Mechanisms and Dynamics in the Interplay of Trust and Distrust: Insights from project-based collaboration

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Abstract
Trust and distrust are two distinct organizing principles that play a critical role in interorganizational projects where highly interdependent organizations collaborate to build tailor-made and technologically complex solutions. Whereas an emerging body of research has debated the conceptual distinction between trust and distrust, this paper emphasizes the processual nature of trusting and distrusting and the interplay between them. Drawing upon insights from project-based collaboration in a complex products and systems industry, we explore the distinct cognitive and behavioral mechanisms through which trust and distrust work and orient firms towards optimism and watchfulness in the interaction. Our findings show that trust and distrust can act both as substitutes and complements through three interconnected dynamics—undermining, enabling, and compensating. These dynamics develop and recursively interrelate through interfirm interactions within single projects and in the broader network. We conclude by presenting our contributions to interorganizational trust literature and by proposing that the interplay of trust and distrust can have both positive and negative effects on the pursuit of project-based relationships.

Keywords
distrust, interplay, organizing principle, project-based collaboration, trust

Introduction
In this article, we explore the workings of, and interplay between, trust and distrust as two distinct organizing principles that guide how firms interpret information, select appropriate behaviors, and coordinate actions in interorganizational interactions (see McEvily, Perrone, & Zaheer, 2003). Management and organization studies have widely acknowledged the crucial role of trust in fruitful collaborations (Bachmann, Gillespie, & Priem, 2015; Brattström, Faems, & Mähring, 2019; Mayer, Davis, & Schoorman, 1995; Pratt, Lepisto, & Dane, 2019). However, despite its benefits,

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trust can also have undesirable and even detrimental consequences for organizations (Gargiulo & Ertug, 2006; Patzelt & Shepherd, 2008; Skinner, Dietz, & Weibel, 2014; Stevens, MacDuffie, & Helper, 2015). We suggest that distrust plays a critical role in potentially diminishing undesirable consequences of trust by highlighting negative potentialities. This role corresponds with an emerging body of literature that views distrust as distinct from trust and as beneficial in organizing uncertain interactions (Guo, Lumineau, & Lewicki, 2017; Lewicki, McAllister, & Bies, 1998; Luhmann, 1979). Yet, little is known about how trust and distrust interrelate and influence each other.

The roles and interplay of trust and distrust are especially critical in contexts where highly interdependent firms cooperate in continuously changing constellations to produce so-called complex products and systems (CoPS). CoPS projects require the integration of interdependent firms’ resources, knowledge, and interconnected components to produce highly customized and technologically complex products within the projects’ time limits (Hobday, Rush, & Tidd, 2000). Motivated by trust, firms can render themselves vulnerable to one another and share strategically important resources in the project (Zaheer, McEvily, & Perrone, 1998). CoPS projects not only emphasize the importance of trust, but also distrust, as these are embedded in a broader latent network of more or less enduring interpersonal and interorganizational relationships (Sydow & Staber, 2002). To exemplify, for robot-based automation projects, a constellation of several partners including robotics providers, system integrators, and highly specialized subcontractors are required to collaborate. However, partners in one project can also compete for other parallel or future projects and the interactions among them might entail consequences, such as reputational consequences or misappropriation of knowledge developed in a joint project. For example, Yaskawa serves as a robotics provider in many projects, but also competes with Swedish system integrators for the integration of solutions related to welding. This implies that coopetition, collaboration with competing firms harboring partially divergent goals (Bengtsson & Kock, 2000), is natural. Thus, interdependencies within and across projects highlight the necessity of both actively trusting and distrusting a partner.

Previous research has suggested that trust and distrust are interrelated and influence each other (Guo et al., 2017). Given the challenges discussed above, the interplay between trust and distrust is particularly relevant in project-based collaboration in a CoPS industry. Trust and distrust are interactive social processes (Möllering, 2013) supporting confident positive and negative expectations, respectively, regarding another’s conduct (Lewicki et al., 1998, p. 439). However, existing research has mainly focused on whether and how they are distinct (Lewicki et al., 1998; Saunders, Dietz, & Thornhill, 2014), and not on how they interrelate and affect each other. Therefore, this paper aims to increase the understanding of the mechanisms through which trust and distrust work as distinct organizing principles and the dynamics of the interplay between them in the context of project-based collaboration in a CoPS industry.

To address this, we acknowledge their processual nature that develops based on social interactions (Gustafsson, Gillespie, Searle, & Dietz, 2021; Nikolova, Möllering, & Reihlen, 2015) and move beyond approaching trust and distrust as relatively stable attitudes or mental states. We conducted an exploratory case study on the interplay between trust and distrust in project-based collaborations in the Swedish robotics and automation industry, where many challenges of interorganizational collaboration in CoPS projects are apparent. Our analysis reveals that trust and distrust operate through distinct cognitive and behavioral mechanisms and each orients firms differently. Trust orients firms to be optimistic and distrust to be watchful towards positive and negative potentialities of their interactions with each other and their social context. Furthermore, our findings show that trust and distrust can act both as substitutes and as complements, influencing project-based relationships both positively and negatively. We identified three interrelated dynamics in the interplay: undermining, enabling, and compensating. While our paper predominantly contributes to
the interorganizational trust literature, it also contributes to project-based organizing by emphasizing the importance of reflexively managing trust and distrust to better address the inherent temporary-permanent dilemma.

**Theoretical Background**

Trust and distrust have traditionally been assigned to opposite ends of a single continuum, but a debate has questioned whether they are two sides of the same proverbial coin (Schoorman, Mayer, & Davis, 2007) or two distinct phenomena that can occur simultaneously (Lewicki et al., 1998). An emerging stream of literature argues that distrust is distinct from trust (Bijlsma-Frankema, Sitkin, & Weibel, 2015; Dimoka, 2010; Guo et al., 2017; Lewicki et al., 1998; Lumineau, 2017); while trust relates to hope, distrust relates to fear, encouraging firms to “be on guard because appearances might be misleading” (Schul, Mayo, & Burnstein, 2008, p. 1296). Distrust provides an additional logic for interactions encouraging firms to consider risks related to the potential for undesired partner behavior (Luhmann, 1979). Studies have also shown that distrust does not necessarily mean a total breach of trust since trust and distrust involve distinct dimensions (Dimoka, 2010) and entail different sets of expectations (Saunders et al., 2014). This implies that while firms can trust the partner in some respects, they can simultaneously distrust them in others. Initial empirical research has indicated that trust and distrust can coexist (Raza-Ullah, 2021; Raza-Ullah & Kostis, 2019), and interact, as distrust can impede trust’s negative influence on contract specificity (Connelly, Miller, & Devers, 2012). In line with this research, we argue that trust and distrust closely interrelate, yet play distinct roles.

The interplay between trust and distrust is particularly pronounced under demanding interorganizational collaboration, such as in project-based collaboration in CoPS. The specific characteristics of this context make both interacting within specific projects and coordinating interactions in present and future projects challenging, and requires a constructive use of organizing principles such as trust (McEvily et al., 2003) and distrust. Therefore, in the following, we use CoPS industries as an example to discuss how these challenges make trust and distrust salient and their interplay critical.

