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## SPECIAL ISSUE PAPER

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# Power and conflict in inter-organisational information systems development

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**Abstract**

The need for inter-organisational information systems projects, which are complex undertakings often riddled with poorly understood power struggles and conflicts that hinder project success, has increased in previous decades. Through the lenses of systemic and episodic power, together with an organisational conflict model, this longitudinal, qualitative case study explores the dynamics of power and conflict and their effects in an inter-organisational information systems development project. This study highlights that the bureaucratic, social and technical setup of the project forms a foundational system from which specific power practices emerge, in this case, the practices of hiding, storytelling and bargaining. The power practices have both restrictive and productive effects on conflict, but the practices cannot easily escape the confines of the foundational system and continue to cause the resurfacing of different manifestations of latent conflict inherent in the system. As a result, both 'power to' (systemic power) and 'power over' (episodic power) can escalate project conflict, and rational conflict management for gaining 'win-win' resolutions may not be in the stakeholders' interests. Thus, strategies for openly managing political conflicts should be considered.

**KEYWORDS**

conflict, episodic power, qualitative case study, systemic power

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## 1 | INTRODUCTION

Past decades have seen an increased need for inter-organisational information systems (IOIS) projects as multinational organisations have sought to standardise systems across regions and countries to meet the demands of globalisation (Sarker et al., 2010). Implementers, project managers, developers and users all have been required to respond to the challenge of increasingly complex IS projects that span several organisations. Research in the context of very large IS projects has shown the likelihood of huge upheavals during the course of the projects. It may be difficult for project management structures to respond to such upheavals properly (Levina, 2005), meet collaboration challenges (Kotlarsky & Oshri, 2005; Kumar & van Dissel, 1996) and mediate power struggles between different groups that may increase over time (Hekkala & Urquhart, 2013; Hirschheim & Newman, 1991; Markus & Bjørn-Andersen, 1987). IOIS development, thus, seems to be a particularly complex undertaking often riddled with poorly understood power struggles and conflicts (Barki & Hartwick, 2001; Hirschheim & Newman, 1991; Levina, 2005). In this paper, we set out to better understand the power and conflict dynamics in such projects.

From the perspective of the technical-rational ideal<sup>1</sup> that guides most IS projects (Avgerou & McGrath, 2007), power and conflict are results of suboptimal decision-making and are issues that must be overcome (Hirschheim & Newman, 1991; Levina & Orlikowski, 2009; Robey et al., 1993). From this perspective, conflict is often the result of the suboptimal distribution of power, 'as when a weaker party resists or seeks to use conflict to overcome a power disadvantage' (Moeller et al., 2014, p. 15) and is typically damaging to project members' abilities to work together (Cohen et al., 2004; Jiang et al., 2014; Robey et al., 1993; Yeh & Tsai, 2001). At the same time, the power of legitimate authority figures (eg, chief executive officers (CEOs)) is seen as helpful in managing conflict and ensuring project success (Johnstone et al., 2006; Levina & Orlikowski, 2009; Robey et al., 1993). Conflict management emphasises activities such as time management, team building and establishment of common goals (Cohen et al., 2004), which are activities that focus on consensus, and the exercising of authority and control to maximise benefits for everyone. In other words, they are rational applications of power that get things done.

Recently, researchers have increasingly questioned the technical-rational ideal and converged on the notion that both power and conflict are normal, expected aspects of everyday practices (Levina & Orlikowski, 2009; Robey et al., 1993; Simeonova et al., 2018). From this perspective, power is enacted rather than possessed; it is enacted by all kinds of actors, human and non-human, regardless of their authority or hierarchical positions, and its effects may be both restrictive and productive (Levina, 2005; Levina & Orlikowski, 2009; Markus & Bui, 2012; Newell & Marabelli, 2016; Simeonova et al., 2018). Conflict, from this perspective, may help project teams air out hidden issues and move forward (Jiang et al., 2014; Levina & Orlikowski, 2009). These findings challenge the technical-rational assumption underlying IOIS projects. They pose questions about the feasibility of optimising the progress of an IS development project toward a common goal, and they highlight the many complications that vested interests and politics bring to such activities (Avgerou & McGrath, 2007).

In this paper, we explore the power and conflict dynamics in an IOIS development project as part of a broader research project that follows the development of a new customer relationship management (CRM) system for several public sector organisations in Northern Europe. The project started in 2013 and was expected to end by 2016. The initial participating organisations (Alpha, Beta and Gamma) were all project partners with equal decision-making rights. However, the costs were distributed so that Beta covered 50%, Alpha, 30% and Gamma, 20%. At the time of writing (2020), the project is ongoing, more than 3 years delayed and more than 6 million euros over budget. The project was completely restructured in 2016 (a new company was established); therefore, this structural shift is, in effect, considered the end of the project depicted in this paper.

Theoretically, this paper contributes to both power and conflict research by delineating the role of the bureaucratic, social and technical setup of the project as a foundational system of power and conflict, within which systemic and episodic power are exercised. This system has three important implications. First, the foundational system limits the nature and effects of *power to* (systemic) and *power over* (episodic) practices in the project, but in different ways. Second, the foundational system has inherent conflict, and all power practices within the system will continue to

cause the resurfacing of different manifestations of latent conflict in the system. Third, although the foundational system can evolve over time, it also becomes embedded in durable social and material objects and, therefore, becomes difficult to change from within. In terms of implications for practice, this study suggests that deconstructing the foundational system, while counter-intuitive, laden with political undercurrents, messy and painful, may be a potentially valuable conflict management strategy to try in addition to traditional conflict management strategies.

The rest of this paper is organised as follows. In the next section, we present the chosen perspective on power and conflict. In the following three sections, we present the research case, the research method and the findings. We close the paper by discussing the theoretical and practical implications of the findings.

## 2 | POWER AND CONFLICT IN IOIS PROJECTS

IOIS projects have been investigated since the mid-1980s (Bakos, 1991; Cash & Konsynski, 1985; Copeland & McKenney, 1988; Daniel & White, 2005; Hekkala & Urquhart, 2013; Kern & Willcocks, 2000; Kumar & van Dissel, 1996; Robey et al., 2008). Compared to *intra-organisational* projects, *inter-organisational* projects involve two or more organisational actors working jointly to create a concrete product and/or service within a limited period of time (Jones & Lichtenstein, 2008). Researchers have argued earlier that although inter-organisational (IO) projects are widely used across diverse industrial and national settings, these projects are more common in the public sector (Jones & Lichtenstein, 2008). A key challenge in IO projects is the coordination of activities under conditions of uncertainty, and this involves aligning several organisational actors with different goals, different levels of expertise and overlapping or unclearly distributed areas of responsibility (Jones & Lichtenstein, 2008). Because IO projects work like joint ventures in many respects, there may be differences of opinion regarding not only the involved roles, responsibilities and time schedules but also the resource requirements (Panteli & Sockalingam, 2005). Often, IO projects lack a central authority or even a formal hierarchy (Jones & Lichtenstein, 2008).

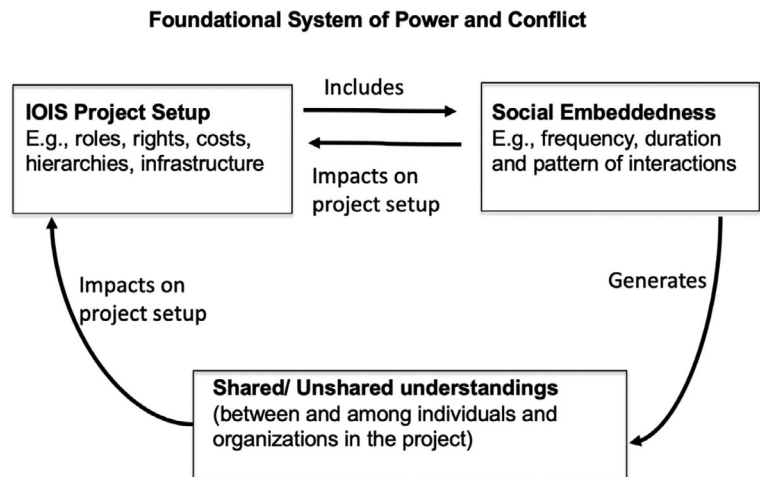
We propose and define the term *foundational system* to capture how the IOIS project setup (roles, rights, costs, hierarchies and infrastructure) and its *social embeddedness* (frequency, duration and pattern of interactions between project actors) generate shared (or unshared) understandings between and among individuals and organisations in the project (Granovetter, 1985; Jones & Lichtenstein, 2008). In line with our focus on power and conflict, in this paper, we emphasise the relational embeddedness aspect of social embeddedness (Granovetter, 1992). Relational embeddedness refers to interactor ties and how actions and outcomes are affected by actors' relations and the quality of their exchanges; in other words, it is 'the degree to which exchange parties know of and consider one another's needs and goals and the exchange parties exhibit behaviours such as trust, confiding, and information-sharing' (Jones & Lichtenstein, 2008, p. 7). The pattern of IO interactions shapes whether understandings among social actors are widely shared, and this either facilitates or hinders communication among and between individuals and organisations (Jones & Lichtenstein, 2008). In sum, the foundational system captures key structures and patterns in the project, such as structures and patterns of coordination and communication, hierarchical relations and inequalities (Jones & Lichtenstein, 2008). Figure 1 presents an overview of the foundational system.

We expect that the foundational system plays a key role in the power and conflict dynamics in IOIS projects. From the technical-rational perspective, the project setup with roles and rights would be critical in the optimal distribution of power to generated shared understandings and avoid conflict. From the perspective of power as an everyday systemic and episodic practice, however, the story is less straightforward. Below, we consider the insights previous researchers have revealed on the topic and highlight what remains unknown.

