“Omega-team is moving to another premise over my dead body...” Power as discursive-material practice in an IS project

Completed Research Paper

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Abstract

Using Foucault's (e.g., 1980) view on discourses and power, this Critical Discourse Analysis study examines how power circulates through material-discursive practices in IS development projects. The findings of this study indicate that one of the key power practices in IS development projects is what we call the 'guaranteeing of equality and rationality' – it sets up the technical-rational ideal and masks the presence of power and politics in the project. However, as projects progress, often this technical-rational ideal begins to crumble with practices such as 'selective ignoring', 'forbidding', 'hiding', and 'criticizing' emerging – each with their own characteristic linguistic moves and material objects mediating the practices. Each of these practices circulates power through what can be called ‘power-resistance' cycles – in short, the same practice may be harnessed for achieving one effect (exercising power) or it may be employed for the achievement of an alternative effect (exercising resistance to power).

Keywords: Material-discursive practices, Power, Critical Discourse Analysis

Introduction

During the past 40 years a number of studies have been conducted on power and its role in information systems development (ISD) (e.g. Markus, 1983; Kumar and van Dissel, 1996; Levina, 2005; Averou and McGrath, 2007; Markus and Bui, 2012). IS researchers have tried to explain and find solutions for power issues, for example through analyzing the conflicts between different stakeholders (user groups and IS professionals) (Hirschheim and Newman, 1991; Levina, 2005; Markus and Bui, 2012; Sarkkinen and Karsten, 2007). According to Averou and McGrath (2007) many IS studies have had a very rational view on power issues. They (ibid.) have highlighted that empirical research frequently views IS development
and implementation activities as purely technical/rational, masking the many complications that power relations and politics bring to such activities.

Among the studies that have tried to examine issues of power and politics within IS context, various sociological theories have been drawn upon: structuration theory (Majchrzak et al., 2000), Bourdieu’s practice theory (Levina, 2005), and theoretical work of Foucault on power and knowledge, to name a few (e.g. Averou and McGrath, 2007; Young, Kuo and Myers, 2012). Utilizing Hardy and Leiba-O’Sullivan’s (1998) ‘Empowerment and the dimensions of power’, Hekkala and Urquhart (2013) argued that in a complex IS project it is difficult to say who ‘has’ power and who ‘lacks’ power, complicating the task of defining whose power over whom should be analyzed. In short, power relations tend to be much more complex in actual situations than is visible, for example, on an organizational chart.

Rather than looking at power as something possessed and asking who has or does not have power, in this paper we are interested in how power is practiced through discourse. This allows us to take the point of view that all actors are already situated in power, i.e. power circulates through discourse and is embedded in material practices (e.g. Hardy and Thomas, 2014, pp. 323-324; McCabe, 2010) and to apply a Foucauldian approach to discourse. This qualitative case study research is guided by the following question: How does power circulate through material-discursive practices in IS development projects?

We chose Critical Discourse Analysis (CDA) to guide our data analysis, because it provides an opportunity to consider the relationship between language and power (Fairclough, 2003; Henderson, 2005; van Dijk 1993). Following van Dijk’s (1993) CDA approach, we are able to investigate what kind of structures, speeches, and other communications have meaningful consequences in building power relations between people in an IS project. Following Fowler (1996), we see CDA as going beyond the formal structure of language. Language is seen not only as a social practice but also as a mode of action that is always socially situated in a dialectical relationship. To complement the CDA approach, we chose Foucault’s (1980) conceptualization of power, which assumes that power circulates through discourse. Importantly, however, Foucault’s idea of discourse is not purely ‘linguistic’, but is about language and practice. The importance of studying power as both discursive and material practices has also been stressed recently in the management literature (Hardy and Thomas, 2014). There are further benefits of adopting a critical research approach. According to Myers and Klein (2011) critical research not only enriches IT professionals’ understanding, but can also improve practice. Thus, critical research offers an avenue for IT professionals to improve ISD practices.

The contribution of this paper is twofold. First, we highlight through Foucauldian approach to discourse how power is practiced both in language and in material objects in an IS development project. Second, we uncover five different types of discursive-material practices in IS development projects and we highlight the importance of understanding power as practice, enacted in doing and saying (Schatzki, 1996; 2006) and, thus, circulating through social discourses and the production and use of material objects.

The rest of this paper is organized as follows. In the next section, we present the definition of power and the basic ideas of power as practice perspective. The following three sections present the research case, the research method and our findings. In the final sections, we discuss our findings and conclude the paper.

Theoretical Background

In the following we discuss relevant extant research: first offering a definition of power, then discussing key aspects of the power as practice perspective, including the basic elements of Foucauldian discourse analysis (e.g. Foucault, 1980; 1982).

Power and resistance

Power is a multidimensional concept, and definitions, interpretations and theories about it abound (Foucault, 1980; 1982; Giddens, 1984; Bourdieu, 1998; Hardy and Leiba-O’Sullivan, 1998; Parsons, 1967; Weber, 1946). According to Hardy (1996) studies of power in social sciences have typically focused on themes of power over and power to. The perspective of the first one (power over) is more negative, and is
based on the premise that some people can compel other people to do something they would otherwise not do (ibid.). The latter one (power to) involves more positive aspects, for example an actor can reach a goal by defining it first. The latter perspective is also more in line with the idea that power is practiced and relational, rather than attributed to a dominant class (e.g., Allen, 1997).

