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Resonating Statements

Discursive acts in IT projects

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Abstract. IT projects are often complex arrangements of technological components, social actions, and organizational transformation that are difficult to manage in practice. This paper takes an analytical discourse perspective to explore the process of legitimizing IT projects. We introduce the concept of resonating statements to highlight how central actors navigate in various discourses over time. Particularly, the statements and actions of an IT project manager are portrayed to show how individuals can legitimize actions by connecting statements to historically produced discourses. The case study of an IT project in a Danish local government spans a two-year time period and demonstrates a double-loop legitimization process. First, resonating statements are produced to localize a national IT initiative to support the specificity of a local government discourse. Second, the resonating statements are used as part of a feedback loop to re-attach the localized IT project to the broader national discourse. The paper concludes with reflections on how to actively build on resonating statements as a strategic resource for legitimizing IT projects.

Key words: IT projects, discourse, resonating statement, case study

1 Introduction

The initiation of a new IT project is often a complex endeavour accompanied by a variety of discourses formed by different stakeholders. From theories on discourse and strategy, we

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know that the practices, activities, and negotiations of discourses create the organizational reality (DiMaggio 1992; Fairclough 1992; Whittington 1996). Consequently, as dominant discourses change over time, specific statements give people in certain positions the possibility to speak and act, while others are disregarded and silenced. As a result, the way in which someone is in a position to talk about proposed actions is related to the exertion of power formation with political implications (Fairclough 1992; Marinetto 2007). Discourses have correspondingly been studied in relation to management (Hardy et al. 2000; Schultze and Stabell 2004), organizational issues (Keenoy et al. 1997; Grant et al. 2001), and power (Whittington et al. 2006). Within the field of information systems, a variety of perspectives have been utilized to understand how IT projects are discursively legitimized (Lyytinen and Hirschheim 1988; Lyytinen 1992; Germonprez and Hovorka 2002; Puri and Sahay 2003).

Despite a growing number of studies investigating different aspects of discursive action, we still know relatively little about how IT project managers navigate in discourses over time by using specific statements to resonate particular actions. Recent attempts to address issues of discursive use (Hay and Richards 2000; Chia and MacKay 2007) have revealed a highly complex scene of macro- and micro-discourses, wherein actors try to produce meaningful connections among sometimes conflicting discourses. In this paper, we present a study of how specific statements are produced to legitimize the ambitions of a project manager in an IT project in a Danish local government. In particular, we focus on the actions of an individual actor to show how statements can be produced to shape, enact, and make sense of macro-level strategies in a local context. We ask the following research question: *How can individual actors use historically produced discourses to navigate between national and local levels?*

To address this question, we first develop a framework for studying resonating statements. We then present empirical findings from a case study that spans a two-year time period. The findings highlight how the concrete project is first formulated into a local discourse by evoking historically produced statements that resonate with the specific context of the local government. Subsequently, we demonstrate that locally produced discourses also need to be evoked and re-attached to the outer discursive levels in order to enable new local practices. We argue that the concept of resonating statements can be used to investigate IT projects in a multi-layered public sector setting where a long history of national policies and local understandings of the concept has taken place. We demonstrate a double loop process of legitimation, which is crucial when managing IT projects in this particular context. Ultimately, we discuss the findings in relation to IT projects in general and argue that similar processes might take place in IT projects across diverse contexts. We conclude that the concept of 'resonating statements' can be a productive and active way of dealing with discourse in IT projects.

2 Discourses in IT Projects

Acts and statements are not placed in a vacuum but need to be formulated and created in order to resonate in a specific context (Hardy et al. 2000). The question is what makes certain statements resonate while others are left without effect. The answer to this question is not straightforward, as it relates to a complex interplay of dominant discourses and positions of actors over

time. Within the IS field, institutional theory literature addresses how institutional pressures and legitimization play a key role in the implementation of technology (Gosain 2004). Different legitimacy-oriented pressures have a significant impact on adoption intent within the use of B2B electronic marketplaces (Son and Benbasat 2007), and thus a deeper understanding of pressures from embedded institutional networks is needed in relation to the adoption of inter-organizational linkages in companies (Teo et al. 2003). For example, Irani et al. (2007) address how the conservative and risk averse culture within the public sector can be understood and at the same time confronted, if we know more about the institutional structures of this particular setting. In addition, Jensen et al. (2009) argue that an institutional perspective is useful in explaining how political pressures, institutional constraints and professional traditions construct the context in which technologies are implemented. At the same time, institutional theory is less useful in describing how individuals respond to institutional pressures.

Discourses in IT projects have also been studied from an actor-network theory (ANT) perspective. For example, Elbanna (2008) provides an alternative view of Enterprise Resource Planning (ERP) projects by addressing how change occurs as a result of a complex process involving different stakeholders. ANT perspectives emphasize the dynamics at play across social contexts over time. Consequently, ANT is particularly valuable for studying temporal-change processes, especially where technology is part of the overall network of actions (Tatnall and Gilding 1999; McMaster and Wastell 2005). While institutional theory and ANT have been applied to explain the effects or outcomes of institutional and structural pressures, more research into how social practices are internalized and reproduced through human actions is needed (Jensen et al. 2009).

To address this issue, the concept of sensemaking has been applied in the literature (Weick and Roberts 1993; Barrett and Scott 2004; Jensen and Aanestad 2007). Sensemaking is concerned with the ongoing interplay of action and interpretation and centres on the two fundamental questions of 'what is going on here?' and 'what do I do next?' (Svejvig and Jensen 2013). People develop certain assumptions and expectations of the technology that shape their subsequent actions with it (Orlikowski and Gash 1994). Here, the notion of technological frames (Orlikowski and Gash 1994; Davidson 2002) has been used in combination with sensemaking to create a socio-cognitive process model of how participants' understanding of requirements change in a requirement determination process (Orlikowski and Gash 1994). For example, Davidson (2002) argues that the study of the frames of sensemaking helps explain how interpretative power has been exercised and, at the same time, constrained. Overall, studies that rely on sensemaking and institutional theories often emphasize that organizational actions are motivated by a desire to increase the organization's legitimacy.