CoPS’s nature and industry features make projects a natural form of organizing as projects enable firms to integrate specialized resources into tailor-made and resource-intensive products and systems (Davies & Brady, 2000; Hobday, 1998). However, the integration of highly intertwined components beyond single firms’ possession is challenging, because it leads to high interdependence among firms. This makes an organization’s success highly contingent on partners fulfilling their commitments (Adner & Feiler, 2019). Firms’ roles and responsibilities in such projects overlap, and mutual adjustments are continuously needed as changing work circumstances, such as emergent customer requirements and partners’ requests, inevitably arise (Hobday et al., 2000; Sydow & Staber, 2002).

The challenges associated with high degrees of interdependence are exacerbated in project-based industries. Interdependent organizations collaborate in many projects, distributed across organizations and overlapping in time (Dietrich, Eskerod, Dalcher, & Sandhawalia, 2010). Additionally, firms are not always able to freely choose with whom to cooperate, since more powerful firms or strong end-customers can play an orchestrating role (Hobday, 1998). Although each CoPS project is unique and focused on specific end-customers’ needs, firms often specialize in delivering specific value propositions or system components (Davies & Brady, 2000), which increases the complementarity among firms and facilitates the creation of latent ties. Due to the presence of latent ties—relationships that become activated when a new project demands it (Starkey, Barnatt, & Tempest, 2000, p. 299)—interorganizational projects are temporarily...
embedded in a broader network. Firms may not only have a shared history, but can also expect to work together in future projects (Ligthart, Oerlemans, & Noorderhaven, 2016). A project’s needs must, therefore, be considered in relation to past experiences, parallel projects, and the possibility to collaborate in future undertakings. For instance, smooth collaboration and success in prior projects or a partner’s reputation in the broader network can give rise to trust, which can be critical in dealing with uncertainty about the partner behavior in current and future projects. However, negative past experiences with a partner or the possibility that the partner misuses the value developed in a joint project to cultivate competing value propositions for other parallel projects or for projects in the future, can entail lower positive expectations and even induce distrust. Distrust and its associated caution are thus warranted since consequences of actions taken in the broader network are hard to foresee.

Accordingly, the interdependence in a CoPS setting means that actors depend on each other to succeed with a project in the short run, while their success in the long run is dependent on the behavior of others within the broader network. On the one hand, interdependence could be seen as reducing the need for trust, as it encourages organizations to partner up with one another in a project to gain access to capabilities and resources possessed by others even in the absence of trust (Gulati & Gargiulo, 1999). On the other hand, the interdependencies among firms across projects, entailing competition and distrust due to the risk of partner opportunism, create a need for active trust to enable cooperation and maintain the willingness to render themselves vulnerable.

Thus, trust is important because it is associated with firms’ willingness to become vulnerable to another party based on positive expectations regarding partners’ intentions and behaviors (Mayer et al., 1995; Rousseau, Sitkin, Burt, & Camerer, 1998). In line with this, Dirks and Ferrin (2001) argue that trust helps firms interpret their partners’ past behaviors, assess their future behaviors, and behave accordingly. Trust encapsulates perceptual, intentional, and behavioral elements (McKnight & Chervany, 2001; Skinner et al., 2014), providing a logic that both orients thinking and enables or constrains acting (McEvily et al., 2003). Trust offers several benefits as an organizing principle, including facilitating risk acceptance, transparency, smooth knowledge-sharing, joint problem-solving, and reducing negotiation and monitoring costs (Möllering, 2001; Zaheer et al., 1998).

Yet, insufficient or excessive trust can be detrimental. Insufficient trust can lead to underestimating a partner’s trustworthiness, diminishing the willingness to cooperate with that partner (Stevens et al., 2015). Conversely, excessive trust can lead to numerous negative consequences, such as strategic inflexibility, overconfidence, limited motivation to negotiate with and monitor the partner, persistence of non-productive relationships, and an inability to realize partner opportunism (Gargiulo & Ertug, 2006; Jeffries & Reed, 2000; Patzelt & Shepherd, 2008; Skinner et al., 2014). As McEvily et al. (2003, p. 99) emphasize, trust can make “actors insufficiently vigilant and excessively vulnerable.” Highlighting the potential negative side of trust, distrust has been suggested as a means to deal with uncertainty (Guo et al., 2017; Kostis & Näsholm, 2019). While distrust has been predominantly associated with negative consequences for interorganizational collaboration, such as rigidity, excessive skepticism, and increased monitoring costs, it also has a positive side associated with cultivating healthy suspicion, constructive skepticism, and vigilance (see Lumineau, 2017). This can be critical in project-based collaboration due to the consequences of interdependencies among actors across projects.

Accordingly, as both trust and distrust are needed, the interplay between them becomes important, yet the literature on trust and distrust faces two important limitations in this regard. First, if trust and distrust are distinct organizing principles, then the literature reflects an insufficient understanding of the mechanisms through which each of these works. Second, empirical research on how they interrelate and influence each other is scarce. The extant research has discussed the interplay of other organizing principles (e.g., relational and contractual governance, or trust and...
control) in two ways: how they influence each other and how they jointly influence a particular outcome (see Cao & Lumineau, 2015, for a review). The bulk of these studies have shown that two organizing principles can function as substitutes, i.e., favoring one decreases the benefits of the other and vice versa, and/or as complements, i.e., favoring one increases the benefits of the other and vice versa (Das & Teng, 2001; Edelenbos & Eshuis, 2012; Huber, Fischer, Dibbern, & Hirschheim, 2013; Möllering, 2005; Poppo & Zenger, 2002). Building on this body of research, we explore the mechanisms through which trust and distrust work as organizing principles and the dynamics underlying their interplay.

**Methods**

Given the exploratory nature of our research, we conducted an in-depth case study (Eisenhardt, 1989), which facilitates context-sensitive insights (Flyvbjerg, 2006) and is a promising means to fulfill our theory-building purposes (see Eisenhardt & Graebner, 2007) regarding the underexplored mechanisms and interplay between trust and distrust.

**Research setting: The robotics and automation industry**

Our research was conducted in the Swedish robotics and automation industry, where many of the challenges of project-based collaboration in a CoPS industry outlined above are apparent, making the interplay of trust and distrust particularly important. Here, firms with complementary expertise collaborate in projects to jointly create customized robot-based automation solutions. Based on the role that firms adopt in a project, firms can be classified into robotics providers, including hardware suppliers, system integrators, responsible for tailoring and integrating different subsystems in the solution, and highly specialized subcontractors, who possess unique competences and knowledge about different processes or technologies. Fourth, industrial customers are the end-users, who often play an orchestrating role in choosing which firms should deliver different components.

Depending on the intended purpose of the robot, different types of hardware devices and software engineering processes are needed, each requiring different knowledge areas and expertise, and therefore co-specialization and temporary alignment of actors are necessary. These interdependencies create uncertainty related, for example, to responsibilities for problems with delivered solutions. In addition, power struggles can occur, since proximity to end-customers, who can favor certain firms, is critical. Interdependencies also stretch beyond a single project as firms are embedded in a broader network, which influences their project-based collaborations.

**Data collection**

The research questions addressed in this paper were developed as part of a larger research project focused on coopetition, uncertainty, and trust in interorganizational relationships. Following Järvi, Almanopoulo, and Ritala (2018), we initially left our research design intentionally incomplete to permit ongoing modifications during the research process, allowing our interest in how trust and distrust work as organizing principles and their interplay to emerge “iteratively and progressively” (Järvi et al., 2018, p. 1526). Consistent with this, our interview guide included themes rather than concrete questions to allow for potential surprises during data collection, and was modified during the data collection process to better align with changes in our research question, which is a typical approach in inductive qualitative studies (Pratt et al., 2019).