It has been highlighted by Kearins (1996) that the exercise of power and processes of control are embedded in organizational practices, and individuals can react in different ways to their effects. Knights and Vurdubakis (1994) assumed that if actors struggle to maintain their own preferred meanings, there is a possibility that they will resist attempts of control. One reason for the failure of IS projects, thus, has been said to be organizational and political resistance to change (Kim and Kankanhalli, 2009). Accordingly, a manager’s ability to work with people and organizations has been highlighted to be as important as technical awareness and knowledge (e.g., Noble and Newman 1993). Markus (1983) has also highlighted that the strength of resistance in an IS project is likely to be affected by the organizational position of the person in power vis-à-vis the position of the person ‘losing’ power. In inter-organizational IS projects control over decision-making has been found to be the central problem that causes resistance (Hekkala and Urquhart, 2013). The issue is exacerbated in situations where there are many different interests represented and the project structure is complex (ibid.). Conversely, Fineman and Sturdy (1999) suggest that resistance could also be the result of oppressive managerial control. In this paper we adopt the idea the power and resistance are mutually implicated (Hardy and Thomas, 2014, p. 325). Rather than seeing resistance as a uni-directional, adversarial response to power, both power and resistance are seen as iterative, adaptive responses to each other (ibid.). So we may find cycles where oppressive managerial control produces resistance, which produces shifts in controls over decision-making towards a more participative approach, which in turn may produce resistance, and so on. The aim of resistance, thus, is not “primarily to function ‘against’ power, trying to eradicate it altogether; rather resistance attempts to harness power otherwise, in the production of different effects” (ibid., p. 325). As a result, situations arise where resistance can strengthen the effects of some power practices, while weakening the effects of other practices.

Foucauldian discourse analysis and key aspects of power as practice perspective

Foucault (1982) sees the everyday relationship as a power relationship, and power relations can either be positive (productive) or negative. Power, in this case, is defined as a ‘technique’ that achieves its effects through its disciplinary character. Power cannot be individually owned, rather people belong to and participate in social practices where power relations are enacted. Accordingly, power is exercised rather than possessed, and its exercising is not a one-way process. In line with Hardy and Thomas (2014), we adopt the Foucauldian view that power circulates through discourse: “manifold relations of power […] permeate, characterise and constitute the social body, and these relations of power cannot themselves be established, consolidated nor implemented without the production, accumulation, circulation and functioning of a discourse” (Foucault, 1980, p. 93). Discourse, then, is a form of social practice that reproduces and changes knowledge, social relations, and structures including power relations (Fairlough, 1992, p. 64). Accordingly, discourses “systematically form the object of which they speak” (Foucault, 1972, p. 49).

This view of power quite naturally aligns with the practice perspective. Practice perspective has gained significant attention and development over the recent years as an alternative to studying things like strategy and knowledge as something that organizations do, rather than have (Cook and Brown, 1999; Hardy and Thomas, 2014; Rasche and Chia, 2009). Practices are often seen as an “array of habitualized human activities”, which are embodied by practitioners, and socially constituted, with shared understandings and know-how of practitioners about their practices guiding activities (Sandberg and Dall’Alba, 2009, p. 1353). Nicolini (2007) further emphasizes that all practices are materially mediated, taking place “through and amid a variety of artefacts and objects” (p. 893). Materiality is defined here as ‘stuff’ that can physically or cognitively constrain and/or enable human activities (Leonardi 2010; Markus and Silver, 2008), but that does not necessarily need to have a physical substance (for example, digital software). In practice perspective, it is recognized that material objects participate in the accomplishment of practice, make the practice durable over time as well as connect different practices to each other across space and time (Nicolini, 2012). As such, “practices, in fact, literally put people (and things) in place, and they give (or deny) people the power to do things and to think of themselves in certain ways”, as a result, producing and re-producing differences and inequalities (ibid., p. 6).
Following Foucault and in line with Hardy and Thomas (2014) and Nicolini (2012), we argue that power can, thus, be viewed as a material-discursive practice - as something that organizations and people speak, think and do. To summarize, we follow three key ideas on power in this paper: (a) power and resistance are mutually implicated, and (b) power is productive, (c) power circulates through discursive-material practices.

Research Case

This study follows the development of a planned new registrar system for three public sector organizations (Alpha, Beta and Gamma) in Northern Europe. The goal of the new registrar system is to provide a centralized means of collecting customer information as well as to provide some web based self-service capabilities to the customers. Alpha, Beta and Gamma have decided to modernize their system base because the current registrar system and the platforms it is developed on are coming to the end of their lifecycle, and the present state of maintenance is difficult (with functional, technological and processual issues). The three organizations chose to collaboratively develop a custom solution (a) because of budgetary constraints in all organisations and (b) because a suitable packaged software – capable of meeting the specific requirements of public sector organizations - could not be found.

The current development project is set in a context of a rather long and complicated history of various prior modernization efforts. Alpha and Beta share a legacy registrar system, which, as mentioned above, is coming to the end of its lifecycle and has numerous weaknesses. For example, it requires a lot of manual data entry, processing and paperwork and information security is very poor. This is particularly problematic, because the system contains data of a sensitive nature. The legacy registrar system (in Alpha and Beta) has been in existence and use since the 1990s and has been developed in parts during that time to further automatize work and make data entry simpler for employees. These previous development projects were often referred to during our data collection, as most of the interviewees have been part of all or some of these prior efforts to improve the system. Gamma, conversely, has a different legacy registrar system, which works quite well. The reason why Gamma is participating in the project is, thus, to provide a baseline for the new system. There are three different groups of stakeholders involved in the project: the project group, steering group and management group, each consisting of representatives from the three organizations. The roles these groups fulfill are described in Table 2. The complicated history of prior modernization efforts, the involvement of three different organizations with varying stakes in the project and its success as well as the three-tiered group structure all provided a ripe foundation for the emergence of many power struggles, making it an excellent setting for conducting our study.

