The Textualization of Problem Handling: Lean Discourses Meet Professional Competence in Eldercare and the Manufacturing Industry

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Abstract

This article reports on research addressing the role of incident reporting at the workplace as a textual representation of lean management techniques. It draws on text and discourse analysis as well as on ethnographic data, including interviews, recorded interaction, and observations, from two projects on workplace literacy in Sweden: a study in an eldercare facility and a study in a large factory. Analysis of the data set demonstrates striking similarities, both in the way incident reporting texts are structured and worded and in the literacy practices that contextualize them. Dominant characteristics in the texts are the absence of actors and the structured, process-based approach of problems and problem handling. The forms often generate conflicts in the ways workers are asked to textually represent an incident. In this article, we argue that lean thinking has penetrated texts and literacy practices of two considerably different workplaces, and this has a large impact on the way workers are instructed to think and act with regard to problem handling techniques.

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The textualization of working life is extensively described and investigated in writing research. In the present article, special attention is paid to the relation between textualization and the implementation of lean management. In order to shed light on what might be a general tendency, we juxtapose data from two very different workplaces: a nursing home within eldercare and a manufacturing industry plant. We focus on a set of practices which is common in both settings: problem handling. In both cases, these practices are highly textualized and the perspectives on problems and problem handling suggested by the texts are contested by the workers on the floor. What we wish to discuss here is what Sarangi (1998) has discussed as a paradox: "whatever gets represented textually tends to be legitimized as institutional reality, but the institutional reality that the text aims to capture always escapes." This seems to be especially true in the case of incident reporting, a practice that aims to identify and solve problems the way the workers experience them. However, the actual experience seems to escape the texts.

Aim and Research Questions

In this article, we wish to explore the broad implementation of lean-inspired management methods in working life, using the practices of problem reporting as a case. By focusing on one specific kind of text, the *incident report*, and the way it is used by employees in eldercare and in the manufacturing industry in Sweden, we show the extent to which discourses and practices related to lean production and management have influenced the public sector. The aim of the article is to investigate how the textualized practices of problem handling are shaped, legitimized, and negotiated in two work environments. Our overall research question is: How are the actions and the spoken discourses of work remediated in writing and reshaped by the institutionalized forms in these two different work settings, and what does this tell us about how lean management is implemented by problem handling textual practices? In the analysis, the following more specific questions are asked:

1. How do incident report texts position the workers? What are the roles given to them in the texts, and how are their voices given space? How do the text discourses construct the activity, its goals and participants, the problem and the solution?

2. How are the lean discourses of problem handling contested on the floor? What are the main themes of conflict and negotiation in the literacy events where the incident reporting takes place?

In order to answer the questions, we conduct a text analysis of the main text type for problem handling in the nursing home and in the factory. Then, we analyze the literacy events surrounding the texts, with a focus on how positions are taken, perspectives chosen, and discourses advocated, questioned, and negotiated.

The Textualization of Work

Today there are few if any occupations to be found that do not demand reading and writing skills. Reading for planning and writing for documentation is a central part of being a carpenter, a truck driver, a shop assistant, a car mechanic, and an assistant nurse (Karlsson, 2009). Standardization processes require careful documentation of every step in the manufacturing or the service process, and workers are asked to spend more and more of their working time in front of a desk while documenting their actions and decisions.

The "textualized workplace" (Scheeres, 2007) has been examined by a number of workplace ethnographers with an emphasis on the different kinds of texts, the way they are used, and the impact they have on workers' identities (e.g., Belfiore, Defoe, Folinsbee, Hunter, & Jackson, 2004; Brandt, 2005; Farrell, 2006; Hull, 1997). Gowen (1996) and Jackson (2000) were among the first ones to show the role that texts play in organizing, monitoring, and documenting work in high-performance environments. Jackson argued that workers need to reproduce themselves as knowledge workers in the new economy and showed the dilemmas and contradictions that such a project entails. The dominant role of texts has been examined since then in all kinds of professional areas, such as agriculture (Jones, 2000), child care (Tusting, 2010), tourism (Hunter, 2004), manufacturing (Folinsbee, 2004), and health care (Alexander, 2000). Despite the different domains there are two main features that are common in these studies: increasing literacy demands and text-dominated workplaces and workers who struggle among conflicting roles and identities. Themes like time pressure, increasing responsibilities, and reshaped identities are very common, creating thus blurry borders to the distinction between the public and private sectors.

The explosion of reading and writing at work can be also understood as an effect of the academization of many occupations. One example is the professionalization of the type of health care work that was earlier informally learned and grounded in personal experiences, often carried out by women

with no education. In the case of Sweden, Törnquist (2004) describes the complex competence of caring as consisting of both personal or intuitive knowledge of the body and knowledge learned in formal education. The more a field is professionalized, that is, through education, the more of the knowledge and competence need to be described—put into language—and assessed.

Lean and New Public Management

In order to better understand the increased role of texts in the workplace we want to look closer at two concepts that have shaped the workplace landscape into its current form, namely lean production and new public management (NPM). Lean production concentrates on the redesign of concepts such as leadership, teamwork, communication, and development with the aim to improve process and results and minimize time and effort (Womack, Jones, & Roos, 1990). The introduction of these very same values in the public sector is discussed in organizational literature with the concept of NPM. In both private and public contexts, standardization of the work process is given a dominant role and documentation of work practices becomes the main tool in order to achieve high control and, ideally, optimal quality.