### 2.1 | Power in IOIS projects

Power has been a core concept in organisational theory for decades and remains subject to many debates (Hardy & Leiba-O'Sullivan, 1998). There is agreement, however, that power relations in organisational life cannot be neglected

**FIGURE 1** The bureaucratic, social and technical setup of the IOIS project as a foundational system



(Granovetter, 1985; Levina & Orlikowski, 2009). Because IOIS projects involve several organisations with different decision-making rights, costs and practices, power dynamics may become particularly pronounced in these contexts. The foundational system of different rights, costs and IS practices can either facilitate or prevent the flow of communication and knowledge sharing in IOIS projects. The system may include, but is not limited to, a preference for (or, in some cases, a fanatical following of) different IS development methodologies and/or different proprietary or open technologies and the project's relational embeddedness (eg, the quality of exchanges between actors). Settling on different rights and practices also advances shared understandings in the project about who has the power to make decisions, for example, on general policies and personnel and budgeting issues among organisations. However, the efficacy of hierarchical power is often over-estimated because regardless of the official authority or hierarchical position, power is likely to be enacted by all kinds of actors (Markus & Bui, 2012; Newell & Marabelli, 2016). Thus, many issues in an IOIS project may be resolved by unspoken power relations within and among participating organisations (Granovetter, 1985).

Unspoken or implicit power relations with restrictive and productive effects are best explored in the framework of episodic power (*power over*) and systemic power (*power to*) (Lawrence et al., 2012; Simeonova et al., 2018). According to this framework, power is 'the dimension of relationships through which the behaviours, attitudes, or opportunities of an actor are affected by another actor, system, or technology' (Lawrence et al., 2012, p. 105). Thus, instead of looking at power as something possessed only by certain actors high up in the hierarchy or those who have official authority, this framework allows us to explore how power is exercised in everyday practices and through multiple relations (between humans, but also between humans and social structures and humans and technologies) (Hardy & Thomas, 2014; Hekkala & Urquhart, 2013; McCabe, 2010).

As mentioned above, we focus on power being exercised in two basic modes: episodic and systemic. Episodic power refers to the relatively discrete acts of a self-interested actor to get other actors, systems or technologies to do something that benefits the interests of the first actor (Lawrence et al., 2001, p. 629; Simeonova et al., 2018). This type of power is also known as *power over*: some actors can compel other actors to do something they otherwise would not do (eg, Hardy, 1996). Episodic power is unevenly distributed within and across organisations, depending on personal relations or the actor's position relative to others (Lawrence et al., 2012). Episodic power is, therefore, often exercised as authority, legitimacy, control, coercion and resource dependency (Clegg et al., 2006). For example, in IO activities, episodic power may be exercised through strict divisions of labour based on the hierarchy and status set up in the foundational system, which aim to *restrict* some actors' behaviours, uses of technology and similar actions (Schirmer & Geithner, 2018; Simeonova et al., 2018). Systemic power, conversely, is vested in social and cultural systems emerging from relational embeddedness and 'works through routine, ongoing practices to advantage

particular groups without those groups necessarily establishing or maintaining those practices' (Lawrence, 2008, p. 174). This type of power is also known as *power to* and *power with* (Allen, 1997); it concerns the actors' capacity, ability and empowerment to act differently, as individual members of a group and as a collective entity. Therefore, systemic power can be identified through 'situations in which the behaviours, beliefs, or opportunities of actors shift in response to changes in the rules (formal or informal) of meaning and membership, or changes in the technologies of discipline and production' (Lawrence et al., 2012, p. 106). For example, in IO activities, systemic power may be exercised through cross-team communities of practice, unified around a shared passion, commitment and common goal (Contu, 2013), which aim to (*re-*)produce fruitful exchanges of ideas (Simeonova et al., 2018).

The effects of episodic and systemic power are contingent and inter-dependent: One actor's *power to* may involve asserting *power over* many other actors, whereas *power over* may be impossible to exercise without *power to*; meanwhile, the effects of exercising power may be productive and restrictive (Clegg et al., 2006, p. 191). For example, a key reason often cited for the failure of IS projects is resistance to change (Kim & Kankanhalli, 2009; Markus, 1983). In IOIS projects, the control over decision-making has been found to be the central problem that causes resistance (Hekkala & Urquhart, 2013). From the perspective of inter-dependent episodic and systemic power, however, control and resistance are both manifestations of power (Hardy & Thomas, 2014; Kärreman & Alvesson, 2009). Therefore, we may find cycles where oppressive managerial control or rules inscribed in a system produce resistance, which produces shifts in controls over decision-making, which in turn may produce resistance, and so on. Thus, resistance attempts to harness episodic and/or systemic power in the production of different effects. As a result, situations arise in which resistance can strengthen the restrictive effects of some power practices while weakening the productive effects of other practices, or vice versa (Hardy & Thomas, 2014). Focussing on these multi-directional flows of episodic power and systemic power allows us to explore how power is practiced in everyday activities by all kinds of actors, at all levels of the hierarchy (Newell & Marabelli, 2016).

In sum, based on extant research, we argue that power cannot be individually owned; instead, people belong to and participate in practices where power relations are enacted. Accordingly, *power is exercised, not possessed*, and its exercising is not a one-way process. Thus, despite best efforts, project setup in terms of roles and rights cannot grant certain actors' possession over particular powers. Rather, project setup and its social embeddedness create the foundation for the kinds of practices (eg, consensus-based decision-making, delegation of tasks based on expertise) in which power by all actors becomes enacted. The potential for the generation of both shared and unshared understandings multiplies. We consider how this might influence conflict in IOIS projects next.

## 2.2 | Conflict in IOIS projects

Organisational conflict is described as the state of disagreement or misunderstanding that results from actual or perceived disputes over resources (Cohen et al., 2004; Pondy, 1967; Yeh & Tsai, 2001). Conflict is also described as 'an interactive process manifested in incompatibility, disagreement, or dissonance within or between social entities (ie, individuals, groups, organizations)' (Rahim, 2002, p. 207). Conflict is often about resource imbalances and differences in meaning, and they arise when 'groups and individuals seek to preserve their vested interests' (Hardy & Clegg, 1999, p. 374). However, as highlighted above, resource imbalances and differences in meaning can also be manifestations of episodic and systemic power. Hardy and Clegg (1999, p. 374) highlight the confusion in the literature regarding power and conflict, noting that mainstream management literature has largely focussed on 'the use of power to defeat conflict'. Based on our own review of the literature, we sense that power dynamics and conflict are often conflated in such a way that it is very hard to discern the precise nature of the relationship between the two concepts.

As described above, the project setup and its social embeddedness create the foundation for power practices in the project. The foundational system of an IOIS project also creates the basis for conflicts between and among individuals and organisations (Jones & Lichtenstein, 2008). While the project setup cannot grant actors' possession over particular powers, the process of distributing and negotiating rights, costs and practices between actors makes a

fertile ground for incompatibilities, disputes and other challenges in human interactions to emerge (Cohen et al., 2004; Johnstone et al., 2006; Robey et al., 1993). Meanwhile, the relational embeddedness of an IOIS project, that is, the quality of the exchanges between the actors, may facilitate effective handling of these disputes and challenges and the creation of shared understandings in the project (Jones & Lichtenstein, 2008). Thus, the foundational system embeds in it both the potential for conflicts but also the project's approach to conflict resolution or management (Pondy, 1967). We expect that episodic and systemic power practices may play both a productive and restrictive role in this conflict generation and management. As indicated by previous research, a clear IOIS setup with well-defined roles, rights, costs and hierarchies does not ensure that the project will be carried out without conflict (Hekkala & Urquhart, 2013). Thus, a better understanding of the project's approach to conflict management and how this includes episodic and systemic power practices is crucial.

Conflict management in IOIS projects is not an easy process because sources of conflicts are often difficult to identify and can escalate quickly (Yeh & Tsai, 2001). A task (substantive) conflict may readily escalate into an emotional conflict as negative emotions are expressed during the conflict (Chaudhry & Asif, 2015), and, thus, the types of strategies selected within a project are important. There is a high risk in IO projects that resolving conflicts as win-win situations may fail to appeal to the different project members because they are from different organisations and are naturally more inclined to be motivated by their own interests or the interests of their home organisations rather than the interests of the overall project (Robey et al., 1993). Additionally, conflicts may become 'zero-sum' games due to the complexity of creating fair rules for project governance. These rules are hard to create and even more difficult to become accustomed to because they demand that new project members find common grounds for collaboration within a short period of time (Jones & Lichtenstein, 2008). Nonetheless, different conflict management strategies, such as managing schedules and setting common goals (to manage substantive, process-related conflicts), team building (to manage emotional conflicts) and co-locating and integrating different types of teams and involved leaders (to manage social, relationship-related conflicts), can be helpful (Cohen et al., 2004, p. 79). Only some of these strategies are aimed at resolving a conflict by addressing the sources of the conflict (Pondy, 1967). Other strategies are aimed at one-way solutions or escapism (Barki & Hartwick, 2001), which may exacerbate conflicts in the long term. One-way solutions may benefit one party in the short run, but there is a risk that conflicts will escalate later on. Meanwhile, avoidance (eg, escaping from a situation) can anger and frustrate parties, resulting in the continuation of or an escalation of the conflict (Barki & Hartwick, 2001, p. 203). Thus, managing a conflict aims to prevent a dispute from becoming a battle and also aims to keep the relationship constructive, although the underlying sources of conflict may not be resolvable (Rahim, 2002).

## 2.3 | Conflict as a dynamic process

Several researchers in IS and organisational studies (Panteli & Sockalingam, 2005; Pondy, 1967) have outlined that it may be easier to understand conflict, and its possible management, if conflict is seen as a dynamic process that describes a conflict relationship between two or more social entities and can be analysed as a sequence of conflict episodes. We follow this process definition of conflict, allowing us to focus on power and conflict dynamics.

We adapt Pondy's (1967) 'model of escalation' to describe the basic process for conflict. We use the model as a scaffolding because it helps us to describe and show conflicts, their aftermaths and their interplays with power practices in a processual form. Pondy (1967) treats conflict as a series of episodes. Each episode includes stages of latent conflict, perceived and felt conflict, manifest conflict and conflict aftermath (Figure 2). Pondy (1967) describes and elucidates not only the growing intensity of conflicts at different stages but also how these stages may lead to consecutive episodes of conflict. The first stage is latent conflict, in which no outright conflict exists (conflict is not perceived), but there is a potential for conflict because of several latent factors, such as interdependence, differences in goals and priorities, bureaucratic factors, incompatible performance criteria and competition for scarce resources. The second stage is perceived conflict, in which social entities (eg, groups or organisations) become aware of the conflict and analyse it. If the entities' positions are truly in opposition, the perception of conflict and open



communication may actually exacerbate the conflict at this stage (ie, make the conflict more salient). The third stage is felt conflict, in which social entities respond emotionally to each other, the conflict becomes personalised, attitudes become polarised into 'us-vs-them' and cooperation between units decreases. What began as a small problem may escalate into a huge conflict. If the conflict is suppressed, its latent conditions may be aggravated and explode in a more serious form later until they are rectified or until the relationship dissolves (Pondy, 1967, p. 305). The fourth stage is manifest conflict, in which social entities try to get back at each other through open and/or passive aggression; organisational effectiveness suffers. The fifth stage is conflict aftermath, in which the conflict is resolved in some way. However, if the sources of the conflict are not addressed, the dispute will arise again.