Building on these insights, the case study presented in this paper is positioned within the stream of IS research that deals with the discursive and communicative legitimization of IT projects (Ngwenyama and Lee 1997; Germonprez and Hovorka 2002). According to Ngwenyama and Lee (1997), participants involved in strategic activity utilize both personal and organizational resources to gain legitimacy. Furthermore, contextuality is vital in the process of gaining validity of strategic action. They highlight that action becomes legitimate only in a given organizational context and that the person who is executing a strategic action to change the behavior must have the formal organizational standing or the moral authority to do so. Here, strategic action is deemed legitimate if it conforms to organizational norms, policies, and structures. While being inspired by the many attempts to understand processes of communicating and

legitimizing IT projects, this research follows a more direct focus on the role of multi-level discourses to understand how parallel and potentially conflicting discourses meet and are brought into IT projects by individuals to serve strategic purposes (Puri and Sahay 2003). This emphasizes a historical context within which actors navigate. Actors cannot simply produce resonating statements to suit their own immediate needs (Hardy et al. 2000; Wodak 2001); rather, they must locate and derive meaningful activities within their historical context if they want to create new forms of action.

3 Resonating Statements in IT Projects

This section will clarify the notion of discourse as well as highlight the different levels of discourse. We introduce the concept of 'resonating statements' as an approach to study the interplay between multi-level discourses over time.

3.1 Multi-Level Discourse Approach

Although scholars have made various attempts to define discourse (Phillips and Hardy 2002), no agreed-upon definition exists. In fact, in contemporary studies, the term discourse may mean almost anything (Keenoy et al. 1997; Grant et al. 1998). In this study, we seek to understand discourse in relationship to a specific process and social context in which discourse is produced (Clegg et al. 2006). We are interested in discourse in the sense of spoken and written language at the level of discursive practices, as well as the more overall 'order of discourse' (Fairclough 1992). Thus, we argue for a perspective, which includes multiple layers of discourse, seeking to address (from the perspective of a local government project manager) both macro- and micro-discursive levels.

We follow Alvesson and Kärreman (2000) in categorizing discourses into different levels containing distinct characteristics. We use three levels of discourse in our analysis. *Grand discourse* is an assembly of discourses that is ordered and presented as an integrated frame. A grand discourse may refer to organizational reality; e.g.; the dominating language use about a culture or ideology (Alvesson and Kärreman 2000, p. 1133). In our context, examples can be studied in the national IT strategies from 2002 onwards where the concept of e-government was introduced in a Danish setting (Johansson 2002; Henriksen and Damsgaard 2007). We will refer to grand discourse as the dominant national discourse from where strategic initiatives are produced. *Meso-discourse* concerns the study of discourse with relative sensitivity to language use in a specific context, but with an interest in finding wider patterns and going beyond the particulars of the text. The attempt is to generalize to other contexts. At this level, local discourse and specific statements can be investigated from more than one highly local domain of social reality (Alvesson and Kärreman 2000). The ephemeral connections between the meso- and micro-discourses are important instances to this study. *Micro-discourse* is a detailed study of language use and actions in a specific context. In this study, social text is investigated as being highly local.

Following a local IT project manager, we investigate the extent of normative ideals that were translated into local government practices. Specific statements were not perceived as being just pure talk (i.e.; without the determining power of discourse). At this level, the statements also revealed information about organizational and historical structures of the particular local domain under investigation. Table 1 summarizes the three levels of discourse.

<i>Type</i>	<i>Form</i>
Grand Discourse	Dominant national discourse from where strategic initiatives are produced.
Meso-discourse	Local discourse and statements that go beyond the particulars.
Micro-discourse	Language use and actions in a specific context.

Table 1. Multi-level discourses (adopted from Alvesson and Kärreman 2000)

3.2 Resonating Statements

Within the complex interplay between micro-, meso-, and grand discourse, we introduce the concept of resonating statements with a twofold purpose: first, to study how a project manager in a local government succeeds in making certain statements in an IT project resonate with the everyday practices in the organization. Second, to stress the interconnectedness between micro-, meso-, and grand discourses in everyday interactions in organizations.

In this sense, discourse, on the one hand, is viewed as local achievements distinct from other levels of social reality. Here, actors make statements as part of micro-processes that only resonate in this particular context due to the historical and cultural shaping of specific organizational structures. On the other hand, discourse also represents overall generally prevalent systems and articulations of ideas in a particular period in time (Alvesson and Kärreman 2000). By defining discourse in this way, resonating statements make it possible to study the specific connection of concepts, terms, and expressions, thus constituting not only a way of talking and writing about a particular issue, but also framing the way people understand and act with respect to that issue (Watson 1994).

Table 2 illustrates how resonating statements can be seen as interconnections of different discursive levels. We argue that successful acts in local government project management should be distinct, yet connected to the national level discourse.

<i>Type</i>	<i>Form</i>	<i>Resonating Statements</i>
Grand discourse	Dominant national discourse from where strategic initiatives are produced.	National level IT project ↓ ↑ Local government project manager
Meso-discourse	Local discourse and statements that go beyond the particulars.	
Micro-discourse	Language use and actions in a specific context.	

Table 2. Resonating statements across multi-level discourses

4 Research Design

The study presented in this paper is part of a larger research project concerning e-government, called eGov+, which is a collaborative effort between three Danish municipalities, three IT vendors, and a group of researchers at a Danish university. The overall purpose of the project is to investigate and design new public IT services. Methodologically, the project was based on a grounded theory approach towards understanding organizational issues and engaging in participatory design-oriented approaches. Participant observation and interviews were combined with workshops involving citizens and caseworkers. A variety of products were developed such as visualization of decision processes and workflows, adaptive documents and services, processes and methods of design, and management models. Six interviews, two workshops, and three observation sessions form the empirical material for this paper.

When studying the resonating statements across the three discursive levels of analysis, specific background knowledge plays an important part in constructing a focused study in the context of an IT project manager. In our study, an understanding of the grand discourse was sought as part of a broader research project dealing with how the notion of e-government was adopted in Denmark (Johansson 2002; Henriksen and Damsgaard 2007). The first author had two years of work experience in the Danish Ministry of Finance, during which time the development of the digital infrastructure in Denmark, eDay3/eDay3+, was in focus. Through this experience, the author gained valuable insights regarding the strategy formulation, the eDay3/eDay3+ project, and the organization surrounding it. While these insights were helpful in understanding how various discourses were produced at a national level, this paper focuses particularly on how the discourse played out in the context of a local government through the statements and actions of an IT project manager. Below, we present how the research study was designed in order to study discourse across the three levels in a local Danish government.