In a literature review focusing on lean thinking in health care, Mazzocato, Savage, Brommelse, Aronsson, and Thor (2010) identify the formalization of problem handling routines as the main feature taken from lean when implemented in health care contexts. According to the same authors, there is a strong focus in health care on developing methods for understanding and handling problems, which include the analysis of processes leading to problems and errors as well as the development of better processes in which problems do not occur. In a discussion of the textualization of the nursing profession in the beginning of the 1990s, Blomgren (2003) shows that after the launching of NPM reformations nurse identity became twofold: as an expert in caring and as an administrative leader. Nurses were given increasingly more administrative roles while their expertise in caring became more and more invisible and the integrity of their caring work was threatened.

The nature and the role of workplace texts has earlier shown to be heavily influenced by new managerial strategies. Studies in health care institutions show that texts that were previously initiated and used by nurses as a means of help now take a more institutional role (Alexander, 2000), while they can also help patients take a more active role in their treatment (Cook-Gumperz & Hanna, 1997). Cuban's (2008) study of women migrant carers in Cumbria discusses documentation as unaccounted and therefore unpaid work that women carers are obliged to do while subordinating themselves and their work roles. In one of our earlier studies on carers' literacy practices in the

eldercare sector (Karlsson & Nikolaidou, 2011; Nikolaidou & Karlsson, 2012), we showed that documentation of everyday practices goes through a filter of regulations regarding what is adequate and appropriate information and, more important, what is appropriate and bias-free language.

All these studies confirm that the implemented initiatives that are results of lean production and/or NPM have resulted in a new kind of workplace writing that is often institutionally regulated and place great demands on workers. Incident reporting, on which we focus here, is characteristic of this new line of thinking, where texts promote practices of standardization and quality control but also surveillance and self-reporting.

Theoretical Perspectives and Key Concepts

We combine a social practice perspective on literacy with a view of meaning as well as social relations as being construed in discourse. Discourse—and discourses—is used here as referring to systems of meanings, or ways to look at the world, which are realized by language or other semiotic resources. Discourses are not merely forms, but coherent networks of understandings and values. They are grounded in social contexts and formed by culture and history (e.g., Fairclough, 1992). The discourse analysis here is based on social semiotic and systemic functional linguistics (e.g., Halliday & Matthiessen, 2004). This linguistic perspective enables the researcher to understand how people create meaning through their choices of words, grammar and text structure, where content can be organized according to type or as sequence (temporal or causal), where participants and processes are pointed out, agents are ascribed ergativity (or responsibility) and affected parties are construed as objects.

Texts, however, cannot be analyzed only as products, isolated from how they are used. In order to capture the meaning changes that occur when the discourses advocated by the management are moved to the floor and the context of the workers, we use the concept of *entextualization* (Bauman & Briggs, 1990). In our data, form-filling is a collective practice. Workers get together and discuss what should be included in the form. Collective form-filling implies extracting discourse produced in interaction and *entextualizing* it, or putting it in text. Entextualization is underpinned by asymmetrical relations inherent in the workplace and is therefore "essential for the reproduction of institutional authority" (Park & Bucholtz, 2009, p. 487). The forms in this study can be understood as a tool for promoting the institutional framework, and workers are called to have their voices heard by complying with this mode. However, the discussions that precede form-filling are usually rich in arguments, details, and personal experiences. The concept of entextualization

in this study has to do with whose voices get to be represented in text and whose are left out, as well as with how this is achieved. An analysis of how the discourse of meetings gets entextualized in the incident reports might reveal the conflicts that lie beneath incident reporting as a literacy event and helps us to understand the transfer from the professional to the institutional, from the personal to the generic, and from the rich and unstructured oral interaction to the short and structured written text.

Method

In this section we present the methods used for data collection and data analysis in the two projects from which the texts are taken. In addition, we account for the tools used for the analysis of the texts and the literacy events in this study.

Data Collection and Data Analysis in the Two Projects

The data chosen for this article originate from two ethnographic studies on workplace literacy in Sweden.\(^1\) The research focus in both studies lies on the increased documentation demands in workplaces that are traditionally associated with physical work, and this explains the choice of the eldercare sector and the manufacture industry as research sites. Both studies were guided by the principles of linguistic ethnography, an umbrella term for studies where linguistic and ethnographic approaches are combined in order to reach a deeper understanding of settings and contexts (Rampton, 2007). The first phase of data collection included almost exclusively participant observations. These were documented by means of fieldnotes, first in the form of scribbles during our stay in the field, then in the form of detailed accounts written in retrospect back at our computers. The second phase of both studies included in-depth interviews and focus groups, mainly exploring texts and literacy practices.

The study within the eldercare sector took place in three nursing homes during a period of one and a half years. In this study, we conducted interviews with 20 assistant nurses and carers. The second study was carried out in a large-scale factory and lasted for a period of 6 months. Data for this project were collected in three different departments of the production floor. The fieldnotes and the transcribed interviews were coded in Atlas.ti, software designed for supporting qualitative analysis of large and diverse data collections. The codes aimed at capturing functions of reading and writing, dilemmas related to text use, and resources used by the participants in order to solve these dilemmas.

Throughout the period of observations, we collected texts that were pointed out to us by the participants as important, helpful, or problematic.

Texts used in formal and/or informal meetings were of particular interest. Recurring literacy events, identified during the observation process, were documented, mainly through extended fieldnotes but in a few cases through audio recording. In all cases, we interviewed the people who had taken part in the literacy event and asked how they had experienced the situation and what they thought of the texts involved. Texts and meeting interactions thus constitute a smaller part of the projects' data and have been collected less systematically compared to observations and interviews. However, given the contexts provided by the two projects, we find these data suitable for more focused case studies.