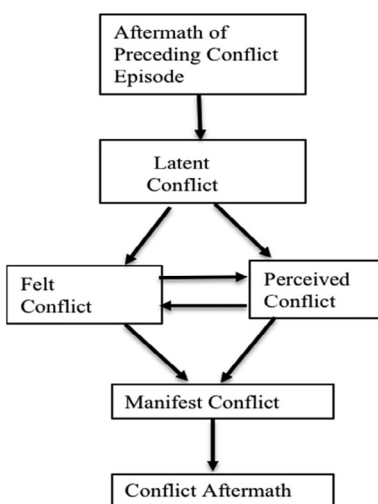
Organisational conflict does not happen in a vacuum: The environment in which the conflict is embedded may become more benevolent and alleviate the conditions of latent conflict coming to the surface, for example, by making more resources available to the organisation. However, a malevolent environment may precipitate new crises. Thus, the development of each conflict episode is influenced by a complex combination of the effects of preceding conflict episodes, attempts to manage those episodes and the environmental milieu.

Because conflict episodes tend to recur (Pondy, 1967) and latent conflict sources may not be resolvable, it is at the interface between perceived and felt conflict and the interface between felt and manifest conflict where most conflict management programs are applied to prevent perceived conflicts from becoming associated with negative feelings and erupting into uncooperative behaviour (Pondy, 1967).

In sum, previous research suggests that in IOIS projects, power struggles and conflicts are hindering project success but are also a natural, unavoidable part of project life. In an effort to unpack the dynamics of power and conflict in IOIS projects and better harness power practices for productive conflict management, this study focusses on a detailed exploration of the project setup (roles, rights, costs, hierarchies and infrastructure) and its social embeddedness (frequency, duration and pattern of interactions between project actors), or what we term the *foundational system*. Next, we outline the methodological approach of our study.

### 3 | RESEARCH CASE AND METHOD

This study follows the development of a new CRM system for three public sector organisations (Alpha, Beta and Gamma) in Northern Europe. The goal of the new CRM system was to provide a centralised means of collecting customer information, as well as to provide web-based self-service capabilities to customers. Alpha and Beta shared a



**FIGURE 2** Stages of a conflict episode (adapted from Pondy, 1967, p. 306)



legacy CRM system and decided to modernise it because it was coming to the end of its lifecycle and system maintenance was difficult. The legacy CRM system required a lot of manual data entry, and information security was very poor. This issue was particularly problematic because the system contained sensitive data. The legacy CRM system had been in existence and use since the 1990s and had been developed in parts during that time to make data entry simpler for employees. These previous development projects were often referred to during our data collection because some of the current project members had been part of all or some of the prior efforts to improve the system. Gamma, conversely, had a different legacy CRM system, which worked quite well. Thus, Gamma's participation in the project was to provide a baseline for the new system. The three organisations chose to collaboratively develop a custom solution (a) because of budgetary constraints in all organisations and (b) because suitable off-the-shelf software (capable of meeting the specific requirements of public sector organisations) could not be found.

Three different groups of stakeholders were involved in the project: the project group, steering group and management group. Each group consisted of representatives from the three organisations. The roles these groups fulfilled are described in Table 1.

### 3.1 | Data collection

The longitudinal case study spanned 3 years (2013-2015) and included three rounds of interviews with key project stakeholders. Although case studies can be of many types or genres (Sarker et al., 2018), our approach may be characterised as an 'interpretive case study' (Walsham, 1995) that is guided by values and principles such as those offered by interpretive scholars (eg, Klein & Myers, 1999; Walsham, 1995, 2006). The interpretive stance allowed us to gain deep insights and reflect on the meanings that individuals assigned to events, situations and changes in the IS project. Pondy's (1967) conceptualisation of the stages of conflict served as a scaffolding (Walsham, 1995). This approach to empirical examination helped us to understand power and conflict dynamics in the IOIS project.

In total, the data set consisted of 62 semi-structured interviews. The first author of this paper conducted all of the interviews. In the first round (March to April 2013), 22 interviews were conducted. All members of the project group, steering group and management group were interviewed. The interviews lasted, on average, for 52 minutes. In the second round (May to June 2014), we interviewed 20 project members (ie, everyone willing to be interviewed). In most cases, this was our second interview with the project participants, but for some who had started later in the project, this interview was the first one. The second-round interviews lasted 46 minutes, on average. In the third round (May to June 2015), we interviewed 21 project members. The third-round interviews lasted 47 minutes, on average. This longitudinal approach provided a unique data set with which to investigate power and conflict dynamics over time. The interviewees, their home organisations and the project group to which they belonged are listed in Table 1. In understanding the project members' roles in the project, the researchers were largely guided by the members' division into three groups (the management, steering and project groups).

### 3.2 | Data analysis

All interviews were recorded and fully transcribed. In the first phase of analysis, the first author of the paper open-coded the data focussing on issues of power and conflict, without a specific theoretical framework in mind. The codes and ideas were examined jointly with the second author of the paper. Differences in interpretation were discussed until a consensus was reached. During the first phase, we noticed many different power practices at play in the IS development project: some restricted project activities, and others pushed the activities forward. Further, the project was mired in conflict from the beginning and certain manifestations of conflict kept recurring.

In the second phase, we focussed on the two core phenomena of interest, power and conflict. First, we examined the different types of power practices and how they were used for restrictive and productive effects.

**TABLE 1** The project groups, roles, organisations of the interviewees and number of interviews

IOIS project group	Role	Members	Number of interviews
Management group	Members of the management group decided all personnel and budgeting issues and defined general policies. This group was also responsible for resolving issues the project group or steering group was not able to solve Brenda was the overall project leader and also a member of the steering group	Brenda (Beta)	3
		Amanda (Alpha)	1 (left the project in June 2013)
		Allison (Alpha)	1 (started in June 2013 as substitute for Amanda; left the project and Alpha in 2014)
		George (Gamma)	3
		Adam (Alpha)	3
		Ben (Beta)	3
Steering group	Members of the steering group guided the project group and tried to resolve problems that occurred in the project group. If the steering group was not able to resolve the problem, it was escalated to the management group. The steering group included business domain and technical experts	Gavin (Gamma)	2 (left the project in 2014)
		Brenda (Beta) (see management group)	See the management group
		Blake (Beta)	2
		Amelia (Alpha)	3 (left the project in April 2014; returned later in 2014 to substitute for Allison; became part of the management group)
		Anthony (Alpha)	1 (started in April 2014; left the project in 2014)
		Ava (Alpha)	3
		Blair (Beta)	3
		Bianca (Beta)	3
		Abigail (Alpha)	1
		Gloria (Gamma)	3
		Garrett (Gamma)	2
		Grace (Gamma)	2
Project group	The aim of the project group was to find possible technical solutions for the new CRM system and to make sure that the development work was defined and executed by domain experts. The group included software developers and user representatives Alex was the project group leader. He was hired externally to run the project but	Alex (Alpha)	3
		Garrett (Gamma)	See the steering group
		Anna (Alpha)	3
		Benjamin (Beta)	1 (left the project in September 2013)
		Bella (Beta)	2 (left the project in September 2013)
		Brian (Beta)	1 (left the project)

TABLE 1 (Continued)

IOIS project group	Role	Members	Number of interviews
	was paid by Alpha, so he was considered an Alpha employee	Ashley (Alpha)	3
		Brittany (Beta)	2
		Beatrice (Beta)	1 (substitute for Brittany)
Supplier 1 (an agile software house)	Omicron is an agile software house (founded in 2005) aiming to provide top-quality software development. The staff, at the time of data collection, consisted of approximately 20 people. Omicron had a contract with Beta	Sean (scrum master)	2 (started in April and May 2014)
		Seth (developer)	1 (started in 2014)
Supplier 2 (a global design firm)	Déka was founded in 1999 and is a global design firm. At the time of data collection, the staff consisted of approximately 150 people. Déka had a contract with Beta	Sophia (user interface designer)	1 (started in August 2014; was on a long leave from June 2015 and never returned to the project)
Supplier 3 (an agile software house)	Ekatón is a software architecture company. At the time of data collection, the staff consisted of approximately 100 people. Ekatón had a contract with Beta	Shane (user interface designer)	1 (started in August 2014)
Supplier 4 (an agile software house)	Midén develops digital business solutions. At the time of data collection, the staff consisted of approximately 50 people. Midén had a contract with Alpha	Samuel (developer)	1 (started in March 2015)
		Sebastian (developer, scrum master)	1 (started in May 2015)

At this stage, we consulted different theoretical power frameworks and chose the episodic power and systemic power perspective (Lawrence et al., 2012; Simeonova et al., 2020) as the most helpful one for analysing what we were seeing in the data. That allowed us to identify several different episodic (*power over*) and systemic (*power to*) power practices that were used in the project (eg, hiding, storytelling and bargaining). As we identified different practices, we noticed that these practices were inter-dependent and also operated within a set of parameters defined by the project setup. Second, we examined the conflicts in the project. At this stage, we consulted different theoretical conflict frameworks and chose the organisational conflict model (Pondy, 1967) because it allowed us to focus on evolving episodes of conflict and attempts to manage conflict. As part of this phase, we described three conflict episodes in detail: (a) conflict between managers and developers, (b) conflict between Alpha and Beta and (c) conflict between external software suppliers and between external and internal project members.<sup>2</sup> These episodes were the most revelatory regarding the dynamic, evolving nature of conflicts in the project and the role of the foundational system in this dynamic.

