

# “We do not talk about this” – Problematic silences in eGovernment

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**Abstract.** Swedish public sector is now a process of transformation, referred to in terms of the general concept eGovernment. The purpose of the paper is to explore the participation of the administrative officers in an eGovernment implementation project, and related to this, the kinds of eGovernment that was articulated. The empirical material was gathered through the use of ethnographic methods, and analysed with central ideas of PD, feminist technoscience and multi-sited ethnography. The main argument is that the administrative officers participated as central actors in the project, but were marginalised in the organisation. This is related to different and more inclusive articulations of eGovernment in the project.

## Introduction

Swedish public sector is now a process of transformation. This transformation process is referred to in terms of the general concept eGovernment. eGovernment is not something that exists as a unified entity, but is articulated differently by different actors in different locations. In this paper I take as my theoretical and methodological point of departure that eGovernment as any entity, “is a word “in the first instance”... but not necessarily *in the last instance*” (Bruun Jensen, 2004, italics in original). The quotation expresses how any entity is not yet stabilized, but is always in the middle of a dynamic process of becoming. With this point of departure the focus moves from the study of how predefined entities relate to each

other, to the study of how entities materialize or come into existence as seemingly unified entities (Suchman, 2007, Barad, 2007, Bruun Jensen, 2004). Thus eGovernment is something that is happening and which is a process or a becoming; it is not yet stabilized. The advantage of this perspective is that it enables eGovernment to simultaneously be defined in multiple ways. Thus eGovernment is a political initiative expressed as a number of ideas, objectives and hopes expressed in political documents. eGovernment is also a research field which engages several journals and a number of researchers who write papers and books. Furthermore eGovernment is a set of ideas which are translated and implemented locally into existing national and local governments. Importantly, eGovernment is enacted or materialized in day-to-day practices in public sector organisations.

When entities such as eGovernment are multiple, it becomes interesting to explore what kinds of eGovernments that are materialized in particular settings, and if any of these are dominant, or problematic. There seem to be some central ideas that form a dominant discourse or a grand narrative of eGovernment (Elovaara & Mörtberg, forthcoming). Central aims with the eGovernment initiative are to increase efficiency of public sector in order to cut costs, to improve the quality of service and availability of these, and to improve democratic processes (Grönlund, 2004). Central aspects of eGovernment are eAdministration, eServices and eDemocracy. A key incentive for the eGovernment initiative is thus rationalisation of public sector as a means to save public money (Ilshammar et al, 2005). Bekkers and Homburg (2007, p. 380) argue that the dominant mythical component in eGovernment is the idea that “technology itself enables or even causes public sector agencies to transform themselves from self-centred conglomerates to citizen-oriented administrative apparatuses”. This idea builds on technological optimism, rationalism, and the idea of the active citizen (see also Elovaara & Mörtberg, 2007, Mörtberg, 2004). This dominant discourse of eGovernment seems to be problematic in some aspects. Elovaara and Mörtberg (forthcoming) highlights how, in this dominant discourse there seem to be a silence about the dismissal of employees in public sector. Also, in this discourse there is no talk about how public sector is an important labour market for women, or about what will happen to the employees in the rationalisation of public sector. Elovaara and Mörtberg (forthcoming) write: “The question how the experiences, knowledge and skills of these employees could provide valuable bits and pieces for the process of developing IT-based work practices and also a good service environment for citizens, is not articulated in the dominant discourse” (Elovaara and Mörtberg, p. 1). Elovaara and Mörtberg (ibid.) discuss how public sector employees’ experiences and skills are not included in the apparatus of the dominant discourse, and how their work is often shadow work (Star & Strauss, 1999). The employees’ knowing is not considered a resource for strategic IT-planning, they are not invited to participate

in the further design of IT-systems, and they often have low incomes (Elovaara & Mörtberg, forthcoming). Since there are problematic silences in the dominant discourse, the question is if there are other articulations of eGovernment that could be different.

In this paper I will tell a story of a systems design project in a Swedish government agency. The purpose is to explore the participation of the administrative officers in the project, and related to this, the kinds of eGovernment that was articulated. The argument that will be developed is that the administrative officers in this local eGovernment project were central actors, but were not recognized as such. In this project one kind of eGovernment that materialized was about the automation of public administration and services, and in this work the knowledge and work practices of administrative officers were essential. Without their knowledge there could be no automated system. Despite this the project seemed to lead to a marginalisation of the administrative officers in the overall organisation – if not in the project. However, also alternative and more inclusive kinds of eGovernment were articulated, and these will be discussed in the concluding discussion.