Data Selection and Methods of Analysis in this Case Study

The reason for bringing together two different studies in this article is the unexpected similarities we noticed when it came to how the two work sites handled problems arising, or incidents. Based on this observation, two of the texts collected during the fieldwork—one from each workplace—were chosen for the analysis in this article. In the factory, this was the form generally used for reporting incidents, and the particular copy that was chosen was one that was filled in during one of the meetings that were recorded. The eldercare text was chosen since it was presented as a new form for improving the incident reporting in one of the workplaces in the study. The particular copy that we analyze is one that was filled in during a meeting that we observed and kept detailed fieldnotes. Thus, the data chosen give us the opportunity to study entextualization as it takes place, in the text (the printed form and what is filled in) as well as in the literacy event.

The discourse is analyzed with a focus on how problem and solution is constructed (e.g., as something that can be typified or as a process), and on how participants are constructed and given roles. Attention is also given to whether the problem handling practice is located on a local lever (i.e., "on the floor") or whether different levels in the organization are involved.

To support the analysis and provide contextual anchoring, we also use data from individual interviews and focus groups. Relevant examples were found using the qualitative codes that describe, for example, individual and collective writing, attitudes toward documentation and toward management, time, second language difficulties, and text restrictions.

The Two Workplaces

The nursing home is a recently privatized facility on the outskirts of Stockholm. It hosts about 100 elderly organized in small wards of

eight residents and two to three carers in each shift. Our observations and interviews were conducted in three different wards, and a total of 12 carers from this facility participated in our project. The carers work in three shifts and hold formal meetings at the change of every shift in order to report on the resident's condition. More meetings of a less formal character take place in the staff room. This is where the carers meet colleagues from all wards and discuss the day's events, feelings, personal issues, and so on. This is where the carers build collaboration and collegiality.

The factory is a large workplace that employs about 1,000 employees working both in offices and on the production floor. Our study was conducted on the production floor where a total of 15 departments are hosted. Each production department is an independent economic unit with a production manager and about 20 machine operators. Here as well there are three shifts with about seven operators in each shift. Each department has an announcement board, and one or two desks with computers on them. The departments are located close to staff rooms, used during breaks, and close to meeting rooms. Finally, the managers' offices are also located on the production floor, very close to the production departments. At the change of each shift all operators meet in front of the announcement board and have a staff meeting with short information about the events of the day (see Nikolaidou, 2015, for the content and the function of the announcement board).

Texts for Problem Handling

Both in the eldercare sector and in the manufacturing industry, there were written incident reports, using forms that showed striking affinity in terms of language and discourse. In both cases, filling out these forms created conflicts between the workers on the floor and the managers. We realized very early that these forms kept being mentioned when we discussed documentation with the workers, as they were texts that the majority of them had difficulty handling. Reporting on incidents and malpractices in the workplace is an important part of a system whose purpose is to guarantee quality and safety for clients and workers. The most common official name of the text used for this is *incident report*. In this section, we focus on incident reports as texts and discuss how the ready-made categories and questions in them, as well as the graphic layout of the forms, can position the workers and their actions in relation to the incident.

Forms for incident reporting were found at all nursing homes studied, with little variation in format and content. A report was to be filled only in cases of deviation from the routine, by the person who discovered or in any way participated in the incident, and it was to be handed in to the ward's manager. It

would then be taken up during a coming staff meeting where the carers discussed issues of safety and work environment. In the nursing home in focus here, the incident report that was used was replaced by a new one during the time of our study. It was widely known that incident reporting was unpopular among the staff and considered problematic. The carers found it hard to know how to write, which made the filling of the form time-consuming—and thus not prioritized. There was resistance toward reporting on colleagues and pointing at others' mistakes. In addition, it was unclear to the carers what happened after the report was signed and submitted. This mistrust was the reason why the management of this nursing home developed a new form for incident reporting, called event report. This change marked a shift in how problems and solutions were discursively construed and in the way the carers were called to analyze them. This shift enabled us to see clearly the conflict between the professional and personal identity of the carers on one hand and the institutional discourse of the management on the other. The focus of the following analysis will be on the new form.

The factory had adopted a lean manufacturing system in the last five years and documentation was an indispensable element of the manufacturing process. Documenting errors was of great significance as it was important that methods and techniques were found that would ensure that the same mistake would not happen twice. The managers promoted a culture of no individual blame that was in line with lean production (Mazzocato et al., 2010) and it was said that the aim of documenting errors was to locate problems and solve them and not to hold individuals responsible. The incident report in the factory that was meant to be used for serious errors went under the name "'Fast' Problem-Solving Report" (in Swedish "Snabb" problemlösning). This form had to be filled out during a meeting between those involved in the incident and only on the production manager's initiative. The purpose of the form was to describe the incident, identify what had caused it, and suggest ways to ensure it would not be repeated. When the form was filled out, it was rewritten by the manager in digital format and then it was archived.

Analysis of the Texts

In this section, the entextualization of problem handling is studied in detail through analysis of the discursive construction of the problem handling process in the texts. We analyze how the following key components are constructed through text structure and language: *the problem, the workers*, and *the solution*. The two texts are analyzed alternately, to facilitate comparison.

The Construction of the Problem

The key component of both the industry and the eldercare form is the problem, and one central function of filling out the form is identifying and analyzing the problem. This process is textualized in ways that are both similar and different. In order to choose the right form in the nursing home, an initial typification of the problem at hand needs to be made. Or rather, there are a limited number of incidents that have incident report forms tied to them, which qualify them as problems, such as *medication* (i.e., wrong medication or medication not given), *falling*, and *aggression*. The fact that the form deals with one type of problem contributes to the similarity to the problem handling method of the factory, where problems are less varied than in eldercare. In the form of the nursing home, the first page mainly consists of checkbox questions, leading the writer through the analysis, and the second page contains spaces for free writing.