Data collection took place from November 2017 to November 2019 and our main data source was 49 semi-structured interviews at 23 organizations (Table 1). These lasted between 31 and 101
minutes, and the majority were conducted by Skype and telephone. All interviews were recorded and transcribed verbatim and followed up with emails or phone calls in case clarifications were needed.

Our initial interview guide included themes regarding the nature and management of projects and dyadic relationships embedded in the broader network. A key theme was interviewees’ experiences of trust and distrust and the corresponding roles in their interactions. As the study progressed, we focused more and more on issues of trust and distrust and their interplay. Questions about trust (and distrust) were posed indirectly by asking the respondents to describe interactions in their projects related to trust and distrust. Additionally, when trust or distrust was mentioned, interviewees were asked what they meant by it, and what trust and distrust and their assessment of their partners’ future behavior implied for their interactions. During all the interviews, interviewees were encouraged to provide examples, and if possible, mention projects.

We decided to interview individuals holding diverse positions at firms with different roles, because we wanted various perspectives and experiences of how trust and distrust work and how

| Firm               | Main Role | Nr of Interviews | Interviewee’s Position                                                                 |
|--------------------|-----------|------------------|---------------------------------------------------------------------------------------|
| KUKA Nordic        | RP        | 7                | CEO, Sales Manager Nordic, Area Sales Manager, Key Account Manager                     |
| YASKAWA Nordic     | RP        | 3                | CEO, Sales and Marketing Manager, Sales Manager                                        |
| FANUC Nordic       | RP        | 1                | Sales Manager                                                                         |
| Opiflex            | Provider of a flexible robot | 2 | CEO                                                                                  |
| Elektroautomatik   | SI        | 1                | CEO                                                                                  |
| AH Automation      | SI        | 7                | Project and Sales Leader, Project Managers, Technical Development and Machine Safety Specialists |
| Evomatic           | SI        | 2                | CEO                                                                                  |
| APR Automation     | SI        | 1                | CEO                                                                                  |
| Teamster           | SI        | 1                | Sales Manager                                                                         |
| Status Automation  | SI        | 1                | CEO                                                                                  |
| Vingebro Automation| SI        | 1                | CEO                                                                                  |
| Karlskoga Automation| SI       | 1                | CEO                                                                                  |
| RobNor             | SI        | 4                | CEO, Project Manager, Robot Programmer                                               |
| Permanova          | SI        | 2                | CEO                                                                                  |
| Stejrnberg Automation| SI      | 3                | Sales Manager                                                                         |
| Virtual Manufacturing| SSC   | 2                | Business Unit Manager                                                                |
| Siemens            | SI        | 2                | Simulation Manager, Product Manager for Digital Enterprise                             |
| Visual Components  | SI        | 1                | Sales Manager                                                                         |
| Indexator          | IC        | 2                | CEO                                                                                  |
| Ålö                | IC        | 2                | CEO, Director Manufacturing Engineer                                                  |
| AGCO               | IC        | 1                | Robot Programmer                                                                     |
| SWIRA              | Industry Organization | 2 | Heads of SWIRA (already counted in the total number of interviews as one is the Sales Manager Nordic at KUKA Nordic and the other is the Sales and Marketing Manager at Opiflex) |
| Automation Region  | Industry Organization | 2 | Project Managers                                                                     |
they interplay. We started by interviewing individuals from system integrators, who frequently need to interact with all project participants to ensure subsystems’ smooth integration into one system. Additional interviewees were contacted because either these individuals or their firms had been mentioned in previous interviews or identified in another firm’s system partner network. In addition to interviews, our understanding of prior relationships and upcoming projects that could influence collaboration in projects was also informed by observations at an industry fair on how organizations interacted (e.g., in panel discussions, in firms’ booths, which robot brands were exhibited), and by archival data (from firms’ websites, videos and LinkedIn posts presenting firms’ system partner networks or project descriptions, industry organizations’ reports, and industry-specific journals).

Data analysis

Our data analysis took place in two phases. The analysis procedure was iterative involving an interplay between our ongoing theorizing, the extant literature, and our data collection. Thus, the constructs that emerged were the outcomes of a process of consulting our developing “interpretative repertoire” (Alvesson & Kärreman, 2007, p. 1268) while analysing our collected empirical material. We coded and analysed the empirical material building upon principles of thematic content analysis (Gioia, Corley, & Hamilton, 2013; Miles & Huberman, 2003).

In the first phase of our analysis, we focused on trust and distrust as organizing principles. This analysis started with open coding where we created a large number of descriptive codes using language similar to our interviewees. We coded when interviewees touched upon positive or negative expectations of a partner’s behavior and when they described how they responded and acted according to expressed concerns or confidence. Secondly, we identified links between our first-order categories and clustered them into more abstract, second-order themes that reflected our identified mechanisms. In developing these themes, insights from previous research on the workings of trust were used (Latusek & Vlaar, 2018; McEvily et al., 2003; Möllering, 2001). Our labels for the mechanisms were inspired by theoretical concepts corresponding to our empirical understanding (e.g., Mayer et al., 1995). While our study could find partial support from previous trust research, confirming and extending this research, there was little research on distrust to draw on (e.g., Guo et al., 2017; Lumineau, 2017). Open to trust and distrust operating as opposites, we initially looked for corresponding distrust processes when we identified trust processes. However, our empirics supported fundamentally distinct mechanisms of trust and distrust that only somewhat corresponded. Next, we clustered the identified mechanisms into broader types, aggregate dimensions, by considering that trust and distrust involve both cognitive and behavioral facets (Guo et al., 2017). This is illustrated in Figure 1.

For our second phase of data analysis, we returned to our interview transcripts to search for specific projects described by the interviewees, and identified instances where the respondents discussed their interaction with specific partners in these projects. We identified several projects, and based on the richness of the data, six projects were selected for further analysis. As the analysis risks becoming fragmented when using coding methods, we turned to narrative approaches where a more contextual understanding can be reached (Riessman, 2008) to capture the interplay between trust and distrust. Drawing on each interview in which a project had been discussed, we constructed chronological narratives of the interactions in these projects. Inspired by other studies aiming to understand trusting processes (e.g., Pratt et al., 2019), attention was paid to the influence of contextual conditions on the interplay.

We coded instances in our narratives where one of the trusting or distrusting mechanisms (either behavioral or cognitive) influenced another trusting or distrusting mechanism and this is how the
| **First-order categories**                        | **Second-order themes**                | **Aggregate dimensions**            |
|------------------------------------------------|----------------------------------------|-------------------------------------|
| • The partner will adhere to unspoken rules    | Believing                              | Cognitive Mechanisms of Trust       |
| • The partner holds benevolent intentions      |                                        |                                     |
| • The partner will act competently             |                                        |                                     |
| • Neglecting                                   | Framing positively                     |                                     |
| • Accepting                                    |                                        |                                     |
| • Excusing                                     |                                        |                                     |
| • Having a sense of belonging                  | Recognizing mutuality                  |                                     |
| • Perceiving mutual interest                   |                                        |                                     |
| • Caring about the partners’ needs             |                                        |                                     |
| • Being transparent about competitive moves    | Disclosing                             |                                     |
| • Sharing to enhance cooperation               |                                        |                                     |
| • Communicating experienced problems          |                                        |                                     |
| • Acting in the partners’ interest             | Committing                             |                                     |
| • Investing in a long-term relationship         |                                        |                                     |
| • Developing personal relationships            | Relying                                |                                     |
| • Depending on the partners’ complementary    |                                        |                                     |
| specialization                                  |                                        |                                     |
| • Counting on the partner to act in the firm’s |                                        |                                     |
| interest                                       |                                        |                                     |
| • Considering potential opportunism           | Appraising                             |                                     |
| • Being aware of potential knowledge leakage   |                                        |                                     |
| • Taking into account reputational consequences|                                        |                                     |
| • The partner prioritizing others’ needs       | Acknowledging divergence                |                                     |
| • Perceiving divergent interests               |                                        |                                     |
| • Having misaligned views                      | Readying                               |                                     |
| • Striving to reinforce established relationships|                                        |                                     |
| • Being stimulated to have alternative strategies|                                        |                                     |
| • Protecting competitive advantages            | Withholding                            |                                     |
| • Increasing transparency with caution         |                                        |                                     |
| • Controlling through contracts                | Safeguarding                           |                                     |
| • Clarifying expectations                      |                                        |                                     |
| • Securing the own interests                   | Deflecting                             |                                     |
| • Bypassing                                    |                                        |                                     |
| • Buffering                                    |                                        |                                     |