Method

Data collection was initiated in February 2013, when we had a first meeting with the project manager. Our data collection consisted of 22 qualitative interviews conducted in the period March 2013 - April 2013. The first author of this paper conducted the interviews. All members from project group, steering group and management group were interviewed. In addition to this, we familiarized ourselves with the pre-work for the project, done in 2012. The interviews were between 20 and 90 minutes long (average 52 minutes). All interviews were recorded and fully transcribed. Project members from Beta organization had a feedback event in September 2013, and the memo of the meeting was sent to the researchers.

In line with our research question and theoretical lens, we have chosen a critical case study approach to examine power relations in a public sector IS development project. We analyzed the data using Critical Discourse Analysis (CDA). There is notable variety in the proposed approaches to critical discourse analysis (Fairlough, 1992; 1995; 2003; Jørgensen and Phillips, 2002; van Dijk, 1993). Overall, in CDA, discourses are not viewed as neutral in terms of their political or ideological content (Fairclough, 1989; van Dijk, 1998; Vaara et al. 2010). We followed van Dijk’s (1993) CDA approach, which investigates what kind of structures, strategies, speeches or other communications have meaningful consequences in building power relations between people (van Dijk, 1993). This approach aligns well with our theoretical perspective that sees power as performed through material-discursive practices. To guide our critical
analysis, we also loosely followed the principles of critical IS research suggested by Myers and Klein (2011), presented in Table 1.

<table>
<thead>
<tr>
<th>Myers and Klein (2011, p. 25); see also Young, Kuo and Myers (2012, p. 508)</th>
<th>This study</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The principle of using core concepts from critical social theorists.</td>
<td>We use Foucault’s (1982) relational conception of power, emphasizing power relations rather than power per se. We also use Foucault’s (1980) idea that power circulates through discourses and is materially embedded. For data analysis, we follow the principles of Critical Discourse Analysis (van Dijk, 1993).</td>
</tr>
<tr>
<td>2. The principle of taking a value position.</td>
<td>Our aim is to advocate equal opportunity for all IS project members. We can identify important beliefs of project members, and challenge beliefs with conflicting arguments and evidence.</td>
</tr>
<tr>
<td>3. The principle of revealing and challenging prevailing beliefs and social practices.</td>
<td>Our aim is also to help give voice to those IS project members who might be underrepresented.</td>
</tr>
<tr>
<td>4. The principle of individual emancipation.</td>
<td>Not explicitly considered in this study.</td>
</tr>
<tr>
<td>5. The principle of improvements in society</td>
<td>We have given and will continue to give feedback to project members in a way that could lead to improvements in social practices in this particular IS project.</td>
</tr>
<tr>
<td>6. The principle of improvements in social theories</td>
<td>Not explicitly considered in this study.</td>
</tr>
</tbody>
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Table 1. The main principles for critical research as used in this study

Table 2 shows the interviewees, their roles, organization and the group they belong to in the project. Most of the project members have one role in their home organization and a different role in the development project. In understanding their role in the project, the project members were largely guided by their division into three project groups. Table 2 reflects this and describes the role of different project groups, rather than that of individual project members.

<table>
<thead>
<tr>
<th>PROJECT GROUP</th>
<th>ROLE</th>
<th>MEMBERS (pseudonyms)</th>
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<tbody>
<tr>
<td>MANAGEMENT GROUP</td>
<td>Members of the management group decide all personnel and budgeting issues. They guide other project groups and define general policies. It is also the duty of the management group to take a stand on issues, which project group or steering group are not able to solve. The members of the management group have different roles in their home organizations. For example, Ben, Ewan and Sean are IT managers and Lily, Kelly and Leon are service managers. Lily is the overall project leader and also a member of the steering group.</td>
<td>Lily (Beta) Kelly (Alpha) Leon (Gamma) Ewan (Alpha) Ben (Beta) Sean (Gamma)</td>
</tr>
<tr>
<td>STEERING GROUP</td>
<td>Members of the steering group guide the project group and try to resolve problems that have occurred in the project group. If the steering group is not able to resolve the problem, it is escalated to the management group. Steering group includes both business domain and technical experts.</td>
<td>Lily (Beta) Tyler (Beta) Erin (Alpha) Debra (Alpha) Eliza (Beta)</td>
</tr>
</tbody>
</table>
These experts have various different roles in their home organizations (customer relationship manager, IS manager, software designer, coordinator, etc.). Isaac from Gamma is acting in both steering group and project group.

Isaac from Gamma is acting in both steering group and project group.

Megan (Beta)  Tracy (Alpha)  Janet (Gamma)  Isaac (Gamma)  Grace (Gamma)

**PROJECT GROUP**

The aim of the project group is to find possible technical solutions and to make sure that the processes are defined and done by people who are experts in the relevant area.

It includes software developers and representatives of users. These individuals also have different roles in their home organizations (project designer, coordinator, user).

The project group consists of multiple teams. One of these teams that features heavily in our findings is called Omega. Omega team members are all software designers and their home organization is Beta. The team includes Jacob, Amber and Nathan, as well as several others from Beta organization, who work closely with them. Omega team is considered to be the technology experts in the project, but otherwise they do not have a special role in the project.

Alex is the overall project manager for the development of the registrar system. He was hired externally to run the project, but is now paid by Alpha, so he can be considered an employee of Alpha.

Alex (Alpha)  Isaac (Gamma)  Carol (Alpha)  Jacob (Beta)  Amber (Beta)  Nathan (Beta)  Chloe (Alpha)  Nicole (Beta)

**Table 2. The project groups, their roles, and the organizations of interviewees**

**Case Findings**

Like most inter-organizational IS development projects, this one started with many different expectations and understandings. In what follows we present a very simplified story of how the project has been evolving until now – through the lens of describing the *key practices* through which we see power circulating in the project. A key element in the setup of the project was the establishment of equal voting rights for each of the three organizations as well as the working structure of management-, steering- and project groups. This seeming ‘guarantee of equality and rationality’ is supposed to set up the technical/rational ideal (Avgerou and McGrath, 2007) of a project environment and suggest that power and politics should play a minimal role in the project.