The example analyzed here, shown in Figure 1, is a form to be filled out in case of aggression, that is, when a resident has been upset or violent. Figure 1 shows, to the left, the first page of the form, which leads the carer through the analysis of the event by asking questions, followed by multiple choices: 1. How did it start? (Was it unprovoked or provoked? Provoked by, for example, another resident, help with personal hygiene or by demands from the staff?). 2. What did the resident use? (e.g., words, hand, or knife?). 3. Toward whom was the aggression directed? (e.g., other resident or staff?). 4. What happened? (Did damage or injury result?). 5. How was the resident calmed? (e.g., by talk, holding, or medicine?). Thus, the structure of the form directs the staff toward analysis and detailed description of events in temporal sequence. This can be seen as a step toward lean thinking, since the focus is on understanding processes and learning how to avoid problem-causing situations in the future. The form involves the carers, asking for their perspective and reflections, including their perceptions, feelings, and judgments (which is further discussed later in the article). However, they are not entitled to freely judge what a problem is and how it should be described.

In the industrial setting, the form is divided into five sections. The first section on the first page (see Figure 2, to the left) gives space for a rather short (max 2 lines) description of the problem. There is also a question of whether the incident is new or repeated. The second section has the title "Quick Framing and Protection of the Client." Here there is a list of questions arranged in four categories, *man*, *method*, *machine*, *material*, and it is therefore called the 4M control section. Each category has three yes-no questions that aim to help the person filling out the form locate the source of the error in one or more of these four factors. A problem is thus closely related to its

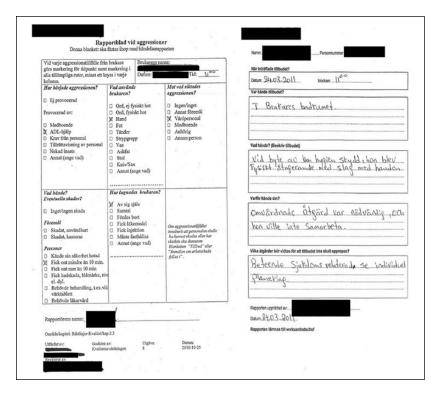


Figure 1. The incident report in the nursing home: first page to the left, second page to the right.

cause, and the causes are preset, leading to a typification of problems according to one of four causes.

What we understand as a close connection between problem and cause is further developed in the next section called "Root Cause Analysis" (*Grundorsaksanalys* in Swedish). In order to locate the root cause of the problem the operators or the managers have to ask the question "why" five times. The idea is that by digging into the cause of a problem five times one is most likely to come closer to the root cause (e.g., The machine is broken. Why? Because it was not properly maintained. Why? Because the person in charge didn't do it. Why?, etc.). At the end of this section, there is space to write the final root cause that was discovered by the "five whys" exercise. This procedure can be understood as a way of contextualizing the problem step by step, but instead of widening the context (e.g., to higher levels in the organization), the root is traced back in a chain of events.

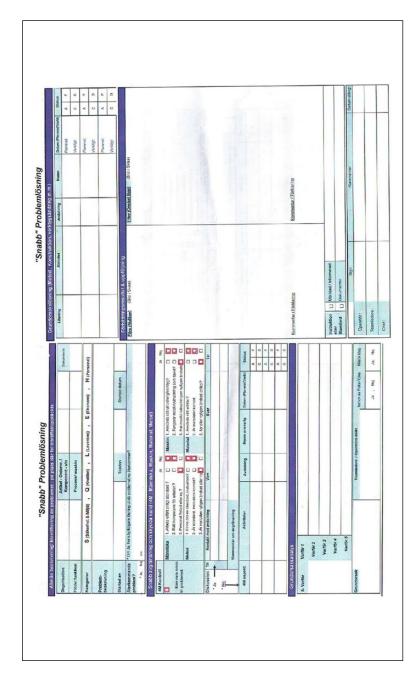


Figure 2. The "fast" problem-solving report in the factory: first page to the left, second page to the right.

The way a problem is identified and traced back in time can be compared to the sequential analysis of the nursing home form. In both cases, problems are understood as results in a chain of unfavorable events. In both cases, these chains are kept on a local level and are limited to factors that can be controlled by the workers.

The Positioning of the Workers

The fact that the problem is unpacked as the result of a local chain of events has effects for the actors that are made relevant to relate to the problem as a process. To start with the form of the nursing home, the carers are encouraged to describe the incident step by step, including what caused it, who was involved, tools used, how it was stopped, whether anyone was hurt, and so on. The language of the form points out agents (*the resident*) as the source of the problem and also asks for the perspective of the carer (*felt, pain*), who is also constructed as the affected party (since the incident report is about aggression toward the staff). The form tries to meet the perspective of the carer by encouraging a narrative style, forming the description of the problem as a story of personally experienced events, with *time* as the main organizing principle. Still, the person filling out the form has to follow the preset scheme of how events unfold and how actors may act. The discourse adopted by the form is a simple and concrete one, where things happen as we see them, and one thing leads to another. It is also a discourse where the staff is allowed to think and feel.

The guided unpacking, and the structured analysis of the problem as a series of events—with agents, affected parties, and solutions—could be expected to support the free writing that is required on the second page of the form, shown to the right in Figure 1. After the two introductory questions about when and where the incident took place, the form asks "What happened? (Describe the incident)."