4.1 Case Setting

The research was carried out in the local government of Aalborg in Denmark. The choice of this particular case setting was based on a combination of sound intellectual principles, bureaucratic requirements, and serendipity (Phillips and Hardy 2002). The underlying idea was to create a case study on how nationally formulated IT projects were discursively addressed in a local government. Three reasons contributed to choosing this particular case setting: (1) Aalborg is the third largest local government in Denmark and is located in northern Jutland furthest away from the capital. This geographical location has historically produced a strong sense of autonomy towards plans and strategies from Copenhagen (Flyvbjerg 1998). As we wished to study how ideas travel across discursive levels, Aalborg local government was interesting, as it was expected that the local discourse would differ from the national one. (2) During the 1990s, the Aalborg local government played a key role in enhancing the vision of the information society (Johansson 2002). The local government was appointed as a 'digital lighthouse' where special synergies and clusters were established between IT vendors, public sector institutions, and universities (Pedersen and Dalum 2004). As a result, the local government had a long history of working with IT as part of its strategy, and, at the same time, creating a unique sense of doing things the 'Aalborg way.' (3) Due to strong ties between Aalborg University and the Aalborg local government, researchers easily gained access to all relevant actors, meetings, and venues to conduct the study.

4.2 Data Sources

To investigate *micro-discourse*, we conducted six interviews with key actors in the local government. The interviews varied in length from 60 to 70 minutes, and the topics discussed focused on both the implementation of the national reform project, eDay3/eDay3+, as well as the role of the interviewees with regard to this initiative. We were interested in naturally occurring discourses in every workday activities (Phillips and Hardy 2002). Three participatory observations, each spread over a period of two weeks, were conducted in the local government. In particular, we observed the practices of the local IT department staff. In the first two weeks, we followed the head of department to understand how he dealt with the national eDay3/eDay3+ project. As this project took form at a national level, a local IT project was formed in the Aalborg local government. Subsequently, it was decided to follow the new project manager during the last two rounds of observation.

In order to also study the *meso-discourse*, we participated in two workshops together with representatives from the Aalborg local government and other key stakeholders. The first workshop included representatives from all departments of the local government. The purpose of this workshop was to discuss and inform the different department managers about future challenges of the eDay3/eDay3+ project. In this workshop, we participated alongside the manager from the IT department and were introduced as observers. The second workshop was held by Local Government Denmark (i.e.; the interest group and member authority of Danish municipalities) with participants from the Danish Agency of Governmental Affairs and the Ministry of Finance. Representatives from ten other Danish local governments were also present. The theme of the

<i>Type</i>	<i>Date</i>	<i>Who/what</i>	<i>Analytical focus</i>
Interviews			
Interview 1	April 2009	Head of IT department	The history of IT in the local government and the role of the IT department
Interview 2	May 2009	Head of IT department	The challenges encountered at an early phase of the eDay3/eDay3+ project
Interview 3	October 2009	Project manager eDay3/eDay3+	The organization of the eDay3/eDay3+ project in the local setting
Interview 4	February 2010	Project manager eDay3/eDay3+	The implementation of the eDay3/eDay3+ project
Interview 5	March 2010	Project manager eDay3/eDay3+	The correspondence between the eDay3/eDay3+ project and national intentions
Interview 6	July 2010	Project manager eDay3/eDay3+	The project manager's reflections on the eDay3/eDay3+ project
Observations			
Observation 1	February 2009	Two weeks observing the head of IT department	The introduction of the eDay3/eDay3+ project across the departments in the local government
Observation 2	February 2009	Two weeks observing the project manager to-be in the IT department	The process of establishing the local eDay3/eDay3+ project in the local government
Observation 3	March 2009	Two weeks observing the project manager in the IT department	The management of the local eDay3/eDay3+ project in the local government
Workshops			
Workshop 1	February 2009	Workshop with participants from the 7 departments in Aalborg local government	The participants' views on the eDay3/eDay3+ project and discussions about future challenges
Workshop 2	October 2009	Workshop organized by Local Government Denmark on best practices. Representatives from Aalborg local government and 10 other local governments	The broader patterns of local experiences with the eDay3/eDay3+ project. The connections between several micro-discourses

Table 3. Overview of data sources

workshop was to define best practices in the eDay3/eDay3+ project. Experiences from the various local governments were shared with representatives from the national institutions acting as moderators. The authors participated in this second workshop alongside the eDay3/eDay3+ project manager from Aalborg.

Our conceptualization of the *grand discourse* was created as part of a broader research focus on national e-government strategies. Furthermore, we used the two workshops and interviews to get an insight into the dominant national discourse from where strategic initiatives were produced. Table 3 provides an overview of the empirical material (interviews, observations, and workshops) used to study resonating statements.

4.3 Data Analysis

Some early examples of using language analysis methods in relation to information systems are found in the studies by Wynn and Novick (1995), Klein and Truex (1995), and Holmquist and Andersen (1987). These examples build on both content analysis and conversation analysis, focusing on language games (Avison and Myers 1995). However, in this case, the unit of interaction is viewed as consisting of three levels: micro-, meso-, and grand discourses. At certain stages, these levels connect through specific utterances during IT projects (Wood and Kroger 2000). The aim of the discourse analysis is to identify some of the multiple meanings assigned to texts, which means that more systematic, labor saving forms of analysis (such as traditional content analysis) can be counterproductive because they aim at rapid consolidation of categories (Phillips and Hardy 2002). As a result, researchers need to develop an approach that makes sense in light of the particular study, and also to establish a set of arguments to justify the specific approach adopted.

In this case, the three types of data sources provided different data forms that were analyzed separately, but were connected through an overall frame of discursive levels. The interviews were semi-structured and transcribed verbatim. The transcribed interviews were read through and coded for grand, meso-, and micro-discourses. For example, a micro-discourse would be statements specifically placing the Aalborg local government in its historical role in the Danish IT development. Such a statement could be: "In the Aalborg local government we have always been regarded to be in opposition to national level ideas. Maybe it is because we are geographically placed far away from the capital city" (Interview 2 with the head of IT department). Statements connecting two or more levels were of particular interest for this study, as they would demonstrate utterances used in a specific context that draw on historically produced discourses across various levels to make certain actions possible. In our case study, they would be connecting specific local knowledge and national level ambitions. In order to be regarded as a resonating statement, we worked retrospectively after collecting the empirical data to identify the statements that actually came to resonate.