While the practice of ‘guaranteeing equality and rationality’ circulates supposedly equal power to all organizations, as the project progressed, we noticed it drifting further and further away from this technical/rational ideal. Different factions (IT managers and software designers) struggle over dominating the decisions about technical solutions by *selectively ignoring* each other, each other’s expertise and project roles (management vs. project group). By enacting the practice of ‘selective ignoring’, the power circulates between IT managers and software designers – by ignoring their work, IT managers exercise power over the software designers, while the designers strongly resist this. As the conflict comes to a head, and the IT managers’ conservative technological preferences prevail, different practices develop among the project members. The software designers begin to *hide* their work and dissatisfaction to avoid conflicts, but also *criticize* the current status quo by moving physical locations (hiding the move from IT managers). Project management resists this practice by highlighting the importance of uncovering “shadow organizations”. Project leadership and the IT managers also try to maintain the powerful positions they have established in the project by trying to *forbid* project members (e.g., the software designers) from doing certain things (e.g., moving to another location).
In the next sections, we describe and illustrate the working of each of these discursive-material practices in detail. Our aim is to demonstrate how power circulates in these practices through the mutual implication of power and resistance as well as the links between practices. We will elaborate the specific material and discursive elements involved in each practice in the discussion section (Table 3).

**The starting point - Guaranteeing equality and rationality**

The project was set up so that each of the three organizations had equal voting rights: “every organization will have one vote; it was thought that in order to maintain policy-making, it is easier that 2-1 votings are possible, and deadlock should not happen... deadlock can only happen if one organisation will refuse to join in the decision-making in which case the whole shebang will fail...” (Alex, Project manager, Alpha). The desired effect of this is a situation where project members would not see any unequal power relations between or within organizations as all members have agreed on the management- steering-, and project group structure and rely on it to be able to rationally and openly discuss and resolve any issues arising in the project: “it seems that people have already a lot of ideas but they are not written in stone. If the discussions (about all areas and technique) will be open we are able to solve issues... And we have policy-making up to management group... and if people try to override someone 2-1, we have an agreement that if some organization will leave the project, the whole project will end...” (Isaac, IS manager, Gamma). The project manager’s self-professed leadership style relied on ‘self-direction’: “self-direction is needed from the project group, the dictatorial leadership way doesn’t work. I need to guide them in the right direction and trust that they are experts, who know what to do...” (Alex, project manager, Alpha).

However, not all parties agreed with this interpretation. Particularly, the software designers of Beta organization expressed resistance to the idea of ‘guaranteeing equality and rationality’. However, we see clearly that the aim was not per se to eradicate the practice of guaranteeing equality and rationality, but rather to harness it to produce an alternative effect. For some, this means the dissolution of steering and management groups, while strengthening the self-direction in the project group: “The situation is very strange. We are paying half of the project, but we have given power of decision-making off. We have the decision right of one third. From the management view this is very strange. The ideology is like we need to collaborate although there is no reason for it...[...] so this kind of odd, uncontrollable bureaucracy (project- steering-, management group) was established... If I would have a power to decide, there would have not been management group or steering group – I would have taken a self-guided project group with the guys, who genuinely do something and know something... As an open source project, without any bidding...” (Jacob, Software designer, Beta). For others, conversely, it means tighter control in the project group through better decision-making at steering and management group levels: “it’s like there are six project managers in the project group at the moment” (Amber, Software designer, Beta); “[It would be nice if someone could tell me], ‘you should do this issue now and this and this after it.. that someone could show me a clear process how to proceed...’” (Nicole, User rep., Beta).

**Selective ignoring (excluding) for gaining dominance**

As the project progressed it became evident that there were different opinions about key technological responsibilities and choices – in particular, IT managers from Alpha and Beta (management group), and software designers from Beta (project group) did not agree which technology was the right one for the project. In Ben’s (IT manager, Beta, part of the management group) opinion, the starting point was that the technical solution for the new system should be ‘conservative’ - in order to facilitate finding experts in this technology later on. This caution came from prior negative experiences with what were considered ‘modern tools’ (e.g., Clojure, a dynamic programming language that targets the Java Virtual Machine1). Conversely, Amber, Nathan, Jacob (working in the project group), and the other Omega-team, a group of software designers of Beta thought to be technological experts in the project, believed that it made more sense to find several technical options from which the best one could be selected through rigorous testing: “We are coding, making hypotheses and then testing. The point of the earlier discussions is not that you believed that Clojure is fine, but how we should move on...” (Amber, Software Designer). While the

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1 http://clojure.org/
software designers (Amber, Nathan and Jacob) were working on finding and trying out different technical solutions, the IT managers (Ewan and Ben, management group) had given the duty to Alex (project manager) to find a “conservative” solution for the project. According to Ben, the intent was that they would inform the software designers that this duty was given to Alex, but somehow this did not happen. As a result, the software designers worked on technological issues for several months without comparing their results to those of the IT managers. The desired effect of practicing selective ignoring (excluding), thus, on all sides was to make sure their respective preferences ‘won’.

When finally it transpired that a solution from Delta (a leading software company specialized in agile development methods) was commissioned by the IT managers, the software designers (Amber and Jacob) were so insulted that they threatened to leave the project altogether. Amber felt her expertise was not appreciated: “Unfortunately, we heard about the choice after the meeting of the steering group. Alex said that the commission was basically, ‘Please suggest some java-stack’ [...] if the management group people think that they are the best experts, where do you need other experts then? [...] [It seems] we don’t need technical expertise, we are buying it from Delta, or Ewan (IT manager, Alpha) is telling what coding language is right. Maybe there is no need for innovations in this project [...]”. After giving notice of leaving the project, Amber (Software designer, Beta) also wondered why the project manager (Alex) did not discuss the reasons for this with her: “If there’s a problem with someone, and someone decides to leave the project - the project manager should discuss it with these people, and should not think that these problems belong to organizations. Alex is thinking that these issues belong to Beta...”.