In the third phase, we focussed on teasing out the joint power and conflict dynamics, and we revisited the three conflict episodes with this focus in mind. We looked at the identified episodic and systemic power practices and how they were exercised within and across the three episodes (an overview is presented in Tables 2 to 4 in Section 4). At this stage, we wrote the episode vignettes shown in the findings, focussing on the power and conflict dynamics. We found that all power practices operated within a foundational system (with inherent latent conflict), and this meant the power practices kept resurfacing in different manifestations of that particular conflict, sometimes escalating (a restrictive effect) and sometimes deescalating (a productive effect) the conflict. We unpack these findings in the next section.

**TABLE 2** Power practice of hiding, its modes and flow, and the dynamics of power and conflict in Episode 1

Mode of power: Episodic, systemic	
Flow of power: Uni-directional or multi-directional	Power and conflict dynamics
<i>Episodic:</i> Uni-directional (managers → developers; Alex → developers) Managers tell Alex to find a conservative solution (this aligns with managers' interests) without telling the developers (managers exercise <i>power over</i> developers). Alex does not inform the developers, either, although they are part of the project group he leads	<i>Aim of exercising power:</i> Avoid open discussion and potential conflict <i>Outcome:</i> Technology choice becomes a new source of conflict later on (both substantive and emotional). In addition, the technology is now set, becoming part of the foundational system and enabling the project group to work on something concrete
<i>Episodic:</i> Multi-directional (managers → developers → managers → project group) Supplier 1 is hired; developers learn about it from the minutes of the steering group meeting (managers exercise <i>power over</i> developers). Developers quit in response (developers exercise <i>power over</i> managers), but their departure is hidden from everyone else in the project group (managers exercise <i>power over</i> project group)	<i>Aim of exercising power:</i> Avoid open discussion and suppress resistance <i>Outcome:</i> Speculation about why developers left is rife. Rumours become a new source of conflict (emotional) and feed the storytelling power practice in Episode 2 In addition, some of the historical baggage (experiences of previous failures) is removed with the departure of two developers
<i>Systemic:</i> Uni-directional (managers → Alex) Alex is not informed of Beta's internal crisis meeting or what was discussed; Beta managers exercise <i>power to</i> avoid telling Alex because he is not officially part of the management group	<i>Aim of exercising power:</i> Assert managers' legitimate authority to make decisions in the project <i>Outcome:</i> Alex develops his own version of what is going on inside Beta and shares it with others in Alpha. Us-vs-them thinking becomes a new source of conflict in Episode 2 (emotional)

## 4 | CASE FINDINGS AND ANALYSIS

Below, we present an overview of the project events and project timeline (from 2013, until the complete restructuring of the project in 2016), focussing mainly on the two different project setups that we found to function as the foundational systems. We then present the three main conflict episodes that occurred during that time. For each conflict episode, we also discuss the specific episodic and systemic power practices that we believe played a key role in the conflict.<sup>3</sup> For readability, we chose pseudonyms for individuals that are easy to remember. For the Alpha organisation, all names begin with an A, for the Beta organisation, all names begin with a B, and for the Gamma organisation, all names begin with a G. For the supplier organisations, all names begin with an S.

### 4.1 | Overview of project events: 2013 to 2016

The project began in 2013. The participating organisations (Alpha, Beta and Gamma) were all project partners with equal decision-making rights. However, the costs were split as follows: 50% Beta, 30% Alpha and 20% Gamma. The project was organised hierarchically into three groups: the project group, steering group and management group. Each group consisted of representatives from the three organisations. Members of the management group decided all personnel and budgeting issues and defined general policies. Members of the steering group guided the project group and tried to resolve problems that occurred in the project group. The project group was to define the requirements for the specification, design and programming work. To do the latter, many external software development companies were hired to assist the project group from 2014 onward. Three of the external suppliers had contracts with Beta, and one had a contract with Alpha.

**TABLE 3** Power practice of storytelling, its modes and flow, and the power and conflict dynamics in Episode 2

Mode of power: Episodic, systemic Flow of power: Uni-directional or multi-directional	Power and conflict dynamics
<p><i>Systemic and episodic:</i> Multi-directional (Alpha, Anna and Ashley → Beta, Brittany → Alpha, Anna and Ashley → ...) Alpha project group members (Ashley and Anna) make up stories about Beta employees (cannot collaborate, cannot take criticism). Alpha exercises <i>power</i> to dismiss Beta because of 'typical Beta' behaviour (a systemic meaning-making device)</p> <p>This <i>power</i> to translates into Ashley and Anna (Alpha) exercising <i>power</i> over Brittany (Beta). Brittany resists the episodic power by questioning the systemic power practice, arguing that Ashley and Anna have <i>no right</i> to dismiss all Beta employees, even if they are difficult, because Beta is paying for half of the project. Because no one with perceived higher authority (eg, Alex, the project group lead) intervenes, the cycle just continues</p>	<p><i>Aim of exercising power:</i> Focus attention on the differences between Alpha and Beta; assert one best way of doing things in the project</p> <p><i>Outcome:</i> Us-vs-them thinking becomes entrenched (higher degree of relational embeddedness in intra-organisational camps than in inter-organisational project group), feeding the bargaining power practice in Episode 3</p> <p>In addition, no one best way is established, because Alpha and Beta have equal rights (project setup). Multiple ways of approaching the development continue to coexist</p>

**TABLE 4** Power practice of bargaining, its modes and flow, and the power and conflict dynamics in Episode 3

Mode of power: Episodic, systemic Flow of power: Uni-directional or multi-directional	Power and conflict dynamics
<p><i>Episodic:</i> Multi-directional (Beta and Supplier 1 → project grou → Alpha and Supplier 4 → Beta)</p> <p>Supplier 1 sides with Beta, and its scrum master is perceived as the new 'boss' with <i>power</i> over the project group (influencing decision-making)</p> <p>Alpha hires Supplier 4, which criticises Supplier 1's work in an official report and sides with Alpha, influencing the project group to take a new direction (rework starts). When some in Alpha perceive that a specific person from Supplier 4 (Samuel) is getting too much power, they organise (with Beta) to get him fired from the project</p>	<p><i>Aim of exercising power:</i> Influence project decisions in one direction or another (through alliances and resources, such as demos of the system, data models and external suppliers)</p> <p><i>Outcome:</i></p> <p>Us-vs-them thinking continues, but ultimately, attention is also focussed on what unites Alpha and Beta project group members (they must work together to get Samuel, the external supplier, fired)</p>

The establishment of equal voting rights for each of the three organisations, as well as the working structure of the management, steering and project groups, followed the technical-rational ideal (Avgerou & McGrath, 2007) of a project environment and was supposed to diminish the role that power and politics could play in the project:

At least for now, ... all three [organizations] are equal; of course, the size of the organization is taken into consideration when considering the funding, but the final decisions [...] Every organization will have one vote; it was thought that in order to maintain policy making, it would be easier to have a 2 to 1 voting hierarchy.... (Alex, Project manager, Alpha, Round 1 interview)

The desired effect was that the participating organisations would have equal power in the project (despite bearing the costs of the project to varying extents). Furthermore, a clear hierarchy and division of labour were established with the management, steering and project group structure. This setup was expected to ensure that project members would be able to rationally and openly discuss and resolve issues arising in the project and that the trust between parties would be increased by facilitating a consideration for each other's needs and goals. The thought was that

these specific rules for communication would facilitate open patterns of communication between individuals and organisations in the project:

We leave policy making up to the management group... and if this conversation continues in an open manner ... [the project should succeed] ... and we have an agreement that if an organization leaves the project, the whole project will end... so there is no option that someone can play their own game.... (Garrett, IT manager, Gamma, Round 1 interview)

As the project progressed, we noticed that it began drifting further and further away from the technical-rational ideal, and the power differences or the lack of them (eg, in the equal voting rights for all organisations) were less and less accepted. Below, we describe three conflict episodes that progressively unfolded between 2013 and 2015. It became clear from the first conflict episode that equal voting rights and the three-tiered structure did not work. Despite this, the project setup was maintained until the project was restructured in 2016. In 2016, the project was transformed into an outsourcing arrangement, where the task of system development was transferred to a separate company (Sigma Ltd.) fully owned by the user organisations. The project, steering and management groups were disbanded. The members of the project group, who had previously worked at different user organisations, became employees of the new company. Alpha, Beta and Gamma became the first clients of Sigma Ltd., but they were also shareholders of the company and had representatives on its board of directors. Although most of the project group members became Sigma employees, most management and steering group members no longer participated in the project. A CEO was hired externally to run Sigma Ltd. The employees relocated to different premises in the beginning of 2016. The new CEO, together with the project members, decided to establish two teams in the in-house company, a customer service team and a development team. The Alpha, Beta and Gamma employees were purposefully mixed in these teams. The in-house company continued with the previous strategy of hiring external software developers, who were also divided between these two teams. The restructuring affected not only the basic project setup, hierarchy and organisational membership but also the quality of the exchanges and trust between project members (relational embeddedness), thus constituting a shift in what we called the foundational system of the project. This study focusses on the events that happened until this restructuring. Figure 3 provides an overview of the key project events between 2013 and 2016.

## 4.2 | Episode 1: Power and conflict dynamics between software developers and managers

One of the first key project tasks was finding the right overall technical solution for the CRM system. This was a joint task for technical experts from the project group, the project group lead (Alex) and the information technology (IT) managers (Adam from Alpha and Ben from Beta) from the management group. The project group technical experts included three software developers (Bella, Benjamin and Brian). Notably, all three were Beta employees. This was because, in previous system upgrade projects, Beta had always taken the lead and supplied the projects with developers. In addition, Ben had been with Beta for many years, had participated in previous projects and had a long history of working with Bella, Benjamin and Brian. Interestingly, despite (or perhaps because of) this common history, the quality of the relationship between Ben and Benjamin was not ideal, and they did not trust each other very much:

Ben cannot stand me because he doesn't discuss [things] with me. Well, he (Ben) feels with reason that I don't appreciate his knowhow. So it's impossible to collaborate with him. [...] And he just talks to other leaders. I think he is uncertain, and he doesn't want to communicate about the issues where he is weak... He tries to override substance by his position. The only important issue to him is the position, which provokes me... [...]. (Benjamin, Software developer, Beta, Round 1 interview)

Their visions of how the IS development should proceed differed significantly, too. However, Ben valued Bella's expertise and their professional relationship, and Bella appreciated that Ben shared important news with her before others. In sum, there was generally a high degree of relational embeddedness among the group of Beta employees before the project began. Conversely, Adam and Alex were new to Alpha and to the project, making them less embedded in the joint task force.