In the factory, the working group that fills in the form is not given the space to write freely about the causes of the problem, but is instead directed to locate the cause in four different factors. The error can therefore be caused only by people, machines, methods, and materials and only in the way that the 12 questions indicate. According to these questions, a worker can have caused the problem if she or he did not act according to the standards, if she or he does not have the right competence for the job, or if she or he is new in the department. In this way, complicated contexts and processes at the workplace are reduced to four factors, and it is only in them that a problem can be localized.

The factory operators are given the chance to explain what has (or might have) caused the error in the "root cause analysis" section. This, however, is done not by giving them space to describe the events and their interpretation of them, but by asking them to do a complex analysis. The events need to be described in a series of questions and answers. Since there are no preset choices, the unmarked alternative would be to answer in a sentence, but briefly, due to the limited space in the form. Similarly, after this analysis, the operators need to be able to describe the root cause in a very short sentence, in line with the short space provided for it.

Another interesting aspect is to look at the language used in the questions found in the 4M section of the form. In most questions no individual participants are indicated, and the subjects of the clauses are normally not agents, for example, a. Work executed according to standards? b. Staff moved or new? c. Right equipment used? The only active participant included in the questions is nonhuman, the machine: d. Does the machine work as expected? The absence of human participants could be in line with the "no-blame" policy followed in the factory, meaning that the focus lies on the action or on the group and not on the individual. However, this way of formulating the questions also creates ambiguities as to who has the responsibility for each action and therefore who is to blame when the answer is nonpreferable (marked with a red box in the form).

The Construction of a Solution

Both the text from the industry and that from eldercare aim at handling problems. However, it is not easy to find explicit descriptions of solutions that are separate from the identified causes. When the causes are found, the solutions are also found, it seems. Another common trait is that it seems more important to assert *that* measures have been taken, and that someone is responsible for this, than to describe *what* is to be done.

It should be noted, though, that solutions can be found on different levels in the process. In the form at the nursing home, analyzing the problem of aggression, one question asked is "How was the resident calmed?" The answers to this question describe one aspect of the problem solution: how the specific problem was solved in the specific case. Again, there are preset choices to pick from: by themselves, through conversation, by being taken away, though medication, by holding, or other. All these solutions are connected to the relation between the resident and the carer, and are thus local in the same way as the analysis of the problem process analysis in the factory. On the second page of the form (see Figure 1, to the right), the last direct question to be answered is: What measures have been taken to prevent the incident from being repeated? This section can be filled out at a later stage and here again the carers are given the opportunity for free writing.

In the factory form, solutions are handled on the back page of the form, in a section called "Solution to the Root Cause" (see Figure 2, to the right). The solution here needs to be presented in six different steps: solution, activity, department, name, dates, and status. The solution needs first to be presented generally and then to be further described by specific activities that will take place. Each solution should be accompanied by a department and a person in charge. Finally, a date should be given for when the activity is planned and executed and the status of the idea/solution should be indicated. In this way, the solution section urges the operators to come up with a concrete plan about what should be done in the future and holds people and teams responsible for its execution. At the same time, the physical space in this section of the form is limited and it makes one wonder to what extent the solution presented here can be concrete. On the other hand, the section that follows on the same page calls for proof of implemented solutions and improvement and it takes up the largest space in the form. Here, the operators are urged to provide a picture or a drawing that shows the way the solution was implemented. It could be argued that what is of more importance is the actual implementation of the solution and proof of it rather than the solution in its planning stage.

Problem Handling in the Texts: Concluding Discussion

The incident reports in the nursing home and in the factory show many similarities, even though we are dealing with two very different workplaces: one that caters for vulnerable human beings and one that is dominated by physical objects. In both places the incident is discussed as a dual pole, contrasting the workers with their work objects (elders or machines), and the forms call for an analysis of the relation between the two. What constitutes an incident and a cause can in neither case be decided by the staff, but is already given in the form as preset categories. The task for the workers is to unpack the problem as a process, which is enabled by the order of the categories and the questions. It is difficult for the staff to include events that fall outside the scope of these forms or events that have a more complicated nature. In addition, in both forms a central role is given to the measures to be taken in the future, and it seems that this, rather than locating the cause, is the main point of both forms.

But there are also differences. The workers as actors are made present in the form at the nursing home but not in that at the factory. In the first case, they are given the chance to write a short narrative and explain the incident from their own point of view (in the analysis of the literacy events we discuss the extent to which this is made possible), whereas in the factory form the workers are made absent by the extensive use of nonagentive subjects in the questions.

The fact that the nursing home is introducing documentation similar to that used in an industrial context speaks for the move toward lean thinking in eldercare. Documentation is standardized and contributes to efficient communication. At the same time, incidents with the residents are handled not as problems with specific individuals but, similar to the industry, as system errors.

The Literacy Events of Problem Handling

To find out how the discourses of the text meet with the views on work and on writing among the staff we will take a closer look at two literacy events where these particular forms were filled out. The literacy event of report writing in the nursing home was rather spontaneous, and it was therefore documented by us through observation and field notes. Our data, in this example, are supported by interview extracts that show the position of the carers when it comes to the language used in the form. In the factory, the literacy event of report writing is a planned meeting. We therefore had the chance to observe and audio-record it.