The structure of the paper is as follows. The introductory section is followed by a second section concerning the theoretical points of departure, in which Participatory Design (PD) and feminist technoscience are presented. The third section concerns the research method, and in this the ethnographic methods used in the study are discussed. The fourth section consists of a presentation of the eGovernment implementation project that was studied. After that an analysis of the empirical material is presented, in which the administrative officers, their participation and their positions in the project and in the organisation are in focus. The paper is concluded with a discussion about the participation of the administrative officers and about how this related to the various kinds of eGovernment that was articulated in the project.

## Points of Departure

A central point of departure for this paper is the ideas of PD. Central in PD is “to talk and exercise participation that enables and allows different realities, experiences and knowledge” (Elovaara et al, 2006, p. 113). However, at the same time as PD is about the inclusion of multiple voices in information systems design, it is not a unified movement but also *has* multiple voices (Törpel, 2005). For me PD is about always being attentive to patterns of dominance and marginalisation (Beck, 2002). A central question in systems design projects is: “How can the dominant notions of ‘relevant expertise and views’ be challenged?” (Karasti, 2003, p. 36). Since eGovernment is often developed and implemented through information systems design projects, PD can also be about participation in the materialization of eGovernment.

The version of PD described here is inspired by feminist technoscience, which I find useful for increasing the methodological sensibility towards the lower frequencies, or fine-tuned aspects of participation and marginalisation (Haraway, 1997). The concept of technoscience highlights how science, technology and society are intertwined (Latour, 1987). Feminist technoscience is the use of feminist research as a resource “in the creation of alternative understandings of technoscience” (Mörtberg, 2003, p. 57). Another issue in feminist technoscience is to point to alternatives and to how things could be different, and in this endeavour, to pay special attention also to lower frequencies and to gender performances. However, feminist technoscience goes beyond the relations of women and men and focus on broader epistemological and ontological issues (Barad, 1999, Elovaara, 2004). Technoscientific practices are central sites for the emergence of new subjects and objects (Suchman, 2007) through which we can explore “alternate conceptualizations of what it means to be human” (ibid., p. 281). In an interview Donna Haraway (2000, p. 156-158) explains how she understands feminist technoscience:

“Feminist technoscience studies ... involves ... understanding that democracy is about the empowering of people who are involved in putting worlds together and taking them apart, that technoscience processes are dealing with some worlds rather than others ...And feminist technoscience keeps looping through the permanent and painful contradictions of gender”.

Barad (1999, 2003, 2007) argues that the world is a dynamic process of becoming, and as we are part of the world, it is our responsibility to intervene in this process. With a focus on the emergence of new subjects and objects it becomes central to explore the processes in which certain entities – e.g. participation, agency, or a new information system – become these seemingly unified entities. Donna Haraway (1991) reminds us that there can be no innocent positions, that is accountability is central in feminist technoscience. From a feminist technoscience perspective it is central to ask about whose knowledge is dominating and whose knowledge is marginalised in technoscientific practices (Elovaara et al, 2006, Karasti, 2003), and what the consequences of this are. Barad (1999, p. 102) writes: “We are responsible for the world within which we live not because it is an arbitrary construction of our choosing, but because it is sedimented out of particular practices that we have a role in shaping”.

Participation is closely related to the possibility to exert influence, to the possibility to act, that is to agency. In feminist technoscience however, agency is not something that someone ‘has’. Rather, agency is something that is produced by specific socio-material, or material-semiotic<sup>1</sup> configurations (Suchman, 2007, Barad, 2007). “Capacities for action are recast... from inherent capabilities to possibilities generated and reiterated through specific sociomaterial assemblages and enactments” (Suchman, 2007, p. 241-42).

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<sup>1</sup> The concept of *material-semiotic* was invented by Haraway (1991, p. 194-195), and indicates the ways in which the material and the cultural are inextricably intertwined (Suchman, 2007, p. 261).