#### 4.2.1 | Latent and perceived conflict

Before the work of selecting the right technical solution began, the joint task force had already perceived many possibilities for conflict stemming from the three-tiered structure, equal decision-making rights, unequal costs and different degrees of relational embeddedness (the foundational system). Thus, many sources of latent conflict (Pondy, 1967) were present in the team and were perceived by the individuals. Three main perceived areas of conflict were mentioned: (a) Beta vs Others, (b) developers vs managers and (c) Beta vs Alex (the project group leader, employed by Alpha). First, developers from Beta were not satisfied with the project setup (ie, the three-tiered structure, equal decision-making rights and unequal costs), as pointed out by Benjamin:

The situation is very strange. We are paying for half of the project, but we have given our power of decision making away... If I had had the power to decide, there would have been no management group or steering group. I would have formed a self-guided project group with the guys who genuinely know something... [] There seems to be some kind of ideology that we have to cooperate, although it does not make sense. (Benjamin, Software developer, Beta, Round 1 interview)

This perceived imbalance sets up the potential for felt and manifests conflict between Beta and everyone else in the project.

Second, some Beta developers also had a difficult relationship with their own manager (based on his performance in previous projects), as exemplified by Benjamin:

They [referring to Ben and his unit] don't want to do anything; they don't want to innovate; they are far too conservative. This has been jamming all of our projects.... (Benjamin, Software developer, Beta, Round 1 interview)

Brian's expectations for the project were similarly low. He felt that previous IS projects had failed because of leadership issues, and he criticised the setup of the project. According to Brian, the whole project was '*overorganised*'. From Ben's perspective, Bella, Benjamin, and Brian were some of the best people from their organisation for this project, but he also commented that the project group and the management group goals for system functionality (Barki & Hartwick, 2001) were not necessarily aligned:

We have to decide very fast what technologies we're going to use. We have people in this group [referring to Benjamin] who wish to use very modern, fancy tools, which may be good; I don't disagree. However, people like me and Adam are thinking that this system should be alive in 20 years, as well..., so we need to make choices that will work later, as well, and we'll have experts on it later on .... (Ben, Management group, Beta, Round 1 interview)

These reservations on both sides set up the potential for felt and manifest conflict between the developers and managers.



YEAR; KEY EVENTS; CONFLICT EPISODES	2013: Establishment of an inter- organizational IS project  Data collected: March, April 2013.	2014: Suppliers 1-3 start in the project (hired by Beta) Data collected: May, June 2014.	2015: Supplier 4 starts in the project (hired by Alpha) Data collected: May, June, August 2015.	2016: Establishment of a new in-house company
KEY EVENTS	<ul style="list-style-type: none"> <li>Start of the project</li> <li>Establishment of equal voting rights for three organizations (Alpha, Beta &amp; Gamma)</li> <li>Establishment of 3-tiered group structure (project-, steering-, and management group)</li> <li>The foundational technology choice (Java)</li> <li>Major conflict months: Sept - Nov</li> <li>A crisis meeting in Beta organization</li> <li>Software developers of Beta leave the project after the crisis meeting</li> </ul>	<ul style="list-style-type: none"> <li>Supplier 1 (an agile software house) starts in April-May 2014</li> <li>Supplier 2 (a global design firm) starts in August 2014</li> <li>Supplier 3 (an agile software house) starts in August 2014</li> </ul>	<ul style="list-style-type: none"> <li>Supplier 4 (an agile software house) starts in March 2015</li> <li>Supplier 2 &amp; 3 leave the project</li> </ul>	<ul style="list-style-type: none"> <li>Establishment of new company (Sigma Ltd.)</li> <li>3-tiered group structure disbanded</li> <li>Project group members (previously employees of Alpha and Beta) become employees of Sigma Ltd.</li> <li>CEO of Sigma Ltd. hired</li> <li>Board of directors selected for the in-house company</li> </ul>
CONFLICT EPISODES	Episode 1: Conflict between Software Developers and Managers	Episode 2: Conflict between Alpha and Beta	Episode 3: Conflict between External Software Suppliers	Re-set of foundational system (with new latent conflicts)

**FIGURE 3** Overview of key events in the project

Third, the search for the technical solution had to include Alex (project group lead, Alpha), who was not privy to internal Beta conversations but was very aware that a ‘shadow organisation’ of the project was present at Beta:

They [Beta] have had one meeting regarding this project, where they clarified the ‘border fences,’ duties, and responsibilities. So, this happened before the project group even started work...[] Such shadow organizations can always be found, but it takes time. (Alex, Project group lead, Alpha, Round 1 interview)

These interdependencies, combined with a lack of open communication, set up the potential for felt and manifest conflict between Beta and Alex.

## 4.2.2 | Felt and manifest conflict

Although everyone was aware of the potential for conflict, none of the issues identified above were openly discussed. Thus, Bella, Benjamin and Brian tried out several technical options and thought the best one could be selected through rigorous testing. While the software developers were working on finding and trying out different technical solutions, the IT managers (Adam and Ben, management group) gave the responsibility for finding a ‘conservative’ technical solution to Alex. According to Ben, the intent was that they would inform the software developers of this, but somehow, it did not happen. Although not explicitly expressed, the reason was most likely that the IT managers were aware that the software developers would not agree with this conservative strategy, and the managers wanted to avoid open discussion and potential conflict. As a result, the decision was, in effect, hidden from the software developers, who worked on technological issues for several months while the IT managers went ahead and

commissioned a conservative solution from Supplier 1. When this finally came to light after a steering group meeting, two of the software developers (Bella and Benjamin) felt so insulted that they threatened to quit the project altogether and questioned whether the management group was really qualified to make decisions about technical issues:

Unfortunately, we heard about the choice after the meeting of the steering group. [...] If the management group think that they are the best experts, why do you need the other experts then? (Bella, Software developer, Beta, Round 1 interview)

The latent conflict had become felt (the developers were angry and insulted) and manifested in openly aggressive behaviour (threats to quit). In response, Ben called for an internal Beta crisis meeting. The crisis meeting saw efforts by Brenda (the overall project manager, management group, Beta) to apologise for the way things had been done and convince everyone that inside Beta open discussions were appreciated. However, she also made it clear that the relationship between Beta's software developers and Alex had been damaged:

I take my responsibility, and can say that I've failed, because you have felt that the roles, responsibilities, and plans have been unclear. This has caused a lot of frustration and suffering for you. I can say that I am really sorry that this happened... and the feedback you gave me shows that this has had a negative influence on the relationship, especially between you [Bella, Brian, and Benjamin] and Alex. You have also wished that Alex would have been more dedicated... [] I really appreciate that you [Bella, Brian, and Benjamin] gave this feedback. I hope that this shows you that we can have open discussions in Beta... [] We have not succeeded in leading this project in the best way. We should think about how to proceed now, so that things do not escalate, because issues can very easily become personalized. We have to solve things now. Alex is not here, so we are just speculating on his role here.... (Brenda, Crisis meeting at Beta, September 2013)

Interestingly, despite the seeming desire to resolve and de-escalate the issue, the pattern of secrecy in communication continued, because the discussions in this crisis meeting were not shared with Alex. As noted by Pondy (1967), open discussion of perceived conflict areas may alleviate or exacerbate issues. In this study, *hiding* (intentionally and unintentionally) key issues and activities from each other (managers hiding decisions from developers, Beta hiding discussions from Alex) was a key episodic and systemic power practice that aimed to avoid conflict. However, this practice contributed to conflict becoming personalised, negatively emotionally charged and accompanied by conflict behaviours (threats). We will discuss this more below.

## 4.2.3 | Aftermath

The aim of the crisis meeting was mainly to resolve the conflict between the developers and managers, but the meeting generated many interesting outcomes in the aftermath. First, Beta's software developers (as technical experts) decided that they needed to be in the same physical location as Alex and the rest of the project group (product owners). The software developers changed locations without informing Ben, the Beta member of the management group. Second, Bella and Benjamin decided to leave the project. The reason for their leaving was not clear to the other project members, and some speculated that they had been fired. As Brittany (product owner, Beta, project group) explained, she had to read about these key personnel changes in the minutes of the management group meeting, and this fuelled rumours:

It seemed really awful, and we [Beta people in the project group] had the feeling that..., like, they [management group] can set aside anyone if they don't like your face ... They didn't want to understand Benjamin, and it was a kind of trumped-up accusation at the end, when IT managers decided to remove them [Bella and Benjamin] from their positions. (Brittany, Round 2 interview)

Thus, the *hiding* of key decisions continued after the crisis meeting and despite Brenda's comments that better project leadership was needed. The findings on the power and conflict dynamics in Episode 1, focussing on the dominant power practice, hiding, are summarised in Table 2.

### 4.3 | Episode 2: Power and conflict dynamics between Alpha and Beta

Once the technology solution was chosen, more detailed work in the project group could begin. This work mainly involved the technical expert (Brian, Beta), the product owners (Anna and Ashley, Alpha; Brittany, Beta) and, of course, the project lead (Alex, Alpha). This group of people was now physically co-located, and it was their job to generate the functional and user interface requirements for the system, create mock-ups, run tests and perform other tasks. With the departure of Bella and Benjamin, the project urgently needed more developers. They were hired externally. Beta signed contracts with two more external software houses (Suppliers 2 and 3). Owing to the lack of open communication about the departure of Bella and Benjamin, rumours of internal issues within Beta spread.