The Nursing Home: Lean Discourse in Conflict With Institutional Writing Norms

In eldercare, writing is often a collective practice, not because it is regulated to be so, but because of the dilemmas that always arise and need cooperation to be solved. In the nursing home, we observed an occasion when the incident report analyzed above was filled out in the staff room. One of the assistant nurses had been physically attacked by a resident with dementia and the event had to be reported. Filling out the form was done during an informal gathering of four people who were drawn into the event because of their different expertise: Two carers had firsthand experience of the incident, one had greater work experience, one had first-language competence. The discussion observed lasted 40 minutes and was documented through field notes. During this time all four carers had suggestions and comments regarding what should be included in the form and what language should be used.

There was nothing strange about this incident when the assistant nurse explained it to her colleagues: She was to help a resident with her hygiene, but the resident turned out to be very upset and just when she went close to her she hit her. According to the carer, the resident had been aggressive before and her behavior was not unexpected. However, the rules for incident reporting oblige her to fill out the form. The first page, with the check boxes, was

filled out without problems but the writing process was paused when they came to the question *What happened*? on the second page. A long negotiation process started, where different formulations were tested and abandoned. The main difficulty was to find an appropriate way to describe the incident without using language that would be interpreted as offensive to the resident. The carers, especially those who had Swedish as a second language, had received intensive training in using appropriate and professional language in their documentation. In interviews the staff expressed a strong awareness of the institutional norms regulating the language of written documentation, as in extract (1).

(1) You cannot write as stupid as you like, "do a poo" or similar things, there will also be finesse and here lies the difficulty. You can write but it shouldn't be like offensive it should be a fine documentation [...] you should not write as I said "very angry" or these unnecessarily weird [words]...

In this aggression case, it was important to describe the incident with consideration for the resident's condition as demented. The verbs *fight* and *refuse* were considered too aggressive and therefore inappropriate. The carer who had Swedish as a first language argued that the word *refuse* was not offensive but the truth. Her colleague, however, had recently been on writing training and insisted that this word should not be used. Other suggestions that came up were to describe the resident as *angry* or *sad*, but this meant making interpretations, which they were told to avoid. The institutional norms regulating who is allowed to make judgments in writing are also described in a focus group interview with the staff, as shown in extract (2):

(2) You should not guess or paint a picture of what you think has happened. We need to focus on facts, it's facts that should be included in the resident's journal and not guessing [...] for example Lennart had a fight with his son yesterday but I didn't see it so I can't write about it, I figured it out, though.

The carer with the longest work experience suggested that they keep the description short and stick to the facts. Finally the term *acting out* (in Swedish *utåtagerande*, which is an adjective made from the verb *agera*, "act"), which is often found in institutional discourse on violent behavior, was agreed upon. In order to be more precise in describing the event, they used help from the list on the form's first page and added *with blows with the hand*. The final description in the form read as follows: *During change*

of hygiene protection, she became acting out with blows with the hand. Thus, the carer chose to use an institutional discourse, with the processes nominalized and with very little agency ascribed to the resident (or to anyone at all). The carer herself is completely invisible as an affected party—or even as a witness.

The next question, Why did it happen? is answered in a similar way: Caring measures were necessary, and she did not want to cooperate. Here too, the actions of the staff are made invisible through caring measures were necessary and the violent agency of the resident is reduced. One conclusion to be drawn is that there seems to be a conflict between the discourse of the form and the professional competence of the carers (cf. Nikolaidou & Karlsson, 2012). On the second page of the form, the last direct question to be answered is: What measures have been taken to prevent the incident from being repeated? The question is answered in this way: Illness-related behavior. See individual plan. Here, we first see the cause recontextualized to a more general level: it all happened because of the dementia of the resident. Thus, no general solution is needed, other than what is already stated in the resident's care plan.

The examples show that the discourse of lean, which invites the carers to take an active part in analyzing the problem, and thus formulating their views and experiences, collides with the institutional discourse of caring, which is impersonal and factual. In addition, the professional competence of the carers prevents them from exposing the residents as well as their own personal needs. As a result, the textual practice of problem handling is not perceived as a real tool for solving real problems.

The Factory: Negotiating Levels of Responsibility

In the factory, a meeting took place in order to fill out a "fast" problem handling form after a serious and costly error had happened. One of the machines in the department had manufactured items with the wrong dimensions over a week's period. The main question discussed in the meeting is why the automatic measure control system was not switched on and why the error went unnoticed for so long. The meeting was 45 minutes long and was attended by two machine operators, a technician, two team managers, and the production manager.

The production manager takes command in this meeting and walks into the room with the form in hand. After quickly filling out the first section with a short description of the problem, he goes on to the 4M questions, and it is here that the main bulk of the discussion takes place. Extract (3) shows how the operators (first O1, then O2) question the meaning of the phrase "according to standard," and thus try to move the analysis beyond the 4M frame.

(3) **PM:** Let's have a look at these four M controls. Man, is the work completed according to the standard? Have we followed the routines that exist there? In relation to how we work with measure control how we work with OB where it says maybe that we should check details for every fifth piece

O1: According to the standard we should also have the measure steering active

PM: Yes, you see, do you use the measure control?

O2: There was a problem with 6 12 as it showed wrong on F sixth track 56

PM: Hand on your heart, do we fully use it?

O2: Yes

O1: Yes but then we couldn't use it and then I closed it because you have to go on, he showed right what's it called by mistake the track becomes too big

PM: So we don't fully use it

The production manager (PM) sticks to the 4M frame and crosses *NO* under the question *Is the work completed according to the standard?* Later on in the discussion, in extract (4), one of the operators argues that the problem might have its cause in another M, namely in the *Material*.

