Journal of the Association for Information Systems

Volume 25 | Issue 4 Article 8

2024

Power as "Present-in-Actions" in Mundane Information Systems Work

Boyka Simeonova *University of Leicester*, b.simeonova@leicester.ac.uk

Paul R. Kelly University of Essex, p.kelly@essex.ac.uk

Stan Karanasios University of Queensland, s.karanasios@uq.edu.au

Robert D. Galliers Bentley University, rgalliers@bentley.edu

Follow this and additional works at: https://aisel.aisnet.org/jais

Recommended Citation

Simeonova, Boyka; Kelly, Paul R.; Karanasios, Stan; and Galliers, Robert D. (2024) "Power as "Present-in-Actions" in Mundane Information Systems Work," *Journal of the Association for Information Systems*, 25(4), 867-889.

DOI: 10.17705/1jais.00876

Available at: https://aisel.aisnet.org/jais/vol25/iss4/8

This material is brought to you by the AIS Journals at AIS Electronic Library (AISeL). It has been accepted for inclusion in Journal of the Association for Information Systems by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.



RESEARCH ARTICLE

ISSN 1536-9323

Power as "Present-in-Actions" in Mundane Information Systems Work

Boyka Simeonova, Paul R. Kelly, Stan Karanasios, Robert D. Galliers⁴

¹University of Leicester, UK, <u>b.simeonova@leicester.ac.uk</u>

²University of Essex, UK, <u>p.kelly@essex.ac.uk</u>

³University of Queensland, Australia, <u>s.karanasios@uq.edu.au</u>

⁴Bentley University, USA / Warwick Business School, UK, <u>rgalliers@bentley.edu</u>

Abstract

The information systems (IS) field has not consistently dealt with the importance of power in theory, research, or practice, because of epistemological and theoretical challenges for studying power in IS. In responding to these issues, we develop an accessible "power-sensitive" framework, using the episodic/systemic view of power and an activity theory (AT) view of organizational practices. We draw on two cases of IS work. Case 1 focuses on information technology (IT) organizations in Bulgaria, and Case 2 focuses on a global development sector nongovernmental organization (NGO) in Thailand. While much of the IS literature emphasizes cutting-edge innovations, this paper highlights mundane yet widespread IS applications such as email and spreadsheets. We elaborate on lessons learned from the cases and develop a power-sensitive framework to support IS researchers and practitioners seeking to acknowledge power in different IS contexts. The paper has two main aims and contributions: to illustrate how power can be articulated using the episodic/systemic view and AT by providing a more dynamic perspective that goes beyond traditional views of power as possessive, hierarchical, and static, and to deploy the cases strategically as part of a broader call for more consideration of power in IS research, illustrating the important insights such a focus can provide. We argue against simply ignoring power or considering it as a "nuisance" in IS research. Instead, we argue that power is endemic to IS work and an integral aspect of everyday IS practices. We characterize this view of power as "present-in-actions" in IS.

Keywords: Information Systems, Episodic Power, Systemic Power, Activity Theory, Practice Theory, Framework

Dubravka Cecez-Kecmanovic was the accepting senior editor. This research article was submitted in January 2021 and underwent three revisions.

1 Introduction

This paper stems from an awareness that "power" has long been marginalized and is effectively "missing-in-action" in information systems (IS) research. We argue that power should be a core research agenda in IS—rather than being considered to be outside of rational models (Markus, 1983), seen as a "nuisance" (Introna, 2003) or an abstract notion, or viewed as

predominantly possessed by powerful agents or organizations. Instead, we suggest that power dynamics are endemic to IS work, evident in actions and responses to actions. We characterize this view of power as "present-in-actions" and provide an innovative lens to explain power in this context. The lens combines the episodic/systemic view of power with activity theory (AT), a practice-oriented theory. This novel conceptual lens goes beyond traditional

views of power as possessive, hierarchical, or static, and aims to assist in providing a better, more complete, understanding of power as an integral aspect of organizational practices.

This paper has two main aims and contributions. First, we demonstrate how the episodic/systemic view and AT articulate power dynamics as present-in-actions in two qualitative case studies. Second, we deploy the cases strategically as evidence of and examples in support of a broader call for more research on power in the IS field. In support of this second aim, we argue for value of practice-based approaches to understanding power in IS. We advocate for more accessible field-specific resources on power, such as the accessible power-sensitive framework we develop in this paper. This framework emphasizes the following components: the importance of contexts when studying power in IS, the benefit of drawing on existing power and practice lenses and theories, and the importance of sharing lessons learned with other researchers and practitioners. We argue that an accessible framework for power dynamics has not previously been available to IS researchers, despite theories of power and practice being previously expounded upon. Without accessible resources, researchers and practitioners may question how power and practice can be understood. Therefore, the powersensitive framework developed in this paper guides researchers and practitioners by focusing on the IS context and questioning how power can be understood, how practiced-based perspectives can be used to study power, and how lessons about power dynamics can be drawn from similar IS contexts.

The analysis starts with a series of questions to clarify the key terms used. First: What is power? Second: Why should we study power in IS? Third: What do we mean by saying that power is "missing-in-action" in IS? Fourth: What do we mean when we advocate viewing power as present-in-actions? Fifth: What is a practice-based view? And finally: What does "mundane IS work" mean? In the following paragraphs, we address each of these questions.

What is power? Power has traditionally been conceptualized as hierarchical and as a resource possessed by actors. More recently, power has also been understood as diffused across people, practices, and objects, including IS (Lawrence et al., 2012; Pozzebon & Pinsonneault, 2012). It can be expressed in conflicts or through overt resistance, but it can also be less noticeable, normalized, and freely accepted by those controlled or exploited (Clegg et al., 2006; Clegg, 1989). It can be viewed as negative and constraining or progressive and productive (Clegg et al., 2006; Foucault, 1980). While power can be all these things, in the past, the emphasis has been on negative or static views of possessive or individual power. This paper equally emphasizes dynamic, fluid,

and productive power, evident in increasingly networked, digitalized, information and knowledgerich work environments. The rationale here is that the emergence and exercise of power (even by actors who possess it) is not static. The exercise of power triggers responses and behaviors from other actors. As such, power is dynamic and fluid. One type of power can lead to another type of power. Understanding such power transitions as present-in-actions requires ongoing research (Blackler, 2011).

Why should we study power in IS? A pragmatic justification concerns well-documented IS failures (e.g., Standish Group CHAOS Report, 2015). IS researchers point to "stubbornly high" failure rates, complexity, politics, and marginalized stakeholders as failure factors (e.g., Dwivedi et al., 2015). In parallel, understanding the darker side of technologies is important, as the use of technologies has problematic impacts that can influence power dynamics, such as bias in machine learning or algorithms (Faraj et al., 2018); technostress or overload (Tarafdar et al., 2016); diversity, inclusion and "digital enforcement" (Díaz Andrade & Techatassanasoontorn, 2021), and surveillance (Van Dijk, 2014).

Is it fair to claim that power is "missing-in-action" in IS literature? This question suggests that something is unexpectedly missing, absent, or inactive, which is why we argue that power has not been studied sufficiently or consistently enough in the field of IS. Markus's (1983) seminal paper on politics in a management information system implementation demonstrated how an IS can transform data and power in an organization. Yet despite Markus's prescient foretelling, IS research on power remains limited, with occasional exceptions (e.g., Walsham, 2001; Koch et al., 2013; Willcocks & Lioliou, 2011). As a result, it remains unclear how diverse forms of power interact and how different forms of power enact responses from other actors in organizations and networks.

What does it mean to advocate a view of power as present-in-actions? We refer here to describing IS contexts and work practices through rich descriptions and qualitative nuance, such as in case studies, in order to understand power as part of the routine actions of IS managers and workers—acknowledging the diversity of IS work practices. Power is a complex phenomenon, concerning, among other things, different circuits (e.g., episodic, dispositional, and facilitative, as noted by Clegg, 1989); how diverse power forms interact and the effects of power at different hierarchical levels (Koch et al., 2013); how power can be confrontational or silent, normalized in routine work (Kelly, 2018), and how stakeholders perceive power in different ways (Simeonova, 2018). Thus, if power is dynamic and fluid, researchers must try to understand power "in the wild"—as present in specific IS work contexts. This is

what we mean by power as present-in-actions. We need to understand contexts, zooming in to see microactions and zooming out to see networked stakeholders' interactions.

What is meant by a "practice-based" view? Practicebased perspectives emphasize the "doings" and "sayings" (Schatzki, 2001a, pp. 58-61) of people working in or discussing their real-life, in situ work contexts. We build on the "practice turn" (Whittington, 2006), in which scholars privilege people's situated actions as the unit of analysis. Practice orientations derive from diverse authors (e.g., Bourdieu, 1977, 1990; Giddens, 1979; Lynch, 1993; Schatzki, 2001b), constitute alternative ways of understanding social phenomena, and provide alternate means of explaining social phenomena without centering explanations on idealized models, rational actors, individualized behavior, macrostructures, or rigid sociological categories (Reckwitz, 2002). Practice orientations share common themes and conceptual antecedents. They are often applied using diverse qualitative methodologies (e.g., ethnography, ethnomethodology, action research, case studies, or discourse analysis). Practice orientations provide IS researchers and practitioners with a "middle ground" that recognizes the roles of agency and structure. They are also beneficial for studying power because they elaborate on the detailed processes connecting people with IS. Practice orientations provide subtle lenses for studying power, which Reckwitz (2002) terms "praxiological" sensitivities (i.e., theory that is sensitive to in situ actions and microlevel patterns of behavior ²). Therefore, one could argue that viewing power as present-in-actions requires articulating the everyday activities of IS work. Practice orientations scaffold such descriptions and feature centrally in the framework developed.

Finally: What is "mundane IS work"? What do we mean by this? It does not mean the novel implementations, disruptive innovations, or cutting-edge designs prominent in IS research. Rather, it implies widespread, already established technologies such as email, social media, databases, and reporting systems that account for much, if not most, IS-mediated work. Thus, the term "mundane IS work" is used throughout this paper to emphasize these common and pervasive IS work routines, activities, and practices that occur daily within and between organizations.

The paper is structured as follows. Section 2 reviews the literature on the foundational areas of the paper:

power in IS, the episodic/systemic view of power, and the AT view of practice as activities. Section 3 explains the methodology applied in researching the cases. Section 4 outlines the findings from the two qualitative case studies. For each case, illustrative examples of power and practice are described and analyzed using the episodic/systemic plus AT lens. Section 5 discusses the implications of the cases and outlines the power-sensitive framework. Section 6 concludes the paper with a discussion of the paper's contributions and its limitations.

2 Conceptual Foundations

This section reviews the literature on power in IS, arriving at the episodic/systemic power lens, which is capable of distinguishing between diverse types of power. We also describe AT, a practice-oriented lens that incorporates concepts that facilitate understanding of IS work.