## Research Method

The empirical material used for this paper was gathered through the use of ethnographic methods. The project that I was following was not run by researchers but was a regular IS design project in a Swedish government agency. It started in September 2005, and I joined the project as a participant observer only a couple of weeks thereafter. Project meetings, discussions, workshops etc. were observed and recorded on MP3. Notes and pictures were taken, and project documents gathered. It was the business analysts who were mainly the focus for the observations. In addition there was a dialogue with the project manager, the method expert, and the project client. Furthermore, interviews with several actors in the project were conducted. The time allocated to TIA usually involved two to three part-days per week for about half a year. After that the contact was kept via the project manager but more infrequently.

It was quite a traditional study, but when analysing the material in this paper I will use ideas of multi-sited ethnography (see Newman, 1998, Marcus, 1995, Henriksen, 2002 and Bruun Jensen, 2004), along with the ideas of PD and feminist technoscience mentioned above. Bossen (2008) describes multi-sited ethnographic research as a dance between theory, method and encounters with the world of ‘creative mess’. Henriksen (2002) argue that when we enter a field of study such as an organisational department we usually think of the site as already pre-existing and with set boundaries. “Such notions of field study and field work rely on the concept of a *field site* as an already delineated geographical location and on an *object of study* that pre-exists the study and lies out there just waiting to be discovered” (Henriksen, 2002, p. 32). This is quite a naïve and positivist approach (Bruun Jensen, 2004). Henriksen (ibid.) asks how research might “be methodologically sensitized to an object of study that *is* in different ways at different times and places?” She (ibid.) argues that instead the researcher is active in constituting the field site and the object of study, through practices of selecting, seeing, connecting and analysing. Her suggestion is that we understand (information system) field sites and objects of research as open-ended “spaces of possibilities mutually constructed by our academic practices and the socio-material settings with which we engage”. Thus the coherence of a field site or another entity is an achievement which requires serious work, rather than a given (Bruun Jensen, 2004). In the words of Suchman (2007, p. 269) the production of artifacts as uniform entities “involve continuous work across particular occasions and multiple sites of use”. Suchman (2007) highlights how entities such as humans and nonhumans are mutually constituted, and how the boundaries between them are configured and enacted, rather than given.

The ideas of feminist technoscience and multi-sited ethnography allow me to not take for given the existence of e.g. participation, but instead to focus on ways in which it materialize as a specific participation in specific sociomaterial

configurations. The ideas invite me to recognize that eGovernment and participation can be constituted in multiple ways by differently situated actors.

In this paper I have been attentive to participation and marginalisation. I have also been paying attention to silences (Mörtberg & Stuedahl, 2005); to what was not said or talked about. The project observed was a rationalisation project, but no one talked about this. Instead there seemed to be a blatant silence about this fact. Inspired by PD, feminist technoscience and multi-sited ethnography, the guiding questions for the analysis were: What kind of participation was enacted in the project? What kind of eGovernment materialised in the project?

## The eGovernment Implementation Project

The empirical material used as an example in the paper is based on a systems design project in a government agency in Sweden, here referred to as The Insurance Agency (TIA). At the time of the observations TIA had approximately 320 employees, and its core business was the administration of a part of the Swedish public social insurance system. The project started in September 2005 and was called 'Project IT support for administrative officers'. The project was extensive and spanned over several years, and was considered critical for TIA.

There were two different objectives associated with the project. One objective was to provide an IT support for the administrative officers for their case administrating tasks. The IT support was expected to ease the work of the administrative officers and also to minimize simple, monotonous and repeated tasks. The administrative officers formed the largest professional group within the organization; 200 out of the total of 320 employees. Of these administrative officers 80 percent were women. Another objective of the project was to automate as much as possible of the administrative process. I was told that the underlying aim was to handle an expected increase in incoming cases, and to enable the administrative officers to spend more time supporting the customers of the organization.

The project was conducted as a business development project, and I followed the project mainly during the business process analysis phase. The project was conducted in-house, and there was a project organisation consisting of a project team, a project manager (Ingrid<sup>2</sup>), a client (John), and a project steering committee. A map of the project organisation is presented in Figure 1. The role of the client was to determine how to allocate the project resources and what the result of the project would be<sup>3</sup>, and there role of the project steering committee was to function as advisors for the client. The project team consisted of a number

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<sup>2</sup> All names mentioned are fictitious.