**Figure 1.** Data structure (I) – Mechanisms.
first-order categories were created (see Figure 2 for an overview of our data structure). By considering the nature of the influence of different mechanisms on others (i.e., creating conditions for, compensating for, or undermining another mechanism), we reached a higher level of abstraction and constructed second-order themes reflecting different dynamics of the interplay between trust and distrust. Next, building on research suggesting that the relationship between two organizing principles can be substitutional and/or complementary (see Cao & Lumineau, 2015), we grouped the identified dynamics into two ways that trust and distrust interplay (our aggregated dimensions in Figure 2). For the complementarity interplay (further illustrated in Figure 3), the dynamics corresponded to previously identified enabling and compensating dynamics (Huber et al., 2013). For the cases of the substitution interplay, we found an undermining dynamic between trust and distrust, where both types of trusting or distrusting mechanisms (behavioral and cognitive) were undermined by the dominance of the other.

The Workings of Trust and Distrust

Our findings show that trust and distrust are distinct and that their workings comprise three cognitive and three behavioral mechanisms. Through these mechanisms, trust and distrust have distinct influences on the ways in which interpretations are made and behaviors are adopted in interorganizational interactions.

The cognitive mechanisms of trust

Believing orients firms cognitively to trust that partners will behave as desired and adhere to unspoken rules. This mechanism is grounded in the three dimensions of trustworthiness (integrity, benevolence, and ability) suggested by Mayer and colleagues (1995). Additionally, believing
implies that firms rely on an unspoken rule of reciprocity and on that the partners will return favors as, for example, a project manager at RoBNor explained: “I give . . . to, let’s say our competitors, because I know that next time they will do the same favor for me.” Another unspoken rule involves honesty: “We are true when we talk to each other. That’s very important” (CEO, Karlskoga Automation). Believing also means that firms rely on an unspoken rule of professionalism and have confidence that their partners will fulfill their roles and keep their promises, as the CEO of Permanova expressed: “When we go for an offer . . . we have to trust that we know how they will act in that deal process.”

Trusting also involves framing partners’ behavior positively, and making positive interpretations of partner behavior that appears to be misaligned with expectations or accepted standards. Framing involves neglecting, accepting, and excusing partners’ deviations from desired behavior. By identifying the mechanism framing positively and its subcomponents, we support and extend the findings of Latusek and Vlaar (2018) suggesting that trust involves suspension of exchange hazards in interorganizational relationships through creating fictions and bracketing concerns or the unknowable (Möllering, 2001). Explanations following the logic of: “it’s business-as-usual,” “it’s normal,” and “it’s not their choice” were used to purposefully neglect partners’ undesirable behavior. Through framing, firms interpret such partner behavior positively: “They are not competitors, they are business colleagues” (CEO, Elektroautomatik). Thereby, interpartner competition is regarded as non-detrimental and frequent partner exchanges are perceived as business-as-usual: “Am I happy with them choosing ABB? No, but it’s part of life” (CEO, KUKA Nordic). Positive framing can also compel firms to excuse partners’ undesired behavior by blaming others’ dependence. For example, a sales manager at FANUC chose to view non-prioritization of the firm’s components by a key partner of theirs as a customer request, rather than their partner’s choice: “Of course, we have partners that use other brands when the end customer has special rules. . . but as long as they use our product as number one, it’s ok.”

Finally, trusting also involves recognizing mutuality by developing a shared sense of belonging and perceptions of mutual interests on both the project and industry levels. On the project level,
mutuality is recognized by caring about partners’ needs, especially in contexts of changing work circumstances, such as unexpected problems. Trust motivates partners to emphasize aligned interests alongside partially conflicting goals and engage in joint problem-solving. For instance, a sales manager at a robot manufacturer explained, “We need to... develop how we work with our system integrators, and also how we can develop our system integrators” (sales manager, Yaskawa). While firms within this industry fiercely compete for some projects, recognizing mutuality can facilitate cooperation by making firms perceive others as members of a broader latent network that aims to bring customers value: “We call it ‘the yellow family’, and we work under the yellow umbrella. So, I feel very comfortable and familiar with my partners” (sales manager, FANUC).

The behavioral mechanisms of trust

**Disclosing** motivates firms to share critical information and knowledge; being transparent about competitive moves, sharing to enhance collaboration, and communicating to solve problems. First, disclosing is particularly important for proactively addressing potential frustrations with a partner. It motivates transparency and honesty regarding future moves and intentions. Second, disclosing encourages firms to collaborate as it supports the information and knowledge exchange needed. As a sales manager at KUKA explained: “Trust means that...we can share information about the end customer really transparently between us.” Third, disclosing implies that firms openly communicate problems and discuss emergent issues honestly. Thus, firms become aware of problems or misaligned expectations in their relationships and can jointly address them expediently.

Trust also involves committing to partners: acting in the partners’ interests, investing in long-term relationships, and developing personal relationships. First, when the committing mechanism is at work, firms help partners satisfy their needs and objectives. For instance, robotics providers devote effort to improving their partners’ technical skillsets. Second, committing facilitates investments in long-term relationships that foster some degree of certainty in projects as collaboration recurs. Third, committing involves developing personal relationships through social activities that further motivate firms to devote resources to collaboration: “Now, we do things together with the two companies. We go to a hockey game together... So, it’s really working well” (CEO, Karlskoga Automation). Deepened commitment can support future collaboration, strengthening ties between firms through co-specialization and personal bonding. The identified mechanisms of disclosing and committing empirically support and extend the trust processes suggested by McEvily and colleagues (2003).

Further, relying on partners is another behavioral mechanism of trust. First, firms are motivated to rely on partner’s specialized skills to develop offers: “We are not good at welding...so we can collaborate with a competitor of ours who is good at that and sort of complete the offer to the customer” (project and sales leader, AH Automation). Second, relying involves counting on partners to contribute and involve them in projects. For instance, robot providers provide system integrators with information about potential projects and rely on them to include their robots in these projects.