The interviews, observations, and workshops provided extensive notes, audio recordings, formal documents, and PowerPoint presentations, all leading to the following questions: Which texts are important for constructing the object of analysis *and* how should these be sampled? The data of each observation session were categorized according to discursive levels. In contrast to the interviews, we also marked sentences that seemed to resonate well among fellow employees

<i>Type</i>	<i>Example</i>	<i>Discursive levels</i>
Grand discourse	<p>“Here in Aalborg local government, we have always done things differently and with success. We don’t see IT as simply a tool for efficiency as it is stated in the official document” (Observation 3, March 2009)</p>	The statement resonates an opposition to seeing IT as a tool for efficiency, which was a predominant argument in the eDay3 strategy documents.
Meso-discourse		The statement resonates a local and historical discourse of how the Aalborg local government treats IT.
Micro-discourse		The statement resonates Aalborg local government as an actor that does things differently and that has been successful in finding alternative IT definitions in the past.

Table 4. Resonating statement connecting the three levels of discourse

in the local government. What counted as resonating statements became a matter of the persons putting the statements forward and how the statements were received among other actors. As these were more formal events, a number of planned presentations and formal notes were presented. These texts were important, as they entailed official versions of the eDay3/eDay3+ project, where the following debates challenged the viewpoints from various discursive levels. Thus when coding, the workshops were used to highlight the discursive practices that take place underneath the more official formulations. Table 4 displays an example of how a statement was categorized according to the three discursive levels.

5 Background: eDay3

E-government strategies began to emerge in the Danish context around 2002 (Henriksen and Damsgaard 2007). In this context, the concept of ‘eDay’ was used to denote centralized and shared IT decisions across Denmark. An eDay stands for a specific date where public sector institutions, companies, and citizens are supposed to be ready for a specific digital solution. The first eDay (eDay1) was initiated on the 1st of September 2003. From then on, all public sector institutions were able to receive and send all mail electronically to/from all other public sector institutions. The second eDay (eDay2) took place on the 1st of February 2005 and granted the right for citizens to send/receive secure digital mail to and from all public sector institutions. The 1st of November 2010 was announced as eDay3. From this day onwards, citizens were able

to access public eServices through NemID (a secure login to the local government homepage). Moreover, communication was made possible through a digital mailbox called ‘digital post.’ This meant that the local government could offer the possibility for communication with citizens, businesses, and other public sector institutions to go through the secure digital post system. The 1st of November 2014 was referred to as eDay4. From this date, it became mandatory for all citizens living in Denmark to have digital post mailbox access and by default, all communication from the public sector would be sent only to this mailbox.

As the eDays have been key in the development of digital infrastructure in Denmark, this paper follows the processes leading up to eDay3, where it was mandated that all local governments should be able to offer access to the digital post mailbox. However, it was not decided how this would take place, neither in terms of which IT solutions to choose or which services to provide. Rather, it quickly became clear that deciding on the concrete meaning of offering access would become a challenge. For instance, would it be appropriate to allow citizens to write emails, which then subsequently would be distributed to the right place? Or would this mean a complete re-organizing of the departments according to a centrally managed mailbox?

6 Resonating Statements: Part I

When the staff from the IT department of the Aalborg local government came back from a national convention about digitization in January 2009, it was clear that eDay3 would need extraordinary attention and effort from the employees in this office if they were to meet the official vision put forth in the national strategy document. Most of the conversations among the IT staff in this period addressed the fact that the Aalborg local government, to a higher degree, would have to align with national policies. During the following months, management in the IT department discussed how to sell the new idea to colleagues in other parts of the organization. It was decided that the Aalborg local government could not wait for the policy makers at the national level to formulate guidelines and directions, since actions were required to be taken at an early stage. Consequently, employees in the IT department began to discuss how the eDay3 project could be used as an instrument for establishing a better connection between the different departments in the local government.

The first resonating statement highlighted from this process was made at a workshop held in February 2009. The senior consultant from the IT department, appointed by the head of department to lead the implementation of eDay3, opened the workshop by stating that “...things are going to change.” He continued,

“We have just returned from a meeting with our colleagues in the ministry. We know that they are going to impose new procedures, but we don’t know how or what. Our suggestion is to act now and that’s why we have invited you to this workshop.”

After a few comments and questions from the participants, it was clear that only a minority was in favour of immediate action. Instead, the general sense was to wait and see what was going to be decided nationally. As one participant suggested,

“Maybe we don’t actually have to change a lot of things, but just say we are doing something about digital solutions to help the citizens.”

As a reaction, the senior consultant from the IT department took a pen and wrote the following statement in capital letters on the whiteboard. Table 5 depicts the three discursive levels for Resonating Statement I.

<i>Type</i>	<i>Resonating statement</i>	<i>Discursive levels</i>
Grand discourse	“If we don’t focus on eDay3 and centralize our processes by use of IT, we will most likely have to let people go. HOW CAN WE DO THIS TOGETHER?” (Workshop 1, February 2009)	The statement resonates a grand discourse at the national level in which eDay3 is an instrument for changing the practices in local governments.
Meso-discourse		The statement resonates a meso-discourse in the local government by connecting IT (eDay3) to local work processes.
Micro-discourse		The statement resonates a micro-discourse to the participants at the meeting by claiming the risk of lay-offs, and by urging everyone to work together.

Table 5. Resonating statement I

The statement helped in getting the attention of the local units and made them enter into negotiations on how to change the overall organization of the local government.

After the workshop, the senior consultant initiated individual talks with representatives from each of the seven departments. During these meetings, he stressed his awareness about the specific historical context of the local government. He used references to the history of the Northern region of Denmark as *the place* for IT innovation, stating that while the national level had good intentions, the local employees were the ones who knew best how to utilize IT for the benefit of the citizens in the region.

The second resonating statement highlighted a different strategy and purpose. It was uttered in a private meeting between the senior consultant from the IT department and a senior consultant from the Department for Employment. Table 6 depicts the discursive levels for Resonating Statement II.