<sup>3</sup> The client was one of the higher directors in TIA but he was not very active in this phase of the project. Instead his tasks were delegated to a representative, a delegated client (John).

of different people, of which some worked part-time and some full-time in the project. Of these there was a project core team at the time consisting of five members who were working full-time with the business process analysis. Hence during the business process analysis there was a project team consisting of less engaged people, and a smaller project core team that worked full time. The project core team was conducting a business process analysis and will henceforth be referred to as business analysts. The business analysts were:

- Sonja, administrative officer.
- Maria, administrative officer.
- Ulf, “business client”. He was supposed to act as a link between the business part of the organization and the IT part.
- Jacob, an expert in graphical user interfaces (GUIs).
- Hans, an expert in the business process analysis method, who was leading the day-to-day work of the business analysts.

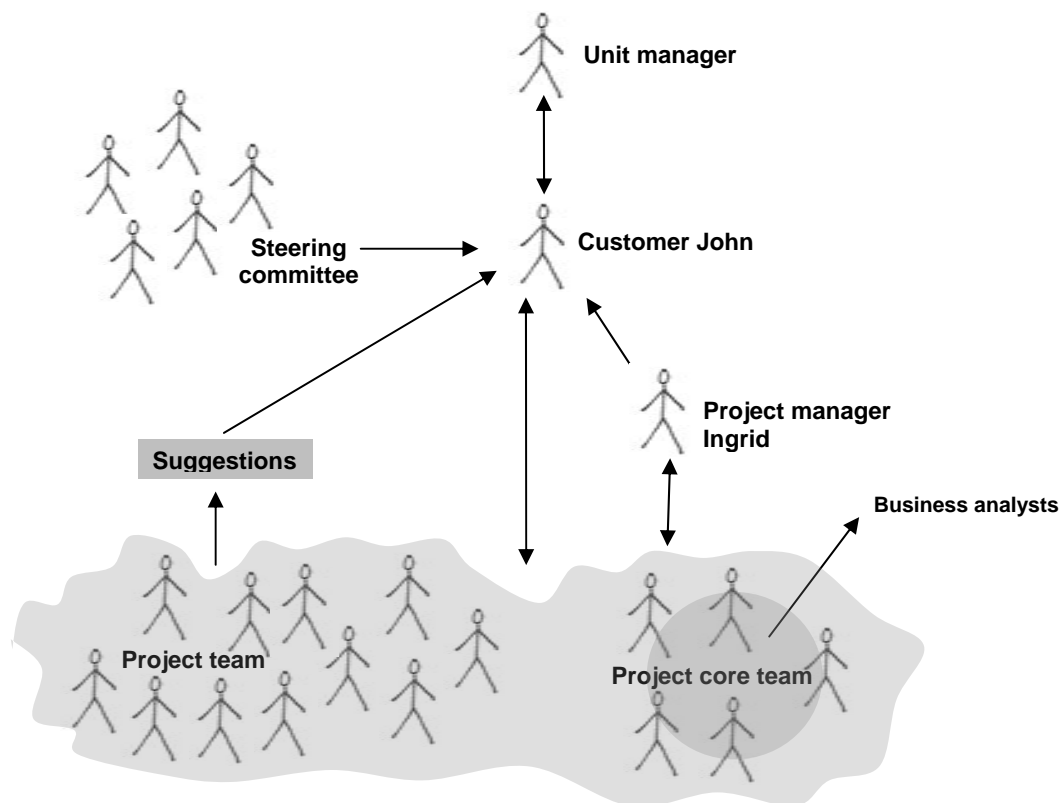


Figure 1. Model of the project organisation.

## The Business Development Process

The project group had already been formed by the start of the fieldwork and the business analysts had begun with their work. The business process analysis

consisted of three steps; today, tomorrow, and the future. As discussed above one of the project objectives were to improve the work situation of the administrative officers, who were thus considered users of the system to be built. Two administrative officers took part in the business process analysis work as business analysts, experts of the work processes to be analysed, and as user representatives. Paper prototypes of graphical user interfaces (GUIs) were used as a method to analyse the existing work practices and to develop user requirements of a better system for tomorrow and the future. The focus in this part of the business process analysis was on work practices. This focus on work practices made the knowledge of the administrative officers central in the business process analysis. However, even when the project focus moved to an automation of the administrative process the ideas about how to develop an automated system departed from the knowledge of the administrative officers.