The cognitive mechanisms of distrust

Distrust involves appraising, which prompts firms to consider negative potentialities, not only of partner behavior, but also regarding interdependencies within the broader network. Firms consider potential partner opportunism, potential harm due to knowledge leakage, and negative reputational consequences. First, appraising calls attention to potential partner opportunism and stimulates firms to consider partners’ hidden agendas. Second, it encourages firms to assess the danger of
knowledge leakage even when interacting with non-opportunistic actors: “We need to be very care-
ful with how much information we give to our customers; we can’t be completely transparent. It’s
leaking through customers, and that is the worst leaking that we have” (CEO, Elektroautomatik).
Third, appraising entails that firms consider how interactions with actors can harm their reputa-
tions in the network: “We have to be a bit careful about what we’re saying . . . we can’t be that
transparent . . . for sure, I cannot discuss projects with Elektroautomatik that I last week discussed
with AH Automation. . .[as they are competitors]” (project manager, Virtual Manufacturing).

Distrust also orients firms towards acknowledging potential divergence between their and their
partners’ interests. This mechanism means acknowledging both that partners may prioritize their
own interests, and that partners’ goals are only partially convergent, as the CEO of KUKA Nordic
expressed: “So, if you’re a system integrator, your number one interest is to get the order disregarding
whatever robot . . . you use. You want to have the order.” Additionally, firms acknowledge
potentially misaligned perceptions and view detailed discussions with their partners about solu-
tions as critical: “The main thing is detailed description, because if you have the details, you have
the whole” (technical development, AH Automation).

When the readying mechanism is at work, firms are cognitively ready to proactively address the
negative consequences of a partner’s undesired behavior by considering ways to reinforce estab-
lished relationships and by being stimulated to develop alternative strategies if problems emerge.
First, readying makes firms view partial misalignment as a reason to improve their own work and
sustain their relationships with partners. A sales manager at Yaskawa, facing competition from its
system integrators, explained: “We are not relaxed and don’t stay back . . . we all the time need to
be focused to do business with them.” Likewise, a sales manager at FANUC remarked: “So, I need
to be there for them and they know it . . . I need to do a bit more extras. If they have distrust, then
you need to convince them again.” Second, an awareness that maintaining relationships is some-
times impossible, despite substantial efforts, can encourage firms to consider alternative strategies.
Distrust thereby prepares firms for the possibility that a close partner will opt to work with a com-
petitor, motivating expansion of the firm’s latent ties in the network.

The behavioral mechanisms of distrust

Withholding refers to the process of restricting flows of sensitive information and knowledge to
partners due to negative expectations about their future behavior. First, withholding orients firms
toward protecting information and knowledge comprising sources of competitive advantage: “We
have to always balance what we expose, tell and give. . . We tend to spare some parts out. . . for
us to have that advantage. Knowledge is what we compete with” (project and sales leader, AH
Automation). Second, by withholding, firms cautiously increase transparency, refraining from pro-
viding too much information during a project’s early phases: “We need to be very careful with how
much information we give to our customers . . . So, we try to give the best solution as late as pos-
sible. . .because if we give it early, you can be sure that it ends up in their RFQ [request-for-quo-
tation]” (CEO, Elektroautomatik).

Distrust also involves safeguarding: controlling through contracts, clarifying role expectations
and responsibilities, and securing the firm’s interests. First, safeguarding ensures that partners’
undesirable behaviors do not cause problems. Using contracts provides security and clarity regard-
ing partners’ behavior, as a sales manager at Yaskawa explained: “We need this NDA [non-disclo-
sure agreement]. . .it needs to stay between us so that they don’t [reveal critical] technical issues
to another robot supplier, for example.” Second, safeguarding also means that firms have detailed
descriptions of which tasks must be accomplished, and by whom. Well-defined responsibilities are
crucial for avoiding misunderstandings and misaligned expectations: “The good thing with distrust is that you have everything on paper or the gray zones about responsibility are much more thin” (CEO, Yaskawa). Third, by safeguarding, firms secure their interests and reduce the risk of undesirable events. For instance, Permanova charged for pre-studies to ensure that others’ intentions were sincere.

Deflecting means that firms tend to deflect the consequences of partners’ expected undesired behavior through bypassing the partners and buffering the impact of such behaviors by implementing alternative strategies. First, bypassing refers to actions taken to bypass the partner and promote the firm’s interests by directly interacting with other members of the network. For instance, the CEO of KUKA Nordic explained: “I know that . . . I cannot rely on the system integrators to tell the KUKA Evangelion to the customer . . . If I know that [a partner] will not push my brand over anything else, then I can act accordingly.” Thus, a robot provider can, for example, establish direct links to customers, thereby outmaneuvering partners. Second, buffering refers to actions taken to avoid negative consequences of unkept promises or partners’ undesirable behavior. For instance, because AH Automation had negative expectations about their partner delivering on time, they placed a ‘fake’ order to ensure that the robots would be received at the time they were needed. By buffering, the firm can also ensure customers’ awareness of partners’ responsibilities, thereby protecting the firm’s reputation in the network in the event of failure.

**Trusting and distrusting orientations**

Since firms operate in complex contexts with many interdependencies within and across projects, foreseeing all potential consequences of their own and others’ actions in the network is impossible. Within the processes of trusting and distrusting, different orientations toward a partner and the firm’s surrounding broader network evolve, influencing how firms interpret information and select behaviors throughout interactions. Trusting orients firms to interact with optimism, while distrusting orients firms to interact with watchfulness. Optimism means that firms emphasize positive potentialities of their interactions, making positive interpretations and willfully overlooking the potential negative consequences of trusting partners. In contrast, watchfulness means firms emphasize interactions’ negative potentialities, making negative interpretations regarding the partner’s intentions and becoming vigilant. Firms can be optimistic about some aspects of the interaction, while at the same time watchful regarding other aspects, but experiences from the interactions can affect the trust and distrust mechanisms, altering a firm’s optimism or watchfulness over time. Thus, the interplay between trust and distrust becomes critical.

**Interrelated Dynamics in the Interplay Between Trust and Distrust**

We turn now to the second part of our purpose, focusing on the interplay between trust and distrust and their mutual influence. In the narratives about specific projects, we noticed that levels of optimism and watchfulness varied depending on the intensity of both the cognitive and behavioral mechanisms of trust and distrust respectively, influencing the interplay between trust and distrust. In line with previous research (Huber et al., 2013), we identified both instances where trust substituted for distrust and vice versa, and instances where trust and distrust were complementary. The substitution was less common and as a result of firms’ continued interactions with each other and in the broader network, a shift to complementarity often occurred. In the following, we give empirical evidence from the narratives to illustrate how these dynamics took place.
Substitution through undermining dynamics

The substitution interplay between trust and distrust occurred when either of them was very high or very low giving rise to undermining dynamics; one organizing principle becomes dominant and undermines the other. In the analysed narratives, the substitution prevented interactions from reaching their full potential, which is in line with previous trust research showing that both insufficient trust and excessive trust can be detrimental for firms (Stevens et al., 2015). For instance, the CEO of Yaskawa explained that in projects with the system integrator Epsilon, they “just sell a robot on payment terms . . . no advice . . . nothing from our side that will help or support.” This can be attributed to dominance of distrust and high levels of watchfulness discouraging them from involving Epsilon more deeply in developing an entire system. Optimism was undermined, making the firm ignorant of opportunities that could be explored through deepened interaction. This approach can be efficient and relevant in situations requiring simple transactions, but it prevents firms from discovering new potentialities that could be beneficial for them.