2.1 Power in Information Systems Research

As has been noted by several scholars (e.g., Willcocks, 2004; Willcocks & Lioliou, 2011), while power is described as an integral aspect of organizations, with some exceptions (e.g., Jasperson et al., 2002; Koch et al., 2013; Orlikowski & Baroudi, 1991; Silva, 2007; Simeonova, 2018; Simeonova et al., 2020), power dynamics are mostly undertheorized in studies of IS in organizations.

IS studies that study power often focus on hierarchical or episodic forms of power (e.g., managers and employees) and the strategic actions of self-interested "rational" actors, rather than examining power in its diffused, cultural, or systemic forms (Lawrence et al., 2012). Prior studies also tend to focus on unidirectional rather than multidirectional forms—in other words, the static exercise of power, not the dynamic aspects of power and its multidirectional responses (Cendon & Jarvenpaa, 2001; Dhillon et al., 2011; Fleming & Spicer, 2014; Simeonova et al., 2020; Simeonova & Galliers, 2023). The existing research tends to consider innovative IS designs, novel implementations or change initiatives, such as automation systems and enterprise systems (Azad & Faraj, 2011; Dhillon et al., 2011), rather than common, mundane organizational practices and technologies.

Introna (2003, p. 239) observed that power is often not researched nor understood in IS and is frequently categorized as a "nuisance," arguing that such

¹ We use "present-in-actions" as a plural form intentionally, rather than the singular or uncountable form "action." This is to stress the multiple actions involved in power dynamics.

² The paper does not aim to compare diverse practice theories or the advantages of diverse terminology (e.g., "practice,"

[&]quot;activity," "everyday work," "context," etc.) used in the broad literature under the practice umbrella. The intention here is to emphasize how practice views can be applied to understand power in IS.

nuisances help constitute the IS field. Additionally, according to Silva (2007), the IS field continues to have epistemological and theoretical beliefs that unwittingly obstruct the study of power in IS. Silva (2007, pp. 165-166) argued that because of the "hidden nature of power and politics ... an epistemological approach that emphasizes the interpretations of meanings, intentions, and actions would be most suitable for making sense of such a complex phenomenon." Because of these limitations, Silva and others (e.g., Jasperson et al., 2002) have concluded that power dynamics in IS lack sufficient theorization—the theories used to study IS phenomena often fail to provide a theoretical foundation. Additionally, Fleming and Spicer (2014) observed that theories and analytical concepts need to change to remain current with emerging developments in organizations and societies. To summarize, IS needs better and more relevant views of power.

When addressed in IS research, power concepts have generally been imported from other fields, particularly social theory. For example, Silva and Backhouse (2003) used Clegg's (1989) "circuits of power" to study the institutionalization of IS. Clegg's framework has also been used to study the creation and institutionalization of IS security standards (e.g., Backhouse et al., 2006), the inscription of power in IT governance (Medaglia et al., 2021), and system development methods (Backhouse et al., 2006; Clegg, 1989; Rowlands & Kautz, 2021; Silva & Backhouse, 2003).

A Foucauldian conceptualization of power dominates IS studies and is typically used to emphasize the use of IS for surveillance or to create an electronic "panopticon" (e.g., Webster, 1995; Zuboff, 1988; Doolin, 2004; Allen et al., 2013). In particular, Doolin (2004) followed the Foucauldian perspective to examine disciplinary power exercised through surveillance. Some studies have used Bourdieu's perspective on power, incorporating participation, discourse, discursive practices, and meaning (e.g., Levina & Vaast, 2008; Levina & Orlikowski, 2009; Azad & Faraj, 2011). Others (e.g., Dhillon et al., 2011) have utilized Hardy and Leiba-O'Sullivan's (1998) framework, which highlights the following power dimensions: as a resource or power over resources, as participation in decision-making (i.e., excluding the less powerful), as preventing conflict through hierarchy (i.e., in respect of the status quo), and as disciplinary action over nonconforming agents. Bergman et al. (2007) utilized boundary objects as objects that transform power and help mobilize resources for negotiation and consensus building. Fleming and Spicer (2014, p. 38) noted that the dominance of the negative connotations despite the role of power as a central aspect of organizations.

Based on this literature, we argue that diverse types of power should be included in IS research to incorporate multiple and nuanced perspectives. In other words, power needs to be understood as a dynamic and fluid phenomenon that unfolds during practices and responses from different actors.

2.2 Episodic Power, Systemic Power, and Mundane IS Work

The episodic/systemic lens, as developed by Lawrence et al. (2012, p. 105), defines power as "the dimension of relationships through which the behaviours, attitudes, or opportunities of an actor are affected by another actor, system, or technology". We use this lens because it emphasizes actors, systems, and technologies, thereby enabling the understanding of diverse forms of power and not privileging static connotations over dynamic considerations.

This section explains the episodic/systemic forms of power—their dynamics and interaction—focusing on how such forms of power feature in mundane IS work. We theorize that these power forms do not exist in isolation and may interact and transform between the different forms, thereby demonstrating the dynamic and fluid aspects of power.

Episodic power is considered a hierarchical resource that is unevenly distributed within organizations and used to serve self-interest (Kärreman, 2010; Lawrence et al., 2012). Episodic power is exercised through authority, legitimacy, control, coercion, and resource dependency (Clegg, 1989; Göhler, 2009), as well as through resistance and self-interest (Cendon & Jarvenpaa, 2001). Thus, this perspective represents power over and is characterized by control and selfinterest (Clegg et al., 2006; Göhler, 2009). IS can be utilized as instruments of power by reinforcing power structures (Doolin, 2004; Hussain & Cornelius, 2009) for example, through the design and control of surveillance. monitoring, or control systems (Simeonova & Galliers, 2023; Simeonova et al., 2020).

In contrast, systemic power is "vested in social and cultural systems, rather than in individual actors" (Lawrence et al., 2012, p. 106). From this perspective, power is diffused throughout diverse social relations for example, in technical, cultural, or bureaucratic systems, processes, and practices (Lawrence et al., 2012). This perspective aligns with power to, which is characterized as a diffuse capacity, ability, or form of empowerment (Göhler, 2009). Thus, systemic power is identified with "situations in which the behaviours, beliefs, or opportunities of actors shift in response to changes in rules (formal or informal) of meaning or membership, or changes in the technologies" (Lawrence et al., 2012, p. 106). Manifestations of systemic power would include the use of IS to cooperate, communicate, serve community interests, empower others, network, and build transparency, trust, and social capital (Cendon & Jarvenpaa 2001; Leonardi et al., 2013; Leong et al., 2019; Simeonova et al., 2020; Simeonova & Galliers, 2023).

Predominant in the literature are episodic power connotations, whereby power is considered to be hierarchical, and actors at higher levels in the hierarchy control resources and dominate interests (Galinsky et al., 2008; Raman & Bharadwaj, 2012). Lower hierarchical levels are not provided equal consideration in decision-making (Bunderson & Reagans, 2011; Heizmann, 2011). Accordingly, knowledge is power and when actors share knowledge, they lose their competitive advantage (Lawrence et al., 2005; Wang & Noe, 2010). Examples of manifestations of systemic power in the literature are mentioned in the context of organizational culture (Blackler, 2011); shared goals and alignment with organizational goals (Contu, 2013; Willem & Scarbrough, 2006); empowerment through removing resource constraints, participation in decisionmaking, the reduction of administrative obstacles (Chuang et al., 2016); and transparency and communication between different hierarchical levels (Leonardi et al. 2013; McAfee, 2006).

2.3 Activity Theory

This section explains the rationale for using activity theory (AT) and the key notions of the theory. It also describes how AT helps to identify and understand episodic/systemic power within activity systems and networks.

AT is based on the concepts of the cultural-historical works of Vygotsky (1978), which have strong links to Marxist philosophy and are focused on learning and development (the zone of proximal development). AT was popularized by the work of Engeström (1987, 2015) and Bødker (1989), among others, in management and IS research. We draw on the contemporary contributions of Engeström, Karanasios, Miettinen, and others (Engeström et al., 1999; Karanasios et al., 2021; Miettinen et al, 2009) in unpacking the use of AT in organization studies and IS.

Historically, and with rare exceptions (e.g., Blackler & McDonald, 2000; Avis, 2007; Daniels & Warmington, 2007; Engeström, 2008b; Reid, 2012), AT research has not consistently focused on power per se. This is because it has not been "easy to depict and analyze hierarchical power relations within a single activity system" (Engeström 2008b, p. 6). Power has often been considered as secondary to AT concepts of emancipation or conflict or in some ways latent behind proxy terms such as politics or control. More recently, there have been efforts to demonstrate more explicitly how AT can articulate power in IS (e.g., Foot, 2014; Kelly, 2018; Schirmer & Geithner, 2018; Simeonova, 2018). These are the contributions upon which we build in this paper.

AT emphasizes a focus on object-oriented and mediated activity. It brings activity into the center of organizational analysis (Spender, 1995). The object is the problem situation, focus, or thing that subjects (actors and agents) work to transform (Engeström et

al., 1999; Blackler, 2009), using "tools" to achieve "outcomes." Objects of activity are, however, constantly in transition and under construction (Hasu & Engeström, 2000), continually on the horizon "as the object is co-configured time and time again" (Engeström, 2000, p. 973). An activity system outlines the process of a subject using "tools" to act upon an object, which is governed by cultural-historical "rules and norms," a "community," and the "division of labor" (Karanasios, 2018).

An activity is governed by explicit and implicit rules and norms that direct behavior. Activities take place within a community (Engeström, 1987), comprising individuals, groups, or organizations that, while distinct, share the same general object and interact with the subject. This perspective highlights the "multiple voices" that emerge via the interactions between the community and the subject (Engeström, 2001). Additionally, activities are viewed as the outcomes of labor and its organization and are thus divided by roles and hierarchies that form a division of labor.

As illustrated in Figure 1, a major contribution of AT to IS research is the notion of tool-mediated activity. That is, AT integrates tools and technologies with the social context, combining them into a single analytical unitthe activity. This facilitates a sociotechnical analysis (Karanasios, 2018). In other words, tools mediate an activity and are extensions of human agency (Karanasios, 2018). AT also assists in the understanding of how multiple activity systems interact (e.g., a management team, a work unit, a client) and how each activity's object of work contributes to a "common" or "shared" object. These connections help to configure new interests, new activities, and new objects of work (Nardi, 2005; Schirmer & Geithner, 2018; Karanasios & Allen, 2013; Foot, 2014). This perspective follows calls from activity theorists to study more expansive activities and networks that are more aligned with contemporary distributed and digitally mediated ways of organizing (Karanasios et al., 2021; Spinuzzi, 2020; Engeström & Sannino, 2020).

Episodic and systemic forms of power can influence the mediating tools and relationships between subjects, objects, and other elements of the activity system. Indeed, power in activities flows via technologies, rules, and objects, influencing the elements within a broader network of activity systems (Engeström, 2008b; Miettinen et al., 2009). For example, episodic power can be exercised to control access to particular tools or resources, while systemic power might be diffused through the rules and norms that manage the interactions within the activity system. In addition, IS, as mediating tools, can either enable or constrain the exercise of episodic and systemic forms of power. An IS, for instance, could reinforce episodic power through monitoring and surveillance, or it could enhance systemic power through collaboration and empowerment.