The result of the business process analysis was supposed to be formulated in a document that would be used as the basis for the decision regarding how to continue with the project and also used as part of a feasibility study. During the business process analysis business requirements were supposed to be formulated. After the business process analysis, a systems requirements formulation process was supposed to follow. During the business process analysis many different systems were articulated by different actors such as the administrative officers, the client, the project manager, the business analysts and the IT representatives. Thus during this part of the design work there clearly was not *one* new system, but several. In other words the system had not yet been stabilized.

## What kind of participation?

TIA administrated several public social insurances, but 'Project IT support for administrative officers' only concerned one of these (here we can call it insurance BA12). BA12 was regulated by a complicated legislation system and included many different special cases and exceptions. The insurances administrated by TIA were related to employments, and the administration of BA12 involved accordance and calculation of an amount to be paid to the insured. The amount would depend on for instance the age of the insured, number of employments, type of employments, previous parental leaves, absences due to illness, periods of adult education, and previous salaries. Thus every administrative case was individual and required extensive knowledge both of the legislation for that particular insurance, and of the system and practices that currently was used for administrating it. There was a check-list for how to work with BA12, but there were no comprehensive descriptions of the administrative work practices.

One day I and one of the IT architects were allowed to follow Maria<sup>4</sup>, one of the administrative officers, as she showed us how she went about when administrating a typical case. The story is told here in order to show the complexity of being an administrative officer, and the situated and embodied knowledge that was required. The story is also told in order to show how eGovernment takes place in practices of employees such as Maria. Maria's story concerns how she worked before the new system was developed, but without her knowledge the automated administration system could not be developed, and thus neither could eGovernment. Many times I was deeply impressed by all the exceptions and special instances that she and the other administrative officers handled in their daily work, and it was obvious how the project depended on their skills.

Maria had her own desk in a rather small open-plan office. On top of her desk her computer screen was placed, framed by post-it notes. She turned on her computer and then opened up the internal organisational portal of TIA. Then she also opened up her work instruments, that is, systems, databases and programs with which she worked. These were:

1. A, a first mainframe. Two systems were related to this (Mareg and CICS).
2. B, a second mainframe.
3. Diahist, a program for tracking the history of previously administrated cases.
4. Diabas, a case handling system.
5. My workplace, a system which retrieved information from Direct Report, in which employers reports to TIA about their employees.
6. MS Visio, a tool for creating diagrams.
7. A program for retrieving information from a business partner.
8. A system for Swedish statistics about dead people.
9. MS Word, for making notes.

Thus she had a total of ten program or system windows open, and talked about this as a problem. She tried to keep as many of these as possible open at the same time on the screen in small windows that she fitted side by side to each other, but this did not work so she still had to flip between the windows. Maria worked with three of the social insurances that TIA administrated. Furthermore, as there were no written descriptions of how to work with a case in BA12, she had to write notes to herself on post-its in order to remember how to proceed with a specific case. These notes she placed around her computer screen.

Maria opened a case through writing a personal security number in Diabas, the case handling system. In Diabas she could see the information that was gathered about this particular person, and her/his case. She told us that a regularly encountered problem was when cases were not made active. The case would then

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<sup>4</sup> All names mentioned are fictitious.

have to be returned to the department at TIA which handled the activation of cases. A case could only be active if all the necessary information was gathered. Information about an insured often existed in several of the systems that Maria handled, because information came from different sources (like the employer and the insured). This sometimes resulted in different information in different systems about the same insured. Thus Maria could not trust that the information in the systems were correct or in agreement, and she had to control this. Furthermore the system could not control whether an insured would get double payments, so this had to be done by Maria and the other the administrative officers. Another problem was that the calculations of the sums to be paid to the insured had to be made in stand-alone programs. This increased the risks of mistakes and miscalculations. (Field notes from November 30, 2005)

Clearly there were several problems with the system that Maria and the other administrative officers worked in currently, and it was not easy to manoeuvre. Furthermore it was not one system, but Maria had to deal with several heterogeneous technical devices. Thus even though these were sometimes referred to as 'the administrative system', as if it was one uniform or coherent system, it was not. It was rather an assemblage of different non-related systems. Only some of these were related to the administration of cases. However, in working with a case, Maria did the job of relating the different systems into a meaningful whole, an administrative system. Thus she configured these heterogeneous devices into a system that was useful for the purpose of case administration. This is what Suchman (2002, p. 99) calls 'artful integrations'. It seemed as though Maria was one of "those actants who configure material-semiotic networks" (Suchman, 2007, p. 270) while at the same she was part of the network.