<i>Type</i>	<i>Resonating statement</i>	<i>Discursive levels</i>
Grand discourse	<p>“Here in Aalborg local government, we have always done things differently. We don't see IT as only a tool for efficiency, as stated in the official document.</p> <p>This means that with IT here in our local government, we will be efficient primarily because we know the specific needs and demands from our citizens.”</p> <p>(Observation 1, February 2009)</p>	The statement resonates a grand discourse from the official document in which efficiency is achieved by use of IT.
Meso-discourse		The statement resonates a meso-discourse by emphasizing that the local government knows best how to be efficient.
Micro-discourse		The statement resonates a micro-discourse of efficiency by emphasizing the importance of the context-specific knowledge of local employees.

Table 6. Resonating statement II

In the individual conversations with representatives from the different departments, the senior consultant showed context-specific awareness of how Aalborg had changed over the last ten years, and he thereby gained acknowledgment from the local departments. In doing so, the senior consultant showed that he understood the local challenges. He demonstrated that he was capable of representing the values of the local government rather than the national demands. As mentioned by the head of the department in charge of social and housing issues,

“We feel that he understands the challenges with IT that we face in our department. So if he thinks he knows best how to utilize eDay3, we will follow.”

Subsequent to the discussions with all the departments, the head of the IT department declared that a new project manager was needed to lead the eDay3 project. Three candidates were initially put forward. The head of the Department of Citizen Services preferred someone with direct contact to citizens. The head of Communications preferred someone with marketing skills, as the success of eDay3 would come down to “how to sell the message”. The head of the IT department considered the senior consultant as an ideal candidate, since he had been in charge of the initial presentations and negotiations. As no single candidate could be agreed upon, a project start-up meeting, including the three candidates, was called for in March 2009. The candidate from the IT department started by welcoming everyone and then stating that if he were to be the new project manager, he would use this opportunity to let the participants voice their opinions. As in the prior months, he demonstrated his respect for the local and specific context, and finished his opening talk with the following statement. Table 7 depicts the discursive levels for Resonating Statement III.

<i>Type</i>	<i>Resonating statement</i>	<i>Discursive levels</i>
Grand discourse	<p>“My role here is not a formal one to enforce the eDay3 agenda by the national policy makers. I cannot decide anything. I am here to listen to what you [representatives in the different departments] are concerned about and to help you solve problems by use of IT. So I may be ‘labelled’ as project manager, but I see my role as facilitator.” (Observation 3, March 2009)</p>	The statement resonates a grand discourse by referring to the national eDay3 agenda outlined by policy makers.
Meso-discourse		The statement resonates a meso- discourse in which the senior consultant invites different viewpoints in the local government.
Micro-discourse		The statement resonates a micro-discourse by voicing inherent local concerns.

Table 7. Resonating statement III

Following this welcome, the head of the IT department asked, “So could we all agree that we have someone to facilitate eDay3?” No objections were made, because after this sentence, it was not a decision concerning a project manager position, but merely a question of facilitating the processes. By stating that the new role was merely that of a facilitator, the senior consultant created a space for himself to resonate among employees of the other departments. A new position was created for him as someone who possessed knowledge about both the national and specific local contexts. Having attained this position, he emphasized that the eDay3 project was more an internal IT project to reorganize local administration rather than serving as a communication or citizen service project.

A few days after the meeting, the newly appointed project manager formulated a new eDay3 project proposal for final approval by the Board of Directors. As part of the final preparation before approval, a document was sent out for review to the seven departments. Instead of distributing the standard template used for formal decision notes in the organization, the project manager sent out a Word document in draft version with unfinished sentences:

“This recommendation has been sent for editing in all departments and in the cross-co-ordination groups. It is recommended that (??)... With these comments (??)...”

Concluding this document, he wrote what is included as the fourth resonating statement. Table 8 depicts the discursive levels for Resonating Statement IV.

<i>Type</i>	<i>Resonating statement</i>	<i>Discursive levels</i>
Grand discourse	<p>“Here in Aalborg we have chosen to do things differently than what was initially suggested. We cannot wait for you [Board of Directors] to decide on the right technical solutions for us to use. As a result, we have chosen to extend the project and go beyond your expectations.” (Observation 3, March 2009)</p>	The statement resonates a grand discourse by referring to the lack of announcement of the technical solution behind eDay3.
Meso-discourse		The statement resonates a meso-discourse by emphasizing that the local government has to go beyond the expectations because they cannot wait for national level decisions.
Micro-discourse		The statement resonates a micro-discourse by implying that local employees know better what is the right technical solution, and that they want to perform better than what is expected at the national level.

Table 8. Resonating statement IV

The unfinished document immediately created attention in the different departments, as the employees realized that the new project manager gave them an opportunity to contribute with their experiences. The former candidate for the position of project manager from the Citizen Service Department said:

“Good thing that I did not have to take on the role as project manager. I think that he will be much better at working across the departments.”

After receiving the documents filled in by the members of the different departments, the new project manager declared that the Aalborg local government would have a unique way of dealing with the national initiative. In fact, he would rename the project to emphasize this difference. In the formal documents, the project was now labelled eDay3+ to state that the Aalborg local government was not satisfied with the information, knowledge gathering, or interest at the national level. Furthermore, the new label symbolized that IT should be beneficial to citizens in the region, and consequently, they should go much further than just meeting the demands of the national level (i.e.; providing access for citizens to the digital post system).

With resonating statements such as these, the new project manager from the Aalborg local government quickly took the position as an expert of local challenges. In a workshop facilitated by the national level to investigate best eDay3 practices, the Aalborg local government was

<i>Type</i>	<i>Resonating statement</i>	<i>Discursive levels</i>
Grand discourse	<p>“The role I am playing in this project is very different from that of a project manager in a ‘regular’ project. Normally, we have a project owner and a vendor where the project owner can approve something and then it is decided how things should be done. It is very different in the case of eDay3+. The Danish Agency of Governmental Affairs is the owner of the project, not us. We don’t know when to decide and sometimes don’t know what to decide.” (Interview 3, October 2009)</p>	The statement resonates a grand discourse by emphasizing that the national level operates through different logics by which the eDay3+ project will be evaluated.
Meso-discourse		The statement resonates a meso-discourse in the local government in which the project manager represents himself as someone who also wants to offer deliverables to the national level.
Micro-discourse		The statement resonates a micro-discourse in which the project manager can no longer guarantee that the local concerns will be heard and decided upon.