Meanwhile, Jacob (Software designer, Beta) blamed Ben (IT manager) for not being interested in listening: “He (Ben) thinks that the only good techniques are Java and Oracle. If I tried to suggest something else, he (Ben) literally said that it can be good but we aren’t going to consider it...[...] Ben cannot stand me because he doesn’t discuss with me. Well, he (Ben) feels with reason that I don’t appreciate his know-how. So it’s impossible to collaborate with him. [...] And he just talks to other leaders – I think he is uncertain and he doesn’t want to communicate about the issues where he is weak... He tries to override substance by his position. The only important issue to him is the position, which provokes me...[...]”.

Once the frustration and anger of the software designers became known, the IT managers and the project leader Lily tried to persuade them to stay in the project. Ben praised Amber’s competence, while also pointing out the potential for collisions inherent in working with someone like Jacob: “Amber, she is a very competent project manager person, very technical person, and of course she has her own thoughts about what kind of technical solutions we should do. While Jacob, he has a very different understanding about the technologies, and there is a possibility for collision ...” (Ben). Ewan also praised the software designers’ work, while also bringing up the inevitable need for the management group to make decisions: “hopefully the project group doesn’t understand us wrong, the user interface work was excellent. We just need to decide which is the best technology”. Lily (project leader, management group) similarly argued that it is the duty of IT managers (management group) to make tough decisions: “The IT managers have the power of decision and they will take a responsibility [...] IT managers approach it from the wider and risk management perspective”.

What we see in this story, is a cycle of ‘selective ignoring (excluding), where the power circulates as the practice is enacted or resisted for different effects. As pointed out, in the beginning the desired effect of practicing selective ignoring, on the part of both the IT managers and the software designers, was to make sure their respective preferences ‘won’, or – in more general terms – to gain dominance. Once it was no longer possible to ignore each other and the IT managers’ preferences prevailed, the software designers resisted the practice by trying to discredit the kind of ‘selective ignoring’ done by IT managers (ignoring of innovative technologies or technologies the IT managers lack the know-how of) and the project manager (ignoring issues happening in the project by labeling them as organization-specific issues). As the software designers’ harnessing of ‘selective ignoring’ to discredit the IT managers and the project management became known, they responded by reinforcing their own ‘selective ignoring’ – justifying the exclusion of Jacob as a difficult person to work with, and defending their choice of a ‘conservative’ technology as their duty to make decisions from a broader risk management perspective.
Forbidding for maintaining dominance

While ‘selective ignoring’ was enacted in the struggle to gain dominance between the project leadership, IT managers and software designers, the same groups practiced ‘forbidding’ for maintaining dominance. Even before the project began, Amber (Software designer, Beta, project group) met Alex (project manager, Alpha, project group) and had a cup of coffee with him. When other members of the project found out about this, they reproached Amber, as they thought that they should have met the project manager (hired externally) as a united front: “they thought that I don’t have the authority to do this … I just wanted to meet and get to know this person. And this was the issue that Lily (Leader of the project, Beta, management and steering groups) didn’t like …[...] I’ve been a project manager several times and I’ve become so used to organizing, I’m very active and I get people together. But I need to be very careful now, because of these political issues. It seems like Beta’s people are not allowed to organize issues…” (Amber, Beta, project group).

After the conflict between IT managers and the software designers had come to a head, members of Beta had a crisis meeting where they discussed the role of Omega-team (Amber, Nathan, Jacob) and other software designers of Beta and what would be the right premises for these people. Up until then, Omega-team had worked at the premises of Beta (their home organization, and also the home organization of Ben and Lily – the other key individuals involved in the conflict). Before the conflict, Ben described his role in the project as “mainly to ensure that the project will go well. Secondly, my role is to get human resources - I always need to fight and justify why our best people are working on this project and not on the other ten issues…”. At the crisis meeting, however, Ben quite literally tried to forbid the team from moving to another location: “Omega-team is going to move to another premise only over my dead body”. Amber, Nathan and Jacob, conversely, argued that it was very important for them (as technical experts) to be in the same location as product owners: “In the prototyping phase we noticed that people didn’t commit themselves to a technical prototype, because Omega-team was in a different place than the project group. Alex (project manager) didn’t come here although he was invited”. When informed that the team had already moved and chosen new rooms, Ben noted: “It would have been nice if someone had told me”.

What we see in this story is both the prelude and prologue to the conflict between IT managers, project leadership (management group) and the software designers (project group). From the beginning of the project, all software designers of Beta (Amber, Jacob and Nathan, who were officially project group members) felt they were being ‘forbidden’ from participating in decision-making and organizing (as Alex ended up being on the payroll of Alpha). This may have contributed to their practice of ‘selective ignoring’ in an attempt to gain some power. As the conflict came to a head and the management continued to ignore the work of software designers and other Omega-team (justifying it with the need to make difficult decisions), the team decided to align itself more closely with Alex and the project team working in Alpha. While Ben (IT manager, Beta) tried to forbid this, the team resisted by moving physical locations before even telling Ben.

Hiding for maintaining status quo

Given the level of open conflict that had developed in the project, necessitating ‘crisis meetings’, project members developed the practice of ‘hiding’ to avoid having to discuss and fight over every little thing: “I started to do issues secretly... and then when I’ve finished something, the project members have said that, ‘Well, it’s nice’, and I myself thought that, ‘Oh surprise, why didn’t you think of it earlier’. I felt that I had to fight about everything, it’s really annoying, really frustrating…” (Jacob, Beta). More generally, hiding was often performed in order to avoid conflict. At the crisis meeting at Beta where Omega-team’s location was discussed, issues around project management were also considered (without the presence of Alex, the project manager).