## Translating Tacit Knowledge to an Automated System

There were no formal descriptions of work practices that concerned the administration of the insurance BA12. Thus the knowledge required to administrate this insurance and the related cases was tacit and embodied. The idea of an automated system relied on the possibility to verbalise and translate as much as possible of the tacit knowledge of the administrative officers. This knowledge would then be used to design a system that would automatically administrate the work previously done by the administrative officers. Thus the participation of the administrative officers in this project was completely central. Their knowledge enabled the automation of the administrative process, and thus the success of the whole project. Without the participation of the administrative officers and their willingness to translate their knowledge there could be no automated system. At least one administrative officer was present at every work meeting that I attended. Without the presence of the administrative officers not much work could be done in the project – at least not during the business process analysis.

Despite this the administrative officers did not seem to be recognized as a resource for the strategic planning of the project, or for the organisation's efforts to become an eAdministration. Others had laid the strategic plans for the project before the administrative officers were even engaged. The administrative officers were not part of the steering committee which discussed the further development of the project. They were also not considered to be IT workers, but were defined as belonging to business rather than to IT (Sefyrin & Mörtberg, forthcoming), even though they clearly worked with the design of IT.

### What would happen with the administrative officers?

It seemed obvious that the project was a rationalisation project, and that the guiding ideas for the project were visions about a more efficient administration. Thus one kind of eGovernment that materialized in the project was that of the dominant discourse. What puzzled me was that initially – approximately during the first two months – no one in the project talked about rationalisation, automation, or reorganisations. The project manager told me that the automation of the system was done in order to be able to handle an expected increase of insurance cases, and to enable the administrative officers to spend more time with customer support. This seemed like an official project rhetoric, and when I asked Ingrid, the project manager, about what would happen to the administrative officers once the new system was implemented in the organisation, she confirmed that the project would lead to cut-downs in the organisation. The administrative officers with the lowest education would be dismissed. Then she said to me that “we do not talk about this”. She said that talking about this would create fear and uncertainty in the organisation, and that this was not part of the aim with the project. (Field notes from November 3, 2005) Later she told me that the solution to this problem was that, as the average age on TIA was rather high, several administrative officers would anyway retire (Field notes from September 12, 2006). At other times I was also told that some of the administrative officers would be moved to the customer service department, and the rest would remain as administrative officers.

Thus despite the central role the administrative officers had in the implementation of eGovernment in TIA, they risked being retired, or transferred to the customer service department. The administrative officers that would be reorganised to the customer service department would no longer be administrative officers, so their skills as administrative officers would not be needed. In this way, even though the administrative officers were central in the project, they were marginalised in the organisation. This shows what kind of risks there might be to make one's knowledge and skills visible (Star & Strauss, 1999, Elovaara et al, 2006).

Only after a while the business analysts that I followed realised that the most prioritised project objective was not to improve the work situation of the

administrative officers but to automate the administrative process. Then they realized that administrative officers might be out of employment as a result of the project. After that they sometimes talked about what would happen to the administrative officers. They did this in an awkward kind of way, and made a joke about what would happen to the administrative officers that would still remain in TIA.

## Alternative articulations of eGovernment

It seemed as though not only was the dominant discourse of eGovernment reiterated in the project, but alternative stories materialized as well. There were the story of the hard work required to make eGovernment happen, and of the skills and knowledge of the administrative officers who participated in order to enable the automated system. There was the essential participation of the administrative officers during the business process analysis, and the dependency of the administrative officers to participate and thus enable the success of the project. There was a story about how the administrative officers were defined as belonging to business even though they were essential in the design of and information system, and thus might as well be regarded IT workers. There were the risks of getting unemployed as an administrative officer, or of becoming moved to the customer service department. There was the silence about these issues on the part of the management. And there were nervous jokes among the business analysts about the risky future of the administrative officers in TIA.