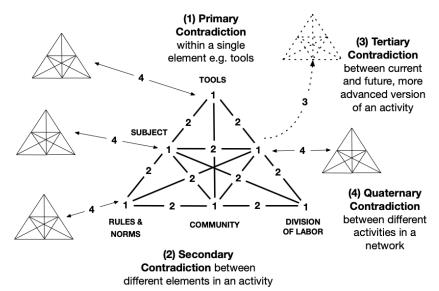


Figure 1. AT Systems and Four Types of Contradictions

Power can also be understood as an aspect of the rules that govern activity systems and norms of behavior (Blackler, 2011). Similarly, power is ascribed in communities that participate in activities. For example, Raman and Bharadwaj (2012) explain how nonauthoritative influence, based on negotiations, can exert influence, even when work roles are relatively equal or balanced. Such influence can be understood as a systemic type of power. Other manifestations of systemic power can be observed within communities of practice—for example, when community activities are unified around a common goal (Contu, 2013).

Power can also be observed in the division of labor. Examining the division of labor can clarify who does what in relation to the object of the activity. Which members of the community participate in which types of actions, why, and using what tools? Such relationships are typically mediated by historical power structures and patterns of interactions within the community, as well as between the community and the broader culture and society (Foot, 2014). From an episodic perspective, power stems from hierarchical relations where individuals at lower levels are compelled to follow the instructions and patterns of behavior set by those at higher levels of the hierarchy (Kärreman, 2010; Raman & Bharadwaj, 2012). Thus, the division of labor may also influence the use of tools through hierarchy, control, coercion, and surveillance—as well as through empowerment, transparency, or opportunities to voice opinions.

A fundamental concept in AT is the notion of contradictions, as illustrated in Figure 1. Groleau et al. (2012, p. 654) consider contradictions to be the "dynamic dimension of activity theory." Contradictions can emerge in different elements of the activity, such as

in tools, divisions of labor, rules, and objects of work between these elements or between activities (Ilyenkov, 1974; Engeström, 2001). An important consideration is that contradictions are not always immediately discernable (Karanasios, 2018). Analytically, they are manifested in the form of tensions, breakdowns, disputes, or conflicts within and between elements of activity systems (Engeström & Sannino, 2011; Allen et al., 2013; Karanasios, 2018; Kuutti, 1999). In AT studies, four forms of contradiction are identified as a means of analyzing case contexts: primary (occurring within single activity elements, e.g., tools), secondary (between elements, e.g., between tools and community), tertiary (between current and future versions of activities), and quaternary (between different, networked activities).

While contradictions are typically considered to have negative connotations, they can provide opportunities for innovation and learning (Engeström, 2001). They should not be considered hurdles that need to be "jumped over" to achieve goals or fix problems—for example, "throwing more money at a contradiction, establishing a new division of labor, or creating new tools will not make them go away" (Foot, 2014, p. 337). This view aligns with the focus of this paper, in that it emphasizes the point that power is structurally inscribed in activity systems and contradictions. Such contradictions require change within and outside an activity in order to resolve conflicts and dilemmas and to facilitate collective learning, as this transforms an activity over time.

Contradictions serve as analytical and explanatory mechanisms highlighting the connections between different activities or elements, power, and the

perspectives of different actors (Daniels Warmington, 2007; Schirmer & Geithner, 2018). It follows that contradictions are indicative of struggles and conflicts that thereby call for an analysis of power and control (Daniels, 2004; Daniels & Warmington, 2007; Schirmer & Geithner, 2018). Daniels and Warmington (2007) argue that a closer inspection of labor-power interactions within activities can assist in understanding emergent contradictions and their manifestations within activities. Schirmer and Geithner (2018) expand on this idea by illustrating how the concept of contradictions—and their resolution serves as a central notion that connects power with learning and change. Contradictions can be considered the result of former resolutions and power in the historic development of an activity and also the trigger processes—"expansive important learning learning" (Schirmer & Geithner, 2018).

In this study, hierarchical power imbalances, characteristic of episodic power, may be manifested in contradictions through conflicts between actors' goals or resource accessibility. Systemic power can be manifested in contradictions through the rules, norms, or cultural dimensions of the activity system, exacerbating tension between actors, communities, or other AT system elements. As episodic and systemic forms of power interact and transform, they can influence the development and transformation of activity systems. Recognizing and understanding these power dynamics can help identify areas of improvement, innovation, or change within and between activity systems.

Thus, in this study, we theorize power in AT as dynamic, fluid, changing over time, and best understood as part of AT elements, technologies, rules, and objects of work. Episodic and systemic forms of power function through the AT elements that influence the development and transformation of activity systems. Power is the medium of collaborative action (Blackler, 2011). Recognizing and understanding such power dynamics, therefore, helps to identify opportunities for control, innovation, learning and change, and transformation in AT.

3 Two Cases of Power in IS Contexts

This paper draws on empirical data from two case studies to demonstrate how the episodic/systemic lens, combined with AT, assists in theorizing power dynamics as present-in-actions. This methodology section orients the reader to the case approach and selection rationale, the case data, and analytical focus, as well as important information from each case's context.

3.1 Case Study Approach and Selection Rationale

We draw on two qualitative case studies (Walsham, 1995, 2006; Yin, 2018) that enable generalization from data to theory and the theorization of power dynamics as present-in-actions in mundane IS work (Lee & Baskerville, 2003, 2012). Case studies provide data and understanding and can therefore render rich descriptions of power and other complex or hidden phenomena (Leong et al., 2015; 2019; Blackler, 2011; Klein & Myers, 1999; Du et al., 2019). In addition to being suitable for evidencing and theorizing diverse phenomena, case studies facilitate the study of power dynamics and practices in context, enabling the understanding of their different forms, connotations, responses, and transformations (Klein & Myers, 1999; Chanias et al, 2019; Du et al., 2019).

The case studies selected are relevant in that they evidence episodic/systemic power, articulate different power dynamics (by zooming in to analyze a single activity system—an organization in Case 1—and zooming out to analyze a network of organizations in Case 2), and feature widespread, mundane technologies such as email and spreadsheets rather than innovative designs or cutting-edge systems.

3.2 Case Data and Focus of Analysis

This section describes the data collected in each of the cases and provides insights into how we analyzed and theorized power in mundane IS work.

Case 1 is based on IT organizations in Bulgaria. The case examined management-employee hierarchical power dynamics. Specifically, we considered how these dynamics influence information and knowledge sharing and the use of email systems and social media within organizations. We focused on dominant episodic hierarchical power but also on the systemic power responses from employees and the interactions and transitions of power in practice.

Case 1 data were collected from interviews with managers and employees across 10 organizations to provide multiple perspectives on power and mundane IS use—for example, in email communication and knowledge sharing (Klein & Myers, 1999). Interviews centered on how managers and employees used IT to conduct routine work, the types of IT used, and the benefits or challenges encountered. Participants elaborated on rules/controls regarding communications, hierarchy, tensions in communication, and control over the technology they used. Participants commented on how and why some tools were preferred over others at different levels of the organization. The AT analysis focused on a single activity system and demonstrated multiple perspectives and power enactments as well as the interaction of different forms of power between management and employees.

Table 1. Summary of Key Components of the Research Design

Case	Case 1	Case 2
Organization and sector	IT organizations	Development sector nongovernmental organization (NGO)
Country	Bulgaria	Thailand
IS work focus	Email communications; knowledge sharing	Reporting systems (online forms, MS Word reports); data sharing (database, spreadsheets, MS Excel)
Level of analysis	Intraorganization department interactions; intraorganizational; manager-employee interactions	NGO manager-employee interactions; External organizations (NGO-local health authorities); International funders-NGO grantee reporting interactions
Empirical data descriptions	10 organizations, 20 interviews with managers and employees	10 field interviews with NGO CEO and employees; 12 NGO team meetings; 6 workshops; review of spreadsheets and reports
Role of researcher	Interviewer	Participant-observer
Analysis of practice	AT division of labor, rules, norms, community; contradictions between strict hierarchy and IS workarounds; object of work	AT tools, rules and norms, division of labor, community; contradictions within activity network of funders/NGO/health organizations/beneficiaries (interorganizational and international)
Analysis of power	Episodic power evident in the hierarchy, rules, and control in using IS; systemic power in responses, workarounds	Episodic and systemic power in normalized funder-NGO compliance systems and NGO data sharing with local health organizations
Limitations	Focus on one sector (IT sector), which may not generalize to other sectors	Focus on single NGO; aid sector funding mechanisms may not generalize to other sectors

Case 2 draws on research exploring power/data/knowledge relations in the development sector with a focus on the use of mundane IS reporting tools, word documents, and spreadsheets. While in Case 1, the researcher was an interviewer, the role of the researcher in Case 2 involved providing evaluation advice to the Thai NGO. In this instance, the researcher acted as an evaluation consultant as well as a researcher, participating in NGO activities and acting as a participant-observer (Kelly, 2019). The data were collected through emails, document sharing, meetings, fieldwork, interviews, workshops, and observations. Data were selected according to the prevalence of episodic/systemic power relations evident in NGO activities.

Table 1 summarizes the key components of each case, including the organizational context, research focus, forms of empirical data, and the episodic/systemic and AT analysis.

4 Findings and Analysis

This section outlines findings from the episodic/systemic and AT analysis of each case.

4.1 Case 1: Knowledge Sharing within IT Organizations in Bulgaria

Case 1 focuses on power issues in intraorganizational knowledge sharing and communications in Bulgarian IT sector organizations. The case illustrates different perspectives on the use of mundane IS for knowledge sharing and the transient dynamics of episodic/systemic power. In this case, email acts as a tool for employees' work activities. For managers, it is the preferred tool for knowledge sharing and communication because it is a means of surveillance and control that also reinforces hierarchical structures and the division of labor. Employees' use of social media is restricted and controlled by managers to maintain power structures, based in part on concerns that social media could circumvent management and the centralization of knowledge (Wang & Noe, 2010; Koch et al., 2012). Paradoxically, this limits knowledge sharing, which could benefit the organization. However, these rules and norms maintain the status quo. The activity system analysis³ of Case 1 (Figure 2) highlights the need to balance episodic and systemic power, enabling management control and employee communication to coexist for organizational benefit.

which have been included and extended in the current version of the paper.

³ The authors thank the anonymous reviewers for their insightful analysis of activity theory and contradictions,

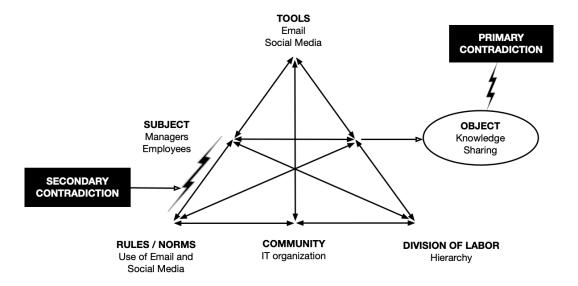


Figure 2. Case 1 AT System, Contradiction, and Power

The case demonstrates how the strict episodic power of control and surveillance enacted by managers triggers systemic power by employees through informal sharing practices, workarounds, the creation of informal networks, and the use of IS. Thus, the exercise of episodic power from management leads to systemic power responses from employees. These different forms of power exist in parallel even though episodic power predominates in this case.