#### 4.3.1 | Latent and perceived conflict

Lack of open communication reduced the quality of exchanges between the actors and led to a lack of shared understanding among the project group members from different organisations. Anna and Ashley from Alpha thought that the biggest problem lay in the inability of Beta leaders to manage their subordinates, whereas Alex (project group lead, Alpha) unfairly got the blame for the difficult situation. Ashley commented on her frustration with the 'camps', or alliances, that had formed. The development of a higher degree of relational embeddedness within the *intra*-organisational camps than within the *inter*-organisational project group hindered the project work:

The power play, it's immense, quite unbelievable. Our project manager [Alex] had a very hellish position... He was made a scapegoat for other people's mistakes... We have even heard the comment that it was Alpha who fired Benjamin and Bella. We were like "Oh, this is not how things went;" and it felt very bad that we were accused... It seems like the leaders of Beta talk in a different way to their subordinates than to other people, and have tried to soften this situation to their subordinates. (Ashley, Alpha, Round 2 interview)

The potential for conflict (Beta vs Others), which had been present from the beginning of the project, was now met with the dissatisfaction of many Alpha employees as to how Beta employees did their jobs.

#### 4.3.2 | Felt and manifest conflict

The potential conflict became materialised almost immediately among the Alpha (Anna and Ashley) and Beta (Brittany) product owners who had to work together every day. The conflict became very personalised and daily arguments followed. Brittany felt that Anna and Ashley were attacking the Beta organisation and her personally, although Beta was paying for half of the project:

We had very bad conflicts in the project group... from our point of view it seemed that there was a juxtaposition between Alpha and Beta... Usually when I came to work they [Anna and Ashley, Alpha] started to complain, complain, complain... It was like a direct attack on our organization [Beta] implying that the people in our organization are stupid... so I needed to tell them quite directly to shut up. You can't dismiss all the Beta people, damn it, ... We are paying for half of this sh\*t.... (Brittany, Beta, Round 2 interview)

Anna and Ashley, meanwhile, felt that Brittany was a typical Beta employee in that she could not take criticism. They also felt that using the financial argument created distrust because the agreement had been that the decision rights would be equal:

I think that Beta people are praising their own employees too much. We have noticed that other people can't criticize them... It makes their blood boil... We have been terror stricken. I just can't understand how someone can say that it's good that Beta is paying for half of the project... In some situations, project members have even said that they are paying... somehow showing that they have more power in the project, although our decision rights are equal... It causes distrust.... (Ashley, Alpha, Round 2 interview)

The project group lead, Alex, although aware of these conflicts, decided not to get involved. Thus, the Alpha-vs-Beta way of thinking and behaving was allowed to persist.

Stories, rhetoric and discourse are key attention-focussing mechanisms (Pondy, 1967) that can draw attention away from what separates the conflicting parties to what unites them (especially if both parties value the relationship), but these mechanisms can also draw attention to the disagreements and differences. In this study, we found that *storytelling* was left to the project group (with no unified communication from the management group or the project lead, Alex). It became a key systemic and episodic power practice for the group that continuously focussed attention on the Alpha-vs-Beta conflict, furthering the relational embeddedness of the intra-organisational camps and eroding trust and high-quality exchanges across the organisations. We discuss this more below.

### 4.3.3 | Aftermath

The conflicts between Alpha and Beta at the project group level were largely ignored. Brittany shared her distress with Blair (steering group, Beta), and Ashley and Anna often complained to Alex. Alex remained silent, and Blair did not take Brittany's complaints further. Thus, behaviours continued in this established pattern. Brian became progressively less involved in the project. External suppliers (Suppliers 1, 2 and 3) hired by Beta during 2014 were involved in the daily activities and were aware of the conflicts, but they tried to steer clear of the Alpha-vs-Beta rhetoric. An external jolt to the environment was delivered when Supplier 4 was hired by Alpha, introducing new individuals into the project group. The findings for the power and conflict dynamics in Episode 2, focussing on the dominant power practice of storytelling, are summarised in Table 3.

## 4.4 | Episode 3: Power and conflict dynamics between external software suppliers

As discussed above, with the departure of Bella and Benjamin, the project urgently needed more developers. They were hired externally. Beta signed contracts with three external software houses (Suppliers 1, 2 and 3) in 2014. Supplier 4 was then hired by Alpha in 2015 to perform a quality audit of what had been developed thus far.

### 4.4.1 | Latent and perceived conflict

Sean (software developer, Omicron, Supplier 1) was one of the first software developers to join the project. It became evident that he had heard something about the lack of open communication and hardships within Beta and between Alpha and Beta:

I've understood that there has been some kind of political tension between, and inside, the user organizations [Alpha and Beta]... and I've heard that Beta, for example, has a shadow organization for this project, which gathers, and they together agree on what kind of attitude they will take and things like that... instead of openly discussing the matters.... (Sean, Round 2 interview)

However, Sean hoped they would be able to avoid really bad conflicts, given the close personal ties between Omicron and Beta:

Some people from Beta have friends in Omicron...so I've been wondering how we can save face [while giving constructive but critical feedback].... (Sean, Round 2 interview)

At the same time, Sean was perceived as the new 'boss' by some of the project team members:

Sean, our scrum master, has taken the role of daily leader. He is bossing us around and saying that you should think about this and this now.... (Brittany, Beta, Round 2 interview)

Suppliers 2 and 3 (hired by Beta) joined the project only a few months after Supplier 1 and had similar reactions to the existing conflicts in the project as Sean. Thus, the potential for conflict between Beta and others was perceived among the external suppliers (who had a contract with Beta and felt loyal to Beta). At the same time, the external suppliers perceived a potential for conflict between the external developers and the internal project group members (the client) and also felt the need to not upset the client.

#### 4.4.2 | Felt and manifest conflict

Although the suppliers perceived the potential for conflict, the first serious conflicts did not become manifested until 2015, when Supplier 4 was hired by Alpha to perform a quality audit for the system as developed thus far. Suppliers 1, 2 and 3 already had contracts with Beta, thus, it was decided that Alpha would handle the bidding. Supplier 4 won the bid, signed a contract with Alpha and conducted the quality audit for the system. Interestingly, although the plan was for an outside organisation to perform an objective quality audit, this same supplier was also hired to do development work, creating a conflict of interest. The report produced by Supplier 4 included heavy-handed criticism of the previous work. Supplier 4 was then contracted to redo some of Supplier 1's work. The rework escalated into a complete reconsideration of the architectural and data model, with Supplier 4 pushing for a novel cloud solution:

I can imagine that it can be a quite a tough spot for [Supplier 1], who has (already) been doing it for a year, and then comes the new guy who says that it's going in the trash... I've managed to create my own utopia on this; it is a cloud service... If we follow it, it will be clearer and simpler... Our architect has started to amend bugs and some basic things relating to that... and it was clear to me that the current data model is not working, so I started to think about new requirements .... (Samuel, Supplier 4, Round 3 interview)

Although Supplier 1 recognised that its work was not perfect due to the fast pace of development, they were quite irritated about the extent to which Supplier 4 questioned their work and decided to redo it:

He [Samuel] made decisions quite independently and used a kind of mental violence... And the consequence was that we decided to rewrite a big part of the system. It wasn't a clever decision. Anyway, I have to admit that I kind of agreed with the plan, because I didn't resist enough. And there were enough people who supported the idea.... (Sean, Supplier 1, Round 3 interview)

Open conflict between the two external software suppliers was exacerbated by the Alpha and Beta product owners siding with ‘their’ suppliers. For example, the Alpha product owners reported that Supplier 1’s external developers (hired by Beta) told them to stick to their domain (*‘Seth [Supplier 1 developer] told me, “It is my duty to think about these issues, not yours”...’*, Anna, Alpha, Round 3 interview) and ignored their suggestions. At the same time, Samuel (Supplier 4, hired by Alpha) and Anna (Alpha) got on well with each other and worked closely together. Gradually, Samuel started to present Anna’s unofficially expressed support as *‘all product owners have supported this’* when communicating his ideas to other external developers. However, Anna was not fully aware of this situation:

It kind of happened insidiously that [external] software developers got too much power in decision making.... (Anna, Alpha, Round 3 interview)

Many other people in the project group said later that *‘He [Samuel] was very manipulative and did not back down with his ideas until others agreed with him...’*. As the project progressed, the conflict between the external software suppliers of Alpha and Beta increasingly became a conflict between the internal project group members (across Alpha and Beta) and one external supplier (Supplier 4). This conflict culminated in 2016 with the firing of Samuel from the project. His dismissal was organised by Alex and by Alpha and Beta product owners (Ashley and Beatrice).

Resources and different degrees of relational embeddedness in informal intra-organisational groups and formal IO groups in the project environment are shown to be key factors that can exacerbate or alleviate existing conflicts (Pondy, 1967). Throughout this conflict episode, we can see how project group members from different organisations saw external suppliers as resources (and vice versa) that could help bolster their influence and push through their points of view in project group meetings. Thus, the project group members used the suppliers, and the suppliers used the project group members in *bargaining* over more decision-making influence for Alpha or Beta. Because the project group members were left to their own devices (with little guidance from the management group), bargaining over decision-making influence became a key episodic power, exercised to benefit the interests of the actors (Lawrence et al., 2012; Simeonova et al., 2020). As we also see, this exercising of bargaining (as episodic power) generated clear resistance practices by other actors, who saw the decision-making power shifting in undesirable ways. We will discuss this further below.

#### 4.4.3 | Aftermath

Although taking sides decreased a little with Samuel’s departure, the existing project structure (with Alpha and Beta and their suppliers) continued to impact the project work until the end of 2015. As described in the overall project overview, in the beginning of 2016, there was a significant change in the project setup. The findings on the power and conflict dynamics in Episode 3, focussing on the dominant power practice of bargaining, are summarised in Table 4.

## 5 | DISCUSSION

The aim of this longitudinal, interpretive case study (Walsham, 1995) was to explore the power and conflict dynamics in an IOIS development project. The lenses of systemic power and episodic power (eg, Lawrence et al., 2012; Simeonova et al., 2018), together with the organisational conflict model (Pondy, 1967), gave us the opportunity to look at and describe the different ‘faces of power’ (restrictive and productive) and their interplay with conflict in the project. We found that the project setup and its social embeddedness, or what we proposed as the foundational system in this study, played a crucial role in the power and conflict dynamics.