## Discussion

The purpose with this paper was to explore the participation of the administrative officers in the project, and related to this, the kind of eGovernment that was articulated. The administrative officers held central positions in the project, so they were not marginalized in the project. They participated in and were central throughout the business process analysis, and their centrality in this was recognized. But their centrality was recognized only to a certain point, and they were still regarded business specialists, not IT workers. In fact, they were not only central for the business process analysis, but for the success of the whole project. Without their participation there would be no automated administration in TIA, that is, no eAdministration, no eService, no eGovernment.

Despite this there was a silence about what was going to happen to the administrative officers as an occupational group in TIA. The official rhetoric was that the automation of the administrative process would relieve the administrative officers of tedious and repetitive work, and they would be able to spend more time on contacts with the customers. Underneath this rhetoric were plans to retire some of them, to move others to the customer service department, and still others

(the least educated) would be dismissed. Thus some would be given other jobs in which their skills as administrative officers would be useless, while others would be unemployed. Some would however be left as administrative officers. These plans were not discussed openly in the project. Thus the administrative officers, their knowledge and skills, were central in the project, but marginalized in the organization.

Barad (2003) argues that there always are possibilities for agency, for intervening in the world's becoming, and that it is our responsibility to rework and to contest what matters and what is excluded from mattering. One way to rework what matters and what is excluded from mattering is to reconfigure the dominant discourse of eGovernment. Understanding entities like eGovernment as open-ended and dynamic processes, as words in the first instance, opens up the possibilities for this kind of reconfiguration. There is not one eGovernment but multiple, constituted by differently situated actors. Keeping this uncertainty alive and letting heterogeneous eGovernments (in plural) exist side by side is thus one way of reconfiguring the dominant discourse.

In 'Project IT support for administrative officers' several kinds of eGovernment were articulated. One of these articulations was a reiteration of the dominant discourse of a more efficient administration. However, other kinds of eGovernment stories were also told, stories of competent and skilled administrative officers who participated in and enabled the design of an automated administration. This story seem to be a hopeful one, but there were also problematic stories of the risks of making visible ones knowledge, of being moved to another department or even dismissed, and of the silence about these issues. If we listen to these stories, maybe they can be used as resources in order to formulate alternative and more inclusive eGovernments than the kind articulated in the dominant discourse. Might it be possible to invite these employees into the process of developing eGovernment, and treat them and their knowledge, skills and experiences as resources for this? Instead of treating them like shadow workers who are essential but invisible, maybe they could be recognized as central in the becoming of eGovernment. Perhaps they could also be recognized as IT workers? Without them there would be no eAdministration, eServices or eGovernment.

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## References

- Barad, Karen (1999). "Agential Realism – Feminist Interventions in Understanding Scientific Practices", in Mario Biagioli (ed.) *The Science Studies Reader*, pp. 1-11, Routledge, New York & London.
- Barad, Karen (2003). "Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter", *Signs: Journal of Women in Culture and Society* 28(3): 801-831.
- Barad, Karen (2007). *Meeting the universe halfway – quantum physics and the entanglement of matter and meaning*, Duke University Press, Durham & London.
- Bekkers, Victor & Homburg, Vincent (2007). "The Myths of E-Government: Looking Beyond the Assumptions of a New and Better Government", *The Information Society*, Vol. 23, No. 5, pp. 373-382.
- Bossen, Claus (2008). Presentation during PhD workshop 2nd-4th June 2008, *How to analyze IT. Strategies, Methodologies and Challenges*, in Aarhus, Denmark.
- Bruun Jensen, Casper (2004). "Researching Partially Existing Objects: What is an Electronic Patient Record? Where do you find it? How do you study it?" Working Papers from Centre for STS Studies, Department of Information & Media Studies, University of Aarhus.
- Elovaara, Pirjo (2004). *Angels in Unstable Sociomaterial Relations: Stories of Information Technology*, Ph D Thesis, Blekinge Institute of Technology.
- Elovaara, Pirjo & Mörtberg, Christina (2007). "Design of Digital Democracies: Performances of citizenship, gender and IT", *Information, Communication & Society*, Vol. 10, No. 3, pp. 404-423.
- Elovaara, Pirjo, Iqbal, Faraja T. and Mörtberg, Christina (2006). "Whose participation? Whose knowledge? Exploring PD in Tanzania-Zanzibar and Sweden", *Proceedings of the ninth conference on Participatory design: Expanding boundaries in design - Volume 1*, Participatory Design Conference, Trento, Italy, 1-5 August, pp. 105-114.
- Grönlund, Åke (2004). "Introducing e-Gov: History, Definitions, and Issues", *Communications of the Association for Information Systems*, Vol. 15 (2004), pp. 713-729.
- Haraway, Donna (2000). *How Like a Leaf – Interview with Thyrsa Nichols Goodeve*, Routledge, London.
- Haraway, Donna (1997). *Modest\_Witness@Second\_Millennium. FemaleMan©\_Meets\_OncoMouse™. Feminism and Technoscience*, Routledge, New York, London.
- Haraway, Donna (1991). 'Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective', in Donna Haraway, *Simians, Cyborgs, and Women. The Reinvention of Nature*, Routledge, New York.
- Henriksen, Dixi Louise (2002), 'Locating virtual field sites and a dispersed object of research', *Scandinavian Journal of Information Systems*, Vol. 14, No. 2, pp. 31-45.
- Ilshammar, Lars, Bjurström, Anna & Grönlund, Åke (2005). "Public E-Services in Sweden – Old Wine in New Bottles?", *Scandinavian Journal of Information Systems*, Vol. 17, No. 2, pp. 11-40.
- Karasti, Helena (2003). 'Can Film Developers Be(come) Technology Developers? Reflections on Gendered Expertise and Participation in System Design', in Christina Mörtberg, Pirjo Elovaara & Agneta Lundgren (eds.), *How do we make a difference? Information Technology, Transnational Democracy and Gender*, Division Gender and Technology, Luleå University of Technology.