The episodic/systemic power and AT analysis for Case 1 is outlined as a single activity system in Figure 2. The activity system demonstrates power dynamics in knowledge sharing in organizations, explicating and contrasting different stakeholder perspectives (i.e., managers/employees). This activity system analysis of Case 1 explores the power dynamics, demonstrating how differing perspectives and goals of managers and employees contribute to power redistribution that influences knowledge sharing and communication practices. This activity system is described as follows.

- Subjects: Managers and employees within organizations. These subjects have different perspectives on knowledge sharing tools. Managers focus on control, while employees prioritize informal knowledge sharing. There is a secondary contradiction between the subject and rules and norms.
- Tools: Email and social media are the primary tools for knowledge sharing and surveillance. Managers favor email for control, while employees value email and social media tools despite management restrictions.
- Object: Knowledge sharing is the object, with primary contradictions emerging from the differing perceptions and goals of managers and employees.

- Rules and norms: Formal and informal rules governing communication include email and social media restrictions.
- **Division of labor:** Hierarchical structures influence power dynamics, with managers using hierarchy power for control.
- Community: The community characterizes power dynamics and knowledge sharing practices, with the hierarchical Bulgarian culture influencing managers' control and employees forming informal networks for collaboration.

4.1.1 Episodic Power: Controlling Communication

Bulgarian culture is hierarchical in that it is characterized by high levels of bureaucracy and control. The main source of power within Bulgarian organizations is in the organizational hierarchy and control, which exerts an episodic form of power. One manager explained that "the hierarchical structure is easier for managing people" and that communication and behavioral rules and norms are followed within this context, including the use of IS. This hierarchy instills a strict system of prescriptions, social roles, and responsibilities, as well as rules and norms that govern communication and knowledge sharing activities. As the manager continued to explain, these rules and norms "provide a frame around how people are supposed to react, how to deal with clients' requests, how to provide adequate answers, and how to find the answers" (Manager, Organization 2).

Implicit and explicit rules regarding the use of emails are inscribed into work practices to reinforce the structure:

... part of the organizational culture about complying with regulations when writing an email—who is copied, who needs to be asked about taking decision, who is responsible. (Manager, Organization 6)

And for the important emails, the employees have to copy [the manager] in so that I receive this correspondence. (Manager, Organization 5)

As these comments suggest, email is used as a tool not only for communication and information sharing, but also for control and surveillance to enforce rules because of its ability to provide a "trail":

[Email and telephone] conversations are recorded, so that it's known who said what and who did what. If there's a problematic situation with a client, I can listen to the records and check the behavior of the employees and whether they did their work adequately. (Manager, Organization 1)

There are common rules for the whole organization for everyone to follow, for example sending email with a copy to the relevant people so that everything can be tracked. (Manager, Organization 8)

Hierarchical control—as episodic power—is also evident in the resistance of management to social media as an organizational knowledge sharing tool because of perceptions that it could disrupt and "decentralize" knowledge and power by breaking down silos (Leonardi et al., 2013). Different hierarchical levels utilize and perceive social media and its effects differently (Koch et al., 2012). Many senior managers in the organizations that formed part of the study have implemented radical measures to restrict access to social media: "I took the measure to restrict access through the IP address and also to record how long people spend on every website, so that I can control communication" (Manager, Organization 5).

Episodic and systemic power is inscribed in the work activity in the tools, rules and norms, subjects, objects, and division of labor. From a management perspective, tools are used to control and monitor activities and are governed by strict rules to restrict their use through hierarchy, power, and control. From the employee's perspective, tools enable knowledge sharing activities where the response of employees is either in compliance with the control and the restricted use of the tools or in finding workarounds. Tensions are manifested around the rules and the use of tools, with informal knowledge sharing norms emerging in organizations as "people prefer to talk" and "different groups are formed." These norms circumvent hierarchy and restrictions and the tools used for surveillance and monitoring so that employees can complete their tasks.

4.1.2 Systemic Power: Circumventing Control through Workarounds

Employees emphasized that restrictions around the communication tools are unhelpful: "It is not helpful to restrict the use of social media as it is very convenient to share knowledge and communicate" (Employee, Organization 5).

Employees circumvent formal rules by accessing tools through their noncorporate devices which are not monitored or restricted: "To avoid the restrictions, people use their devices to communicate and share knowledge." (Employee, Organization 6).

Additionally, when people trust each other and know who knows what, they talk to their colleagues directly, without following the prescribed procedure: "People have formed informal online work groups/networks to communicate" (Employee, Organization 8). Informal networks have also been formed offline for convenient communication. Such examples demonstrate that organizational restrictions lead to workarounds, informal groups/networks and communications, and the use of noncorporate IS tools. Thus, systemic traits of power arise from the informal networks and use of IS.

In summary, managers rely on episodic power to control knowledge sharing, which enacts a systemic power response by employees through workarounds and empowerment through informal knowledge sharing.

4.1.3 Interaction of Episodic (Increasing Control) and Systemic Power (Facilitating Knowledge Sharing)

Interestingly, some managers recognize that the strict exercise of episodic power might be considered restrictive and that people communicate informally. Nevertheless, controlling communication continues as the preferred management approach. The management response to workarounds differs. Some managers suggested that employee workarounds could lead to restrictions from management, such as banning the use of noncorporate IS and dissolving informal networks. This can be considered as an episodic power response from management. Other managers explained that they facilitate such practices and informal networks to support employee work and acknowledged the convenience of using these tools to share knowledge. Therefore, a systemic power response from employees could enact a systemic power response from management. These occurrences evidence power as dynamic and fluid in practice, responding to the exercise of episodic/systemic power.

Power dynamics in Case 1 were prominent between managers and employees and focused on management control of tools for knowledge sharing. Rules and norms were established to control email use among employees, social media was blocked, and employees' use of websites was monitored. This suggests that episodic, hierarchical power largely dominated the systemic power of knowledge sharing among the employees. Managers aimed to control communication and knowledge sharing, viewing open communications as a threat to episodic power. The analysis of Case 1 therefore demonstrates that power dynamics in activity systems are dominated by episodic forms of power. The case also demonstrates instances of systemic forms of power in employee workarounds and informal knowledge sharing activities.

The primary contradiction in the activity system of Case 1 is therefore the perception and control of the object (i.e., knowledge sharing). Employees recognize the usevalue of knowledge sharing to solve problems, while managers perceive knowledge sharing activities as tokens that should be controlled through monitoring the tools that enable the activities. This primary contradiction of the perception of knowledge sharing and its management leads to a secondary contradiction between the subject and the rules as the strict rules instilled by managers provoke employee workarounds and informal knowledge sharing to circumvent the rules, hierarchy, and controls. The benefits of collaborative tools for knowledge sharing are outweighed by the strict hierarchy, rules, and the need to continuously monitor communication. This explains the dominant use of emails as a knowledge sharing tool within the Bulgarian organizations studied. Sharing knowledge is governed by hierarchy and control, where power emerges from the division of labor and is manifested through strict rules and procedures—i.e., episodic power.

4.2 Case 2: Compliance and Knowledge Sharing in Global Development

Case 2 focuses on the development sector, a local Thai hospital (a public health authority), and, most importantly, a Thai NGO called HTSG. The paper draws on five examples from collected data to illustrate the power dynamics in the NGO's activities. Such aid chains of many organizations are typical and accepted in global development (Wallace et al., 2006), and power dynamics are evident in interorganizational compliance processes, learning, and knowledge sharing activities. Case 2 highlights episodic/systemic power in a network of activities (Blackler, 2009; Engeström et al., 1999; Karanasios & Allen, 2013).

HTSG is a small NGO in northern Thailand with around 25 employees providing healthcare services for marginalized, ethnic minority communities in mountainous and remote terrains. HTSG runs short-term

projects, funded by the EU, USAID, international NGOs, private philanthropic organizations, and the UN. HTSG's IS-mediated activities are not high-tech—the organization uses "old" desktops, laptops and "mundane" software (e.g., MS Word, Excel) and funder-reporting IS.

Activity theorists have shown how contemporary activities are dispersed (Engeström, 2001). In this case, power is theorized as fluid, relational, changing over time, and experienced differently by different stakeholders. HTSG's aid work is co-configured via "distributed agencies" (Blackler & Regan, 2009, p. 164) within the aid chain. Two contradictions are emphasized in this network of activities. The first contradiction is quaternary, occurring between funder and NGO compliance activities (Figure 3). The second, is tertiary, occurring between HTSG's current state that prioritizes fieldwork engagement and its future state as it transforms into more digital and IS-intensive work (Figure 4).

The funder's object of work is to ensure NGO compliance with funding conditions and meeting project objectives. For HTSG, reporting and compliance involve increased office-based work using funder-controlled IS, which requires time, computers, employees, and expertise. HTSG's object of work involves compliance but also comprises maintaining resources for field engagement with beneficiaries, visiting villages (which can take days of travel), training, and understanding beneficiary contexts, problems, and needs. The contradiction here is that compliance work draws resources away from fieldwork. This quaternary contradiction features episodic and systemic power interactions, evident in the shared funder-NGO object of work and the network of activities.

Tensions, in this case, were partially evidenced in several ways: in the CEO's comments regarding HTSG's precarious funding environment, in confusion caused by funder compliance systems and technologies, and in HTSG's need to bring in foreign, English-speaking employees who are skilled at writing reports and using international funder IS. However, unlike some AT studies, conflicts were not explicit. This is important to note in terms of power dynamics because aid sector IS, digital work norms (systemic), and funder financial power (episodic) are normalized and freely accepted by small NGOs. Such power is difficult to overtly resist and is best understood as normalized, silent, masked (Engeström, 2008b), or submerged (Kelly, 2018). 4 The following findings from the case data illustrate diverse power relations in the case.

⁴ Historically, power featured in colonial relations. Today, it is evident in global development funding, reporting, consultancy, and technology processes (Wallace et al., 2006; Brigham & Hayes, 2013). Since the 1990s, sector reliance on IS and digital assets has increased (Walsham & Sahay, 2006; Heeks, 2010; Thompson, 2008), with calls for a new

[&]quot;Amazon" to fix "old aid" (Quaggiotto, 2007). This reflects a broad transformation that some call "development 2.0" (Thompson, 2008; Kelly, 2018). Today, a few dozen large agencies dominate aid finances, deploy advanced IS, and exert power in funding markets over millions of small NGOs that lack IS capacity and financial stability.