After the whole debacle with IT managers and software designers working in parallel for months, Amber criticized Alex’s way of leading to Ben. At the crisis meeting, a discussion arose as to the effectiveness of Alex’s leadership: “We need to discuss if Alex is the right person for this work. I noticed there were problems when I discussed with Amber earlier. It is not a good leadership style if you need to read issues from the record…” (Ben). This issue was discussed in some depth and the project group members (Amber, Jacob, Nathan and Nicole) thought that they should inform Alex about what they had discussed. Ben (management group), however, disagreed (“We can't publish this one, we can't give this one to Alex”) and
defended Alex: “I guess that Alex does not want to be bad to anyone. The guy is alone, wants to please his boss...”. Finally, Beta people decided to hide this discussion from Alex.

At the same time, there was also resistance to hiding. Alex (project manager) recognized that there is always a shadow organization within an organization, but emphasized the importance of uncovering it: “it [shadow organization] can always be found, but it takes time. It is important to find these key forces, these people who have an influence on issues and decision-making. And they really are not always the people who you would assume because of their position.” Leon (IT manager, Gamma, management group) advocated openness and constructive discussions in the project: “We should not hide any problems, but should solve problems... we should not do any poor compromises, because bad compromises will ruin a good project...”.

What we see in this story is another prelude and prologue to the conflict between IT managers, project leadership (management group) and the software designers (project group). Unsuccessful attempts to ‘forbid’ the Omega-team from participating in decision-making led to its members ‘hiding’ some of their activities as well as to ‘selectively ignoring’ what the management group was doing and thinking. As the conflict escalated, the team ‘hid’ its move to Alpha premises from Ben, while also hiding their dissatisfaction with project management from Alex (Alpha).

**Criticizing for changing the status quo**

While the practice of ‘hiding’ developed in response to intense conflict in the project, the practice of ‘criticizing’ developed alongside it - with the aim of resolving conflicts through dialogue and any necessary changes to, for example, the structure of the key stakeholder groups or the physical location of project members (as the move of team Omega). For example, some members of the steering group were not satisfied with the idea that the chairman of the steering – and management groups was the same person (Lily). Debra thought that this went against all textbooks and would end badly for the project: “This is such a basic issue that I don't even want to explain... if you are a creator together with your two neighbours, and then there is a steering group which guides you, and then it happens that one of your neighbours will go and act as a chairman of this steering group. There is no balance then. The end result will suffer, and the guiding will suffer as well...”.

Erin also thought that a better solution should be found: “I understand very well why there is the same chairman in the steering- and management groups - they want to ensure that the flow of information works. But there should also be some other solution for it... I see that as a chairman of the steering group Lily has a possibility to forecast the work of the management group, she can talk about the problems that she sees are important to discuss in the management group as well. Knowing Lily, it may be that we are able to solve issues in the steering group and she need not to bring anything to the management group... However, it is essential that our group dynamic will work in the steering group...”.

The practice of constant criticizing was, however, also resisted. Mainly it was seen as leading to the souring of important relationships in the project: “There have been problems in previous projects between different people (between domain experts and IT experts). And when people realized that this one domain expert is in the steering group [talking about Debra] they became worried that now she [Debra] will lead the project to some direction that she doesn’t understand... but when people heard that I [Erin] was selected to be a member in this steering group, some people said to me that ‘yes, stand up to Debra... somehow I understand why people say so, but it also amuses me because I get along very well with Debra, and we have a very good mutual understanding about issues...’” (Erin); “Jacob who is very clever, almost like genius, but the social behaviour is rude at times. He for example has a way to say that this is idiotic, this should be done this way, and so on. And then when he writes it down and it is sent to the leaders... There have been slides where failed IS projects are listed by him and there has been all the issues that other people have done wrong...” (Amber).

**Analysis and Discussion**

The aim of this research was to study how power circulates through material-discursive practices in IS development projects. The Critical Discourse Analysis (CDA) (e.g. Van Dijk, 1993) together with the Foucauldian (e.g. Foucault, 1980; 1982) view on discourses and power gave us the opportunity to look at
the relations between discourse, power, dominance and inequality in the relationships of IS project members. Averou and McGrath (2007) have highlighted that many earlier IS researchers have viewed IS development and implementation activities from a very rational/technical perspective.

This study shows that the technical rationality and the ‘masking’ of power and politics are not only characteristic of the received view of the researchers, but are also common for practitioners. The project we studied started by setting up equal voting rights and a simple three-tiered control architecture – guaranteeing equality in decision making for all three participating organizations, while also establishing a decision-making structure able to handle any emerging conflicts or disagreements in a rational manner. From a critical perspective, this suggests an attempt to eliminate power and politics as much as possible from the project. During the course of the project the technical-rational ideal began to crumble with practices such as ‘selective ignoring’, ‘forbidding’, ‘hiding’, and ‘criticizing’ emerging – each with their own characteristic linguistic moves (Table 3). It should be noted that while we label these moves ‘linguistic’, by definition all practices involve not just speaking, but acting and thinking (Nicolini, 2012). Accordingly, while we refer to gossiping and consensus-building as particular forms of speaking, it is impossible to entirely separate these forms from particular forms of behaving (the bodily movements of people involved in gossiping are likely to differ from those of the people involved in consensus-building). In addition, we also tease out the specific material objects mediating the practices in our research case. For example, differences in the choice of meeting location (public vs. private) go hand-in-hand with differences in speech forms (consensus-building vs. gossiping) and, together, accomplish different practices – guaranteeing equality or hiding (see Table 3).