- Latour, Bruno (1987). *Science in Action - how to follow scientists and engineers through society*. Harvard University Press, Cambridge Massachusetts.
- Marcus, George E. (1995). 'Ethnography in/of the World System: The Emergence of Multi-Sited Ethnography', *Annual Review of Anthropology*, Vol. 24, pp. 95-117.
- Mörtberg, Christina (2003). "In Dreams Begin Responsibility – Feminist Alternatives to Technoscience", in Christina Mörtberg, Pirjo Elovaara & Agneta Lundgren (eds.), *How do we make a difference? Information Technology, Transnational Democracy and Gender*, Division Gender and Technology, Luleå University of Technology.
- Mörtberg, Christina (2004). "Medborgare i en digital tid – aktörer eller medborgare?", in Christina Mörtberg & Beathe Due (eds.), *Informationsteknologi och kön som prisma i analyser av nordiska IT-policies*, NIKK Småskrifter nr. 9, 2004.
- Mörtberg, Christina & Elovaara, Pirjo (2008, forthcoming). "Attaching People and Technology – Between e and Government", in Shirley Booth, Sara Goodman & Gill Kirkup (eds.), *Gender and Learning Sites*.
- Mörtberg, Christina & Stuedahl, Dagny (2005). "Silences and Sensibilities – increasing participation in IT design", *4th Decennial Conference on Critical Computing: Between Sense and Sensibility CC '05, AARHUS'05, Proceedings*, 21-25 August, Aarhus, Denmark, pp. 141-144.
- Newman, Susan E. (1998). 'Here, There, and Nowhere at all: Distribution, Negotiation, and Virtuality in Postmodern Ethnography and Engineering', *Knowledge and Society*, Vol. 11, pp. 235-267.
- Sefyrin, Johanna & Mörtberg, Christina (forthcoming). "This I want to be able to do, this I want to be able to see" – Performance of prototyping, participation, gender and agency."
- Star, Susan Leigh & Strauss, Anselm (1999). "Layers of Silence, Arenas of Voice: The Ecology of Visible and Invisible Work", *Computer Supported Cooperative Work*, Vol. 8, No. 1-2, pp. 9-30.
- Suchman, Lucy (2002). "Located Accountabilities in Technology Production", *Scandinavian Journal of Information Systems*, Vol. 14, No. 2, pp. 91-105.
- Suchman, Lucy (2007). *Human-Machine Reconfigurations – Plans and Situated Actions*, Cambridge, Cambridge University Press. 2nd Edition.
- Törpel, Bettina (2005). 'Participatory Design: A multi-voiced effort', *4th Decennial Conference on Critical Computing: Between Sense and Sensibility CC '05, AARHUS'05, Proceedings*, 21-25 August, Aarhus, Denmark, pp. 177-181.