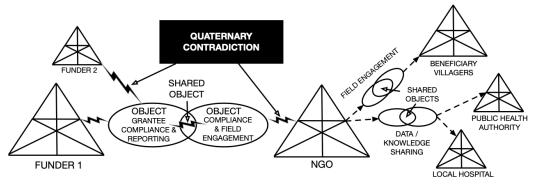


Figure 3. Case 2 AT Network, Power Relations, and Quaternary Contradiction

4.2.1 Episodic Power: Finance and Funding

This example concerns HTSG's reliance on a typical episodic, resource-based power—financial funding. HTSG shares knowledge with international funders via grant applications; project reports; and monitoring, evaluating, and constructing knowledge according to the shifting priorities of the funders (Leal, 2007). In this way, funding acts as a financial constraint, an economic resource, and an episodic form of power. HTSG's CEO recognizes that its financial sustainability is precarious:

We're facing a challenging time for our future. Some of our programs may need to close ... they aren't funded for the long term, but for one or two years only. The funding environment is really difficult for us. (Khun, CEO, 2015)

Finance is an episodic form of power that is evident in this case; it impacts the NGO's activities, technology use, division of labor, work rules, and norms.

4.2.2 Systemic Power: Diverse Compliance Norms and IS

The case also demonstrates the systemic array of normalized compliance rules, processes, and IS practices that configure HTSG's activities. Grant applications, funder reports, performance indicators, and impact evaluations must align with funder prescriptions, language (English predominantly), niche interests, document templates, and IS. Such information and knowledge sharing involves complicated online systems for grant applications and project reporting and requires the use of common technologies such as MS Word and Excel. Responding in this context requires significant development expertise, language skills, IT, and data management capacities. HTSG struggles to meet such routine requirements, even though they have become the norm in this sector.

HTSG complies with multiple funder time frames for periodic reporting, due diligence, midterm, and end-ofproject evaluations, plus impact reports. To complicate things, different funders have different systems, niches, rules, templates, forms, IS, and time frames. As explained by an intern brought in by HTSG from the US to help compile such reports:

There are different application forms, different project templates, funder evaluation forms, and reports, so it's kinda confusing! ... There are clusters of reporting periods, like December, July, half-year reports, annual reports too. (Susan, HTSG Report Writer, 2014)

This array of digitized compliance processes, time frames, requirements, and information sharing is not an example of episodic power. Rather, it is systemic, diffused across diverse organizations, IS, business processes, skill sets, and time frames. Diverse funder IS and compliance prescriptions enact a normalized, distributed array of controls, which configure the NGO's activities, rules, and norms; object of work; data collected; and even skills and resource needs. Information technology, office templates, and web-based reporting systems function as tools that enable and mediate this data/knowledge sharing. The power here is systemic, diffused across many funder systems, norms, and IS.

4.2.3 Systemic Power: Digital Processes, Leaving the Field

Digitally intensive processes are transforming HTSG leading to an increase in office work, digitized data, and knowledge work. This has an impact on HTSG's equipment, training, hiring, and particularly fieldwork, in that target beneficiaries are often in remote villages. This is a challenge for HTSG. Until recently, employees were hired for fieldwork, prioritizing significant time for village visits. The shift away from fieldwork, toward office work, documentation, representation, communication, and evaluation is challenging for HTSG—as the organization has limited skills, human resources, time to travel to mountainous areas, and necessary support equipment. The shift implicates IS in the audit society or audit cultures of control (Strathern, 2000; Harper, 2000;

Kelly, 2019) and means that the NGO's activity rules, tools, and division of labor are increasingly moving toward digitally mediated office work. These activity and power transformations reduce field engagement with village beneficiaries.

This shift is evidenced in HTSG's requests for interns from a program affiliated with a prominent US Ivy League university—the Princeton in Asia (PIA) Fellowship.⁵ Since 2013, PIA Fellows have interned at HTSG for one or two years. During the study, the following interns worked at HTSG: Susan (2014-2015), Cherry (2015-2016), and Mia (2015-2016). These interns were recent US graduates who brought technological/digital literacy, research and statistical competence, and English language skills to support HTSG's accelerating volume of office work, reporting, applications, evaluations, and communication. This is a systemic "capabilities" form of power, which exacerbates sector inequalities between global development NGOs with technology/digital capabilities and small, local NGOs that have little digital expertise, lack sufficient resources, and struggle to compete in global funding markets where digital products demonstrate competence and legitimacy (Kelly, 2018, 2019). Thus, HTSG needs computing resources (activity subjects, rules, and tools) and staff members with digital skills, as its object of work has become more digitally mediated.

4.2.4 Systemic Power: Empowerment **Following Episodic Compliance**

Despite these episodic (funding) and systemic power compliance. relations (funder data/knowledge intensification, and increasing digital pressures), HTSG is creating new opportunities locally, to work, run projects, and pursue their agenda moving forward. Empowerment through strengthening data management, improving IS capabilities, and developing new opportunities is important. Despite the influence of funder compliance regimes and data/knowledge on HTSG's activities, following successful funding applications and compliance, an element of empowerment has emerged that is enabling HTSG to do their work. Compliance and sharing knowledge involve contested negotiations between diverse stakeholders (Blackler, 1995), in which power is coercive and controlling (compliance regimes, audit cultures, data/knowledge intensity) but also productive (empowering, learning, digital capability improvements). Power is thus fluid, relational, and distributed across subjects via a network of different activities. In other words, empowerment can emerge from episodic or systemic controls—in this case, the NGO has created new opportunities and ways to work with beneficiaries.

4.2.5 Systemic Power: Data/Knowledge **Sharing within Network**

A clear example of systemic empowerment occurs when HTSG shares project data with doctors at a local hospital and a regional public health authority. A report excerpt shows HTSG was acquiring new digital capabilities, for example by creating a digital database, training volunteers to collect data, and improving communication within its network:

Project improving communication among local networks, Muang A Hospital and Muang B Public Health Offices 6, with greater in-depth knowledge sharing being established and more communication between volunteers and hospital. (HTSG Healthcare Project Report, 2013)

The report excerpt shows HTSG's knowledge-sharing activities in a noncoercive, systemic way. There was no financial exchange and HTSG was not in a hierarchical relationship with the local health authority. Sharing was not for compliance; rather, it developed because of HTSG's interactions with village beneficiaries, its village volunteer network, and its ongoing learning about the use of digital data. HTSG had more accurate health data from villages than public health authorities who rarely visited remote villages. As such, this collaboration, using mundane tools (e.g., basic laptops and spreadsheets), created an outcome (more accurate health data) that was shared between villages, HTSG, doctors, a local hospital, and the health authority. HTSG's IS is not cutting-edge IS, it is mundane; however, it has important healthcare and relationship-building outcomes. HTSG's data sharing is thus demonstrated as a systemic form of power that is part of the organization's learning and transformation and is reflected in the opportunity it created to set a new object of work with the local health authority.

HTSG is experiencing a transformation and is learning to evaluate and use IS, collect data, build knowledge, and communicate in English with diverse funders, using mundane IS such as spreadsheets and report templates. This transformation is unavoidable if HTSG wishes to survive, market itself, and build its reputation in the competitive funding markets of development 2.0 (Kelly, 2019). HTSG's transformation is leading to new data-intensive capabilities but less fieldwork, to productive power in terms of digital opportunities but destructive power through the neglect of marginalized beneficiaries. Power here is systemic, fluid, and relational across different stakeholders and activities. It is therefore limiting and transformative.

⁵ See https://piaweb.princeton.edu

⁶ "Muang" (เมือง) in Thai means district or city in English. Real places have been anonymized.

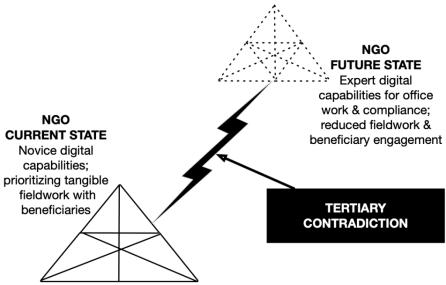


Figure 4. Case 2 Power Relations and Tertiary Contradiction

Power and transformation are evident in the activity network too. As evidenced in case details, a quaternary contradiction can be identified between the funding organizations and HTSG, mediated by diverse IS as well as rules and divisions of labor that constitute the funder compliance process. However, a tertiary contradiction is also evident in the NGO's temporal transformation between its existing state, which prioritizes tangible beneficiary fieldwork and visits to work with remote villagers, and its future state, which will prioritize digital intensities, digital data, IS, office work, employee roles, and skills. HTSG is struggling and also learning, divided between fieldwork, and the development of digital capability (see Figure 4). Power relations (compliance but also empowerment) are involved in this transformation from field engagement with beneficiaries toward increasingly digital, officebased work.

In summary, Case 2 illustrates that power is not only about asymmetric power distributions, exploitation, or control (Silva, 2007). Power is also transformative, empowering, and productive. The case represents multidecade, sector-wide shifts towards development 2.0 (Thompson, 2008; Heeks, 2010; Quaggiotto, 2007; Kelly, 2018, 2019), where many small NGOs must compete with and comply with the parameters set by large, digitally intensive aid agencies in global funding markets. Case 2 demonstrates fluid episodic and systemic power dynamics generated in sector activity networks.

5 Discussion, Implications, and a Power-Sensitive Framework

As stated earlier, this paper has two aims. The first is to illustrate how the episodic/systemic lens and AT can articulate power as "present-in-actions." The second is to strategically deploy cases to support calls for and to

illustrate how to identify and understand power in IS. In particular, we employ the value of practice-based approaches to generate power-sensitive analysis, models, and concepts. Historically, few IS researchers have called for more research on power (e.g., Markus, 1983; Zuboff, 1988; Jasperson et al., 2002; Willcocks, 2004; Silva, 2007). We argue and demonstrate that practice orientations such as AT can assist in the study of power in a digital world. They help us understand possessive or hierarchical power and also illuminate the more fluid, context-rich nuances of systemic power dynamics, even when power is relatively unnoticed or silent because it is inscribed in routine IS work and mediated by mundane technologies.

Given the ongoing contemporary problems evident in IS—its failure rates (Dwivedi et al, 2015, Standish, 2015), its "dark side" (Tarafdar, 2016), and digital enforcement (Díaz Andrade & Techatassanasoontorn, 2021)—the concerns of historical calls to focus more on power remain relevant. They also warrant new approaches and tactics for dealing with power, such as new concepts, cases, lessons, and frameworks to support researchers as well as practitioners.

5.1 Theoretical Implications

Two lessons or implications follow from the analysis of these two cases that are relevant to IS researchers, designers, and practitioners. The first is that episodic control and systemic community responses are connected. The second is that power dynamics are distributed and endemic throughout activity systems and networks, part of contradictions, and not isolated in single elements, single locations, subjects, or technologies. These two lessons respond to the earlier argument that power has not featured sufficiently in the extant IS literature.

5.1.1 Theoretical Implication 1: Episodic Controls Provoke Systemic Community Responses

The AT analysis demonstrates how episodic power (e.g., management controls, compliance, finance, rules, regulations, constraints) configures mundane IS work and may provoke systemic power as the community seeks opportunities to avoid such controls (e.g., as in the Case 1 workarounds). Episodic power over IS limits access to information. However, community trust, social capital, and opportunities for sharing (e.g., new power responses, new activities, new shared objects) may circumvent episodic controls (e.g., as in Case 2 data sharing with the hospital). Subjects seek ways to resolve power constraints and tensions arising from contradictions. Community relations in activity systems and networks can support communications, data/knowledge sharing, trust, and innovation, chiming with other research on power as inscribed in activity communities (e.g., Contu, 2013). Even IS controls can-perhaps counterintuitivelyprovoke systemic power, and even empowerment, as in Case 2, thereby showing how power is fluid in IS work contexts.