(4) O1: But we have hassle with our laces you know

PM: Mm

O1: There is tape around some and you've seen how they look

PM: Yes yes yes

O1: and once I was gonna put it there and the whole pin went loose with all the lace I was gonna

PM: then we can't possibly say if it was operated with or without but it's leaning more to that we have probably not operated with measure control if it's like you say it should have discovered it in that case

[...]

PM: such big differences

The operator suggests that the equipment they use is old and unreliable but he is interrupted by the manager who seems to ignore this argument and goes back to what was previously discussed. By this point, he has answered most of the questions by indicating that there are no problems when it comes to the

method and the machines and now he crosses that there is no problem with the material used. Finally, in extract (5), he makes a new attempt to locate the source of the problem by going back to the section *Man*:

(5) **PM:** But then we can go back to man, do we have the right competence in order to complete the job? In relation to the specific case does everybody know what to do?

O2: I hope so

O1: more training, knowledge, opportunities in this

O2: We've we had training on measure control it was very superficial and

O1: I have never had any

O2: and this was before the crisis so it wasn't something we've been doing I can say I would need it.

[...]

PM: Yes no but absolutely but then here it seems like we have a little lack of competence in relation to this part

The production manager asks the team to go back to the first M in the 4M section of the questions—Man—and consider whether there is right competence for the job. The first operator argues that he has never received any training on measure control, and the second one says that training was given a long time ago and that was judged insufficient. Both these utterances suggest faults in the organization, not offering sufficient training for the staff. The manager, however, concludes—with reference to the form and the 4Ms—that there is lack of competence. In the question Is there the right competence for the job? he crosses the box for no, and erases the yes he had previously put there. This is shown in the upper part of Figure 3. After this point, the discussion continues for some time, during which the machine operators stress the importance of all arguments that they have already put forward. The production manager, on the other hand, does all he can to prove that lack of competence seems to be the main cause of the error.

In extract (6), the manager asks the team about the main cause of the error and again points at lack of competence:

(6) **PM:** But what do we think then is the primary cause? Because if one doesn't operate with measure steering then could the primary cause be that we we maybe have inadequate competence [...]

What is interesting here is the way he introduces the idea of lack of competence: there is an extended use of modality (could the primary cause be that we

4M Kontroli	1		Ja Nej			Ja	Nej
: Kan vara orsak till problemet	3. Personal flytted Metod 1. Finns det en sta 2. År stendard, inst	för arbetet ? eller ny ? ndard, instrukti ruktion korrekt		Har maskin Material 1. Används rät 2. Är meteriele	askin/utrustning som täni utrustningen nyligen ändi Lartiidar? Lkorrekt		
Diskussion Till	3. År metoden nylig Kontakt med avdelning		Vern Svai				el GCI
* Nel	Kommentar om avgränsning						
4M aspekt	Aktiviteler		Avdeining	Namn ansvarig	Datum (Planerat/Vorki)	Status	
Moniska	E) uttort anligt Str Stones on vid proble	anokasil. M.	11/32			A C	P
Monniske	Sakyor kompiters Vet g ved wan sike god	a = her u-	on molst	inlig.		C C	D
		- 1			1 1	A C	D

Figure 3. Part of the "fast" problem-solution report, filled in by the manager.

we maybe have inadequate competence) and a reference to generic actors (if one doesn't operate). It seems that the manager tries to put forward the idea of lack of competence without sounding too threatening. At the same time, the two operators and all their colleagues in the department seem to be held accountable for what has happened, as they lacked competence to deal with the machine. In an interview we had with them right after the meeting, the operators explained that they felt like they were taking the blame for everyone else.

Back to the incident report, the manager wrote *lack of competence* and *don't know what to do* in the root cause section (see the lower part of Figure 3). Notice here again that no actors are mentioned and it is not very clear who these phrases refer to. As discussed earlier, the solutions are given very limited space in the form and the manager writes down his ideas in the form of nominal phrases: *clear guidelines, training in measure control, standardization of the working operation*. As activities he suggests *a meeting with the group* and *training*. Written in this way, the solutions suggested are vague about the organizational level on which the responsibility should be placed, since they do not clearly indicate what will be done and who will do it. So even though the form's contents call for concrete solutions, the physical outline of the form and the discussion that took place during the meeting lead to a vague form of writing.

It is also important to notice what the manager chose to leave out of the form. In the process of entextualization, the manager chose to eliminate the arguments about lack of trust for the automatic measure control and the faulty equipment. He also did not include details about how the operators try to compensate for the problems described. Instead, he chose to accentuate the

argument about lack of training and lifted it up to the main cause of the error, and does so with help from the form. What is more, this argument was slightly but significantly changed in the process of entextualization: Whereas the operators talked about lack of *training*, the manager wrote down lack of *competence*, recontextualizing the phrasing of the form. This change in wording is important since lack of competence is in line with a deficit discourse that puts the blame on the operators. On the other hand, the operators talked about not being offered training or receiving poor training by the management. The operators place themselves as receivers of a bad service whereas the manager places them as agents in a problematic situation.

Discourses in Conflict: Concluding Discussion

In both workplaces, filling out an incident report initiates a process of entextualization. Among colleagues, the discussions around the incidents are characterized by a discourse rich in details and personal references. However, in the entextualization of the incident from oral to written form, the discourse of incident reporting changes; it is now impersonal, short, and bureaucratic. The agents of the actions described are blurry and the events have lost their details. In the nursing home, the language and the content used originates from an institutional discourse that they have been taught to use in written documentation, whereas in the factory the content of the form is decided by the manager and not by the whole team. The polyvocality of the oral interaction is lost and instead we are given only one perspective (which is wrongly presented as unanimous) angled toward one specific direction.