Another example of very high distrust is when a small system integrator was too watchful of risks, and avoided collaborations with the robot provider Yaskawa, who frequently enters into system integration in welding solutions. As expressed by a project leader: “Yaskawa are more into welding . . . we have chosen to try to limit our work with insted of them . . . because they compete with us and they can.” Due to high distrust, this small system integrator avoids collaboration with Yaskawa and instead partners up with KUKA, as “KUKA has a cleaner organization . . . they don’t integrate themselves.” Although avoiding this provider might be wise in such projects, this watchfulness also meant that the system integrator emphasized risks, withheld information about potential projects, and avoided collaborating with Yaskawa, keeping it a competitor instead of a valuable partner. Thus, the potential benefits of trust were undermined.

We also noticed cases where trust was too high, overriding distrust. For example, AH Automation trusted that Delta, a robot provider, would not compete, with the argument that “if they do system integration, it would be for a very good reason . . . So, it’s an exception when they do that more or less” (sales manager, AH Automation). Trust, however, became a problem as Delta “bought [a firm] . . . a small integration company. This is a problem, because it’s all on Delta’s hat now” (sales manager, AH Automation). In another narrative, the CEO of Evomatic explained that Evomatic worked primarily with Delta and trusted this partner based on many personal relationships across the firms. Due to high trust, Evomatic made themselves vulnerable to Delta as they were locked into the relationship, thus the distrust that could have been needed, as Delta also collaborated with other system integrators, was undermined. Similarly, in a third narrative, AH Automation was excessively trusting Alpha based on previous experiences, and was too optimistic about Alpha’s contribution to a project that was going to start. They did not, for example, take measures to safeguard themselves for unexpected events, thus trust undermined distrust. However, the firms’ orientation in these projects changed because distrust mechanisms were set in motion, and thus, dynamics of complementarity between trust and distrust emerged.

Complementarity through enabling and complementing dynamics

We also identified two dynamics underlying complementarity between trust and distrust: enabling and compensating dynamics. Whereas the presence of enabling dynamics means that one complements the other by creating conditions to facilitate and improve the other, the presence of compensating dynamics means that one can address the limitations of the other and vice versa (see Cao & Lumineau, 2015). These dynamics occur due to the mutual influence between cognitive mechanisms of one and behavioral mechanisms of the other, as illustrated by the arrows linking trust and
distrust to each other in Figure 3. Enabling dynamics take place when behavioral mechanisms of either trust or distrust set cognitive mechanisms of the other in motion by creating conditions in favor of them. Compensating dynamics take place when cognitive mechanisms of one compensate for the limitations of the behavioral mechanisms of the other. Furthermore, we find the complementarity interplay between trust and distrust to be a relatively closed and self-perpetuating process, as the interconnectedness of the enabling and compensating dynamics “creates a type of closed loop” (see Pratt et al., 2019, p. 18). The recurring oscillation between enabling and compensating dynamics developed due to the intertwined nature of the mechanisms of trust and distrust and the interaction of cognitive and behavioral mechanisms (illustrated in our figure with the two curved arrows within trust and distrust). The enabling and compensating loops were thereby linked to each other in a recursive manner. As further illustrated in Figure 3, the broader latent network feeds into the interplay of trust and distrust by providing cues that confirm or contest firm’s interpretations and expectations, influencing the interaction that unfolds in project-based collaborations. Next, we present three examples of projects that explicate these dynamics and their interrelatedness.

The first example is a collaboration between AH Automation and a robotic provider (Alpha), with whom the firm had a smooth collaboration dominated by trust. Influenced by prior successful projects, AH Automation relied on Alpha to deliver their robots in a new project. As a project manager at AH Automation explained, “If they promise to deliver, they will keep it. If he says something, he means it. You need to feel such trust, because we are putting a lot of risk [related to delivery] into the hands of our supplier.” However, AH Automation experienced minor delivery delays from Alpha, creating a misalignment between expectations and experiences. “When we sold it, we had one delivery time and when it was sold we got a different . . . longer delivery time. That’s a big problem” (project & sales leader, AH Automation). This misalignment between expectations and experiences created the conditions for cognitive mechanisms of distrust to be set in motion. AH Automation began to question Alpha’s ability to deliver on time and considered ways to improve their readiness to deal with potential undesired consequences of larger delays. As the project manager noted: “I don’t like surprises. But if I know what to expect, I can prepare for it. . . it might be good, but it might be bad. This I will know afterwards.” AH Automation appraised negative potentialities related to customer complaints and reputational consequences in its network, which both influenced and was influenced by the behavioral mechanisms of distrust. This example reflects enabling dynamics: the cognitive mechanisms of distrust were set in motion due to the discrepancy between the firm’s orientation to behave optimistically and its actual experiences in the course of their interactions.

Compensating dynamics in turn arose as cognitive mechanisms of distrust compensated for the limitations of behavioral mechanisms of trust. The potential overcommitment and over-reliance was compensated for when AH Automation became watchful in their interaction to avoid identified negative potentialities, such as a dissatisfied end-customer and potential harm to its reputation in the network. This implies that trust mechanisms were complemented by distrust mechanisms such that AH Automation, while still trusting the partner and relying on the partner to deliver, simultaneously developed alternative strategies for negative potentialities and placed ‘fake’ orders to deflect the partner’s undesired behavior and secure that they would receive robots on time for forthcoming projects: “I have a fake order of 4 robots for a project I haven’t even quoted yet. And I have the possibility to cancel that order by the end of June. So I now place fake orders . . . ” (project & sales leader, AH Automation). AH Automation also communicated their concerns to people at Alpha, one of which explained that they were also concerned about the delivery delays and wanted to fix this issue immediately: “Long delivery times . . . have become a key concern. So one thing is ‘can we fix the damage done?’ Because we said we would deliver that week and then it came six weeks later. And that can damage customer relations. So we need to bounce back from that.”
Although AH Automation acted precautiously, Alpha managed to deliver the robots on time in this particular project, providing unexpected positive cues to AH Automation regarding their future behavior. This highlights that distrust created the conditions for AH Automation to continue trusting Alpha and, more specifically, enabled the re-emergence of the trust mechanisms believing and framing positively (another loop of enabling dynamics).

Our second example is a project in which Elektroautomatik trusted another system integrator (Beta) based on its reputation as a very profitable firm. Elektroautomatik disclosed information about a project opportunity, and relied on its partner to contribute resources to the project. As Elektroautomatik’s CEO explained, in the firm’s interactions with Beta, Elektroautomatik’s staff realized that “the reason why [Beta] can be profitable is because they don’t have the premium attitude towards the customers . . . [Beta] said that [the customer] can read the manual and solve the problem themselves, but this is not the way we work.” Elektroautomatik’s reflections on received cues about undesired partner behavior led to the firm acknowledging its partner’s divergent approach to after-sales services and appraising negative potentialities associated with the partner’s unwillingness to provide continuous customer support. This example illustrates enabling dynamics through which the disclosing and relying behavioral mechanisms of trust set in motion the acknowledging divergence and appraising cognitive mechanisms of distrust.

Based on the cognitive mechanisms of distrust, potential problems that could have resulted from over-reliance on Beta in this complex project with a demanding end-customer were compensated for, thus illustrating the ensuing compensating dynamics. Elektroautomatik realized that “to let Beta take responsibility [for parts of a project] is challenging. . .as we have to . . . always treat the customer as the most important” (CEO, Elektroautomatik). The intertwined cognitive and behavioral distrusting mechanisms added watchfulness to the interaction, and Elektroautomatik was motivated to avoid harmful reputational consequences by bypassing Beta and supporting the end-customer itself. Elektroautomatik continued to collaborate with Beta as they trusted the quality of their products, but due to distrust, it safeguarded itself by working with Beta at arm’s length distance in less-complex projects, and mainly when Elektroautomatik did not lead the project.