5.1.2 Theoretical Implication 2: Power Is Present-in-Actions in Activities and Networks

The analysis of the two cases illustrates how power is not isolated or fixed in one activity element but endemic across activity systems and networks. Power is evident in tools (e.g., emails, reporting templates, databases, social media), in the division of labor (e.g., hierarchy, compliance regimes), in community resistance through searches for new networks or workarounds (Malaurent & Avison, 2016), and in alternative/informal ways of circumventing restrictive control in IS work (Davison et al., 2013). The cases show that empowerment, knowledge exchange, and the reduction of administrative obstacles (Chung et al., 2016; Leong et al., 2019) can be provoked—again possibly counterintuitively—by IS-mediated controls and can result in opportunities for autonomy, collaboration, and collective agency. This response is common in AT studies, where contradictions can lead to innovations and transformations. However, if contradictions remain unresolved, further pressure and stagnation can result.

Power dynamics can occur between managers and employees, departments, and internationally networked organizations and can be mediated through mundane IS, such as emails, social media, and spreadsheets. As Blackler (2011, p. 732) argued, AT researchers should take note of Hardy and Clegg's (1996) observation that power is best theorized not as a possession, but as "the medium of collective action."

Thus, power is fundamentally part of the situated unfolding of IS-mediated activities (Nicolini, 2009, 2012; Blackler, 2011); it is present-in-actions and is recognizable in AT elements, contradictions, objects of work, systems, and networks. Power can appear fixed and controlling in one time and place (e.g., financial control) but fluid over time or across new dynamics (e.g., in new workarounds and in management responses to such workarounds). Power can change as agents act and respond to it, resolve conflicts, find workarounds, struggle, learn, collaborate, comply, and use mundane IS. Practice-based perspectives such as AT (Groleau et al., 2012) can be useful for understanding these power relations and discerning coercive controls, hierarchies, social norms, learning and agency, and empowermentwhether more visible, or more unclear, masked (Engeström, 2008b), or submerged (Kelly, 2018).

As discussed earlier, IS researchers and practitioners have had insufficient access to flexible models that explicate power and practice as core tenets of everyday IS work. Too often, power has been "missing-in-action." Therefore, we developed a power as "present-in-actions" framework, which is explained in the following section.

5.2 Toward a Power-Sensitive Framework

This paper began by acknowledging power as missing-in-action in much of IS research and advancing the argument (e.g., Orlikowski & Baroudi, 1991; Jasperson et al., 2002; Willcocks, 2004; Willcocks & Lioliou, 2011) that power is a central component in IS research and practice. As noted, power has traditionally been understood as episodic, hierarchical, concentrated, and constraining (Silva, 2007). As we have demonstrated, it can also be perceived as systemic, empowering, and distributed across subjects, tools, rules, communities, and networks.

We used the episodic/systemic lens on power and AT to illustrate how one view of practice can help to analyze diverse types of power in IS contexts. The framework developed (Figure 5) collates these threads to signpost how existing views of power and practice can inform IS researchers and practitioners. Such power-sensitive models and frameworks are part of what will be required if IS as a field is to be more accepting of and explicit and proactive about power.

5.2.1 Why Do We Need a Power-Sensitive Framework?

If power is missing-in-action, then IS models and methods need more power-sensitive approaches. Popular IS textbooks, methods, and models used in research and practice—from IS success criteria and stakeholder management to information and knowledge management models—mostly deal with power as a marginal concern (Dwivedi et al., 2015;

Kelly, 2018). In contrast, the framework developed in the paper incorporates power as a part of IS contexts in what we hope is an accessible and extendable way. We highlight the centrality of power using illustrations of key concepts and examples from the two cases examined here. Readers can use the framework to reference and understand alternative views on power and practice. We argue that the framework is needed to highlight power as an audible and visible feature of IS research and practice.

5.2.2 How Does the Framework Work?

The framework signposts considerations, conceptual resources, and case examples to facilitate the understanding of IS power and practice. Figure 5 develops the four questions signposted in the introduction of the paper as four quadrants highlighting IS (1) contexts, (2) power, (3) practices, and (4) lessons. These framework components are depicted as a four-stage process and provide conceptual resources that researchers and practitioners can draw upon. Actionable examples from this research are provided to illustrate how the framework works in practice by utilizing an episodic/systemic view of power and AT.

The quadrants on power and practice include references to signpost various topics and concepts. We recognize that the power-sensitive framework is not exhaustive many other views on practice and power exist, such as in technology as practice (Orlikowski, 2000) or sociomateriality (Orlikowski, 2007; Leonardi & Barley, 2008). However, and importantly, the framework aims to introduce concepts and perspectives for readers interested in acknowledging and learning more about power in IS contexts. To better understand conflicts or contradictions, the AT view (Engeström, 1987; Allen et al., 2014) can be useful. Or to comprehend the network of human/nonhuman actors that emerges during the evolution of a new technology with diverse stakeholders, actor-network views (Latour, 2005; Callon, 1986) are particularly well-suited.

Similarly, in terms of power, the episodic/systemic view (Lawrence et al., 2012) highlights concentrated versus culturally diffused power. However, Foucauldian surveillance, which has been used in previous IS research (e.g., Zuboff, 1988, 2019), is included in the framework in addition to other Foucauldian concepts relevant to IS, such as governmentality or biopower (e.g., Foucault, 1991; Foucault & Rabinow, 1984). Depending on the reader's IS context and focus, different power/practice views may be more or less relevant. The framework signposts key perspectives and concepts for readers to develop further understanding.

This paper does not aim to detail all the advantages of every view of power and practice in IS; rather, it seeks to exemplify concepts, outline illustrative cases, signpost usable resources, and instill interest in seeing power in the practice of mundane, common IS use.

The framework provides actionable examples emerging from this research, which can be used in practice by researchers and practitioners. The IS context of these actionable examples is the use of mundane IS for data and knowledge sharing through email and social media (Case 1) and reporting systems and spreadsheets (Case 2). The perspective on power in these case studies is the episodic/systemic view of power, which highlights power as hierarchical possession, control, resource dependence, and fluid empowerment. The practice view followed is AT, which demonstrates contradictions between the episodic control of tools and rules and systemic power in community workarounds and data/knowledge sharing. In Case 1, contradictions led to the avoidance of episodic control, and in Case 2, contradictions led to learning, transformation, and development. Figure 5 illustrates how the framework can be used to define context, select views of power and practice, and create subsequent lessons for IS researchers and practitioners.

The framework can help researchers beyond the examples provided in this paper. For instance, it could be used to study how artificial intelligence (AI) leads to increased surveillance in the workplace, allowing managers or supervisors to monitor workers and potentially increasing power imbalances. It could also be used to study how AI systems lead to empowerment and development and would be particularly useful for studying digital innovation and inclusion.

In sum, we argue that the framework provides the following benefits. First, it emphasizes power as present-in-actions but does not overtly stipulate how power in practice should be viewed. The framework guides but does not prescribe. The framework is intentionally basic and thus open, flexible, and accessible, allowing for adaptation and extension by IS researchers. Second, the framework generalizes across different IS contexts and technologies. The framework's aim is to encourage IS theory and practice to incorporate power and to improve the understanding of power dynamics. This is especially important in the current technological era, where it is increasingly evident that IS contribute, intentionally or not, to local and global power inequalities. The framework is thus not limited to a single sector, technology, or case. Rather, it is flexible across IS researcher and practitioner contexts, technologies, and diverse types of power and practice.

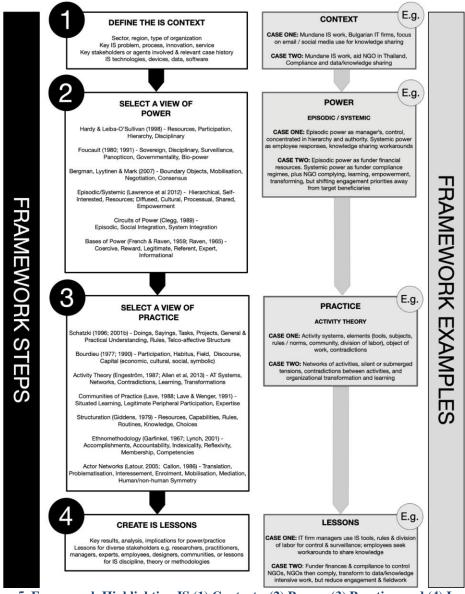


Figure 5. Framework Highlighting IS (1) Contexts, (2) Power, (3) Practice, and (4) Lessons

6 Conclusion

This paper was motivated by an awareness that power has long been marginalized and "missing-in-action" in IS research. We outline two major contributions: We demonstrate how the episodic/systemic view and AT articulate power dynamics as "present-in-actions" and develop a power-sensitive framework to support researchers and practitioners seeking to acknowledge, study, and respond to power in IS.

In analyzing the two cases, we demonstrate that power is not only episodic, hierarchical, or controlling, but is also systemic, empowering, and fluid across time and between stakeholders. Power is present-in-actions in the daily work of countless individuals who use common mundane IS technologies such as email, databases, social media, and reporting systems.

This paper also has certain limitations. It utilizes case studies drawn from larger projects and describes how power relations are configured in particular contexts. It does not exhaust the advantages of diverse approaches to practice and power. Rather, the paper demonstrates how to use specific power and practice lenses and highlight other existing power and practice lenses that could be used to understand power dynamics. Finally, power requires ongoing development to account for contemporary concerns such as digital change, datafication, AI, and digitalization.

More IS studies are needed that incorporate power and practice and, importantly, translate scholarly results into accessible, power-sensitive lessons, tools, checklists, and frameworks that can be used by academics and practitioners.

References

- Allen, D., Brown, A., Karanasios, S., & Norman, A. (2013). How should technology-mediated organizational change be explained? A comparison of the contributions of critical realism and activity theory, *MIS Quarterly*, 36(5), 835-854.
- Allen, D., Karanasios, S., & Norman, A. (2014). Information sharing and interoperability: the case of major incident management, *European Journal of Information Systems*, 23(4), 418-432.
- Avis, J. (2007). Activity theory—Talking truth to power? *Proceedings of the Conference of the Discourse, Power, Resistance Series*.
- Azad, B., & Faraj, S. (2011). Social power and information technology implementation: a contentious framing lens. *Information Systems Journal*, 21(1), 33-61.
- Backhouse, J., Hsu, C., & Silva, L. (2006). Circuits of power in creating de jure standards: shaping an international information systems security standard. *MIS Quarterly*, *30*(SI), 413-438.
- Bergman, M., Lyytinen, K., & Mark, G. (2007). Boundary objects in design: An ecological view of design artifacts. *Journal of the Association for Information Systems*, 8(11), 546-568.
- Blackler, F. (1995). Knowledge, knowledge work and organizations: An overview and interpretation, *Organization Studies*, *16*(6), 1021-1046.
- Blackler, F. (2009). Cultural-historical activity theory and organization studies, In A. Sannino (Ed.), *Learning and expanding with activity theory* (pp. 16-38). Cambridge University Press.
- Blackler, F. (2011). Power, politics, and intervention theory: Lessons from organization studies, *Theory & Psychology*, 21(5), 724-735.
- Blackler, F., & McDonald, S. (2000). Power, mastery and organizational learning. *Journal of Management Studies*, *36*(6), 835-852.
- Blackler, F., & Regan, S. (2009). Intentionality, agency, change: Practice theory and Management. *Management Learning*, 40(2), 161-176.
- Bødker, S. (1989). A human activity approach to user interfaces. *Human Computer Interaction*, 4(5), 181-195.
- Bourdieu, P. (1977). *Outline of a theory of practice*. Cambridge University Press.