Avgerou and McGrath (2007) highlight that much of IS research has viewed IS development and implementation activities from a very rational and technical perspective, necessitating a complementary view in which IS development is understood as fundamentally political. This study shows that the technical-rational ideal and the 'masking' of power are not only characteristic of the researchers' views but are also common for practitioners. The IOIS project we examined started with the setting up of equal voting rights and a three-tiered control architecture. These efforts supposedly guaranteed equality in decision-making for all three participating organisations and also established a decision-making structure that could handle emerging conflicts or disagreements in a rational manner. From this perspective, the idea was to institute a clear hierarchy and a structure of authority, eliminating other kinds of power, as well as much of the potential for conflict. At the same time, the project members from different participating organisations were often selected based on their previous experiences of working together; this generated a higher degree of relational embeddedness (Jones & Lichtenstein, 2008) in the informal intra-organisational camps than in the formal IO project groups. As a result, a pattern of IO interactions formed characterised by a distinct lack of open communication. The technical-rational ideal began to crumble, with power practices such as hiding (Episode 1), storytelling (Episode 2) and bargaining (Episode 3) emerging; each contributed to conflict in the project in different ways, depending on whether it was exercised in an episodic or a systemic mode and in a uni-directional or multi-directional flow. The findings are summarised in Tables 2 to 4. Below, we discuss these findings in relation to extant research.

First, the findings demonstrate that power practices may be both *uni-directional* and *multi-directional*. In their multi-directional form, power practices (hiding, storytelling and bargaining) embody *control* and *resistance* as manifestations of power (Kärreman & Alvesson, 2009). Thus, we confirmed that multi-directional power practices may be harnessed to achieve one effect (exercising power) or an alternative effect (exercising resistance to power or even resistance to resistance). Kärreman and Alvesson (2009) called this latter aspect (resisting resistance) counter-resistance. Although counter-resistance has not been discussed extensively in the previous literature, it helps us to understand why resistance does not necessarily lead to change in a complex project such as this IOIS development project and instead showcases the restrictive effect of power (Lawrence et al., 2012) that ends up reinforcing existing conflicts. In this case, we can best see this in the storytelling practice (Episode 2), where Alpha's attempt to exercise *power over* Beta is resisted by Beta through claiming that Alpha has no *power to* dictate behaviour because Beta is paying for half of the project (and also because of equal decision-making rights), and this only leads to further attempts by Alpha to exercise *power over* Beta. Interestingly, we also find uni-directional power practices, where the circulation of power through relations is momentarily stopped. This may be specific to the hiding power practice (Episode 1) because hiding, in effect, works by trying to hide the fact that either *power over* or *power to* is being exercised. However, as soon as it becomes known that something is hidden between the project members, this practice generates resistance, and the practice becomes multi-directional. In this case, the developers resisted (by quitting) after they learned about the hiring of Supplier 1 from meeting minutes and realised that this development had been actively hidden from them.

Second, the findings demonstrate that systemic power and episodic power may have *restrictive as well as productive effects on conflict* (Lawrence et al., 2012). According to Lawrence et al. (2012), systemic power is productive, allowing one to do something one otherwise would not be able to do; examples are the power to vote, the power to access information and the power to resolve a conflict. Episodic power is seen by Lawrence et al. (2012) as restrictive, and this highlights the fact that one actor can control the potential actions of another (eg, the *power of* a boss over a subordinate). In this case, we find that both systemic power and episodic power may have restrictive as well as productive effects on conflict. Systemic power and episodic power can create new sources of conflict between actors in the project or perpetuate existing sources of conflict between actors, that is, restrictive effects. However, as highlighted by extant research, power also plays a role in conflict management (Cohen et al., 2004), where power can have unexpected productive effects. In this case, deliberate conflict management in the project was scarce (limited to one crisis meeting). Perhaps because of this lack of deliberate conflict management, we found no evidence of consensus-oriented strategies such as accommodation and compromise (Barki & Hartwick, 2001). However, many of



the exercised power practices ended up performing other conflict management strategies without the actors necessarily being aware of them. For example, hiding avoided conflict while also asserting the managers' authority to impose one-way solutions (Barki & Hartwick, 2001). The secret hiring of Supplier 1 to deliver the basic technology foundation for the project generated a new conflict source but also had a potentially productive effect on conflict later. It allowed the project group to move on with its work. The departure of two Beta software developers removed much of the historical baggage from the project and allowed the degree of relational embeddedness to increase for the formal IO project group, with new ties forming among project group members across Alpha and Beta. Although we can only speculate what would have happened if Benjamin and Bella had not left, we can be certain that potential further conflicts were eliminated with their departure. In sum, in this case, systemic power and episodic power also had productive effects on conflict, but these effects were unintended.

In seeing power as restrictive as well as productive in conflict, it is useful to consider the kinds of material and social objects that the exercising of power creates. In this case, we can see how the choice of the conservative technological solution (Java) becomes part of the foundational system. Although the equal decision-making rights, three-tiered structure, unequal costs and different degrees of relational embeddedness point to structural and social aspects of the foundational system, the technological choice marks an evolution of the foundational system into the material<sup>4</sup> world. Thus, it sets up material (rather than structural or social) boundaries for what the project members have the *power to do* (Levina & Orlikowski, 2009; Newell & Marabelli, 2016) in terms of system development later. The durability of materiality means that, once put in place, particular technologies or objects can become carriers of power practices (hiding and bargaining) and patterns of IO interactions (lack of open communication) but can also provide a common point of departure for IO actors who cannot rely on established relationships to create shared understandings. We discuss the theoretical and practical implications of this below.

Third, the findings confirm that systemic and episodic power practices are inter-dependent, and this is an aspect previously overlooked in IS research (Simeonova et al., 2018). This case highlights the inter-dependent nature of modes of power (systemic and episodic) in practice and how they can have different aims and outcomes when dealing with conflict. For example, the episodic power practice of hiding aims to avoid open discussion and conflict but also generates a new substantive and emotional source of conflict that feeds the systemic power practice of the Alpha-vs-Beta storytelling later. We can also see the inter-dependent nature of systemic power and episodic power in the hiding practice, where the managers' exercise of systemic *power to* guide policy (enabled by the three-tiered project structure) translates into them also being able to exercise episodic *power over* software developers (trying to make them accept a conservative technological solution they otherwise would not accept). Another example can be seen in the bargaining practice, where Supplier 4 can exercise *power over* other software developers and project group members only because the supplier is enabled to exercise systemic *power to* push for changes by its official role as the quality auditor. Thus, although episodic power may help with bringing about changes in the project, only systemic power can lead to the institutionalisation of these changes (Simeonova et al., 2020) in the foundational system. Without institutionalisation, the changes revert back to the status quo, as they did when some of Supplier 4's suggestions (ie, making the system cloud based) were rejected in the end because the project members felt the external developers had become too powerful but did not have the legitimate systemic *power to* dictate such decisions.

## 5.1 | Theoretical implications: Foundational system of power and conflict

The equal voting rights of the organisations, the hierarchical structure (three groups, each consisting of representatives from the three organisations who remained employed by their home organisations), unequal costs borne by the three organisations, and different degrees of relational embeddedness across intra-organisational and IO groups in the project all set the basic parameters for the project work. According to Lawrence et al. (2012) and Simeonova et al. (2018), systemic power is embedded in social relations and in technical and bureaucratic systems and practices.

Thus, the project setup creates a foundational system of power that determines how systemic power (*power to*) may be exercised. The findings suggest, in addition, that episodic power is also constrained by the foundational system but not determined by it.

Our findings related to the foundational system have three key theoretical implications. First, the foundational system sets the limits for the practices of *power to* and *power over*, but in different ways. The foundational system (the basic parameters for the project work) *determines* how project members are allowed to practice systemic power or *power to*. This can be seen in that the stakeholders invested with less *power to* by the foundational system were limited in their actions from the beginning of the project. For example, from the beginning, the Beta software developers were blocked from utilising (did not have the *power to* utilise) their expertise to make technology choices because of their position in the lowest tier of the project hierarchy. Thus, systemic authority or *power to* was used to restrict the software developers' arguably legitimate, expertise-based *power over* technology choices, that is, people with authority 'kept software developers in their place' (Bachrach & Baratz, 1962). Conversely, the foundational system *constrained but did not determine* how the project members were allowed to practice episodic power or *power over*. This can be seen in episodic power being not equally enabled for all social actors within the foundational system. One reason is outlined above. Differences in systemic power translate into differences in episodic power (the authority to guide policy translates into managers being able to exercise *power over* developers, whereas the developers' only option to exercise *power over* managers is to quit). Another reason, not determined by the foundational system, is that episodic power may arise from multi-directional power flows (eg, counter-resistance) and take forms not actually aligned with the foundational system and not consciously recognised as episodic power by other actors (Bachrach & Baratz, 1962). This became evident especially in the bargaining practice. Initially, Supplier 4 gained *power to* assess progress and make recommendations when Alpha hired the supplier to conduct a quality audit. However, through multi-directional bargaining, Supplier 4 began to increasingly and insidiously use *power over* internal project members in the project group. Thus, instead of becoming an equal supplier with the others, or an 'objective evaluator', the supplier took on the role of project leader. There is no evidence in our case that this was either a conscious choice among the internal project members or that the risk of possible consequences was recognised. However, when Samuel's (Supplier 4) misuse of *power over* became recognised, it was deemed illegitimate (not in line with the foundational system), resulting in Samuel being fired and Supplier 4 taking on the role of external supplier that the company was meant to take.