Table 9. Resonating statement V

referred to as those who did not comply, but still performed better than average (Workshop 2). By the end of Phase 1 in 2009, it was evident that the eDay3+ project had been localized in the Aalborg local government. In the process of confirming or opposing micro-, meso-, and grand discourses over time, the project manager had organized a hybrid project, eDay3+. The project discursively bridged national level formulations, seven departments, and produced an accepted local discourse. Despite the immediate success of the IT department and the project manager, such a project was also at high-risk, as it was exposed to many potential conflicts. Most noticeably, it was declared in opposition to the national grand discourse (and a particular notion of efficiency) in order to gain ownership by the local departments. It was still unclear how to actually deal with the demands from the national level and how to avoid people getting dismissed in the local departments.

7 Resonating Statements: Part II

By the end of 2009, the eDay3+ project began to take a different form. The project manager engaged in a discursive act that brought the project into alignment with the national discourse.

As a result, a second round of resonating statements was initiated with the aim to re-attach the project to the national level. The project manager began to present himself as someone appointed to secure the interest of the local departments. Now he argued that he had been put in a very different position as mediator between the national and local levels. In this specific role, he could not do anything when the national level or others interfered. Table 9 depicts the discursive levels for Resonating Statement V.

The project manager argued that even though the local government was not a flagship, they would be successful in adopting the national eDay3 program. The Aalborg local government became a showcase that other local governments wanted to copy, and their efforts were also noticed by the Danish Agency of Governmental Affairs:

“We have heard what went on in the Aalborg local government. They are not a part of our flagship program but still they find ways to connect to the overall ideas. That proves to us that we are doing something right.”

In the local government, the different departments had historically been rather autonomous, dealing individually with the digital communication with citizens. eDay3+ introduced a new organizational structure. Decision-making groups were now placed centrally in the IT department with direct power and responsibility. Employees of lower ranks (i.e.; staff positions just below directors) were situated in these groups in order to make quicker decisions.

As the date for the national eDay3 project deadline came closer (November 2010), a new organizational structure was in place in the local government that facilitated digital mail (through digital post) contacts from citizens. No agreements were made with vendors and no solutions were bought or implemented, but the organizational structure would ensure that the people put in charge could decide what should happen to the incoming mails. The project manager explained how he evaluated the success of the project. Table 10 depicts the discursive levels for Resonating Statement VI.

<i>Type</i>	<i>Resonating statement</i>	<i>Discursive levels</i>
Grand discourse	<p>“The fact that we have made these organizational changes has provided us with the confidence that we will not lose staff. Did it improve the digital communication between the local government and the citizens? I don’t think so. Perhaps sometime in the future.” (Interview 4, February 2010)</p>	The statement resonates a grand discourse by stating that the ambition of eDay3 thus far has not resulted in improved digital communication.
Meso-discourse		The statement resonates a meso-discourse about the achievements (or lack thereof) of eDay3 in the local government.
Micro-discourse		The statement resonates a micro-discourse by highlighting that the main reason for the eDay3+ efforts is to ensure that the Aalborg local government would not lose staff.

Table 10. Resonating statement VI

The activities of first localizing the project as eDay3+ and then re-connecting it to the overall national vision meant that the project, to some extent, had made itself immune to complaints and contradictory challenges from within the local departments. In the double loop process, the project had actively been negotiated into a local government project and back again to have national significance. When the project succeeded in being re-attached to national aims, the relevance of the project group correspondingly disappeared. The head of the IT department called a meeting between the departments. At this meeting, he stated that there was no longer a need for a project concerning the implementation of eDay3 and that focus should now be placed on other tasks.

The now former project manager used a sarcastic tone to the processes in which he had played a key part in the preceding year. Table 11 depicts the discursive levels for Resonating Statement VII.

<i>Type</i>	<i>Resonating statement</i>	<i>Discursive levels</i>
Grand discourse	“We complied with all the national demands, even before eDay3 was here. This is good, so now we can focus on the things that really matter, which is to implement an external print system to deal with those citizens without mail and to get the citizens to actually use the digital post.” (Interview 5, March 2010)	The statement resonates a grand discourse of national requests that do not match the real concerns in the local setting.
Meso-discourse		The statement resonates a meso-discourse in which local departments have complied with the national demands early to allow time for actual-use issues.
Micro-discourse		The statement resonates a micro-discourse in which local employees will have to get citizens to use the system.

Table 11. Resonating statement VII

During the summer of 2010, eDay3+ was gradually closed down and channelled into other directions. It was the general impression that the project had been a success, mainly because of the actions of the project manager. As a result, he would lead and represent the local government in new national initiatives leading up to eDay4.

8 Discussion

By applying a multi-level discourse analytical perspective, we have aimed at portraying how a contemporary IT project is historically embedded and is dependent on various characteristics

of current governing of the Danish public sector. In the context of a multi-layered public sector setting, we have shown that the eDay3/eDay3+ project required a double loop process of first localizing and then re-connecting the project to contrasting levels of discourse. The findings indicate that the management of IT projects needs to be constituted within historical, national, and local discourses. The scope of navigation for an IT project manager is not something stable that is mandated hierarchically. This finding relates to the more general conclusions on discourses in IT projects, where it is highlighted that the person who is executing strategic actions must have formal organizational standing and moral authority; e.g.; (Ngwenyama and Lee 1997). Here, strategic action is deemed legitimate if it conforms to organizational norms, policies, and structures. The interplay between discourses and policies thus takes shape in the strategic actions made by the involved actors.

By introducing the concept of resonating statements, we contribute new insights to IT projects in general. The concept of resonating statements represents an alternative way to approach and explore empirical data, particularly in a multi-level setting. First, this approach allows us to understand how certain statements in IT projects come to resonate with the everyday practices in a given organizational setting. Second, the focus on resonating statements helps us stress the interconnectedness between micro-, meso- and grand discourses. While excellent insights and findings have been produced in this area by the concepts of technological frames (Orlikowski and Gash 1994; Davidson 2002) and managerial decision-making (Ngwenyama and Lee 1997; Puri and Sahay 2003), our conceptualization of resonating statements aims to supplement these insights by including the three layers of discursive action. This approach allows IT projects in general to be scrutinized in concrete and narrow statements, while maintaining relations to historically produced details of the argumentation.