- Bourdieu, P (1990). *The logic of practice*. Stanford University Press.
- Brigham, M., & Hayes, N. (2013). Hybridity, consulting and e-development in the making: Inscribing new practices of impact assessment and value management, *Information Technology for Development*, 19(1), 112-132.
- Bunderson, J., & Reagans, E. (2011). Power, status, and learning in organizations, *Organization Science*, 22(5), 1181-1194.
- Callon, M. (1986). Some elements of a sociology of translation: domestication of the scallops and the fishermen. In J. Law (Ed.) *Power*, *action and belief: A New Sociology of Knowledge*. (pp. 195-233). Routledge.
- Cendon, B., & Jarvenpaa, S. (2001). The development and exercise of power by leaders of support units in implementing information technology-based services. *The Journal of Strategic Information Systems*, 10(2), 121-158.
- Chanias, S., Myers, M., & Hess, T. (2019). Digital transformation strategy making in pre-digital organizations: The case of a financial services provider. *The Journal of Strategic Information Systems*, 28(1), 16-32.
- Chuang, C., Jackson, E. & Jiang, Y. (2016). Can knowledge-intensive teamwork be managed? Examining the roles of HRM systems, leadership, and tacit knowledge. *Journal of Management*, 42(2), 524-554.
- Clegg, S. R. (1989). Frameworks of power. SAGE.
- Clegg, S. R., Courpasson, D., & Phillips, N. (2006). *Power and organizations*. Pine Forge Press.
- Contu, A. (2013). On boundaries and difference: Communities of practice and power relations in creative work. *Management Learning*, 45(3), 289-316.
- Daniels, H. (2004). Cultural historical activity theory and professional learning, *International Journal of Development and Education*, 51(2), 185-200.
- Daniels, H., & Warmington, P. (2007). Analysing third generation activity systems: Labour-power, subject, transformation, *Journal of Workplace Learning*, *19*(6), 376-391.
- Davison, R. M., Ou, C. X. J., & Martinsons, G. (2013). Information technology to support informal knowledge sharing. *Information Systems Journal*, 23(1), 89-108.
- Dhillon, G., Caldeira, M., & Wenger, R. (2011). Intentionality and power interplay in IS implementation: The case of an asset

- management firm. The Journal of Strategic Information Systems, 20(4), 438-448.
- Díaz Andrade, A., & Techatassanasoontorn, A. (2021). Digital enforcement: Rethinking the pursuit of a digitally enabled society. *Information Systems Journal*, 31(1), 185-196.
- Doolin, B. (2004). Power and resistance in the implementation of a medical management information system. *Information Systems Journal*, 14(4), 345-362.
- Du, W., Pan, S., Leidner, D. E., & Ying, W. (2019). Affordances, experimentation and actualization of fintech: A blockchain implementation study. *The Journal of Strategic Information Systems*, 28(1), 50-65.
- Dwivedi, Y. K., Wastell, D., Laumer, S., Henriksen, H.
 Z., Myers, M., & Srivastava, C. (2015).
 Research on information systems failures and successes: Status update and future directions.
 Information Systems Frontiers, 16(1), 143-156.
- Engeström, Y. (1987). Learning by expanding: An activity-theoretical approach to developmental research. Orienta-Konsultit.
- Engeström, Y. (2015). Learning by expanding: An activity-theoretical approach to developmental research. Cambridge University Press.
- Engeström, Y., Miettinen, R., & Punamäki, R. (1999). Perspectives on activity theory. Cambridge University Press.
- Engeström, Y. (2000). Activity theory as a framework for analyzing and redesigning work. *Ergonomics*, 43(8), 960-974.
- Engeström, Y. (2001). Expansive learning at work: toward an activity theoretical reconceptualization. *Journal of Education and Work*, 14(1), 132-156.
- Engeström, Y. (2008a). Enriching activity theory without shortcuts, *Interacting with Computers*, 20(2), 256-260.
- Engeström, Y. (2008b). From teams to knots: Activitytheoretical studies of collaboration and learning at work. Cambridge University Press.
- Engeström, Y., & Sannino, A. (2020). From mediated actions to heterogenous coalitions: Generations of activity-theoretical studies of work and learning. *Mind*, *Culture*, *and Activity*, 28(1), 5-25.
- Engeström, Y., & Sannino, A. (2011). Discursive manifestations of contradictions in organizational change efforts: A methodological framework, *Journal of Organizational Change Management*, 24(3), 368-385.

- Engeström, Y., Miettinen, R., & Punamäki, R. (1999). *Perspectives on activity theory*. Cambridge University Press.
- Faraj, S., Pachidi, S., & Sayegh, K. (2018). Working and organizing in the age of the learning algorithm. *Information and Organization*, 28(1), 62-71.
- Fleming, P., & Spicer, A. (2014). Power in management and organization science. *The Academy of Management Annals*, 8(1), 236-298.
- Foot, K. (2014). Cultural-historical activity theory: Exploring a theory to inform practice and research. *Journal of Human Behavior in the Social Environment*, 24(3), 329-46.
- Foucault, M. (1980). *Power/knowledge: Selected interviews and other writings*. Pantheon.
- Foucault, M. (1991). Governmentality. In G. Burchell, C. Gordon, & P. Miller (Eds.), *The Foucault Effect: Studies in Governmentality* (pp. 85-106). University of Chicago Press.
- Foucault, M. & Rabinow, P. (1984). *The Foucault Reader*. Pantheon.
- Galinsky, D., Magee, J. C., Gruenfeld, D. H., Whitson, J., & Liljenquist, K. (2008). Power reduces the press of the situation: Implications for creativity, conformity, and dissonance, *Journal of Personality and Social Psychology*, 95(6), 1450-1466.
- Giddens, A. (1979). *Central problems in social theory*. University of California Press.
- Göhler, G. (2009). Power to and power over, In S. R. Clegg & M. Haugaard (Eds.), *The SAGE handbook of power*. SAGE.
- Groleau, C., Demers, C., Lalancette, M., & Barros, E. (2012). From drawings to computer visuals: Confronting situated and institutionalized practices in an architecture firm. *Organization Science*, 23(3), 651-671.
- Hardy, C. & Clegg, S. R. (1996). Organizations, organization and organizing. In S. R. Clegg & C. Hardy (Eds.) *Studying organization: Theory and method*. SAGE.
- Hardy, C., & Leiba-O'Sullivan, S. (1998). The power behind empowerment: Implications for research and practice. *Human Relations*, *51*(4), 451-483.
- Harper, R. (2000). The social organization of the IMF's mission work. In M. Strathern (Ed.), *Audit cultures: Anthropological studies in accountability, ethics and the academy* (pp. 21-56). Routledge.
- Hasu, M., & Engeström, Y. (2000). Measurement in action: An activity-theoretical perspective on

- producer-user interaction, *International Journal* of Human-Computer Studies, 53(1), 61-86.
- Heeks, R. (2010). Development 2.0: The IT-enabled transformation of international development, *Communications of the ACM*, 53(4), 22-24.
- Heizmann, H. (2011). Knowledge sharing in a dispersed network of HR practice: Zooming in on power/knowledge struggles, *Management Learning*, 42(4), 378-392.
- Hussain, Z. I., & Cornelius, N. (2009). The use of domination and legitimation in information systems implementation. *Information Systems Journal*, 19(1), 195-224.
- Ilyenkov, E. (1974). *Dialectical logic*, essays on its history and theory. Progress.
- Introna, L. (2003). Disciplining information systems: Truth and its regimes. *European Journal of Information Systems*, 12(3), 235-240.
- Jasperson, J., Carte, T., Saunders, C., Butler, S., Croes, J., & Zheng, W. (2002). Review: Power and information technology research: A metatriangulation review, MIS Quarterly, 26(4), 398-459.
- Karanasios, S., & Allen, D. (2013). ICT for development in the context of the closure of Chernobyl nuclear power plant: An activity theory perspective. *Information Systems Journal*, 23(4), 285-306.
- Karanasios, S. (2018). Toward a unified view of technology and activity: The contribution of activity theory to information systems research. *Information Technology & People*, 31(1), 134-156.
- Karanasios, S., Nardi, B., Spinuzzi, C., & Malaurent, J. (2021). Moving forward with activity theory in a digital world. *Mind*, *Culture*, *and Activity*, 28(3), 234-253.
- Kärreman, D. (2010). The power of knowledge: Learning from "Learning by Knowledge-Intensive Firms." *Journal of Management Studies*, 46(5), 1405-1416.
- Kelly, P. R. (2018). An activity theory study of data, knowledge, and power in the design of an international development NGO impact evaluation. *Information Systems Journal*, 28(3), 465-488.
- Klein, H., & Myers, M., (1999). A set of principles for conducting and evaluating interpretive field studies in information systems. *MIS Quarterly*, 23(1), 65-93.
- Koch, H., Gonzalez, E., & Leidner, D. E. (2012). Bridging the work/social divide: The emotional

- response to organizational social networking sites. *European Journal of Information Systems*, 21(6), 700-716.
- Koch, H., Leidner, D. E., & Gonzalez, E. (2013). Digitally enabling social networks: Resolving IT-culture conflict. *Information Systems Journal*, 23(6), 501-523.
- Kuutti, K. (1999). Activity theory, transformation of work, and information systems design. In Y. Engeström & R. Punamäki-Gitai (Eds.), Perspectives on activity theory—learning in doing: Social, cognitive and computational perspectives (pp. 360-376). Cambridge University Press.
- Latour, B. (2005). Reassembling the social: An introduction to actor-network-theory. Oxford University Press.
- Lawrence, T., Malhotra, N., & Morris, T. (2012). Episodic and systemic power in the transformation of professional service firms. *Journal of Management Studies*, 49(1), 102-143.
- Lawrence, T., Mauws, K., Dyck, E., & Kleysen, R. (2005). The politics of organizational learning: Integrating power into the 4I framework. *Academy of Management Review*, 30(1), 180-191.
- Leal, A. P. (2007). Participation: the ascendancy of a buzzword in the neo-liberal era. *Development in practice*, *16*(5), 539-548.
- Lee, A., & Baskerville, R. (2003). Generalizing generalizability in information systems research. *Information Systems Research*, 14(2), 221-245.
- Lee, A., & Baskerville, R. (2012). Conceptualizing generalizability: New contributions and a reply. *MIS Quarterly*, 26(2), 746-761.
- Leonardi, P., & Barley, R. (2008). Materiality and change: Challenges to building better theory about technology and organizing. *Information and Organization*, 18(3), 159-176.
- Leonardi, P., Huysman, M. & Steinfield, C. (2013). Enterprise social media: Definition, history, and prospects for the study of social technologies in organizations. *Journal of Computer-Mediated Communication*, 19(1), 1-18.
- Leong, C., Pan, S. L., Bahri, S., & Fauzi, A. (2019). Social media empowerment in social movements: Power activation and power accrual in digital activism. *European Journal of Information Systems*, 28, 172-205.
- Leong, C., Pan, S., Ractham, P., & Kaewkitipong, L. (2015). ICT-enabled community empowerment