Both dynamics were also evident in our third example, a project between KUKA and Gamma. Before the project call was introduced, relations between KUKA and Gamma had been dominated by distrust. Gamma primarily worked with ABB robots in its projects, and Gamma’s loyalty to ABB locked KUKA out from those projects. “Historically, we have been choosing ABB in most cases. We only select KUKA when the customer wants us to select them” (CEO, Gamma). Consequently, KUKA often withheld information about project opportunities from Gamma. Before the project, KUKA received information about an end-customer needing a new complex robot-based automation solution, that they could develop together with system integrators in its system partner network. However, as a sales manager at KUKA explains: “the reason we had Gamma was because the end customer wanted to have them. And the end customer wanted to have KUKA robots. So that was good for us, of course.”

While KUKA distrusted Gamma’s intentions to promote its robots, knowing about their loyalty to ABB, KUKA approached Gamma and informed them about a customer’s call to explore the possibility of working together in a project. However, due to distrust, KUKA also bypassed Gamma and frequently contacted the end-customer to ensure that Gamma would not convince the end-customer to use ABB robots instead. This as they realized that Gamma’s loyalty to ABB serves as “a good reason why we need to be at the end customers. Because if the system integrators go to the end customers and the end customers say the word KUKA two times in five minutes, the chance that the system integrator will offer KUKA robots is very high” (CEO, KUKA Nordic). KUKA’s deflecting enabled Gamma’s willingness to collaborate with KUKA, as well as KUKA’s realization that Gamma harbored benevolent intentions. Once the two firms started discussing contract details,
mostly motivated by the need to safeguard themselves, they both also recognized their mutual
goals, and therefore framed their relationship more positively. This example reflects enabling
dynamics, in which the deflecting and safeguarding behavioral mechanisms of distrust set in
motion cognitive mechanisms of trust before the project began.

In turn, cognitive mechanisms of trust compensated for the limitations of excessively withholding information about project opportunities and being overly skeptical and watchful during interactions with Gamma. Thereby, KUKA shared critical resources and knowledge and relied on Gamma to satisfy the demanding industrial customer. Thus, compensating dynamics occurred when the cognitive mechanisms of trust encouraged the firms to emphasize positive potentialities and activate a latent tie in the broader network that had not been explored. Further, the emerging cognitive mechanisms of trust, integrated with the behavioral mechanisms of trust, created optimism about the project. In implementing the project, however, many problems and misunderstandings occurred between the two companies: “We grew gray hair,” Gamma’s CEO commented. A sales manager at KUKA explained: “The problem or challenge . . . was that Gamma didn’t really have knowledge on KUKA robots and how to program them.” This issue became evident as the behavioral mechanisms of trust meant that the partners openly communicated problems to solve them. Ultimately, KUKA appraised and considered negative reputational consequences of customer blame for problems with the solution or significant project delays: “And the bad thing is that the end customer is really good. They want KUKA and they know that there is nothing wrong with KUKA robots. But Gamma started to think: ‘well is there something wrong with the KUKA robots? It doesn’t work as well as with ABB’” (sales manager, KUKA Nordic). This shows that behavioral mechanisms of trust created conditions for cognitive mechanisms of distrust (another loop of enabling dynamics). However, as the firms were able to eventually implement the project, Gamma started to see KUKA as a potential partner and consider them for future projects. A new loop was initiated whereby a latent tie in the network was activated that could be further explored.

To sum up, our study highlights that the interplay between trust and distrust is not simply a question of substitutes or complements, but it is a far more complex relationship where substitution and complementarity can oscillate depending on firms’ interactions with each other and with their relational context.

Discussion

While temporary alignments allow flexible and task-specific allocations of complementary resources contained in a CoPS industry, project-based collaborations are challenging in this context. Firms are vulnerable to their partners as they are sharing strategically important resources and are interdependent, both for the completion of single projects, and as a result of their embeddedness in a broader network. In this context, organizations need organizing principles as logics to guide their interactions. We argue that trust and distrust are particularly relevant organizing principles because they influence how interpretations are made, behaviors are adopted, and in turn how interactions take place. Our study aimed to explore (1) the mechanisms through which trust and distrust work as distinct organizing principles, and (2) the dynamics of the interplay of trust and distrust in the context of project-based collaboration in a CoPS industry.

Regarding the first part of our purpose, we empirically demonstrated how trust and distrust work through cognitive and behavioral mechanisms, based on insights from project-based collaboration in the robotics and automation industry. The identified mechanisms reflect practices of exercising trust and distrust. For example, believing, reframing, and recognizing, combined with disclosing, relying, and committing, are active processes of exercising trust and not mere passive evaluations of their partners’ trustworthiness. We thereby extend the research on trust and distrust
by showcasing the intricate workings of trust and distrust in practice (Latarek & Vlaar, 2018; Weick, 2008) and by pointing at their processual nature. This paper addressed a call for more research on “active trust” (Giddens, 1984) and “the process nature of trust as a leap of faith resulting from socio-cognitive interactions” (Nikolova et al., 2015, p. 234). We extend this line of work by discussing “active distrust,” and suggest that the processuality of trusting and distrusting cannot be limited to mental or cognitive processes of the trustor (e.g., Möllering, 2001) since cognitions are embedded in the firms’ interactions with each other and with their social context. Thus, our study contributes to a process theory of trust (see Nikolova et al., 2015), and suggests a move from approaching trust as a relational governance mechanism towards exploring the practices of trusting as a dynamic organizing principle and focusing on organizational actors’ first-hand experiences. In doing so, further research could address the affective component of trust and distrust (McAllister, 1995). In this paper, we have mainly focused on cognitive and behavioral processes of trusting and distrusting. However, shedding light on how these interact with affective processes (see Gustafsson et al., 2021) would allow for a more complete picture.

Further, by identifying the distinct mechanisms underlying trust and distrust, our study provides insights into, and clarification on, the longstanding, unresolved debate surrounding the conceptual relationship between trust and distrust as either “polar opposites” (Mayer et al., 1995; Schoorman et al., 2007) or distinct yet coexisting phenomena (Guo et al., 2017; Lewicki et al., 1998; Lumineau, 2017; McKnight & Chervany, 2001; Saunders et al., 2014). Our findings support the latter view, explaining that trust and distrust are distinct and can coexist in a relationship because their underlying workings fundamentally differ. For example, interviewees highlighted that trust motivated them to disclose critical information for projects to be successfully completed, yet at the same time, distrust motivated them to withhold sensitive knowledge which often represents an important source of their competitive advantage. Additionally, we emphasized the importance of distinguishing trust from distrust since they divergently orient firms in their interactions. We propose that, in exercising trust, organizations interact with optimism regarding the potentialities of their interactions; meanwhile, in exercising in exercising distrust, organizations demonstrate watchfulness regarding such potentialities. This insight can help future research distinguish trust from distrust by paying closer attention to their distinct underlying mechanisms and their cognitive and behavioral facets that guide firms differently, instead of merely separating them in terms of their partners’ trustworthiness/distrustworthiness dimensions (e.g., Dimoka, 2010).