As we follow how certain statements become successfully incorporated into the process of an IT project, we display statements that are most likely not strategically planned or to be further reflected upon, but rather the result of a gut feeling from the persons involved. Consequently, our approach provides, in methodological terms, a way to go beyond the everyday conversations, thus showing the relevance of deep insight into the history and local settings in the analysis of discourses in an IT project. Conceptually, our findings point to the importance of the role of the IT project manager as a mediator or boundary spanner (Aldrich and Herker 1977; Tushman and Scanlan 1981; Levina and Vaast 2005). The multi-level discourse approach on resonating statements has offered a glimpse of the dynamics at play when an individual actor takes on a mediating or a boundary spanning role to bridge national strategies with local practices. As exemplified in the analysis, the project manager not only articulated his role as someone put in place to secure the interest of the local departments; rather, he found himself in a very delicate position as the mediator between the national and local levels. He drew direct lines to earlier discourses, summarizing and directing them to different organizational units at specific moments during the projects lifetime. The project manager's ability to master these discourse connections became vital in a multi-layered process of: (1) managing a project to the satisfaction of national level demands, (2) conducting organizational changes to implement the digital mail infrastructure across the local government, and (3) ensuring that employees were not made redundant in this process.

As our analysis depicts, the understanding of the historical character of discourses is important in managing IT projects successfully. In our study of resonating statements, we conclude

that resonating statements, especially the ability to combine and connect several levels of discourses at specific moments, are crucial to secure progress within IT projects.

9 Concluding Remarks

The purpose of this paper was to investigate how individual actors can build on historically produced discourses to navigate between national and local levels through the use of resonating statements. Towards this objective, we constructed a multi-layered model of discourses to identify and portray how successful statements could be balanced among these three levels. Our paper has highlighted seven statements that provided resonance among its peers and helped realize the goals of an IT project manager. Consequently, we investigated how a project manager strategically navigated when working with IT between national and local institutions. We portrayed the managing of the eDay3 project as a double loop process of first localizing the national idea (with specific use of micro-discourse) and then re-attaching the locally formed project back to the national level (with specific use of meso- and grand discourses). Our study shows that both national and local strategies are far from stable and firm, but rather are constantly enacted and changed as part of discursive practices.

We have shown how a project manager championed the task of balancing statements at specific times during a two-year period. This has been illustrated in order to emphasize the usefulness and importance of understanding the interplay and historical character of discourses in IT projects. We indicate that the statements are successful due to their connectedness to earlier understandings in the local contexts; however, we do not show the actual historical, and on-going, shaping of these understandings. In other words, we do not present—nor do we methodologically portray—the constant struggle between competing understandings, as we do not compare our seven statements to a variety of non-resonating statements. To further elaborate upon the concept of resonating statements, a more thorough investigation of these micro-processes is needed. For future research, it would be appropriate to empirically and methodologically understand why a particular project manager chooses to promote certain understandings and not others.

In this paper, we portray this as the logic for making IT project management successful. We demonstrate the importance of knowing how different understandings exist across multiple levels and display the results of successfully navigating among these. To further understand what makes a statement resonate or not, a deeper look into the actual negotiation processes at different levels is needed. For strategies and ideas to travel across multi-level settings, joint sense-making is required (Weick 1993). This means a mutual understanding of how to make sense of the local contextual world in relation to other levels. Discursive actions between organizational members produce a particular view of current situations based on objects, institutions, history, and their siting in a finite time and place. Resonating statements could be viewed as processes dependent on human agents' capacity to establish new and recurrent cross-boundary practices based on shared institutional meanings (Pawlowski and Robey 2004). These processes consist of a variety of inclusion/exclusion mechanisms, which over time form the impression of a shared institutional meaning. As we have emphasized in this paper, in showing the interconnectedness

between three discursive levels, meanings are constantly under pressure and are exposed to struggles/negotiations, not only across the three levels depicted here, but also across multiple local realities and micro-discourses. As IT projects, in general, can appear to be increasingly complex, often combining multiple historical and organizational settings and textual material, we offer that our concept of resonating statements provides a starting point for unravelling some of the multiple, variable, and complex realities facing those working in IT projects.

References

- Aldrich, H., and Herker, D., (1977). Boundary spanning roles and organization structure. *Academy of Management Review*, (2:2): 217-230.
- Alvesson, M., and Kärreman, D., (2000). Varieties of discourse: On the study of organizations through discourse analysis. *Human relations*, (53:9): 1125-1149.
- Avison, D. E., and Myers, M. D., (1995). Information systems and anthropology: an anthropological perspective on IT and organizational culture. *Information Technology & People*, (8:3): 43-56.
- Barrett, M., and Scott, S., (2004). Electronic trading and the process of globalization in traditional futures exchanges: a temporal perspective. *European Journal of Information Systems*, (13:1): 65-79.
- Chia, R., and MacKay, B., (2007). Post-processual challenges for the emerging strategy-as-practice perspective: Discovering strategy in the logic of practice. *Human relations*, (60:1): 217-242.
- Clegg, S. R., Hardy, C., Lawrence, T., and Nord, W. R., eds., (2006). *The Sage handbook of organization studies*. Sage.
- Davidson, E. J., (2002). Technology frames and framing: A socio-cognitive investigation of requirements determination. *MIS Quarterly*, 26(4): 329-358.
- DiMaggio, P., (1992). Nadel's paradox revisited: Relational and cultural aspects of organizational structure. In: *Networks and organizations: Structure, form, and action*, N. Nohira and R. G. Eccles (eds.), pp. 118-142.
- Elbanna, A. R., (2008). Strategic systems implementation: diffusion through drift. *Journal of Information Technology*, (23:2): 89-96.
- Fairclough, N., (1992). Discourse and text: linguistic and intertextual analysis within discourse analysis. *Discourse and Society*, (3:2): 193-217.
- Flyvbjerg, B., (1998). *Rationality and power: Democracy in practice*. University of Chicago press.
- Germonprez, M., and Hovorka, D., (2002). Examining group communicative processes: critically based tools and training. *AMCIS 2002 Proceedings*, pp. 1618-1628.
- Gosain, S., (2004). Enterprise information systems as objects and carriers of institutional forces: the new iron cage?. *Journal of the Association for Information Systems*, (5:4): 151-182.
- Grant, D., Keenoy, T. W., and Osrick, C., eds., (1998). *Discourse and organization*. Sage.
- Grant, D., Keenoy, T., and Osrick, C., (2001). Organizational discourse: Key contributions and challenges. *International Studies of Management and Organization*, (31:3): 5-24.

