S. Kozlowski (Eds.), *Multilevel theory, research, and methods in organizations*, 1st edition (pp. 267–307). San Francisco: Jossey-Bass.
- Kroeger, F. (2012). Trusting organizations: The institutionalization of trust in interorganizational relationships. Organization, 19, 743–763.
- Langley, C., Smallman, C., Tsoukas, H., van de & Ven, A. H. (2013). Process studies of change in organization and management: Unveiling temporality, activity, and flow. *Academy of Management Journal*, 56, 1–13.
- Lewicki, R. J., McAllister, D. J., & Bies, R. J. (1998). Trust and distrust: New relationships and realities. *Academy of Management Review*, 23, 438–458.
- Lewis, J. D., & Weigert, A. (1985). Trust as a social reality. Social Forces, 63, 967–985.
- Lumineau, F., & Oliveira, N. (2018). A pluralistic perspective to overcome major blind spots in research on interorganizational relationships. *Academy of Management Annals*, 12(1), 440–465.
- Mason, C. M. (2006). Exploring the processes underlying within-group homogeneity. *Small Group Research*, 37, 233–270.
- Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integration model of organizational trust. *Academy of Management Review*, 20, 709–734.
- McKnight, D. H., Cummings, L. L., & Chervany, N. L. (1998). Initial trust formation in new organizational relationships. *Academy of Management Review*, 23, 473–490.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis*, 2nd edition. London: SAGE Publications.
- Miller, C. C., Cardinal, L. B., & Glick, W. H. (1997). Retrospective reports in organizational research: A reexamination of recent evidence. *Academy of Management Journal*, 40, 189–204.
- Möllering, G. (2006). Trust: Reason, routine, reflexivity. Bingley, UK: Emerald Group Publishing Ltd.
- Ocasio, W. (1997). Towards an attention-based view of the firm. *Psychology*, 1, 403–404.
- Ocasio, W. (2011). Attention to attention. Organization Science, 22, 1286–1296.
- Poppo, L., Zhou, K. Z., & Li, J. J. (2016). When can you trust 'trust'? Calculative trust, relational trust, and supplier performance. *Strategic Management Journal*, *37*, 724–741.
- Ring, P. S., & van de Ven, A. H. (1994). Developmental processes of cooperative interorganizational relationships *Academy of Management Review*, 19, 90–118.
- Rousseau, D. M., Sitkin, S. B., Burt, R. S., & Camerer, C. (1998). Introduction to Special Topic Forum: Not so different after all: A cross-discipline view of trust. *Academy of Management Review*, 23, 393–404.
- Schilke, O., & Cook, K. S. (2013). A cross-level process theory of trust development in interorganizational relationships. Strategic Organization, 11, 281–303.
- Schilke, O., & Lumineau, F. (2017). The double-edged effect of contracts on alliance performance. *Journal of Management*, first published 15 July 2016. doi org/10.1177%2F0149206316655872
- Schoorman, D., Mayer, R., & Davis, J. (2007). An integrative model of organizational trust: Past, present and future. *Academy of Management Review*, 32, 344–354.
- Simon, H. (1947). Administrative behavior. New York: Macmillan.
- Stevens, M., MacDuffie, J. P., & Helper, S. (2015). Reorienting and recalibrating inter-organizational relationships: Strategies for achieving optimal trust. *Organization Studies*, *36*, 1237–1264.
- Strauss, A. L., & Corbin, J. M. (1998). Basics of qualitative research: Techniques and procedures for developing grounded theory, 2nd edition. Thousand Oaks, CA: SAGE Publications.
- Swärd, A., & Lunnan, R. (2011). Does it matter who trusts? A multilevel approach to trust in an alliance. In T. K. Das (Ed.), *Behavioral perspectives on strategic alliances* (pp. 109–133). New York: Information Age Publishing.

Tajfel, H. E. (1978). Differentiation between social groups: Studies in the social psychology of intergroup relations. New York: Academic Press.

- Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behavior. In S. Worchel & W. Austin (Eds.), *Psychology of intergroup relations* (pp. 7–24). Chicago: Nelson-Hall.
- Tolbert, P., & Zucker, L. (1996). The institutionalization of institutional theory. In S. R. Clegg, C. Hardy, & W. Nord (Eds.), *Handbook of organization studies* (pp. 175–190). London: SAGE Publications.
- Williams, M. (2001). In whom we trust: Group membership as an affective context for trust development. *Academy of Management Review*, 26, 377–396.
- Zaheer, A., Lofstrom, S., & George, V. P. (2002). Interpersonal and interorganizational trust in alliances. In F. J. Contractor & P. Lorange (Eds.), *Cooperative strategies and alliances*. London: Pergamon.
- Zaheer, A., McEvily, B., & Perrone, V. (1998). Does trust matter? Exploring the effects of interorganizational and interpersonal trust on performance. *Organization Science*, *9*, 141–159.
- Zucker, L. (1977). The role of institutionalization in cultural persistence. American Sociological Review, 42, 726–743.

Author biographies

Anna Brattström is associate senior lecturer at Lund University, School of Economics and Management, Sten K. Johnson Centre for Entrepreneurship. Her current research focuses on the dynamics of collaboration in the setting of R&D relationships and innovative new venture teams and has been published in journals including Research Policy, Entrepreneurship Theory and Practice, Journal of Product Innovation Management and MIT Sloan Management Review.

Dries Faems is the Chaired Professor of Entrepreneurship, Innovation and Technological Transition at WHU. He has published papers on the topic of collaboration for innovation in journals including *Academy of Management Journal of Management, Strategic Management Journal* and *Research Policy*. His current research focuses on the governance of collaborative innovation trajectories and the performance implications of open innovation strategies.

Magnus Mähring is the Erling Persson Professor of Entrepreneurship and Digital Innovation at the Stockholm School of Economics. His research addresses organizational transformation processes, particularly involving digital technologies. He has published in journals including *California Management Review, Decision Sciences, Human Relations, Information Systems Research, Journal of the Association for Information Systems* and *MIS Quarterly*. Magnus currently serves as Senior Editor for *JAIS* and is currently appointed to the Swedish Government's Expert Committee for Digital Investments.