- in crisis response. *Journal of the Association for Information Systems*, 16(2), 175-212.
- Levina, N., & Orlikowski, W. (2009). Understanding shifting power relations within and across organizations: A critical genre analysis. *Academy of Management Journal*, 52(4), 672-703.
- Levina, N., & Vaast, E. (2008). Innovating or doing as told? Status differences and overlapping boundaries in offshore collaboration. *MIS Quarterly*, *32*(2), 306-332.
- Lynch, M. (1993). Scientific practice and ordinary action: Ethnomethodology and social studies of science. Cambridge University Press.
- Malaurent, J., & Avison, D. (2016). Reconciling global and local needs: A canonical action research project to deal with workarounds. *Information Systems Journal*, 26(3), 226-256.
- Malaurent, J., & Karanasios, S. (2020). Learning from workaround practices: The challenge of enterprise system implementations in multinational corporations. *Information Systems Journal*, *30*(4), 638-663.
- Markus, M. (1983). Power, politics, and MIS implementation, *Communications of the ACM*, 26(6), 430-444.
- McAfee, P. (2006). Enterprise 2.0: The dawn of emergent collaboration, *MIT Sloan Management Review*, 46, 21-28.
- Medaglia, R., Eaton, B., Hedman, J., & Whitley, E. A. (2022). Mechanisms of power inscription into IT governance: Lessons from two national digital identity systems. *Information Systems Journal*, 32(2), 242-276.
- Miettinen, R., Samra-Fredericks, D., & Yanow, D. (2009). Re-turn to practice: An introductory essay. *Organization Studies*, *30*(12), 1308-1328.
- Nardi, A. (2005). Objects in collaborative activity. *Mind, Culture, and Activity, 12*(1), 36-51.
- Nicolini, D. (2009). Zooming in and out: Studying practices by switching theoretical lenses and trailing connections. *Organization Studies*, 30(12), 1391-1418
- Nicolini, D. (2012). Practice theory, work, and organization: An introduction. Oxford University Press.
- Orlikowski, W. (2000). Using technology and constituting structures: A practice lens for studying technology in organizations. *Organization Science*, 11(4), 404-428.

- Orlikowski, W. (2007). Sociomaterial practices: Exploring technology at work. *Organization Studies*, 28(9), 1435-1448.
- Orlikowski, W., & Baroudi, E. (1991). Studying information technology in organizations: Research approaches and assumptions. *Information Systems Research*, 2(1), 1-28.
- Orlikowski, W., & Iacono, C. (2001). Research commentary: Desperately seeking the "IT" in IT research—A call to theorizing the IT artifact. *Information Systems Research*, *12*(2), 121-134.
- Pozzebon, M., & Pinsonneault, A. (2012). The dynamics of client-consultant relationships: exploring the interplay of power and knowledge. *Journal of Information Technology*, 26(1), 35-56.
- Quaggiotto, G. (2007, April 30). Development 2.0: A new paradigm for the non-profit sector? *jinfo*.
- Raman, R., & Bharadwaj, A. (2012). Power differentials and performative deviation paths in practice transfer: The case of evidence-based medicine. *Organization Science*, 23(6), 1593-1621.
- Reckwitz, A. (2002). Toward a theory of social practices: A development in culturalist theorizing. *European Journal of Social Theory*, 5(2), 243-263.
- Reid, A. (2012). Activity theory, discourse and power:
 A critical perspective on professional roles in healthcare. *Proceedings of the Critical Perspectives on Professional Learning Conference*.
- Rowlands, B., & Kautz, K. (2022) Power relations inscribed in the enactment of systems development methods. *Information Systems Journal*, 32(2), 278-308.
- Schatzki, T. R. (2001a). Introduction. In T. R. Schatzki, K. Knorr Cetina, & E. E. Von Savigny (Eds.) *The practice turn in contemporary theory* (pp. 1-14). Routledge.
- Schatzki, T. R. (2001b). Practice mind-ed orders. In T. R. Schatzki, K. Knorr Cetina and E. E. Von Savigny (Eds.) *The practice turn in contemporary theory*. Routledge.
- Schirmer, F., & Geithner, S. (2018). Activities, activity systems and power relations in organizational change: A multi-level perspective based on activity theory. *Journal of Accounting & Organizational Change*, 14(1), 8-32.
- Silva, L. (2007). Epistemological and theoretical challenges for studying power and politics in information systems. *Information Systems Journal*, 16(2), 165-185.

- Silva, L., & Backhouse, J. (2003). The circuits-of-power framework for studying power in institutionalization of information systems. *Journal of the Association for Information Systems*, 4(1), 294-336.
- Simeonova, B. (2018). Transactive memory systems and Web 2.0 in knowledge sharing: A conceptual model based on activity theory and critical realism. *Information Systems Journal*, 28(4), 592-611.
- Simeonova, B. & Galliers, R. D. (2023). Power, knowledge and digitalisation: A qualitative research agenda. In R. D. Galliers, & B. Simeonova (Eds.), *The Cambridge handbook of* qualitative digital research (pp. 60-80). Cambridge University Press.
- Simeonova, B., Galliers, R. D., & Karanasios, S. (2020).

 Strategic information systems and organizational power dynamics. In R. D. Galliers, D. Leidner, & B. Simeonova (Eds.), *Strategic information management: Theory and practice* (5th ed., pp. 221-238). Routledge.
- Spender, J. C. (1995). Organizations are activity systems, not merely systems of thought. JAI Press.
- Spinuzzi, C. (2020). "Trying to predict the future": Third-generation activity theory's codesign orientation. *Mind*, *Culture*, *and Activity*, *26*(1), 5-18.
- Standish Group (2015) *Chaos Report 2015*. Standish Group Incorporated.
- Strathern, M. (2000). Audit cultures: Anthropological studies in accountability, ethics, and the academy. Routledge.
- Tarafdar, M., D'Arcy, J., Turel, O., & Gupta, A. (2016). The dark side of information technology. *MIT Sloan Management Review*, 56(2), 61-70.
- Thompson, M. (2008). ICT and development studies: Towards development 2.0. *Journal of International Development*, 20(6), 821-835.
- Van Dijck, J. (2014). Datafication, dataism and dataveillance: Data between scientific paradigm and ideology. *Surveillance & Society*, 12(2), 198-208.
- Vygotsky, L. S. (1978). Mind in society: The development of higher psychological functions. Harvard University Press.

- Wallace, T., Bornstein, L., & Chapman, J. (2006). *The aid chain: Coercion and commitment in development NGOs*. Intermediate Technology Publications.
- Walsham, G. (2001). Making a world of difference: IT in a global context, Wiley.
- Walsham, G., (1995). Interpretive case studies in IS research: nature and method. *European Journal of Information Systems*, 5(2), 75-81.
- Walsham, G., (2006). Doing interpretive research. *European Journal of Information Systems*, 15, 320-330.
- Walsham, G. & Sahay, S. (2006). Research on information systems in developing countries: Current landscape and future prospects. *Information Technology for Development*, *12*(1), 6-24.
- Wang, S., & Noe, R. (2010). Knowledge sharing: A review and directions for future research, *Human Resource Management Review*, 20(2), 115-131.
- Webster, J. (1995). Networks of collaboration or conflict? Electronic data interchange and power in the supply chain. *The Journal of Strategic Information Systems*, 4(1), 31-41.
- Willcocks, P. & Lioliou, E. (2011). Everything is Dangerous: Rethinking Michel Foucault and the social study of ICT. In R. D. Galliers. & W. Currie, (Eds.), The Oxford handbook of management information systems: Critical perspectives and new directions (pp. 174-198). Oxford University Press.
- Willcocks, P. (2004). Foucault, power/knowledge and IS: Reconstructing the present. In J. Mingers & P. Willcocks (Eds.), *Social theory and philosophy for information systems*. (pp. 245-280). Wiley.
- Willem, A., & Scarbrough, H. (2006). Social capital and political bias in knowledge sharing: An exploratory study. *Human Relations*, 59(11), 1342-1371
- Yin, K. (2018). Case study research and applications. SAGE.
- Zuboff, S. (1988). In the age of the smart machine: the future of work and power. Basic Books
- Zuboff, S. (2019). The age of surveillance capitalism: The fight for a human future at the new frontier of power. Basic Books.

About the Authors

Boyka Simeonova is an associate professor of innovation at the University of Leicester School of Business. Boyka has published in highly-ranked organization and management journals and has co-edited the books: *Strategic Information Management: Theory and Practice* (5th ed., Routledge) and the *Cambridge Handbook of Qualitative Digital Research* (Cambridge University Press).

Paul R. Kelly is a lecturer in the Organisation Studies and Human Resource Management Group at Essex Business School, University of Essex, UK. His work focuses on information and organizations, using perspectives on power and practice. He has published in leading journals, including *Information Systems Journal* and *Organisation Studies*. He is also the co-author of the book *Organisational Change Management*. Paul is an Honorary Researcher at the Centre for Human Security and Social Change, La Trobe University, Australia.

Stan Karanasios is an associate professor of information systems at the University of Queensland Business School. He holds a visiting professor position at Southampton University. Previously he worked at RMIT University and the University of Leeds. His current research focuses on the interaction between new information and communication technologies and society. He has published in leading information systems journals, including MIS Quarterly, Information Systems Journal, European Journal of Information Systems, Journal of Information Technology, Journal of Strategic Information Systems, and Journal of the Association for Information Systems. He is a senior editor for Information Systems Journal and an associate editor for European Journal of Information Systems.

Robert D. Galliers is the University Distinguished Professor Emeritus and former provost at Bentley University and a professor emeritus and former dean, Warwick Business School. He received the AIS LEO award for exceptional lifetime achievements in information systems in 2012 and was the founding editor-in-chief of *The Journal of Strategic Information Systems*.

Copyright © 2024 by the Association for Information Systems. Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and full citation on the first page. Copyright for components of this work owned by others than the Association for Information Systems must be honored. Abstracting with credit is permitted. To copy otherwise, to republish, to post on servers, or to redistribute to lists requires prior specific permission and/or fee. Request permission to publish from: AIS Administrative Office, P.O. Box 2712 Atlanta, GA, 30301-2712 Attn: Reprints, or via email from publications@aisnet.org.