Regarding the second part of our purpose, we provided important insights on the underlying dynamics in the interplay between trust and distrust (Guo et al., 2017; Saunders et al., 2014). We propose that, in interorganizational interactions embedded in a broader network of relations, trust and distrust can complement one another in specific situations and substitute for each other in other situations, depending on how firms interact with each other and with their social context. In our study, we encountered a few examples of when either trust or distrust was dominating, and in those cases, trust and distrust acted as substitutes through an undermining dynamic. However, trust and distrust mainly acted as complements, and we have shown that two dynamics underlie their complementarity. Specifically, trust involves both cognitive and behavioral mechanisms that interact with distrust’s behavioral and cognitive mechanisms, respectively, giving rise to different dynamics in their interplay (as illustrated in Figure 3). While behavioral mechanisms of trust create the conditions facilitating cognitive mechanisms of distrust, and vice versa (enabling dynamics), cognitive mechanisms of distrust compensate for the weaknesses of behavioral mechanisms of trust, and vice versa (compensating dynamics). Having shown that such dynamics form due to the interactions between underlying mechanisms, we extend the research on enabling and compensating dynamics between different organizing principles (Huber et al., 2013). Thus, similar to Jarzabkowski, Bednarek, Chalkias, and Cacciatori (2019), our study suggests future research on
the interplay between contradictory organizing principles zoom in on the mechanisms level (Pajunen, 2008) and focus on the interplay between different mechanisms of these organizing principles rather than solely focusing on their interplay as uniform entities. Zooming out after identifying the underlying mechanisms and their interactions could support richer theorizing on their interplay within a broader social context.

We propose that the interplay between trust and distrust interacts with relations and processes in a broader network, which can influence the pursuit of project-based relationships both negatively and positively. Thus, our study contributes to research on the positive and negative sides of trust and distrust. When trust and distrust act as substitutes, their advantages are undermined, leading to restraining effects of their interplay on the pursuit of project-based relationships. If trust is, for example, overemphasized at distrust’s expense, inertia and path dependencies can lock firms into repeated collaborations with a few specific partners, hindering other collaboration opportunities (Ghemawat, 1991). While lock-in effects can provide firms with a sense of stability and decreased uncertainty, these effects can be especially dangerous in the complex networks that often develop within CoPS industries. In this context, firms must coordinate not only their project interactions but also their latent ties because, although projects are temporary, they are influenced by firms’ experiences in past projects and by the possibility to engage in future ones (Sydow & Windeler, 2003). Our findings also suggest that the interplay between trust and distrust can yield positive effects on the pursuit of project-based relationships. When trust and distrust act as complements, they motivate firms not only to exploit resources and capabilities present in their current ties, but also to explore latent ties in the network and create more opportunities for future projects with others, as in the example with Gamma and KUKA. Future studies could examine further how the interplay between trust and distrust influences exploitation of current, and exploration of latent, ties in the network.

The watchfulness triggered by distrust, coupled with optimism triggered by trust, encourages firms to engage in reflective practice (Yanow & Tsoukas, 2009), where the reflection on activities is embedded in the practicing of them (acknowledging that cognition and behavior are inseparable). In the context of interfirm networks, this means that firms not only need to reflect on, and adjust, their own behavior, but also on their partners’ actions, and on the consequences of these actions for the firm and others in the broader network. This allows for other ‘ways of seeing’ and questioning taken-for-granted assumptions in the midst of action, which can constructively address potential limitations of misplaced trust and unjustified optimism as well as misplaced distrust and unjustified watchfulness. Thus, while overemphasizing either trusting or distrusting at the other’s expense can be tempting, since it reduces the experienced ambivalence between contradicting logics in an interaction, reflective practice supports firms to overcome this temptation, informing their interactions through dual orientations. This practice can also be seen as an exercise of organizational wisdom, defined as “the capacity . . . to simultaneously acknowledge and embrace opposing orientations, and thereby strive for a course of action that honors both” (Ashforth, Rogers, Pratt, & Pradies, 2014, p. 1465).

While our findings are specific to the studied context, its challenges are oftentimes present in many other industries and contexts. We expect our findings on the mechanisms of trust and distrust and their interplay to apply to knowledge-intensive industrial contexts where firms with only partially converging interests must share sensitive knowledge to jointly create technological solutions and engage in recurrent temporary collaborations over time. Our findings could thus be applicable in contexts where multiple organizational actors interact and collaborate under conditions of high interdependence and uncertainty about the partners’ behavior. Yet, importantly, component standardization and opportunities for production learning economies vary, both between products that
fall under the category of CoPS (Hobday, 1998) and between products in similar industries. Different degrees of technological complexity, customization, and uncertainty can affect the challenge of project-based collaborations and the applicability of our findings across contexts, calling for future research to further explore the influence interdependence can have on the interplay of trust and distrust. Trust and distrust may work and interrelate differently when solutions are more standardized with less complex interdependencies, and the interactions are more stable and less challenging. In such contexts, other organizing principles can be more relevant.

Further, while our study has elucidated the interplay between trust and distrust, future research could expand on the mechanisms and dynamics we identified and uncover additional mechanisms, affective processes, and other dynamics that can be present in the interplay. In addition, we do not know enough about the oscillation between and within dynamics of substitution and complementarity. Our study has indicated that this oscillation can be explained by contextual factors, such as the orchestrating role of the customer or previous experiences. Building on our findings and the work of Huber and colleagues (2013), future research could investigate the complex loops that can drive such oscillations over time. Relatedly, while the interaction between enabling and compensating dynamics reflects a relatively closed and self-perpetuating system, more research is needed on what could interfere with and break this loop. Future research could focus on how firms transition from project to project with different partners or follow a single case over time, showing how the dynamics of trust and distrust unfold based on data from both project participants. Power asymmetries and different intensities of interdependence may, for instance, highly influence the interplay.

Moreover, our research has highlighted the importance of process- and context-sensitive studies in capturing interorganizational relationships’ inherent relational complexities, which has implications for the broader body of research on interorganizational relationships. For instance, further insights can be gained into firms’ socially embedded processes when guided by formal and informal governance in interfirm relationships. Similarly, our insights on trust and distrust and their interplay can inform research on how contradictory logics, such as cooperation and competition, can be reflexively managed.

To conclude, this paper has highlighted the importance of firms’ ability to reflexively manage trust and distrust in order to uphold the dual orientations that successful project-based relationships require. Thereby, our findings enrich the understanding of the temporary-permanent dilemma of project-based organizing, addressing a call for “a more processual and relational understanding of project-based organizing” (Manning & Sydow, 2011, p. 1395).

Acknowledgements
We would like to sincerely thank Senior Editor Jörg Sydow and three anonymous reviewers for their constructive critique and insightful comments that were critical in improving the quality of our manuscript. We are also thankful to Nicole Gillespie, Sascha Albers, Paavo Ritala, Michael Pratt and other colleagues, for their constructively challenging comments on earlier drafts of the paper. Earlier versions of the paper were presented at the EGOS Colloquium and the Annual Meeting of the Academy of Management.

Funding
Forskningsrådet om Hälsa, Arbetsliv och Välfärd 2013-0741 Kempestiftelserna.

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Notes

1. We view trust as an inherently relational and individual-level phenomenon, which diffuses within an organization and evolves into taking the form of interorganizational trust (Zaheer et al., 1998) — “collectively-held trust [and distrust] orientations by members of one organization toward another organization” (McEvily & Zaheer, 2006, p. 2). With this view, we chose not to look into individual differences or personality differences that key actors could bring.

2. While we acknowledge that an affective component of trust frequently has been addressed by prior research (McAllister, 1995), our open coding of the empirical material mainly highlighted the importance of cognitive and behavioral aspects.

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