- Hardy, C., Palmer, I., and Phillips, N., (2000). Discourse as a strategic resource. *Human relations*, (53:9): 1227-1248.
- Hay, C., and Richards, D., (2000). The tangled webs of Westminster and Whitehall: the discourse, strategy and practice of networking within the British core executive. *Public Administration*, (78:1): 1-28.
- Henriksen, H. Z., and Damsgaard, J., (2007). Dawn of e-government—an institutional analysis of seven initiatives and their impact. *Journal of Information Technology*, (22:1): 13-23.
- Holmqvist, B., and Andersen, P. B., (1987). Work language and information technology. *Journal of Pragmatics*, (11:3): 327-357.
- Irani, Z., Elliman, T., and Jackson, P., (2007). Electronic transformation of government in the U.K.: a research agenda. *European Journal of Information Systems*, (16:4): 327-335.
- Jensen, T. B., and Aanestad, M., (2007). Hospitality and hostility in hospitals: a case study of an EPR adoption among surgeons. *European Journal of Information Systems*, (16:6): 672-680.
- Jensen, T. B., Kjaergaard, A., and Svejvig, P., (2009). Using institutional theory with sensemaking theory: a case study of information system implementation in healthcare. *Journal of Information Technology*, (24:4): 343-353.
- Johansson, S., (2002). Dansk IT-politisk historie. *Danmark som informationssamfund Muligheder og barrierer for politik og demokrati*, 140.
- Keenoy, T., Oswick, C., and Grant, D., (1997). Organizational discourses: Text and context. *Organization*, (4:2): 147-157.
- Klein, H. K., and Truex, D. P., (1995). Discourse analysis: a semiotic approach to the investigation of organizational emergence. *The Semiotics of the Workplace*, 227-268.
- Levina, N., and Vaast, E., (2005). The emergence of boundary spanning competence in practice: implications for implementation and use of information systems. *MIS Quarterly*, (29:2): 335-363.
- Lyytinen, K., and Hirschheim, R., (1988). Information systems as rational discourse: An application of Habermas's theory of communicative action. *Scandinavian Journal of Management*, (4:1): 19-30.
- Lyytinen, K., (1992). Information systems and critical theory. In: *Critical Management Studies*, M. Alvesson and H.C. Wilmott (eds.), London: Sage Publications, pp. 159-180.
- Marinetti, M., (2007). *Social theory, the State and modern society*. McGraw-Hill Education, UK.
- McMaster, T., and Wastell, D., (2005). Diffusion or delusion? Challenging an IS research tradition. *Information Technology and People*, (18:4): 383-404.
- Ngwenyama, O. K., and Lee, A. S., (1997). Communication richness in electronic mail: Critical social theory and the contextuality of meaning. *MIS quarterly*, (21:2): 145-167.
- Orlikowski, W. J., and Gash, D. C., (1994). Technological frames: making sense of information technology in organizations. *ACM Transactions on Information Systems (TOIS)*, (12:2): 174-207.
- Pawlowski, S. D., and Robey, D., (2004). Bridging user organizations: Knowledge brokering and the work of information technology professionals. *MIS Quarterly*, (28:4): 645-672.
- Pedersen, C. Ø. R., and Dalum, B., (2004). Incremental versus radical change—The case of the Digital North Denmark program. *10th International Schumpeter Society Conference 2004*, 9-12. June, 2004, Bocconi University, Milano, Italy.

- Phillips, N., and Hardy, C., (2002). *Discourse analysis: Investigating processes of social construction*, (Vol. 50). Sage.
- Puri, S. K., and Sahay, S., (2003). Participation through communicative action: A case study of GIS for addressing land/water development in India. *Information Technology for Development*, (10:3): 179-199.
- Schultze, U., and Stabell, C., (2004). Knowing what you do not know? Discourses and contradictions in knowledge management research. *Journal of Management Studies*, (41:4): 549-573.
- Son, J. Y., and Benbasat, I., (2007). Organizational Buyers' adoption and use of B2B electronic marketplaces: Efficiency- and legitimacy-oriented perspectives. *Journal of Management Information Systems*, (24:1): 55-99.
- Svejvig, P., and Jensen, T.B., (2013). Making sense of enterprise systems in institutions: a case study of the re-implementation of an accounting system. *Scandinavian Journal of Information Systems*, (25:1): 3-36.
- Tatnall, A., and Gilding, A., (1999). Actor-Network Theory in Information Systems Research. *Proceedings of the 10th Australian Conference on Information Systems*, pp. 42-46.
- Teo, H. H., Wei, K. K., and Benbasat, I., (2003). Predicting intention to adopt interorganizational linkages: An institutional perspective. *MIS Quarterly*, (27:1): 19-49.
- Tushman, M. L., and Scanlan, T. J., (1981). Boundary spanning individuals: Their role in information transfer and their antecedents. *Academy of Management Journal*, (24:2): 289-305.
- Watson, T., (1994). *In search of management*. London, Routledge.
- Weick, K. E., (1993). The collapse of sensemaking in organizations: The Mann Gulch disaster. *Administrative science quarterly*, 38: 628-652.
- Weick, K. E., and Roberts, K. H., (1993). Collective mind in organizations: Heedful interrelating on flight decks. *Administrative Science Quarterly*, (38:3): 357-381.
- Whittington, R., (1996). Strategy as practice. *Long Range Planning*, (29:5): 731-735.
- Whittington, R., Molloy, E., Mayer, M., and Smith, A., (2006). Practices of Strategising/Organising: Broadening Strategy Work and Skills. *Long Range Planning*, (39:6): 615-629.
- Wodak, R., (2001). The discourse-historical approach. *Methods of Critical Discourse Analysis*. SAGE Publications, 63-94.
- Wood, L. A., and Kroger, R. O., (2000). *Doing discourse analysis: Methods for studying action in talk and text*. SAGE Publications.
- Wynn, E., and Novick, D. G., (1995). Conversational conventions and participation in cross-functional design teams. In: *Proceedings of conference on Organizational computing systems*, ACM, pp. 250-257.