The representation of events in the incident report is therefore misleading, but the question is what the purpose of these reports is in the first place. The carers are given free space to write in the form but they are also given a number of rules to follow when writing. In addition, they hold staff meetings where they discuss these incidents in detail, and in our interviews with them they have reported that the meeting is a more natural and effective place for them to discuss these issues. The machine operators participate in a meeting in order to find the cause and a solution for the incident and most of their arguments are neglected and not included in the form. The actual forms also play an important role in these conflicts as they do not provide enough space and guide the description of the incident in such a way that makes it impossible to include all viewpoints (as shown in the text analysis). It seems likely that in both cases the incident report fulfills a purpose different from the one presented to the workers; the aim might not be representation of events but a bureaucratic record keeping of incidents that can be easily read and that clearly (although indirectly) point to actors involved and actions to be taken.

Discussion

In this article, we have explored the textualized problem handling practices of two different workplaces, of which one belongs to the traditionally public welfare sector and the other to the private and commercial sector. The main focus has been on the question of lean thinking in problem handling: to what degree it is implemented, to what extent (and how) it is supported by texts and whether there are conflicts between lean discourses and other discourses in the workplaces.

Both forms for incident reporting are analytically oriented. This goes well in line with lean thinking, where reaching an understanding is a key goal. However, to allow a totally free analysis would not be efficient. Therefore, the process description, the cause identification and the choice of solution is strictly steered, through preset options. Beside these managerial discourses is the oral discourse, where the workers discuss reasons and solve problems. The oral discourse is closely accompanied by practical actions: fixing the machines, calming residents and trying different ways out of the problematic situation. It can be described as a professional discourse that builds on experience and professional interest in problem handling. Thus, the practices of handling problems through writing can be described as awkward in both settings as they are related to institutional norms and censorship (in the eldercare) or indirect blame (in the industry).

In both workplaces, managers wish to involve the workers in describing and analyzing the processes that lead to problems, but the texts suggest a predefined set of options to choose from, which causes confusion. In the industry, the confusion is due to the fact that the preset options do not match the workers' conception of possible causes of the problem. In the eldercare the confusion is rather caused by the fact that the lean discourse of the form is similar to the personal and professional discourses which normally are not allowed in writing. Still, in both cases the perspective of the workers can be said to be broader and more comprehensive than that of the form: The industrial workers adopt a broader view of what is considered as problematic on the production floor and the carers reflect upon issues of resident integrity, also in more "internal" problem handling processes. Interestingly enough, this is exactly what lean thinking is said to be aiming at: a collective understanding of larger contexts.

But there are also differences between the workplaces. Both incident reports regulate the relation between the workers and their work objects, human beings in the eldercare and the machines in the industry. This results in different understandings of the notion of a problem and different approaches to filling out these forms. In the industry, writing about a machine's faulty

behavior does not need to be handled with extra care. However, locating the problem in the machines or in the materials is still considered problematic as the blame is indirectly placed on the management and raises demands on extra costs. In the eldercare, writing about the problematic behavior of a resident needs to be handled sensitively, with a focus on protecting the resident's integrity. In addition, filling out too many of these forms for one resident shows that this resident's stay in the facility is problematic and the negative picture painted in writing is not in line with the comfortable life that the ward is supposed to offer.

Our observations show that the workers were always concerned with the issue of blame (Mazzocato et al., 2010, p. 379). In the eldercare situation, the carer who witnessed the aggressive behavior of the resident was uncertain about how to fill out the report without offending the resident. In the industry, operators were concerned at being asked to participate in the meeting and felt as if they were taking the blame. Some operators also expressed their fear that these reports are digitally archived and that the management keeps records with the names that appear in the forms too many times. Written documents are therefore seen by the workers as something permanent. Incident reporting in written form seems to create blame in a work culture that struggles to avoid it.

It becomes evident that writing, in a workplace that is shaped by lean thinking and NPM strategies, is problematic. Lean manufacturing has introduced documentation in the heart of the work activity and has placed demands on workers that lie outside their traditional tasks and work roles. Incident reporting is a practice that originates from the ideals of teamwork and clear communication and calls for documentation that aims to locate problems and solutions and not to place blame. However, we have shown that this is regulated by institutional norms that do not always match the professional norms of the staff. Documentation therefore is often followed by feelings of confusion and uncertainty, and the workers seem to want to solve problems without the mediation of a written text.

Our findings confirm predictions in earlier writing research (e.g., Jackson, 2000) about the role of standardization and quality control practices in the workplace. These practices have gone a long way since they were first introduced in the industry, and they are now dominant in other occupational areas, such as health care. Our findings show how power can be exercised through the use of texts that urge the workers to constantly prove and defend their work roles and tasks in written form and come across as "knowledge workers." In the heart of these practices, we find texts that are supposed to be a means of help in structuring workflow and in flagging up discrepancies and finding solutions for the future. Instead, the factory workers and the carers in the nursing home are asked to exercise practices of self-surveillance and

self-reporting that can possibly turn against themselves and their colleagues in the future. It seems difficult to escape from similar practices of writing up people at work, especially when they are presented as a means of improvement, offered by the management. Thus, what seems like filling out a simple incident report can hide complicated power relations and struggle.

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- 2. Quotation marks are in the original form.
- 3. All texts and all spoken data are in Swedish and the examples have been translated to English. When grammatical analysis was carried out, the translation was held as close to the original lexical and grammatical structure as possible. Regarding more general functions, such as labeling texts, the translations were adjusted to acceptable English.

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