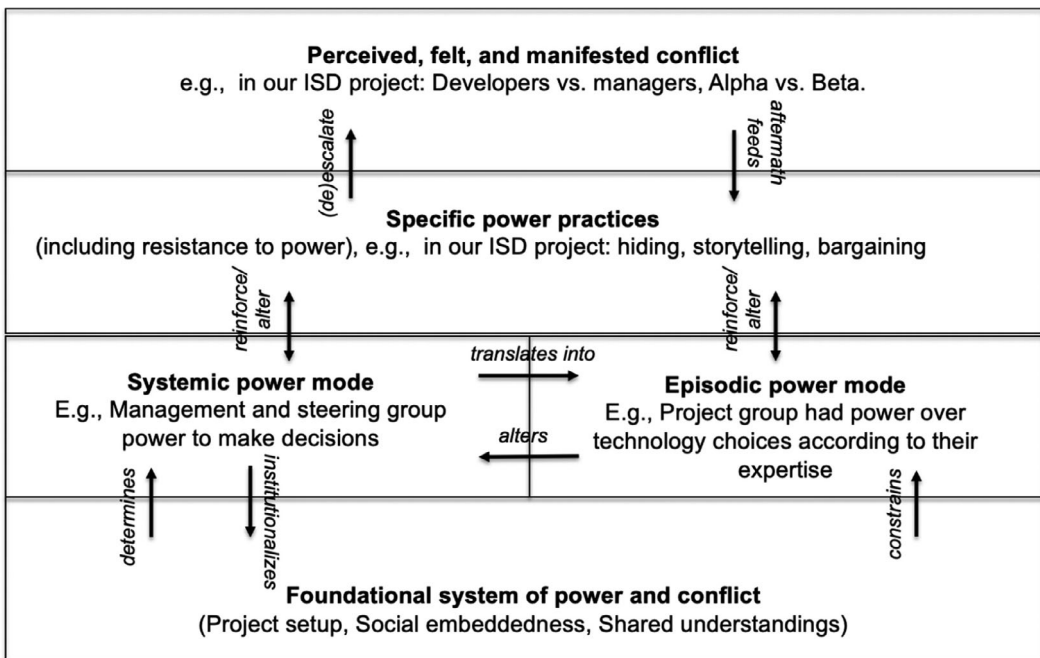
Second, this study suggests that the foundational system, inevitably, has elements that can give rise to conflict. In this case, equal voting rights, unequal costs and higher relational embeddedness within instead of across organisational groups mean a conflict between Alpha and Beta was inherent in the project setup. As a result, we found that all power practices within the system kept causing the resurfacing of different manifestations of that particular conflict (in Episode 1, this was a conflict between Beta developers and project manager Alex, Alpha; in Episode 2, this was a conflict between project group members from Alpha and Beta and in Episode 3, this was a conflict between suppliers of Alpha and Beta). This is why, in the restrictive effects, all power practices generated substantive and emotional conflict sources (Priem & Kenneth, 1991), as described previously. However, sometimes power practices escalated the foundational conflict (in Episode 2, storytelling escalated the conflict between Alpha and Beta), and sometimes the practices de-escalated it (in Episode 3, bargaining de-escalated the conflict between Alpha and Beta when they had to fight together against Samuel). In sum, because conflict is inherent in the foundational system, all power practices that are embedded in such systems (systemic) or constrained by such systems (episodic) are restrictive as well as productive in conflict. Of course, not all project foundations are equal: some have more conflict inherent in them than others. This case illustrates an interesting effect of an 'over-organised' system that, in a sense, enables 'too much' systemic power. The legitimate authority of management and steering group members to guide policy and make decisions translates into the daily episodic exercising of *power over* the project group members, which is restrictive and generally escalates conflict. Thus, the room for unexpected episodic power practices, not determined by the foundational system and able to challenge the foundational system, to emerge is also perhaps more limited than in a different (less hierarchical) system.

Third, the foundational system of a project can evolve over time but can also become embedded in durable social and material objects and choices (such as organisational memory, meaning-making systems and the technical architecture in IS development). As a result, the project stakeholders become increasingly invested in the foundational system but also perceive it to be changeable. These two issues make resolving the conflict inherent in the foundation seem achievable, but this often proves to be difficult in practice. In addition, this case suggests that only systemic power can lead to the institutionalisation of changes (Simeonova et al., 2020) in the foundational system. Only when changes brought about by episodic power practices become institutionalised by systemic power is the foundational system able to evolve. This case demonstrates many instances when this did not happen. Clearly, the ability to influence the evolution of the foundational system was, from the beginning, heavily biased toward favouring the interests of the social actors invested with more *power to* by the foundational system. For example, this study suggests that extending systemic *power to* more actors is perceived as a 'zero-sum' game in which the gains won by one party must be losses suffered by another (Robey et al., 1993). Thus, external suppliers were added, and a certain amount of *power to* (systemic power) was extended to them with existing organisational interests in mind. As a result, the external suppliers were never considered equal to the founding members of the project, and the suppliers were never granted legitimate decision-making rights. Thus, the changes that were institutionalised in the foundational system tended to perpetuate the already-established systemic power, investing those who could already exercise significant *power to* with even more systemic power.

We illustrate the key theoretical contributions of this case in Figure 4. The figure highlights the power and conflict dynamics and outlines specific processes (denoted by the labelled arrows) that explain the dynamics between the foundational system, specific power practices and conflict. We chose the unorthodox visualisation to convey the core finding that specific power practices and conflict build on the foundational system like a wave or a wall. In sum, the foundational system sets the parameters for systemic power and episodic power but in different ways. The modes of systemic power and episodic power reinforce specific power practices (eg, hiding, storytelling and bargaining), which, in turn, escalate and de-escalate the manifested conflicts (eg, Alpha vs Beta) in the project. The manifested conflicts and their aftermath feed further power practices, which may bring about changes in the project (eg, hiding brought about the choice of Java as the foundational technology) that can alter the *power to* (systemic) and *power over* (episodic). However, only when these changes became institutionalised through systemic power (eg, the decisions became official in the minutes of the management and steering group meetings) does this lead to the evolution of the foundational system.

## 5.2 | Practical implications: Beyond the technical-rational ideal

The key practical implication stemming from the findings shown in Figure 4 is the suggestion that deconstructing the foundational system may be a good idea even if this seems counter-intuitive and the foundational system sounds fair (eg, it includes equal voting rights). In this case, if the voting rights had been unequal, the project would have probably progressed faster and with less conflict. However, this would have risked too much influence by any one organisation and a complete breakdown of the IO cooperation. Alternatively, the project management and steering groups could have moved the plan of starting an in-house company to an earlier stage (it had been planned from the beginning) once they realised the project leadership left much to be desired. However, because this went against their own interests (forming an in-house company meant disbanding the management and steering groups), this did not happen. Thus, our findings confirm insights from existing research that conflict *resolution*, in terms of resolving underlying latent conflict sources, is extremely difficult. Rational conflict management for gaining constructive win-win situations, meanwhile, is hindered by vested interests. In this project, there was almost no rational conflict management oriented toward win-win conclusions and consensus because there was no interest in it; the vested interests pushed the organisations toward unintended conflict management through avoidance and the assertion of one-way solutions (Barki & Hartwick, 2001; Robey et al., 1993). Thus, we suggest that in inherently political projects,



**FIGURE 4** Overview of key theoretical implications of the power and conflict dynamics in IOIS development

conflict management should also come in inherently political varieties, such as through the deliberate dismantling and restructuring of foundational systems.

## 6 | LIMITATIONS, FUTURE RESEARCH AND CONCLUSION

Like any other study, this work has limitations. This study was based on one IOIS project in a specific culture, and the system was developed for a limited domain. We also acknowledge that the presented power practices are not the only ones active in this case and are also not the only ones, or even the common ones, that may appear in IOIS development projects. However, the power practices (hiding, storytelling and bargaining) presented in this study are key practices in conflicts, and they helped us understand and describe the different faces of power (restrictive and productive) with clear examples. We strengthened the findings by relating them to previous research on different modes of power in the field.

Future research is still needed to better understand what kinds of power modes (episodic or systemic) appear in different conflict stages and how the power and conflict dynamics may change depending on the degree of relational embeddedness among IOIS project members. It is also important to focus more clearly on the emotional aspects of conflicts. Scholars have argued that emotional conflicts are very difficult to identify because there is a tendency to rationalise disagreements and express them as substantive rather than emotional (Yeh & Tsai, 2001). It would be important to analyse more deeply how substantive conflicts escalate into emotional conflicts and what kinds of power practices and modes of power these conflicts reinforce (cf. Chaudhry & Asif, 2015). For example, it would be crucial to understand how different negative emotions coincide with a lack of agency in projects (Murungi et al., 2019) and how different emotional conflicts may strengthen certain power practices (eg, possible disengaging) and modes of power (eg, voiced or muted) (cf. Meares et al., 2004). This kind of research would help us to understand interactor ties (relational embeddedness) (Jones & Lichtenstein, 2008), as well as actors' supportive and

resistive actions (Stein et al., 2015) and their outcomes. Moreover, it would be interesting to ask whether emotional conflicts can help or hinder the introduction of changes in the foundational system of a project and the institutionalisation of the changes through systemic power (Voronov & Vince, 2012).

In conclusion, through the lenses of systemic power and episodic power, together with an organisational conflict model, this longitudinal, qualitative case study analysed the power and conflict dynamics in an IOIS project. We found that the project setup and its social embeddedness, or what we termed the foundational system in this study, played a complex and crucial role in these dynamics. Counter to the technical-rational ideal, this study suggests that designing a clear and fair foundational system that prevents power struggles and conflicts may be an impossible and unhelpful ideal for which to strive.

## DATA AVAILABILITY STATEMENT

There is no data available due to the privacy and ethical concerns.

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## ENDNOTES

- <sup>1</sup> *Technical-rational ideal* refers to the assumption that “IS practice can be effectively understood as a process of technical reasoning and acting governed by a mix of concerns about software construction, administrative control, and economic gain. Its mission has been to empower managers, IS engineers, and ICT users with knowledge and techniques for effective decision making” (Avgerou & McGrath, 2007, p. 295). Although acknowledging power, in this perspective power is conceived of as “a capacity to get things done that can be defined optimally for all relevant groups” (p. 297). Thus, power is a question of authority, hierarchy, and division of labour; these factors distribute power across actors and determine which actors possess power over other actors (ie, can get other actors to do things they would otherwise not do). The assumption is that if such a distribution is done optimally, power struggles and conflicts should not occur.
- <sup>2</sup> Interestingly, Gamma was not involved in these conflict episodes, perhaps due to the company's lower investment in the project (Gamma bore 20% of the costs) and because its legacy CRM system was functioning well. In sum, of the three project partners, Gamma had the least at stake.
- <sup>3</sup> Many more episodic and systemic power practices were enacted during the project, but we did not focus on identifying all power practices. Our aim was to identify power practices that played a role in the conflict episodes in the project.
- <sup>4</sup> *Materiality* refers to objects, bodies, and ‘stuff’ that can physically or cognitively constrain and/or enable human activities (Leonardi, 2010; Markus & Silver, 2008), but that does not necessarily need to have a physical substance (eg, digital software).

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