Finally, we found that each of these material-discursive practices circulates power through what can be called ‘power-resistance’ cycles, where resistance and power are seen as ‘iterative’ responses to each other (e.g. Foucault, 1982). In short, the same practice may be harnessed for achieving one effect (exercising power) or it may be harnessed for the achievement of an alternative effect (exercising resistance to power). We describe the effects of these cycles for each practice (Table 3).

<table>
<thead>
<tr>
<th>Discursive-Material Practice</th>
<th>Example linguistic moves; example material objects</th>
<th>Effects of circulating power</th>
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<tr>
<td>Guaranteeing equality and rationality</td>
<td>Linguistic moves: consensus-building Material objects: Project policy documents; Group structure</td>
<td>Exercising power: establishing a power- and politics-free project structure and policy-making system Exercising resistance in response to power: denying and questioning the structure and system (link to all other practices)</td>
</tr>
<tr>
<td>Ignoring / Excluding</td>
<td>Linguistic moves: silence, threats/manipulation, placating (empty praise), justification Material objects: ‘Conservative’ vs. ‘modern’ technical solutions (e.g., programming languages, database software)</td>
<td>Exercising power (ignoring of opinions, and technical options): getting one’s preferred (conservative or not) technology chosen (more generally, gaining dominance). Exercising resistance in response to power (discrediting ignoring): trying to get the chosen technology discredited by implying that more innovative/appropriate choices were ignored; hide and criticize (link to other practices) Exercising power in response to resistance: placate resisters; reinforce the legitimacy of the chosen technology (refer to authority and broader perspective of management group); forbid (link to other practice)</td>
</tr>
<tr>
<td>Forbidding</td>
<td>Linguistic moves: commandment, injunction, bidding Material objects:</td>
<td>Exercising power (project members are not allowed to meet the project manager alone; Omega team is not allowed to move to other premises): maintain dominance (existing control hierarchy and decision-making) Exercising resistance in response to power: ignore and</td>
</tr>
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### Table 3. Overview of discursive-material practices in IS development projects

Table 3 builds on the ideas of Foucault (1980) that power relations are ingrained in discourses, power and resistance are mutually implicated, and power is productive. The ‘selective ignoring’ practice demonstrates particularly well how power and resistance are mutually implicated, and enables us to see how power relations are produced through the multi-sided exercising of power in practice. This supports the findings of Hekkala and Urquhart (2013) that show that both power relationships and their form (how power relationships are constituted) are crucial in the activities of IS projects. They (ibid.) also identified that in addition to overt resistance, there is also silent resistance and submission to situations. Our study suggests that resistance may be exercised in many ways in response to power and may influence how different practices link and work together. For example, resistance to ‘selective ignoring’ may link to both practices of ‘criticizing’ and ‘hiding’ – it is possible that overt resistance to ignoring is more likely to lead to criticizing, while silent resistance to ignoring is more likely to lead to hiding. However, the potential presence of these links needs to be examined in future research.

This study suggests that power-resistance cycles may be unleashed by a number of different triggers, such as **role conflicts, cost/benefit imbalances, identity crises**, and – expectedly – **change**. While the project-, steering- and management-group structure conveys a neat and orderly division of roles and tasks, it also comes with significant role conflicts embedded in it. For example, the task of finding technical solutions for the project is delegated to the project group, yet the final decision-making rights are kept largely in the management group. Without a clear separation, each group adopted both the task and the decision-making as their duty. Similarly, while equal voting rights were put in place to ensure all three organizations enjoyed the same benefits from the project, these equal benefits did not necessarily match with equal costs, resulting in situations where people perceived that ‘equality does not mean actual equality’. For example, Beta organization was paying for half of the project, but enjoying only one third say (or even less if the project manager is considered an Alpha employee) in the decision-making. Individual- and group-level identity crises (e.g., in the form of doubts such as ‘what is my/our expertise and is it valued?’) were also often triggers of power-resistance cycles. People seeking importance, meaning and appreciation is fundamental in any social setting as can be seen in the software designers’ resistance to selective ignoring or the project manager’s (Alex) resistance to hiding by trying to uncover ‘shadow organizations’. Lastly, as expected, our findings suggest that power-resistance cycles can be triggered by change. The safety, comfort and convenience of the status quo is powerful and moving into an unknown situation tends to create frustration and rebellion, even if the current state is not ‘a perfect one’ (as exemplified in Ben resisting the move of Omega team to another location and various project members resisting to the practice of constant criticizing).
Power as discursive-material practice in an IS project

In seeing power as productive, it is useful to consider the kinds of objects that the exercising of power creates. For example, Avgerou and McGrath (2007, p. 299) have pointed out that different interpretations of knowledge enable and constrain courses of action, which also involves power - exercised power may reproduce or change the domain of knowledge, which in turn may reconfigure the power relations. In our case, we can see how existing knowledge and categorization of different technological solutions into either ‘conservative’ (e.g., Java and Oracle) or ‘modern’ (e.g., Clojure) forms a very particular knowledge base in the project that becomes contested in the practice of ‘selective ignoring’, where the software designers question, for example, the innovativeness of the ‘conservative’ technologies. Furthermore, technical language can be used to hide issues and to dominate decision-making through ignoring non-technical arguments. In sum, our findings indicate that objects play a key role in the accomplishment of the various power practices, their inter-linking and durability (cf. Nicolini, 2012). In particular, we observed that more durable power-resistance cycles were created when they centered around not only specific people, their behavior and linguistic moves, but – importantly – specific material objects. For example, we observed that the power-resistance cycles that produced the most noticeable effects (both positive and negative) in the project were the ones related to two sets of objects: a bundle of technological solutions categorized as ‘conservative’ and ‘modern’ and the physical location space of the Omega team. The continued presence of these objects ensures the continuation of these cycles in some form (if not overt, perhaps silent or covert). In essence, the objects may continue to be the carriers of certain practices (ignoring, hiding) and power-resistance cycles, even when people may want to change them.

This study shows not only how power is situated in multiple discourses, but how one instance of a discursive-material practice can be weakened through resistance, while another instance is strengthened (see also Hardy and Thomas, 2014). For example, our findings demonstrate that the ‘selective ignoring’ done by IT managers (preference for ‘conservative’ technological solutions at the expense of ignoring others) was actually strengthened by the resistance to this by the software designers. While the software designers aimed to discredit the IT managers’ choice, their resistance ended up reinforcing the choice as the IT managers had to defend it in response to the resistance. However, in other cases, subordinates were able to counter the managerial power (e.g. by moving to the another premise) or bypassing central people (both management group people and project group people bypassing the project manager in communication). For example, the practice of ‘forbidding’ was weakened by resistance (IT manager’s attempt to forbid the move of software designers from one location to another). By doing it anyway and hiding it, the software designers left the manager with no choice but to note that “it would have been nice if someone had let him know”. The long-term effect of this move on the practice of ‘forbidding’, however is, as of yet, unkown. It is entirely possible that new rules will be enforced in terms of teams and locations as a result of the Omega team moving despite Ben’s objections. In that case, the practice of ‘forbidding’ may be strengthened by the resistance. Furthermore, future research is needed to better understand how objects (that seem to make power-resistance cycles more durable) are implicated in the strengthening or weakening of the practices in which these cycles unfold.

From a critical perspective, this study also supports the views of van Dijk (1993), who has discussed the roles of discourse in the (re)production and challenge of dominance and how the process can involve different modes of discourse. Discourses may, for example, more or less directly or overtly support, enact, legitimate, deny, mitigate or conceal dominance (ibid). The material-discursive practices we found can be argued to reproduce or challenge dominance to a different extent – for example, guaranteeing equality and rationality largely conceals, but at the same time enacts and legitimates a particular form of dominance. The practices of criticizing and selective ignoring both overtly challenge dominance, however; only the latter is overtly trying to enact a different form of dominance. Hiding challenges dominance too, but does so more covertly (mitigation). Forbidding, conversely, supports and maintains a particular form of dominance. It should be emphasized that especially in large IS development projects the challenges and reproduction of dominance can come from unexpected directions, as in our case, where the technical specialists at times use expert language with subgroups in management and thus relegate the domain specialists and overall management to tertiary roles in decision making.

While the concept of power and resistance to change have been widely discussed in the IS field (Hirschheim and Newman, 1991; Hekkala and Urquhart, 2013; Levina, 2005; Markus and Bui, 2012; Markus, 1983), the role of discourse in relation to power has been theoretically underdeveloped and
empirically unexplored in ISD settings. Thus, the perspective of this study (power as practice in an IS project) not only draws attention to material objects but also draws attention to power cycles, revealing more about what kind of structures, speeches, and other communications have remarkable consequences for power relations and how power is practiced through these different discourses.

Furthermore, by following the principles of critical IS research (Myers and Klein, 2011), we are able to advocate equal opportunity for all IS project members. All of the members of the IS project were interviewed. We can identify important beliefs of project members, challenge beliefs with conflicting arguments and evidence (surface the conflict of conservative vs. modern technologies, surface the resistance to guaranteeing equality and rationality). Our aim is also to help give voice to those IS project members who might be underrepresented. In this case both management group people and project group people are bypassing the project manager in communication. We have given and will continue to give feedback to project members in a way that could lead to improvements in social practices in this particular IS project. The feedback follows the above-mentioned principles: the principle of taking a value position, and the principle of revealing and challenging prevailing beliefs and social practices. At the same time it should be noted that there is a risk of further turmoil in the project when some of the issues that have been hidden become visible through research intervention. However, this is deemed to happen, as we, the researchers, have promised to present the study results to the participants already during the course of the project instead of looking at the possible train wreck from the side. In sum, this study makes a practical contribution by showing how power circulates through different practices in a particular ISD project, allowing for the betterment of current practices in this project as well as providing a novel way for practitioners to analyze debilitating power conflicts in other ISD projects they may be involved in. Theoretically, this study contributes to extant theorizing on power in IS projects by offering a novel perspective of power as enacted in various discursive-material practices. We highlight that power circulates through power-resistances cycles, which may weaken or strengthen practices. The study also indicates that it is important to understand why and when power-resistance cycles happen, not simply how power and resistance are exercised and become manifested in different practices. From a managerial perspective, it is important to note that power-resistance cycles may be triggered quite unexpectedly and may have a life well beyond what the people involved expect.

Conclusions

This critical, qualitative case study analysed how power circulates through material-discursive practices in an IS development project. Applying Foucauldian view on discourse and power together with the Critical Discourse Analysis (CDA) method meant that language was not only seen as a social practice but also as a mode of action that is socially situated in a dialectical relationship. These views together provided us an opportunity to go beyond the formal structure of language, and investigate not only the relationship between language and power, but we were able to investigate what kind of structures, speeches, and other communications have meaningful consequences in building power relations between people in an IS project.

Furthermore, by building on practice theory (cf. Nicolini, 2012), this study demonstrates that power is practiced both in language and in material objects in an IS development project – something that is still rarely considered in information systems research. We hope that this paper furthers interest in the role of discourse and material objects in relation to power, as well as in the perspective of power-as-practice as this is still understudied and theoretically underdeveloped in our field. We uncover five different types of discursive-material practices in IS development projects and highlight the importance of understanding power as practice, enacted in doing and saying, and thus, circulating through social discourses and the production and use of material objects. Practically this critical research offers an avenue for IT professionals to improve ISD practices especially by highlighting for them the dangers of ignoring the domain specialists through the use of overly technical language and concentrating on details of technology.

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